
Harold W. Pinel
Wayne W. Smith
Cleve R. Wershler
ALBERTA BIRDS, 1971-1980
Volume 2. Passerines

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Ornithology, better than any other science, bridges the gap between professionals and amateurs. Oologists, birders, bird-binders, Christmas count participants and atlissers have contributed significantly to the discipline through countless hours of dedicated field work. Data accumulated from this work has been used to document breeding bird distributions, migration routes, winter ranges, nesting ecology, moult patterns and behaviour. Often though, much data is lost because it is never recorded or made available to others.

This publication shows, once again, how amateur naturalists can contribute to the development of their science. The observations of birders throughout Alberta, compiled by Harold Pinel, Wayne Smith, and Cleve Wershler, fill an import void in the literature of Alberta Ornithology. This volume covers the passerine birds of Alberta. Vol. 1, Non-Passerines (Natural History Occasional Paper No. 13) appeared in 1991. Regional bird guides such as The Birds of Alberta (Salt and Salt 1976) and The Birds of Canada (Godfrey 1986) provide only general range information and little detail on change. The volume of observations documented in this Occasional Paper can be compared directly with Alberta Birds 1961-70 by Sadler and Myres (1976) to reveal range contractions or expansions and variations in migration dates and abundance. The recently published Atlas of Breeding Birds of Alberta made great use of the observations included here to provide context for the breeding observations. However, all non-breeding information is available for the first time here. A continued effort to record and document data like this will be necessary to ensure that changes in the breeding distributions, migratory habits, and abundance of our birds does not go undetected.

The Provincial Museum of Alberta is pleased to have the opportunity to publish these data and to make them available to birders, ornithologists, and resource managers.

The authors are to be congratulated for their fine efforts in compiling these two volumes.

W. Bruce McGillivray, Ph.D.
Assistant Director, Curatorial
Provincial Museum of Alberta
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We are grateful to a number of people for their assistance in the preparation of this work.

Cliff Wallis was invaluable for his generous contribution of time and advice in the planning and organization of the final manuscript. Through his company, Cottonwood Consultants Ltd., he made computer equipment and working space available at all hours of the day.

Linda Pinel generously donated her time in typing the manuscript.

The Natural History Section of the Provincial Museum of Alberta made specimen collections and file materials available. We especially thank Phil Stepney, Bruce McGillivray, Ross Hastings and Maggie Ballantyne. The comments of Jocelyn Hudon on a draft of this manuscript were appreciated.

Herb Copland of the Manitoba Museum of Man and Nature kindly made the files of the Prairie Nest Record Scheme available.

Finally, we acknowledge the many people who, through their interest in birds, have contributed data toward this work.
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INTRODUCTION

Historical Perspective

From 1956 to 1960, the Alberta Bird Report was published annually. These five, small, mimeographed publications were the joint efforts of the Calgary Bird Club and Edmonton Bird Club, and were edited by E. Derek Beacham, E. Otto Höhn and W. Ray Salt. These constituted the first systematic summaries of bird observations in Alberta. In general, records for only the southern half of Alberta were available, and in most years, the majority of the text was devoted to the Calgary area.

There was a long gap in the publication of a summary of Alberta bird records until Sadler and Myres (1976) wrote Alberta Birds 1961-1970, which was published as "Occasional Paper No. 1" by the Provincial Museum of Alberta. This publication, although more comprehensive than the previous annual reports, still had a definite bias towards the Calgary area.

During the late 1970's and early 1980's, discussions among the authors focused on the value of publishing the information accumulated on Alberta's avifauna for the 1970's. We believed that a publication similar to Sadler and Myres (1976) was essential in order to provide continuity to the documentation of ornithological records in Alberta.

Compared with the 1960's, there was an explosion of ornithological data on all fronts in the 1970's. There were more publications in regional, national and international journals; more local publications; more publications by government departments and private consulting companies; and an unprecedented gathering of data by amateur birdwatchers.

For this publication, reports from all sources were used. The files, publications and/or specimens of the Calgary Field Naturalists Society, Edmonton Natural History Club, Provincial Museum of Alberta, and Prairie Nest Record Scheme were reviewed. In addition, published journal articles, government publications, and private publications were examined.

The authors recognize that the data presented in this volume is incomplete. Observations not recorded in a central file or published in the literature would not be represented. In total, 485 persons are listed as contributing field observations that were used in this volume. It is largely the dedication and systematic record-keeping of these observers which made this publication possible.

The Birds of Alberta (Second Edition) by Salt and Wilk (1966) was used as an authority for the significance of all records from 1971 to 1975, while The Birds of Alberta - with their ranges in Saskatchewan and Manitoba (which we refer to as the third edition) by Salt and Salt (1976) was used for all records from 1976 to 1980. Sadler and Myres (1976) served as a model for our work.

The major focus of Alberta Birds 1971 - 1980 is to summarize and analyze reports of Alberta birds for the decade. This includes: records of new species for the province, records of uncommon species, migratory information (including regional comparisons), range extensions, significant breeding and winter records, resightings of hypothetical species, population changes, and habitat preferences. Volume 1 was published in 1991 and is available from the Calgary Field Naturalists' Society, c/o 1017 - 19 Ave. N.W., Calgary, Alberta T2M 0Z8.
Authority for Records

The authors have employed objective criteria in the classification of observations. We have not attempted to judge the validity of sight records; however, in some cases we have provided comments which point out the unusual nature of an observation. The responsibility for sight records rests with the individual observers.

Documented, verified or confirmed records refer to those which have been substantiated with material evidence -- specimen, photograph or sound recording. Where possible, we have provided details on the type of documentary evidence. Hypothetical records, which have been bracketed in the text, are sight records of those species for which no material evidence exists for Alberta, or of those species which have become extirpated in Alberta.
**BIRD HIGHLIGHTS OF THE DECADE**

This section lists the species that showed interesting changes in status, abundance or distribution during the decade. Details can be found under the individual species account.

### New Species

First confirmed reports of a species in Alberta, documented by a photograph, specimen or sound recording.

<table>
<thead>
<tr>
<th>Species</th>
<th>Species</th>
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</thead>
<tbody>
<tr>
<td>Great Crested Flycatcher</td>
<td>Wood Thrush</td>
</tr>
<tr>
<td>Chestnut-backed Chickadee</td>
<td>Nashville Warbler</td>
</tr>
<tr>
<td>Eastern Bluebird</td>
<td>Chestnut-sided Warbler</td>
</tr>
</tbody>
</table>

### First Nesting Records

First documented nesting record for the species in Alberta.

<table>
<thead>
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<tbody>
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<tr>
<td>Sedge Wren</td>
<td>Chestnut-sided Warbler</td>
</tr>
<tr>
<td>Gray-cheeked Thrush</td>
<td>Blackburnian Warbler</td>
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### Resightings of Hypotheticals

Additional unconfirmed reports of species already on the Alberta hypothetical list prior to 1971.

<table>
<thead>
<tr>
<th>Species</th>
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</thead>
<tbody>
<tr>
<td>Pygmy Nuthatch</td>
</tr>
<tr>
<td>Black-throated Gray Warbler</td>
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</tbody>
</table>

### New Hypotheticals

Unconfirmed sightings of species not previously on the Alberta hypothetical list.

<table>
<thead>
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<tr>
<td>Vermilion Flycatcher</td>
<td>Western Bluebird</td>
</tr>
<tr>
<td>Canyon Wren</td>
<td>Black-throated Sparrow</td>
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</tbody>
</table>

### Increasing Species

Species that have recently increased in numbers in Alberta.

<table>
<thead>
<tr>
<th>Species</th>
<th>Species</th>
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<tr>
<td>Common Raven</td>
<td>Chestnut-sided Warbler</td>
</tr>
<tr>
<td>White-breasted Nuthatch</td>
<td>Yellow-headed Blackbird</td>
</tr>
</tbody>
</table>
Reported More Frequently

Species noted much more frequently in the 1970's than previously in Alberta, possibly because of greater activity by Alberta birders or because of increases in numbers.

Violet-green Swallow
Blue Jay
Chestnut-backed Chickadee
Sedge Wren
Eastern Bluebird
Northern Mockingbird
Nashville Warbler
Grasshopper Sparrow

Le Conte's Sparrow
Sharp-tailed Sparrow
Harris' Sparrow
Smith's Longspur
Bobolink
Cassin's Finch
House Finch

Extralimital

Species observed or found breeding outside of their known range or migration route. Confirmed breeding records are indicated by an asterisk.

Olive-sided Flycatcher
Western Wood-Pewee
Yellow-bellied Flycatcher*
Alder Flycatcher
Willow Flycatcher
Least Flycatcher
Dusky Flycatcher
Cordilleran Flycatcher*
Eastern Phoebe*
Say's Phoebe
Western Kingbird*
Horned Lark*
Purple Martin*
Tree Swallow*
Violet-green Swallow*
Northern Rough-winged Swallow*
Barn Swallow*
Gray Jay
Steller's Jay
Blue Jay*
Clark's Nutcracker*
Common Raven*
Mountain Chickadee*
Boreal Chickadee
White-breasted Nuthatch*
Brown Creeper
Rock Wren*
House Wren
Winter Wren
Sedge Wren*
Marsh Wren*
American Dipper
Golden-crowned Kinglet*
Ruby-crowned Kinglet*
Mountain Bluebird
Townsend's Solitaire*
Veery
Gray-cheeked Thrush*
Swainson's Thrush

Hermit Thrush
Varied Thrush*
Gray Catbird*
Northern Mockingbird
Brown Thrasher
Sprague's Pipit
Bohemian Waxwing*
Cedar Waxwing
Northern Shrike
Loggerhead Shrike*
European Starling
Solitary Vireo*
Philadelphia Vireo
Tennessee Warbler
Orange-crowned Warbler
Nashville Warbler*
Northern Parula
Chestnut-sided Warbler*
Magnolia Warbler
Cape May Warbler
Black-throated Blue Warbler
Yellow-rumped Warbler
Townsend's Warbler
Black-throated Green Warbler
Blackburnian Warbler
Palm Warbler*
Bay-breasted Warbler
Black-and-white Warbler
American Redstart
Ovenbird
Northern Waterthrush*
Connecticut Warbler*
Mourning Warbler
MacGillivray's Warbler
Common Yellowthroat
Canada Warbler
Yellow-breasted Chat
Scarlet Tanager
Western Tanager
Rose-breasted Grosbeak*  Dark-eyed Junco
Black-headed Grosbeak  McCown's Longspur*
Lazuli Bunting  Chestnut-collared Longspur
Indigo Bunting  Snow Bunting
Dickcissel  Bobolink
Rufous-sided Towhee*  Western Meadowlark
Chipping Sparrow  Brewer's Blackbird*
Brewer's Sparrow  Common Grackle
Lark Sparrow*  Northern Oriole
Lark Bunting  Rosy Finch
Baird's Sparrow  Pine Grosbeak
Grasshopper Sparrow*  Purple Finch*
Le Conte's Sparrow*  Cassin's Finch
Sharp-tailed Sparrow  House Finch
Fox Sparrow  Red Crossbill
Lincoln's Sparrow  White-winged Crossbill
Swamp Sparrow  Common Redpoll*
White-throated Sparrow  Pine Siskin
Golden-crowned Sparrow  American Goldfinch
White-crowned Sparrow*  Evening Grosbeak
Harris' Sparrow

Unusual Sightings

Species recorded infrequently in Alberta.

Scissor-tailed Flycatcher  Scarlet Tanager
Northern Mockingbird  Indigo Bunting
Northern Parula  Dickcissel
Black-throated Blue Warbler  House Finch

Unusual Winter Records

First winter records of a species for Alberta (two asterisks), or records of species that rarely winter in Alberta.

American Crow  Rufous-sided Towhee**
Chestnut-backed Chickadee**  Song Sparrow**
Winter Wren**  White-throated Sparrow
Ruby-crowned Kinglet**  White-crowned Sparrow
Townsend's Solitaire  Harris' Sparrow
American Robin  Lapland Longspur
Varied Thrush**  Red-winged Blackbird
Brown Thrasher**  Western Meadowlark
Cedar Waxwing  Yellow-headed Blackbird**
Loggerhead Shrike**  Rusty Blackbird
Tennessee Warbler**  Brewer's Blackbird
Orange-crowned Warbler**  Common Grackle**
Nashville Warbler**  Purple Finch**
Yellow-rumped Warbler**  Pine Siskin
Palm Warbler**  American Goldfinch**
Black-and-white Warbler**
No Reports

Species with confirmed records for Alberta, but for which there are no reports for the decade.

Sage Thrasher
Pine Warbler
### LOCATION GUIDE AND MAP

Refer to the map that follows this list for the location of any place mentioned in this book. This is done by reference to the Township, Range and Meridian. Township numbers are shown up the side of the map. Range numbers are shown along the bottom and certain base lines. Meridian numbers are shown along the top.

Locations of lakes are listed separately following the other place names. Both sub-sections are in alphabetical order.

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SYMBOLS USED IN THE TEXT

Seasonal Occurrence

\begin{itemize}
  \item \textbf{W} - winter record
  \item \textbf{S} - spring migration
  \item \textbf{F} - fall migration
    \begin{itemize}
      \item \textbf{a} - first record of the season
      \item \textbf{b} - highest individual numbers recorded during the season
      \item \textbf{c} - last report of the season
    \end{itemize}
  \item \textbf{B} - summer or nesting record of interest within a species' usual range
  \item \textbf{Mp} - midsummer dispersal or passage movement
\end{itemize}

Extralimital or Unusual Records

\begin{itemize}
  \item \textbf{E} - extralimital (outside the usual range)
    \begin{itemize}
      \item \textbf{b} - breeding or summer record
      \item \textbf{m} - migration period record
      \item \textbf{v} - record of a vagrant species reported irregularly in Alberta
      \item \textbf{w} - winter record
    \end{itemize}
\end{itemize}

Miscellaneous

\begin{itemize}
  \item \textbf{[ ]} - hypothetical species or records
\end{itemize}
Olive-sided Flycatcher (Contopus borealis)

During the decade, the first spring arrivals were recorded from May 13 to 28. These were usually reports of single birds, and no peak numbers were reported during spring migration. In southern Alberta, the latest spring migrants were generally recorded in the last week of May and in the first week of June. There were some extralimital spring migration observations from locations in the grasslands and Cypress Hills of southern Alberta.

The Olive-sided Flycatcher inhabits conifer-dominated woodlands in northern Alberta and in the foothills and mountains of western Alberta. It is usually found in the vicinity of wetlands, but also occurs away from water on hillsides and mountain slopes.

In the mountains, this species is relatively uncommon, but widespread, occurring mainly at higher elevations. Salt (1976) found it to be "the only truly widespread flycatcher" in Kananaskis Provincial Park where it favoured mature spruce-fir woodland. In Banff and Jasper National Parks, the highest breeding density was recorded in subalpine fir (Abies lasiocarpa)-willow (Salix spp.) avalanche slopes (Holroyd & Van Tighem 1983). In Waterton Lakes National Park, this species was scarce (Sharp 1973).

In the Ft. MacKay area, typical breeding situations were mature coniferous or mixed woods with considerable height diversity or an open canopy, or interface situations where there was a height difference between the two habitats (Francis & Lumbis 1979). The highest density was found in a mature black spruce (Picea mariana) muskeg.

There were extralimital summer reports from Turner Valley and Elk Island National Park.

In Banff and Jasper National Parks, autumn migration occurred in August (Holroyd & Van Tighem 1983). Francis & Lumbis (1979) gave a fall departure date of August 20 for the Ft. MacKay area. In southern Alberta, the majority of fall migrants were recorded over a relatively short period from August 17 to September 7. During the southward migration, there were no extralimital records of Olive-sided Flycatchers from the eastern grassland regions.

1971. S - 1, May 28, Calgary - RIP
       F - 2, Aug. 25, Calgary - RIP

1972. Sa - 2, May 19, Calgary - GEA, WEB, BIL, VGL
       Em - 1, May 27, Dalum - HWP, LIP (Kondla et al. 1973)
       Eb - summer, Elk Island N.P. - Burns et al. (1986)
       Fa - 3, Aug. 20, Calgary - WWS, CAW, CRW
       Fc - 1, Sept. 9, Carseland - GEA, WEB

1973. Sa - 1, May 17, Elk Island N.P. - MAR
       Em/Fa - 1, Aug. 25, Conrich - RUB
       Fc - 1, Sept. 2, Calgary - VGL, WWS

       S - 1, May 20, Dillberry Lake P.P. - GWG, LOG
       S/Em - 2, May 26, Bindloss - WWS
       Sc/Em - 1, June 5, Police Coulee - Wershler (1980)
       Eb - summer, Elk Island N.P. - Burns et al. (1986)
Western Wood-Pewee (*Contopus sordidulus*)

In southern Alberta, most first spring migrants were reported during the first two weeks of May, with dates ranging from May 2 to 16. There was an exceptionally early spring record for 1977. In the mountain national parks, spring migration was slightly later, occurring in the last half of May (Sharp 1973; Holroyd & Van Tighem 1983). The Western Wood-Pewee was the most common spring flycatcher in Jasper National Park, and was less common in Banff National Park (Holroyd & Van Tighem 1983). This species arrived slightly later in northern Alberta with the first birds generally recorded in the last third of May.

Salt & Salt (1976) depict this species as breeding throughout Alberta, but note that its numbers are not great in the north or in the southern prairies, and that it has only recently been discovered nesting in the Cypress Hills.

The Western Wood-Pewee inhabits a range of woodland types, including deciduous, mixed and open coniferous. It was considered an uncommon summer resident in the mountain national parks (Sharp 1973; Holroyd & Van Tighem 1983). In Banff and Jasper National Parks, the highest densities of this species during the breeding season were in deciduous forest (Holroyd & Van Tighem 1983). These authors further noted that there were no records of Western Wood-Pewees north of the Miette and lower Athabasca Rivers in Jasper National Park.

In the Ft. MacKay area of northern Alberta, Francis & Lumbis (1979) found that coniferous-dominated forests were preferred, with the highest densities occurring in mature black spruce (*Picea mariana*). Western Wood-Pewees are rare and local in extreme northern Alberta.

This species is scarce and local in southeastern Alberta, where it is restricted largely to river valleys and farm windbreaks (Wallis 1976, 1977). With this consideration, the map in Salt & Wilk (1966) more accurately depicts the range than the map in Salt & Salt (1976). The Western Wood-Pewee has been documented as nesting in the Cypress Hills (Salt & Salt 1976), but it is not widespread there. It is found at lower elevations in deciduous-dominated mixed woods, but is surprisingly absent from higher elevations in the Cypress Hills, despite an abundance of apparently suitable habitat.

There were extralimital breeding season reports from the Neutral Hills in 1975 and 1976.

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<td>1980</td>
<td>Sa</td>
<td>May 27, Calgary</td>
<td>DAE, HWP, JOR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fa</td>
<td>Aug. 17, Calgary</td>
<td>ANS</td>
<td></td>
</tr>
</tbody>
</table>
Autumn migration occurred mainly in August, and the last reports ranged from late August to the second week of September.

1971.  
   **Fc** - 1, Sept. 5, Calgary - HAV

1972.  
   **Sa** - 1, May 13, Canmore - GEA, WEB
   - 1, May 13, Calgary - WWS
   **Fc** - 6, Aug. 28, Calgary - GEA, WEB, GOK, BIL, VGL

   **Sa** - 3+, May 5, Reesor Lake - HES
   - 1, May 5, Seebe - VGL
   **Fc** - 1, Sept. 1, Calgary - BIL, VGL

1974.  
   **Sa** - 2, May 6, Calgary - HAV
   - 1, May 11, Edmonton - JOB, JWB
   **Fc** - 1, Aug. 27, Edmonton - DEG
   - 2, Aug. 30, Calgary - HWP

1975.  
   **Sa** - 1, May 14, Manning - GRG, PAG, MAH
   - 1, May 16, Calgary - BIL
   - 1, May 21, Stony Plain - BEB, GEB
   **Eb** - uncommon, summer resident, Neutral Hills - Bradley & Bradley (1977b)

1976.  
   **Fc** - 1, Sept. 11, Calgary - LRB
   **Sa** - 5, May 7, Jasper N.P. - Holroyd & Karasiuk (1977)
   - 2, May 12, Sherwood Park - RIC
   - May 20, Ft. MacKay - Francis & Lumbis (1979)
   **Eb** - uncommon, summer resident, Neutral Hills - Bradley & Bradley (1977b)

1977.  
   **Fc** - 2, Sept. 7, Calgary - HWP
   **Sa** - 1, April 27, Calgary - HWP
   - 1, May 6, Jasper N.P. - Holroyd & Van Tighem (1983)

1978.  
   **Sa** - 1, May 15, Calgary - JOR
   **Fc** - 1, Sept. 9, Calgary - HWP

1979.  
   **Sa** - 1, May 2, Shepard - CFNS
   **Fc** - 1, Sept. 1, Calgary - RUB

1980.  
   **Fc** - 1, Sept. 8, Calgary - OLD, HWP, JOR

**Empidonax Flycatchers**

The following seven species of Empidonax flycatchers are notoriously difficult to identify, especially during migratory periods when they are often silent and outside of their characteristic nesting habitats. For this reason, migratory data for these species, especially during the fall, was limited and unreliable.

Even though each species has distinctive songs and calls during the nesting season, many observers have trouble distinguishing between two pairs of closely related species: Alder Flycatcher/Willow Flycatcher, and Hammond's Flycatcher/Dusky Flycatcher. Better treatment of identification points in new field guides during the 1980's should enable more observers to correctly identify these similar species. This will hopefully result in more information concerning these species' respective breeding ranges in the province.
Yellow-bellied Flycatcher (Empidonax flaviventris)

In Alberta, very little information exists regarding migration dates for this species. This is due to the scarcity of the species in the province; the fact that the migration route mostly bypasses the more populated parts of southern Alberta; and the difficulty posed to birdwatchers in separating this species from other Empidonax flycatchers. From the few reports available, the Yellow-bellied Flycatcher appeared to arrive in the province during late May. Fall migration was during August, with no records during the decade after September 1.

During the nesting season, this species occurs mainly in the boreal forest, with scattered records from a few places in the foothills as far south as the Turner Valley area. For further clarification, the record of two singing birds on June 19, 1970 in the foothills southwest of Calgary (Sadler & Myres 1976) was near the Sheep River 12.8 km west of Turner Valley. This was the same record that was mistakenly reported in Salt & Salt (1976) as mid May.

In the Ft. MacKay area, the preferred nesting habitat appeared to be black spruce (Picea mariana), open above 2 meters, where a density of 27 territories/100 hectares was recorded (Francis & Lumbis 1979). At Sir Winston Churchill Provincial Park in 1976, CRW found that relatively small areas of black spruce within mature mixed forest were used for nesting. In the Coal Valley area, Cottonwood Consultants Ltd. (1978) found this species common in dense, moist alder (Alnus spp.)-willow (Salix spp.) shrubbery on a slumping hillside with springs and scattered lodgepole pine (Pinus contorta), white spruce (Picea glauca) and aspen (Populus tremuloides).

1961. Eb - nest of 4 eggs, June 23, Jasper N.P. - ETJ. This observation was from personal field notes and not available to Sadler & Myres (1976).

1971. Em - 1 singing, May 24, Elkwater - WWS, CRW
   Eb - 2, June 22, Elk Island N.P. - Burns et al. (1986)

1972. Em - 1, Aug. 6, 7 & 13, Calgary - WWS, CAW, CRW, MEW, RAW

   - several, summer, Cross Lake P.P. - Peters & Nolte (1973)
   Em - 1, Sept. 1, Calgary - WWS

   - "song of what was believed to be" this species, July 9, Jasper N.P. - WAW (Rogers 1974d)
   Fc - 1, Aug. 30, Edmonton - STJ

   B - 5 males, June 12, Peerless Lake - GRG, PAG
   Fc - 1, Sept. 1, Syncrude lease - Sharp & Richardson (1976)

1976. Eb - 1 pair & nest, May 22, Bear Lake - RIC
   B - 3, June 15, Gregoire Lake - WWS
   - 1, June 22, Lesser Slave Lake P.P. - WWS
   - 2 singing, June 23, Sir Winston Churchill P.P. - CRW
   Fc - Sept. 1, Ft. MacKay - Francis & Lumbis (1979)

1977. B - 4 singing, June 1, Ft. MacKay - WWS
   Eb - 2 singing, June 2, William A. Switzer P.P. - CAW
   - 2 singing, July 14, Notikewin - CAW

   Eb - 6 singing on one transect, June 10, Coal Valley - CAW, CRW
   - 1, June 20, Healy Creek, Banff N.P. - Holroyd & Van Tighem (1983)
Alder Flycatcher (Empidonax alnorum)

During the decade, the taxonomic status of the "Traill's Flycatcher" was revised, and full species status was given to two groups previously recognized only as song types of the "Traill's Flycatcher" (American Ornithologists' Union 1983). The "fee-bee-o" song type became the Alder Flycatcher, while the "fitz-bew" song type became the Willow Flycatcher. Prior to this revision, few observers paid much attention to identifying and specifying the song type; and even after the revision, many observers were unable or reluctant to distinguish the differences in vocalizations. As a result, a few of the records for this species listed as "Traill's" may indeed be of the Willow Flycatcher.

In southern Alberta, spring arrival dates usually ranged from the second to the fourth weeks in May. In northern Alberta and the mountains, the first spring arrivals were generally noted during the fourth week of May.

The nesting range of this species in Alberta is not fully understood at this time. Salt & Salt (1976) indicate that Alder Flycatchers breed "in most of southern Alberta north at least to Athabasca and probably farther". However, our data shows that this species is absent from most of the grasslands ecoregion. It occurs in the aspen parkland, north through the boreal forest, and south along the foothills to Waterton Lakes National Park. Typical habitat is willow (Salix spp.) swamps, but the species also regularly occurs in immature poplar (Populus spp.) - willow stands around wetlands and along stream courses. The ranges of the Alder and Willow Flycatchers overlap in the mountain national parks. The Alder Flycatcher is considered uncommon in Banff and Jasper National Parks, but it is more common in Jasper National Park (Holroyd & Van Tighem 1983).

In the Ft. MacKay area, this species is relatively common and prefers stands of tall willow without a tree canopy (Francis & Lumbis 1979). The highest density recorded was 69 territories/100 hectares.

There was an interesting extralimital summer record near Duchess in 1977.

Fall migration occurred mainly during August. In the decade, there was only one record after the end of August.

1971. Sa - 3 "Traill's", May 28, Carseland - RAO
1972. Sa - 2 "Traill's", May 22, Calgary - GEA, WEB
   Fa - 1 "Traill's", Aug. 12, Calgary - WWS
   - 3, Aug. 13, Rosebud - Kondla et al. (1973)
1974. Sa - 1 "Traill's", May 10, Calgary - WIA
1975. Sa - 1, May 11, Calgary - BIL
   P - 3, June 21, Bow Valley P.P. - HWP, KVT, CRW
   B - uncommon, summer resident, Neutral Hills - Bradley & Bradley (1977b)
   B - uncommon, summer resident, Neutral Hills - Bradley & Bradley (1977b)
1978. Sa - 1, May 1, Beaverlodge - AUA, KAA
   Eb - 1 singing, June 19, springs area in Red Deer River valley north of Duchess - CAW
- 2, May 27, Ft. McMurray - BRW
  B - 8, June 13, Bob Creek - CAW
1979.  B - 1, June 11 & 17, Macabee Creek - Wiseley (1979a)
  - 2 singing, July 16, Oldman River valley near Ft. Macleod - CAW
  FC - 1, Aug. 31, Bottrel - SFJ

Willow Flycatcher (Empidonax traillii)

The nesting range of this species was not well known during the 1970's. Salt & Salt (1976) state that Willow Flycatchers have been recorded in summer only in the Rockies and their foothills from near Banff north to Jasper.

The following range description was developed by the authors after analyzing data from the 1980's. The Willow Flycatcher is a cordilleran species in Alberta, primarily restricted to mountain valleys. Its major range is from Banff National Park south to Waterton Lakes National Park. It is relatively scarce north of this range in Jasper National Park.

Within Banff and Jasper National Parks, it is more localized than the Alder Flycatcher, but the two species sometimes share the same habitat. Like the Alder Flycatcher, the Willow Flycatcher occurs in willow (Salix spp.) swamps, but the Willow Flycatcher appears to be able to utilize more restricted and drier areas of habitat.

During the decade there were extralimital nesting season records for the Willow Flycatcher from the Grand Prairie-Winagami Lake-Kakwa area, and from Little Fish Lake.

  - 1, June 19, Little Fish Lake - W. Smith (1975)
  - 2 nests, summer, Kananaskis P.P. - Salt (1976)
  - 3 singing, June 10, Bow Valley P.P. - CRW
1978.  Eb - 1 singing, Aug. 21, north of Kakwa Falls - CAW, CRW, RAW
1979.  Eb - 1, June 3, Grande Prairie - ELC, GEC
  B - 1, July 11, Goat Pond - Wiseley (1979a)
  Eb - 8, July 20, Highwood River - Wiseley (1979a)
1980.  B - 2+, June 7 & 8, Bow Valley P.P. - JOR

Least Flycatcher (Empidonax minimus)

The first spring migrants arrived in Alberta from May 8 to 18. This was very similar to the first spring migrant records for the previous decade as listed by Sadler & Myres (1976). Spring migration was slightly later in the mountains, where it occurred primarily in late May and early June (Holroyd & Van Tighem 1983).

Salt & Salt (1976) state that the Least Flycatcher breeds throughout Alberta, but in the mountains and in the Cypress Hills it is scarce and restricted to the lower valleys. Since the Least Flycatcher is a bird of deciduous and deciduous-dominated forests, there are large tracts of continuous coniferous forests in the mountains and northern Alberta where this species does not occur. In Banff and Jasper National Parks, Holroyd & Van Tighem (1983)
considered this species a fairly common summer resident being most common in the lower Bow, Miette and Athabasca River valleys. Salt (1976) had no records for Kananaskis Provincial Park.

The typical breeding habitat of the Least Flycatcher in the Ft. MacKay area was deciduous forests and the deciduous portions of mixed forests on dry to mesic sites (Francis & Lumbis 1979). Preferred nesting habitat seemed to be those deciduous forests in which an open subcanopy was present between three and eight meters above ground. The highest density of 180 territories/100 hectares was found in a deciduous plot with a willow (Salix spp.) subcanopy.

Fall migration occurred in August for the most part. The last few fall migrants were recorded ranged from August 27 to September 21 during the decade.

1971. Sa - 1, May 12, Calgary - RIP
   Fc - 1, Sept. 21, Calgary - RIP

1972. Sa - 1, May 11, Miquelon Lake - WWS
   - 1, May 14, Calgary - CAW, CRW
   Eb - 2 pairs, June 8 & 13, Waterton Lakes N.P. - Sharp (1973)
   Fc - 1, Aug. 27, Carseland - CFNS

1973. Sa - 1, May 12, Lake Newell - CFNS
   - 1, May 13, Elk Island N.P. - JIW
   Fc - 1, Sept. 2, Calgary - RUB

1974. Sa - 1, May 9, Milk River Canyon - WWS
   - 1, May 9, Calgary - BIL
   - 1, May 11, Edmonton - JIW
   Fc - 1, Sept. 14, Cheadle - TSS
   - 1, Sept. 20, Nisku - RIP

1975. Sa - 2, May 8, Peace River - RIP
   - 1, May 9, Sylvan Lake - HUS
   - 1, May 10, Manning - GRG, PAG, MAH
   - 1, May 15, Calgary - HWP
   - May 17, Syncrude lease - Sharp & Richardson (1976)
   Fc - 1, Aug. 26, Calgary - HWP
   - 3, Sept. 8, Edmonton - DEG

1976. Sa - 1, May 14, Miquelon Lake - CRW
   - 5+, May 16, Norman Lake - HWP
   - May 17, Ft. MacKay - Francis & Lumbis (1979)

1977. Sa - 1, May 9, Edmonton - ERE, TWT, MGW
   - May 12, Ft. McMurray - Gully (1979)
   - 2, May 14, Carseland - ANS
   Fc - 2, Sept. 9, Banff - Holroyd & Van Tighem (1983)

   - 2, May 16, Wandering River - RAE
   - 1, May 19, Edmonton - JOF
   Fc - 1, Sept. 9, Calgary - CFNS

1979. Sa - 10, May 18, Pincher Creek - WWS
   Fc - 1, Sept. 2, Bottrel - SFJ

1980. Sa - 1, May 16, Calgary - DAE, JOR
   Sb - 50, May 27, Calgary - OLD

Hammond's Flycatcher (Empidonax hammondii)

Spring migration occurred in Banff and Jasper National Parks in mid and late May (Holroyd & Van Tighem 1983). This species was usually encountered singly or in pairs. The May records listed for Jasper National Park in 1977 and 1978 represent the earliest and maximum count records for the mountain national parks.
In Alberta, the Hammond's Flycatcher is restricted in distribution to the Rocky Mountains, where it occurs locally from Jasper National Park to Waterton Lakes National Park. Holroyd & Van Tighem (1983) considered this species to be an uncommon summer resident which appeared to be more common in Jasper National Park and northern Banff National Park than in southern Banff National Park. The highest densities during the breeding season were recorded in Douglas fir (Pseudotsuga menziesii) forests and open white spruce (Picea glauca) stands on dry slopes.

Autumn migration occurs in August. The latest record that Holroyd & Van Tighem (1983) had for Banff and Jasper National Parks was August 24, 1977. This flycatcher is extremely difficult to distinguish from other Empidonax species during this season.


1978. **Sa/Sb** - 2, May 27, Yammuska - Wiseley (1979b)

**Dusky Flycatcher (Empidonax oberholseri)**

During the decade, the first spring migrants were recorded in southern Alberta from May 17 to 25. Spring migration in Banff and Jasper National Parks occurred in late May (Holroyd & Van Tighem 1983).

The Dusky Flycatcher nests in the Rocky Mountains and their foothills as well as in the Cypress Hills (Salt & Salt 1976). Unlike the Hammond's Flycatcher which prefers coniferous forests, it primarily inhabits deciduous-dominated habitats, especially stunted or immature woods and associated shrubbery on drier slopes. In the Cypress Hills, where the Dusky Flycatcher is very common, it also occurs in riverine and hillside hawthorn (Crataegus spp.)/willow (Salix spp.) shrubbery. In the summer, this species appears to be more common in Banff National Park than in Jasper National Park, the reverse pattern of Hammond's Flycatcher (Holroyd & Van Tighem 1983). The Dusky Flycatcher was recorded throughout Banff National Park, and as far north as the middle Athabasca River and the Southesk River in Jasper National Park. Wiseley (1979a) considered this species a fairly common summer resident in Kananaskis Country with reported sightings from the Bow River valley, Highwood River, Sheep River, Bragg Creek and Kananaskis Provincial Park. There were extralimital summer records for the decade from Sundre, Waiparous Creek and Calgary.

There were few fall observations of this species because of difficulty in separating Empidonax flycatchers at this time of year. Migration apparently occurred in August.

1971. **Sa** - 1, May 19, Elkwater - WWS

1972. **E** - 20 singing, June 19, Reesor Lake - WWS

1973. **Sa** - 1 singing, May 20, Longview - JIW

     B - 2, June 21, Bow Valley P.P. - HWP, KVT, CRW
1975. Sa - 1, May 25, Seebe - BIL
     Eb - 1, June 30, Calgary - BIL
     F - 1 banded, Aug. 19, Oldman River Gap - ETJ
1976. B - 1, June 20, Bow Valley P.P. - HWP
     B - 1 singing, June 2, William A. Switzer P.P. - CAW
     F - 1, Aug. 12, Vermilion Lakes, Banff N.P. - Holroyd & Van Tingham
       (1983)
1978. Sa - 1, May 19, Bow Valley P.P. - JOR
     S - 1, May 27/28, Grande Prairie area - Wiseley (1979b)
     B - 7 singing, June 16, Bob Creek - CAW
     - 8 singing, June 17, Camp Creek - CAW
     - nest with 4 young about 5 days old, July 3, Banff N.P. - Holroyd
     & Van Tingham (1983)
     - adult with 3 fledged young, July 3, Banff N.P. - Holroyd & Van
       Tingham (1983)
1979. Sa - 1, May 17, Sibbald Flat - Wiseley (1979a)
1980. B - 1 singing, June 9, Coal Valley - CAW, CRW
     Eb - 2, July 4-6, North Ghost Campground, Waiparous Creek - ANS

**Cordilleran Flycatcher (Empidonax occidentalis)**

During the decade, this species was known as the Western Flycatcher (*Empidonax diffícilis*). This was subsequently changed to Cordilleran Flycatcher (American Ornithologists' Union 1989).

Spring migration records were few, but it appeared that the first birds arrived in the last half of May.

The Cordilleran Flycatcher nests in the mountains and foothills of southwestern Alberta north as far as the Jasper and Cadmin areas (Salt & Salt 1976). Within its range, it appears to be local and uncommon, but because it is rather inconspicuous, it may be more widespread. There was an extralimital nest record from Whitehorse Creek along the Forestry Trunk Road south of Edson in 1978. This flycatcher prefers streamside habitats in steep-sided valleys. In these areas, it utilizes both coniferous and deciduous woods, but typically nests on cliffs or banks.

Data for fall migration was scarce. It appeared that migration occurred in August, with the latest record for the decade being September 10. The migration records from Calgary in 1975 and 1979 were the first Alberta records away from the mountains and foothills.

1972. B - 1 adult feeding fledged young, July 4, Bow Valley P.P. - CRW
1973. F - 1, Aug. 16, Mistaya Creek, Banff N.P. - Holroyd & Van Tingham
       (1983)
     - 1 adult, Aug. 20, Eisenhower Junct., Banff N.P. - SCO
1975. B - 14 nests, June 22-Aug. 10, creeks near Sheep River Ranger
     Station - DEE
     Em/F - 1, Aug. 25-Sept. 10, Calgary - RUJ
1977. Sa - 1 singin, May 19, lower Bow River, Banff N.P. - Holroyd & Van
     Tingham (1983)
     S - 3, May 28, Yamnuska - Wiseley (1979b)
     E - nest with 4 eggs, July 3, Kananaskis P.P. - GRG
     - 1, July 24, Bragg Creek - KAD
1978. S - 7, May 27, Longview - PAB

-24-
B - nest with 3 young, July 16, Johnston Creek, Banff N.P. - Holroyd & Van Tighem (1983)
Eb - nest, July 22, Whitehorse Creek along Highway 40 south of Edson - CHH
1979. Em/Sa - 1, May 19, Calgary - MIB
B - 1 adult carrying food, Aug. 11, Talbot Lake, Jasper N.P. - Holroyd & Van Tighem (1983)

Eastern Phoebe (Sayornis phoebe)

The Eastern Phoebe is the first flycatcher to arrive in Alberta in the spring, with the first birds usually appearing in mid to late April. First dates for the decade ranged from April 11 to 30. This species was not recorded in Waterton Lakes National Park (Sharp 1973), and there were no spring observations from Kananaskis Provincial Park (Salt 1976). In Banff and Jasper National Parks, this species was a rare spring migrant, with only a few records from late April and May (Holroyd & Van Tighem 1983).

The Eastern Phoebe is a woodland bird that prefers edges of woods and clearings. It nests throughout Alberta except in the mountains and grasslands. Data for the decade showed that there were extralimital nesting season records from Millarville, Bow Valley Provincial Park, Seebe, Cochrane, Sheep River Ranger Station, Grande Prairie, Banff, Oldman River near Whaleback Ridge, and a ranch just north of Waterton Lakes National Park. Salt & Salt (1976) state that this species nests in the Cypress Hills. However, this is based on a single report of nesting in 1971 which has since been discounted. The 1972 nesting record from Dry Island Buffalo Jump Provincial Park is interesting because the nests were in caves, and the 1975 record from the Sheep River area indicated the possibility that this species may produce second broods in Alberta.

In the Ft. MacKay area, Francis & Lumbis (1979) observed this species most often around man-made clearings where it used buildings and other structures for nest sites.

Fall migration occurred mainly in August, with the last birds generally observed in late August or early September. The latest fall migration date for the decade was September 9.

1971. Sa - 2, April 27, Mirror - MAC
1972. Sa - 1, April 30, Ponoka - WWS
Eb - 2, May 21, Millarville - GEA, WEB, BIL, VGL
B - 2 nests in caves, May 24 & June 1, Dry Island Buffalo Jump P.P. - WWS
Eb - 1 pair & nest, summer, Bow Valley P.P. - Wallis & Wershler (1972b)
- nested, summer, A. Russell ranch near Waterton Lakes N.P. - Sharp (1973)
Fc - 1, Aug. 31, Calgary - BIL, VGL
Fa - 1, Aug. 22, Carseland - RUB
1974. Sa - 1, April 14, Sherwood Park - JAP
1975. Sa - 1, April 26, Buffalo Lake - ENHC
- 1, April 27, Calgary - ANS
- 1, April 29, Grande Prairie - WAM, YVM
- April 29, Syncrude lease - Sharp & Richardson (1976)
Eb - nesting, May 21, northwest of Cochrane - DAB, GUB
- nest with young, June 7, Oldman River near Whaleback Ridge - CRW
- nest with young which left by July 1, Sheep River Ranger Station
  - DEE. On July 24 this same nest had 3 eggs; on July 27 there
  were 3 young in this nest.
- fledged young, July 10, Grande Prairie - WAM, YVM
- 1, July 16 & Aug. 5, Banff - Holroyd & Van Tighem (1983)
  Fc - Aug. 22, Syncrude lease - Sharp & Richardson (1976)
  - 1, Sept. 9, Calgary - HWP
1976.  Sa - 3, April 11, Galahad - KAS
  - 1, April 18, Big Hill Springs P.P. - MGO, TOO
  - April 20, Ft. MacKay - Francis & Lumbis (1979)
  S - 1, April 26, Banff - Holroyd & Van Tighem (1983)
  F - 1, Aug. 23, Boulton Creek, Kananaskis P.P. - Salt (1976)
  Fc - 1, Sept. 7, Calgary - HWP
1977.  Sa - 1, April 19, Edmonton - JOF
  - 1, April 23, Ft. MacKay - WWS
  B - 3 adults in attendance at 2 nests, June 18, Ft. MacKay - WWS.
  One nest contained one egg & four newly hatched young; other
  nest contained one fresh egg.
  - 1, June 28, Swift Lake - CAW
  Fc - Aug. 23, Ft. McMurray - Gulley (1979)
1978.  Sa - 1, April 21, Grande Prairie - YVM
  - 1, April 22, Dogpound - AAM, JMP
  - April 30, Ft. McMurray - Gulley (1979)
1979.  Fc - 1, Sept. 3, Bottrel - SPJ

Say's Phoebe (*Sayornis saya*)

The first spring migrants, alone or in twos, usually arrived in Alberta during
late April, with first spring dates for the decade ranging from April 20 to
May 2. There were a number of extralimital spring migration records from
locales such as Jasper, Dunstable, Edson, Banff, Little Smoky, Dimsdale, Ft.
McMurray, Ft. MacKay, Weberville, Dunvegan, Grande Prairie, Lesser Slave Lake
Provincial Park, Beaverhill Lake, Bear Lake and Saskatoon Lake. It is
possible that records from these areas indicate a minor migration route east
of the Rockies of birds heading for nesting grounds in northern British
Columbia, Northwest Territories, Yukon or Alaska. This idea is supported by
the fact that a number of these spring records are from the last half of May
and early June, considerably later than the first migrants are observed in
southern Alberta.

Say's Phoebes nest in the grasslands of southeastern Alberta, and much less
commonly in the southern parklands and foothills. This species is primarily a
bird of badlands, barren prairie coulees and river banks, but birds may also
be found around prairie farms where they nest under the eaves of a building or
in open buildings. The 1971 nesting site at Dinosaur Provincial Park was very
unusual.

The only two sites in the province where both species of phoebes have been
reported nesting are Big Hill Springs Provincial Park and Dry Island Buffalo
Jump Provincial Park.

Fall migration occurred mainly in August, with the last birds generally
observed in Alberta during late August and early September. There were late
September observations for 1971 and 1976. There were fall observations from
the mountains and northern Alberta, but fewer than reported during spring
migration.

1971.  Sa - 1, April 20, Taylor - NGK, HWP
1972. Em/Sb 20, April 24, Little Fish Lake area - WWS, CAW

1974. Sa 1, April 22, Wayne - LIM, DVW

1975. Sa 1, April 27, Hastings Lake - BOT

1976. Em/Sa 1, March 31, Banff - Holroyd & Van Tigham (1973)

1977. Sa 1, April 25, Calgary - Butot (1976c)

1978. Sa 1, April 28, Grande Prairie - GEC

1979. Sa 1, April 23, Calgary - JOT

B - brood in Barn Swallow nest near roof of small cave, June 8, Dinosaur P.P. - Kondla (1972)

Fc 1, Sept. 22, Calgary - VGL

1972. Sa 2, April 23, Rosedale - GEA, WEB, BIL, VGL


Eb - 1, on a single day between May 29 & June 10, Goosegrass Lake - H. Smith (1975b)

F - 1, Aug. 30, Waterton Lakes N.P. - Sharp (1973)

Fc 1, Sept. 12, Champion - GWG

1973. Sa 1, May 2, Miquelon Lake P.P. - JIW

Fc 1, Sept. 11, Calgary - WWS

1974. Sa 1, April 22, Wayne - LIM, DVW

1975. Sa 1, April 27, Dunstable - BIL, VGL

Fc 2, Aug. 12, Edson - REG

Eb - 2, May 28, Little Smoky - JLC

Em 1, April 27, Dimsdale - YVM, DVW

Em/Fc - 1, Aug. 30, Lesser Slave Lake P.P. - DEG, GGC

Em/Sa - 1, May 2, Miquelon Lake P.P. - JIW

Eb 1, June 9, Miquelon Lake area - KWT

Em - 1, Aug. 2, Ft. McMurray - Gulley (1983)

Fc - 2, Aug. 29, Conrich - HWP

Em/Sa - 1, April 27, Little Smoky - ETB

Em/Fc - 1, Aug. 30, Lesser Slave Lake P.P. - DEG, GGC

Em - 1, May 12, Ft. McMurray - Gulley (1983)

Eb - 1, July 20, Swan Hills - DEG, GGC

Fc - 2, Aug. 31, Calgary - RUB

Em/Sa - 1, April 25, Calgary - Butot (1976c)

Em/Fc - 1, Sept. 2, Syncrude lease - Sharp & Richardson (1976)

Em/Sa - 1, April 27, Little Smoky - ETB

Em/Fc - 2, Sept. 5, Water Valley - Johnston (1976b)

Em/Sa - 1, March 31, Banff - Holroyd & Van Tigham (1973)

Em/Sa - 1, April 27, Little Smoky - ETB

1976. Em/Sa - 1, April 27, Little Smoky - ETB

- 1, April 27, Dimsdale - YVM, DVW

- 1, May 12, Ft. McMurray - Gulley (1983)

- 1, June 9, Miquelon Lake area - KWT


- 2, Aug. 29, Conrich - HWP

- 1, Sept. 24, Boulton Creek - Salt (1976)

- 1, April 25, Calgary - Butot (1976c)

1977. Em/Sa - 1, April 27, Little Smoky - ETB

- 1, May 8, Ft. MacKay - WWS

- 1, May 9 & 13, Ft. McMurray - Gulley (1983)

- 1, May 15, Weberville - CAW

- 1, May 16, Dunvegan - CAW

- 1, July 12, Wembley - ELC, GEC, JVL

1978. Em/Sa - 1, April 25, Calgary - WIH

- 1, April 28, Grande Prairie - GEC


- 1, May 13, Lesser Slave Lake P.P. - Bradley (1980a)

- 1, May 16, Ft. McMurray - BRW

- 1, May 22, Beaverhill Lake - RUB

- 1, May 24, Bear Lake - ELC, GEC, JVL

1979. Em/Sa - 1, April 29, Saskatoon Lake - ELC, GEC

- 1, April 23, Calgary - JOT

- up to 2 birds, Aug. 8-30, Gorge Creek - Wiseley (1979a)

- 1, Aug. 15, Wembley - ELC, GEC

- 1, Aug. 29, Jasper - Holroyd & Van Tingham (1983)
[Vermilion Flycatcher (*Pyrocephalus rubinus*)]

The following hypothetical record is the first reported sighting for Alberta. This observation is extremely unusual, and unfortunately, was reported without any supporting documentation.


**Great Crested Flycatcher - (Myiarchus crinitus)**

Prior to the decade, there were only two unconfirmed, but probably reliable, records of this species in Alberta. One report was from Elk Island National Park in 1939 (Ussher 1940a); the other was from Ministik Lake in 1963 (Weber 1974).

The first confirmed report of this species for Alberta, as well as the first documented nesting record, occurred during the 1970's. Great Crested Flycatchers were observed during every year of the decade in east-central Alberta from specific locales including Two Hills, Elk Island National Park, St. Paul, Moose Lake Provincial Park, Cooking Lake, Botha, Kingman, Mann Lake, Delburne, Miquelon Lake, Cold Lake Provincial Park and Edmonton. Northwest of Edmonton, this species has been recorded only three times: twice from Lesser Slave Lake Provincial Park in 1975 and 1977, and once from Dunstable in 1978. The first confirmed report came from Moose Lake Provincial Park in 1974 when the calls of this species were recorded (Weseloh 1977a), while the first documented nesting record was in 1977 near Kingman (Trann 1977). Nesting also occurred in the Kingman area in 1978 and 1979. In east-central Alberta, this species occurs in open situations in deciduous and mixed wood areas, often in the vicinity of human habitations.

The only record for southern Alberta occurred in 1972 when this species was observed as a fall migrant near Carseiland in early September (Lang 1972b).

A summation of all known Alberta records revealed that this species has been observed from May 22 to September 9.


1973. **Eb** - 1, June 10, Two Hills - GRG, PAG

1974. **Eb** - birds present, June, Two Hills area - Salt & Salt (1976)
- 1 pair (calls recorded), June 12-July 11, Moose Lake P.P. - LYB, CAW (Weseloh 1977a)

1975.  Eb - 2, June 7, Two Hills - GRG, PAG, DOM, LYM
  - 1, July 1, Cocking Lake - GRG, PAG, DOM, LYM
  - 1, July 2, Lesser Slave Lake P.P. - CRW (Salt & Salt 1976)
  - 1, July 5, Botha - GRG, PAG, DOM, LYM

1976.  Eb - 1-3 birds, June 4-Aug. 28, Kingman - Trann (1976)
  - 1, June 6, Mann Lake - KAB, PAG (Weseloh 1977a)
  - 1, June 19, Moose Lake P.P. - Weseloh (1977a)
  - 4, Aug. 11, Delburne - GRG

1977.  Eb - May 22-Sept. 6, Kingman - KWT. Ken Trann provides a detailed account of these birds in the PNRS and in Trann (1977) as follows: May 22 - male first seen; June 16 - nest started in bird box; June 17 - female first seen; June 19 - one egg found in nest; June 25 - five eggs in nest; July 11 - 3 young + 2 addled eggs in nest; July 22 - young left the nest; Aug. 17 - complete family last seen; Sept. 6 - male last seen on this day. 
  - 1 male, July 24, Miguelon Lake - Trann (1977). This was a different bird than the above.
  - 1, late summer, Lesser Slave Lake P.P. - CRW (Bradley 1980a)

  - nest with 1 egg & 3 young, July 5, Kingman - KWT. An account of this nest is contained in the PNRS.
  - family of 5, Aug. 14, Elk Island N.P. - RIK

1979.  Eb - 1, June 22, Cold Lake P.P. - Slater (1979)
  - nest with 6 young, July 12, Kingman - KWT. An account of this nest is contained in the PNRS.


**Western Kingbird (Tyrannus verticalis)**

The first spring migrants usually arrived in mid May, with arrival dates for the decade ranging from May 8 to 22. There were extralimital spring migration records from Vegreville, Wembley, Beaverhill Lake, Jasper and Banff.

The Western Kingbird nests in southern Alberta north to Bodo and Big Valley, and west to Lethbridge and Calgary (Salt & Salt 1976). It is found locally in natural situations in open poplar (Populus spp.) woodland along southern river valleys, but is more often encountered in the vicinity of windbreaks and human habitats. During the decade, there were extralimital nesting season records from Jasper, Provost, Willow Creek Provincial Park, Bow Valley Provincial Park, Devon, Tofield, Lesser Slave Lake Provincial Park, Beaverhill Lake and Vermilion.

This species migrates south mainly in August, with the last birds generally observed in late August or early September. The latest observations for the decade were on September 6. There were only two extralimital records during the fall, from Dogpound and Bottrel.

1971.  Sa - 1, May 21, Calgary - RIP
  Fc - 2, Sept. 6, East Coulee - BIL, VGL, WGM

1972.  Sa - 1, May 20, Tolman Bridge - WWS
  - 2, May 20, Standard - HWP, LIP
  Eb - 1, June 13 & 14, Bow Valley P.P. - CAW, CRW
  - 1 pair nesting, June 24-July 23, Provost - PJF

  Fc - 3, Aug. 30, Irricana - RUB
1974. **Sa** - 2, May 17, Hanna - GWG, LOG  
**Eb** - 3, July 27, Willow Creek P.P. - Crack & Danielson (1974d)  
**Fc** - 1, Aug. 24, Calgary - RFC  
1975. **Sa** - 4, May 17, Carseiland - BIL, DVW  
**Em/Sa** - 1, May 18, Vegreville - BUB, BYB  
**Eb** - 1, June 15, Devon - WEH  
- 1 immature, Aug. 3, Tofield - BEB, GEB, JIW  
1976. **Sa** - 2, May 22, Carseiland - HWP  
**Eb** - summer, Lesser Slave Lake P.P. - Bradley (1980a)  
1977. **Sa** - 1, May 21, Calgary - RKO, ADS  
**Em/Fc** - 2, Sept. 3, Dogpound - RUB  
1978. **Sa** - 2, May 18, Irricana - ELH, JOH  
**Em** - 1, May 21, Wembley - DOW, LEW  
**B** - 30, July 9, Lake Newell - RUB  
**Fc** - 1, Aug. 27, Irricana - RUB  
1979. **Sa** - 1, May 8, Indus - PEB  
**Em** - 1, May 25, Jasper N.P. - Holroyd & Van Tighem (1983)  
**Eb** - 1, June 7, Beaverhill Lake - RIK  
- 1, June 23, Vermillion - RIK  
**B** - 25, Aug. 5, Irricana - RUB  
**Em/Fc** - 1, Sept. 6, Bottrel - SFJ  
1980. **Sa** - 2, May 20, Writing-on-Stone P.P. - DAE  
**Em** - 1, May 24, Beaverhill Lake - PSA, JIF, ALS (Gollop 1980a)  

**Eastern Kingbird (Tyrannus tyrannus)**

During the decade, the first spring migrants arrived from May 9 to 22. This was remarkably similar to the arrival dates of the Western Kingbird. Spring migration of the Eastern Kingbird in the mountains and northern Alberta generally occurred in mid and late May (Francis & Lumbis 1979; Holroyd & Van Tighem 1983).

Salt & Salt (1976) indicate that this species nests throughout Alberta but is scarce in the heavily forested regions of the north and in the Rocky Mountains. However, it is actually absent from much of the far north and western Alberta. In Banff and Jasper National Parks, Holroyd and Van Tighem (1983) report this species as a fairly common summer resident only in the lower valleys, being most common in the Bow River and Athabasca River watersheds. In Waterton Lakes National Park, the Eastern Kingbird is a common summer resident, preferring shrubbery and forest edges near ponds, rivers, and lakes at lower elevations (Sharp 1973).

In the Ft. MacKay area, this species frequents open habitats such as muskegs, marshes, lakeshores, and man-made clearings characterized by scattered trees and/or an abundance of dead snags (Francis & Lumbis 1979).

Fall migration commences in mid August and is relatively short in duration as the last few birds are usually observed during late August or the first ten days of September. The latest record for the decade was September 15.

1971. **Sa** - 1, May 17, Calgary - WWS  
**Fc** - 5, Sept. 4, Gladys - BIL, VGL  
- 2, Sept. 7, Reesor Lake - WWS  
1972. **Sa** - 1, May 17, Lacombe - VGL  
**Fc** - 1, Sept. 9, Carseiland - GEA, WEB  
1973. **Sa** - 15, May 18, Beaverhill Lake - LOG  
**Fc** - 2, Sept. 10, Calgary - HWP, CAR  
1974. **Sa** - 1, May 14, Rockyford - LIM, DVW  

-30-
- 1, May 17, Tofield - GWG, LOG  
Fc - 1, Aug. 31, Conrich - RUB  
- 1, Aug. 31, Sundre - CAR  
1975. Sa - 2, May 17, Franchere - PAP  
- 2, May 17, Bonnyville - PUP  
- 1, May 21, Spruce Grove - BEB, GEB  
- 1, May 21, Cheadle - TSS  
- May 21, Syncrude lease - Sharp & Richardson (1976)  
Fc - 1 flock of 54, Aug. 26, Syncrude lease - Ward et al. (1976)  
- 1, Sept. 9, Calgary - HWP  
- 2, May 22, Calgary - HWP  
- 2, May 23, Bear Lake - RIC  
Fc - 1, Aug. 29, Calgary - HWP  
- Sept. 15, Ft. MacKay - Francis & Lumbis (1979)  
1977. Sa - May 9, Banff N.P. - Holroyd & Garstshore (1978)  
- 2, May 13, Wembley - MCL  
- 1, May 14, Bruce Lake - SEA, JMP  
Fc - 5, Sept. 3, Crossfield - RUB  
- 1, May 20, Wembley - DOW  
- 2, May 20, Cremona - RUB  
- May 23, Ft. McMurray - Gulley (1979)  
Fc - 8, Aug. 27, Irricana - RUB  
1979. Sa - 1, May 20, Calgary - BSD  
- 1, May 20, Wembley - ELC, GEC  
1980. Sa - 2, May 22, Calgary - OLD

Scissor-tailed Flycatcher *(Tyrannus forficatus)*

The record below is the fourth report of this southern species in Alberta, and it represents the first observation from the mountains. Salt & Salt (1976) list details of the three reports previous to the decade. It is noteworthy that three of the four sightings were from southern Alberta during June.

1980. Ev - 1, early June, Spray Lake - AIR

**FAMILY: ALAUDIDAE**

**Horned Lark** *(Eremophila alpestris)*

Migrant Horned Larks usually arrive in southern Alberta in mid February. However, in some years migrants may arrive as early as late January. The earliest spring record for Ft. McMurray was April 26, 1978. Spring migration in Banff and Jasper National Parks was during late April and May, with the earliest record being March 17, 1979 (Holroyd & Van Tighem 1983). Spring migration peaked in southern Alberta from mid March to early April.

The Horned Lark is one of the commonest nesting passerines in Alberta. Salt & Salt (1976) list four subspecies for the province. The status and range of the two subspecies which nest in the grasslands and parklands are not well defined. These grassland populations typically nest in heavily grazed
grasslands, and frequently raise two broods in a season. With the spread of agricultural practices, this species has also been able to adapt to nesting in cultivated fields and other disturbed areas. Because of this, the range has been extended into the southern edges of the boreal forest.

A third subspecies, arcticola, which nests in the alpine areas of western Alberta, is more common in Jasper National Park than it is in Banff National Park (Holroyd & Van Tighem 1983). Although both Salt & Salt (1976) and Godfrey (1986) show that the breeding range includes all the alpine areas of Alberta, data indicates that Plateau Mountain is the farthest south in the mountains that nesting has been recorded (Sadler & Myres 1976). However, Sharp (1973) states that a few may breed in alpine areas of Waterton Lakes National Park, but has no data to support this. Holroyd & Van Tighem (1983) state that Horned Larks nest almost exclusively in well-drained alpine tundra, with the highest density occurring in the mountain avens (Dryas octopetala)-snow willow (Salix reticulata ssp. nivalis)-moss campion (Silene acaulis) community.

Salt & Salt (1976) indicate that a fourth subspecies, hoyti, may nest near Lake Athabasca. Macoun & Macoun (1909) cite a breeding record of this arctic subspecies at Ft. Chipewyan, but do not include any details. There was a nesting record from the Syncrude lease in 1975 (Francis & Lumbs 1979), but the subspecies represented by this record was not determined. E. a. hoyti is a common migrant in southern Alberta. In late March or early April, large flocks of this subspecies pass through the grasslands at the same time that local races are already nesting.

In the fall, migrant Horned Larks were recorded in the Ft. MacKay area from August 30 to October 17 (Francis & Lumbs 1979). In Banff and Jasper National Parks, migration peaks in mid to late September (Holroyd & Van Tighem 1983). Most Horned Larks leave the province by early to mid November.

It appears that Horned Larks regularly winter as far north as Calgary and Drumheller. The few records north of this area have been listed as extralimital. The farthest north winter record was from Saskatoon Lake. There were also two winter records for Jasper National Park. Usually, Horned Larks occur only in small numbers in Alberta during the winter. However, large numbers were reported in the winter of 1977/78.

1971.  
W - 65, Jan. 8, Calgary - WWS
- 35, Jan. 9, Carseland - VGL, DVW
Eb - 1, early June, Utikuma Lake - H. Smith (1975b)
- 3 immatures, Aug. 8, Highwood Pass - St. Clair (1971)

1972.  
W - 35, Jan. 3, Langdon - HAV
- 10, Jan. 8, Hesketh - HWP, LIP, CAW
Sb - 700, March 18, Shepard - RIP
Ew - 7, Dec. 24, Botha - GRG, PAG

W - 25, Jan. 1, Delacour - HAV
Sa - 30, Feb. 17, Strathmore - TSS
- 1, Feb. 17, Tofield - LOG
Sb - 400, March 12, Calgary to Carseland - HAV
Fc - 1, Nov. 18, Kathyrn - PTB, SCO
W - 100, Dec. 25, Skiff - GRW
- 150, Dec. 25-27, Grassy Lake - GRW

1974.  
Sa - 1, Feb. 9, Cheadle - TSS
- 12, Feb. 24, Camrose - BEB, GEB
Sb - 800, March 9, Calgary to Baintree - RUB, ADM, JIM
- 3,000, April 6, Calgary to 16 km north of Calgary - HAV
Fc - 12, Nov. 3, Lake McGregor - EWB, RUB
Ew - Dec. 26 (+/- 1 week), Stettler - Christmas Bird Count
1975.  Sa - 25, Jan. 31, Dry Island Buffalo Jump P.P. - WWS  
- 70, Feb. 1, Cheadle - TSS  
- 13, Feb. 16, Kingman - BEB, GEB, JIW  
Sb - 1,000+, March 24, Carbon - KAM  
Eb - 1 juvenile recently fledged, July 22, Syncrude lease - Ward et al. (1976)  
1976.  Ew - 20, Jan. 9, Galahad - KAS  
Sa - 4, Feb. 22, Calgary - DVW, LIW  
- 1, Feb. 22, Camrose - BRB, GAB  
- May 12, Ft. MacKay - Francis & Lumbis (1979)  
Fa - Aug. 30, Ft. MacKay - Francis & Lumbis (1979)  
Fb - 300, Sept. 6 & 7, Lower Kananaskis Lake - Salt (1976)  
1977.  Ew - 1, Jan. 3, Hythe - GOH  
Sa - 90, Jan. 29, Brant - WWS  
- 3, Feb. 13, Vegreville - ERB  
- 1, May 2, Ft. MacKay - WWS  
Eb - 1 pair in grasslands, May 29, Beaverlodge - BBM, GEM  
- 1 adult & 1 young, July 30, Whistler Mt., Jasper N.P. - LRB  
Fa - 20, Sept. 1, Ft. MacKay - WWS  
W - 332, Dec. 27, Calgary - Christmas Bird Count  
- 770, Dec. 27, Lethbridge - Christmas Bird Count  
1978.  W - 200, Jan. 3, Mazeppa - GRW  
- 750 in small flocks, Jan. 25, Three Hills to Calgary - WWS  
Sa - 7, March 12, Strathmore - MIR  
- April 26, Ft. McMurray - Gulley (1979)  
Fb - 300, Sept. 13, Slave Lake - ELH  
- 700+, Oct. 8, Wildhorse - RUB  
Fc - 8, Nov. 27, Jasper N.P. - Holroyd & Van Tighem (1983)  
Ew - 65, Dec. 26, Saskatoon Lake - ELC, GEC  
W - 541, Dec. 26, Lethbridge - Christmas Bird Count  
Sa - 1, Feb. 14, Irricana - CLM  
1980.  Ew - 12, Jan. 5, Saskatoon Lake - ELC, GEC  

FAMILY: HIRUNDINIDAE  

Purple Martin (Progne subis)  

Most Purple Martins apparently enter central Alberta in the spring from the east and bypass southern Alberta. The first spring migrants, small numbers of males, usually arrive in late April or early May. There was an exceptionally early record for 1979.  

The range of this species in Alberta is poorly known. It regularly nests in central Alberta south to the Penhold area. In the decade there were extralimital nesting records for Trochu, Drumheller and Calgary. There were no records for the mountains (Sharp 1973; Salt 1976; Holroyd & Van Tighem 1983). Although this species has nested in the Ft. McMurray area, there are no recent records (Francis & Lumbis 1979).  

Purple Martins now appear to be highly dependent on bird houses for nesting. Horsbrugh (1918) documents a record of natural cavity nesting in the Sylvan Lake area, where some nested in stumps in a recently burned area in 1916.
Pinlay (1975) summarizes the known Alberta nesting records of this species using natural cavities.

As in the spring, Purple Martins appear to mostly bypass the southern third of the province during fall migration. They are rarely seen after the end of August, the latest record for the decade being September 9. There was an unusual record of a large number at a roost in Sherwood Park over a three to four week period in 1977.

1971.  
Sa - 4 males, May 1, Lac Ste. Anne - WIH, WGM, MIP, RIP  
Eb - 1 male, late May, Drumheller - Kondla et al. (1973)  
- up to 13 birds, May 27 to July 3, 4 different sites in Calgary - Bird & Bird (1971). Eggs were laid at one site, but were destroyed by European Starlings.  
Fb - 8+, Aug. 15, Gull Lake - ADB, CDB

1972.  
Sa - 6 males, May 4, Miquelon Lake P.P. - WWS, CAW, CRW  
Em/Sc - 1 female, May 28, Beynon - Kondla et al. (1973)  
B - 1 pair & 4 young, Aug. 3, Elnora - WWS  
Eb - 1 pair & 3 young, Aug. 8, Trochu - WWS  
Fc - 1, Sept. 9, Sylvan Lake - NGK

Sa - 2 males, April 20, Edmonton - EWC  
B - 40 nests with eggs, May 28, Sylvan Lake - HSA (Houston 1973c)  
- 31 pairs, summer, Thunder Lake - CAF

1974.  
Sa - 1 male, May 4, Ft. Saskatchewan - JIW  
Fc - 15, Sept. 5, Busby - RIP

1975.  
Sa - 3 males, May 2, Rocky Mt. House - BLM  
- 1, May 8, Edmonton - JHA, MIA  
Em/Sa - 1 male, May 7, Calgary - WWS  
Em - 2, May 13, Strathmore - TSS  
- 2 females, May 15, Calgary - BNB

1976.  
Sa - 2, May 8, Sherwood Park - RIC  
Eb - 1 pair & a fledged young, Aug. 14, Calgary - MMH, NAM, WGM  
(Weseloh 1977a; Pinel & Butot 1978). This is the first successful nesting record for Calgary.

1977.  
Sa - 1 male, May 3, Galahad - KAS  
- 6, May 4, Edmonton - RIC  
- 1 female, May 11, Wembley - DOW, LEW  
Em - 4, Aug. 14, Calgary - HDM

1978.  
Sa - 1, April 26, Edmonton - LYM

1979.  
Em/Sa - 1 male, April 19, Irricana - CLM  
Em - 3, April 29, Millarville - DRD

Tree Swallow (Tachycineta bicolor)

Tree Swallows arrived in southern Alberta from April 5 to 20. Migration occurred in Banff and Jasper National Parks in late April and May, with the peak in mid to late May (Holroyd & Van Tighem 1983). Francis & Lumbis (1979) reported an arrival date in the Ft. MacKay area of April 26.

Tree Swallows nest throughout the province. However, they occur locally in the grasslands of southeastern Alberta, mainly in river valleys or where nest boxes are provided. In the mountain national parks, this species occurs only at lower elevations (Sharp 1973; Holroyd & Van Tighem 1983). In the Ft. MacKay area, it nests wherever forests border lakes or rivers, the limiting factor being the availability of nest sites (Francis & Lumbis 1979).
Tree Swallows have readily adapted to nest boxes, and the creation of bluebird trails has increased their numbers. Pinel (1980) discusses reproductive efficiency and site attachment of this species in connection with a bluebird trail in the Calgary area from 1973 to 1978. Clutch size varied from 5.46 to 5.86; the number of young fledged per nest varied from 3.33 to 4.88; and reproductive efficiency varied from 56.8% to 89.3%. Adults retrapped in following years moved an average distance of 3.17 km from the point of banding, whereas birds banded as nestlings and returning to nest were retrapped an average distance of 20 km from their natal site.

Wilde (1979) reported that Tree Swallows deserted their nests in a farmyard one day after application of a pesticide, while nesting birds remained in a nearby farmyard, where no pesticides were applied. About 14 days after insecticide application, Tree Swallows returned to the yard. Shaw (1984) studied levels of several organochlorine pesticides and PCB's in nesting birds in the Edmonton area in 1978 and 1979. Higher levels were found in large nestlings than in eggs, indicating some contamination was originating in the nesting territories.

Most birds leave the province by the end of August, with stragglers lingering until the third week of September in some years. Holroyd & Van Tighem (1983) state that most birds leave Banff and Jasper National Parks by the end of July, but the species was recorded as late as September 8.

1971.

Sa - 4, April 13, Barrier Lake - TSS
Fb - 1 pair at nest, May 25, Elkwater - WWS
   - 1 pair at nest, June 10, Reesor Lake - WWS
   - 4 pairs & 2 nests, June 19, Battle Creek - WWS
Fc - 1, Sept. 18, East Coulee - NGK

1972.

Sa - 3, April 7, De Winton - VGL, RIP
Sh - 40+4, April 29, Calgary - HWP
   - 50, May 6, Bow Valley P.P. - BIL, VGL
Fc - 2, Aug. 27, Frank Lake - CFNS


Sa - 1, April 20, Vegreville - CAF
   - 3, April 22, Irricana - BIL, VGL
Sh - 35-40, April 28, Carseland - BIL, VGL, CAR
B - 1, June 13, Winagami Lake P.P. - WWS. The bird was nesting in a
    Cliff Swallow nest in an active Cliff Swallow colony.
Fc - 2, Sept. 12, Redwater - DEG, GCG

1974.

Sa - 2, April 20, Frank Lake - EWB, LIM, DVW
   - April 26, Grande Prairie - YVM
Sh - 100, April 28, Leduc - HES
Fc - 2, Sept. 16, Leduc - RIP

1975.

Sa - 1, April 13, Calgary - BIL, CAR
   - 1, April 20, Tofield - DID
   - 3, April 20, Grimshaw - JAF
   - April 30, Syncrude lease - Sharp & Richardson (1976)
Fc - Aug. 25, Mildred Lake - Sharp & Richardson (1976)
   - 2, Sept. 6, Millarville - RUB

1976.

Sa - 1, April 7, Cochrane - HWP
   - 5, April 20, Morinville - PED
   - April 26, Ft. MacKay - Francis & Lumbis (1979)
   - 2, April 27, Dimsdale - DVW
Fc - 6, Sept 2, Ft. Chipewyan - RAE

1977.

Sa - 1, April 5, Frank Lake - GRW
   - 2, April 5, Chain Lakes P.P. - HWP, JOR
   - 1, April 8, St. Albert - PED
   - April 22, Ft. McMurray - Gulley (1979)
Fb - 80, Aug. 23, Grande Prairie - WAM, YVM
Fc - Sept. 8, Banff N.P. - Holroyd & Gartshore (1978)
Violet-green Swallow (Tachycineta thalassina)

Violet-green Swallows arrive during late April and early May. While spring migrants usually occur in small flocks, an exceptionally large number was observed in the spring of 1972.

The known nesting range of this species has changed significantly during the period between the publication of the second and third editions of The Birds of Alberta. The third edition depicts a more extensive range which includes the extreme southern portion of the grasslands. Here, Violet-green Swallows are found nesting primarily in cliffs along the lower Milk River valley, but they have also been seen in the summer along the Belly River (Salt & Salt 1976). During the 1980's, numbers have increased along the lower Milk River and new nesting populations have been discovered along the lower stretches of the South Saskatchewan and Red Deer Rivers. In these areas, Violet-green Swallows have occasionally been seen in association with colonies of Cliff Swallows. Future work in southeastern Alberta may show that Violet-green Swallows utilize old Cliff Swallow nests, as reported for other areas of North America by Harrison (1987).

In the mountains, this species is found from Waterton Lakes National Park north to Jasper National Park. Within this area, there are discrepancies in abundance and distribution. Salt & Wilk (1966) and Salt & Salt (1976) state that this species has become more abundant and has extended its distribution within the mountains of Alberta. However, Holroyd & Van Tighem (1983) report that for Banff and Jasper National Parks this species appears to be less common than it formerly was. In Waterton Lakes National Park, Sharp (1973) considers this species to be locally common. In the mountain national parks, it is primarily restricted to lower valleys, where it nests in buildings as well as natural sites.

Salt & Salt (1976) indicate that most Violet-green Swallows leave the province by the end of August. Fall migration in Banff and Jasper National Parks occurs during late July and August (Holroyd & Van Tighem 1983).

1971. Em/Ep - 1, May 20, Elkwater - WWS
   Ep - 1 pair feeding young in nest in sandstone cliff, July 5, Milk River Canyon - WWS
1972.  Sa - 9, April 22, Canmore - GEA, WEB
   Sh - 300+, April 24, Seebe - VGL
1973.  Sa/Sh - 80, April 23, Seebe - BIL, VGL
   - 8, May 6, Jasper - LIM, DVW
   Eb - 3, June 5, Milk River near Onefour - CAW
   - 1 pair at nest in old woodpecker cavity, June 6, Milk River near Wildhorse - WWS

- 8, Sept. 13, Calgary - PES
1978.  Sa - 4, April 16, Calgary - ANS
   - 25, April 20, Wembley - ELC, GEC
   Sh - 600, April 28, Miquelion Lake - KWT
1979.  Sa - 10, April 8, Calgary - JOR
   - 1, April 25, Grande Prairie - ELC, LRD
1980.  Sa - 2, April 18, Whaleback Ridge - CRW, RAW
   Sh - 500+, April 21, Calgary - OLD
   B - 1,000, May 30, Calgary - ANS
   - 1 pair nesting, June 21, Milk River Canyon - CAW, CRW
  Fc - 1, Sept. 19, Cochrane - KAM
   - 1, Sept. 21, Irricana - Steeves (1981)
- nest & several pairs, June 10, Pinhorn Grazing Reserve - W. Smith (1975)
- 1 pair, June 11, Kennedy Creek - WWS
- 1, July 2, Onefour - WWS

1975.  
Sa  - 1, May 12, Vermilion Lakes, Banff N.P. - Karasiuk (1976a)  
Eb  - 3 pairs, June 29, Milk River near Wildhorse - WWS  
F  - 1, July 27, Chain Lakes P.P. - PIN

1976.  
Sa  - 3, May 11, Jasper N.P. - Holroyd & Karasiuk (1977)  

1977.  
Sa  - 2, April 22, Banff - Holroyd & Van Tighem (1983)  
B  - 50+ at nests, June 17-19, Banff Springs Hotel - Holroyd & Van Tighem (1983)

1978.  
Sa  - 2, April 24, Canmore - EMV  

1979.  
B  - 1, June 4, Lost River near Onefour - CRW

Northern Rough-winged Swallow (Stelgidopteryx serripennis)

Northern Rough-winged Swallows arrive in Alberta from late April to mid May. Holroyd & Van Tighem (1983) record the peak of spring migration as early to mid May for Banff and Jasper National Parks, with migrant flocks of up to 25 birds being not uncommon.

In Alberta, the Northern Rough-winged Swallow nests mainly along watercourses in the grasslands and parklands north to about Red Deer. It also extends westward into the foothills and mountains along river valleys. Within this range, this swallow is very localized and nowhere abundant. From Jasper National Park southward, it occurs at lower elevations, usually near lakes or rivers (Sharp 1973; Holroyd & Van Tighem 1983). There were extralimital nesting season records from Edmonton, Winagami Lake Provincial Park and the Syncrude lease during the decade.

There is little information on the fall migration of this species in Alberta. From available data, it appears that most birds leave the province by mid August. The latest date for this decade is August 24, 1974. In contrast, the last date for four years in the previous decade varied from September 4 to 13 (Sadler & Myres 1976). Holroyd & Van Tighem (1983) note that migration occurs from late July to mid August in Banff and Jasper National Parks. ETJ recorded a sizeable movement in mid August of 1975 in the Oldman River Gap.

1971.  
Sa  - 2, May 8, Calgary - HAV
1972.  
Sa  - 4, April 30, Canmore - GEA, WEB, BIL, VGL
Sa  - 1, May 5, Seebe - VGL  
Eb  - 1, June 21, Winagami Lake P.P. - WWS
1974.  
Sa  - 1, May 5, Pinhorn Grazing Reserve - WWS  
- 2, May 6, Calgary - HAV  
Fc  - 2, Aug. 24, Calgary - HWP, CAR
1975.  
Sa  - 2, May 11, Calgary - HWP  
Eb  - 1 pair & 5 young, June 14 to July 26, Syncrude lease - Sharp & Richardson (1976)  
B  - 1 nest, June 26, Banff - Holroyd & Van Tighem (1983)  
Fb  - sizeable movement (16 banded), Aug. 16-18, Oldman River Gap - ETJ
1976.  
Sa  - 2, May 6, Calgary - ELH
1977.  
Sa  - 1, April 28, Calgary - JOR  
Bank Swallow (*Riparia riparia*)

Bank Swallows usually arrive in small numbers in southern Alberta in early May. There was an exceptionally early date for 1972. For the Ft. MacKay area, Francis & Lumbis (1979) reported an arrival date of May 10. For Banff and Jasper National Parks, Holroyd & Van Tighem (1983) recorded Bank Swallows arriving from late May to early June, with a peak in late May.

Godfrey (1986) and Salt & Salt (1976) show that this swallow nests throughout all of Alberta in suitable habitat. However, Sharp (1973) has no definite nesting data for Waterton Lakes National Park. Holroyd & Van Tighem (1983) consider this species to be an uncommon summer resident in Banff and Jasper National Parks, and have only a few recent nest records. For the Ft. MacKay area, Francis & Lumbis (1979) note that this species is a local nester. They also have an unusual record of a solitary nest in 1977.

It appears that most Bank Swallows leave central and southern Alberta by mid August, with stragglers lingering into early September in some years. Francis & Lumbis (1979) reported that Bank Swallows leave the Ft. MacKay area in mid August. In Banff and Jasper National Parks, most birds depart in late July and August (Holroyd & Van Tighem 1983).

1971.  
*Sa* - 1, May 9, Gladys - CDB
- 7, May 9, Calgary - MIP, RIP

1972.  
*Sa* - 6, April 19, Waterton Lakes N.P. - Sharp (1973)
- 1, April 28, Cheadle - TSS
*Ph* - 300+, Aug. 27, Frank Lake - CFNS
*Fc* - 1, Sept. 3, Shepard - BIL, VGL

*Sa* - 4, May 9, Irricana - VGL, CAR
*Fc* - 1, Sept. 5, Brant - RUB

1974.  
*Sa* - 2, April 30, Milk River Canyon near Onefour - WWS
- 2, May 12, Namaka Lake - RUB
*Fc* - 7, Sept. 8, Irricana - RUB
- flock, Sept. 8, Tofield - JIW

1975.  
*Sa* - May 16, Horseshoe Lake - Sharp & Richardson (1976)
*Fc* - Aug. 27, Syncrude lease - Sharp & Richardson (1976)

1976.  
*Sa* - May 1, Tofield - AAJ, SAJ
- 5, May 6, Jasper N.P. - Holroyd & Karasiuk (1977)
- May 10, Ft. MacKay - Francis & Lumbis (1979)

1977.  
- 1, May 6, Galahad - KAS
- May 13, Ft. McMurray - Gulley (1979)
*Eb* - 1 solitary pair nesting in a pit, summer, Ft. MacKay area - Francis & Lumbis (1979)

1978.  
*Sa* - 1 pair, June 24, Edmonton - Harper (1978)
- 2, April 29, Nier - JMP

1979.  
*Sa* - 2, April 28, Calgary - BSD

1980.  
*Sa* - 1, April 18, Whaleback Ridge - CRW, RAW
Cliff Swallow (*Hirundo pyrrhonota*)

Cliff Swallows generally arrive in small numbers in southern Alberta during the first two weeks of May. Sharp (1973) states that spring arrival is in mid to late May for Waterton Lakes National Park. For Banff and Jasper National Parks, Holroyd & Van Tighem (1983) have an arrival of May, with a peak in late May. Francis & Lumbis (1979) give an arrival date of May 15 for the Ft. MacKay area.

Cliff Swallows are colonial nesters that occur throughout Alberta. However, their distribution is localized. They are absent from extensive areas of the far north where no suitable habitat exists. Large colonies are more common in Banff National Park than in Jasper National Park (Holroyd & Van Tighem 1983). These authors also report on two unique colonies in alpine areas of Banff National Park: 50 nests at Redoubt Lake, and 50 nests at Devon Lakes. Hofman (1980) has an interesting account of a female House Sparrow feeding nesting Cliff Swallows, an apparent case of displacement activity. B. Lang (1974) investigated all bridges in Calgary during June and July 1973 to census nesting Cliff Swallows. He found a total of 2,562 nesting birds, with colony size ranging from 12 to 600 birds.

Most Cliff Swallows leave Alberta by the end of August, with a few remaining into September. The latest date for the decade was September 23, 1976. Cliff Swallows leave Banff and Jasper National Parks in late July and August, with a peak in early August (Holroyd & Van Tighem 1983). Sharp (1973) states that they leave Waterton Lakes National Park by mid August.

1971.  
**Sa** - 1, May 2, Calgary - JOP  
**B** - 12 active colonies, summer, Dinosaur P.P. - Kondla (1978)  
**Fc** - 1 immature, Sept. 6, East Coulee - BIL, VGL, WGM  

1972.  
**Sa** - 2, May 8, Seebe - VGL, DVW  
**Fc** - 15+, Sept. 17, Indus - HWP, CAR  

**Sa** - 2, May 15, Calgary - HWP, LIP  
**B** - 300 nests, June/July, Calgary (Centre St. Bridge) - B. Lang (1974). This was the largest colony in Calgary.  
**Fc** - 2, Aug. 25, Tofield - GWG, LOG  

1974.  
**Sa** - 1, May 3, Milk River Canyon near Onefour - WWS  
- 1, May 9, Rockyford - LIM, DVW  
**Fc** - 2, Sept. 7, Eagle Lake - HWP  

1975.  
**Sa** - 4, May 12, Calgary - RUB  
- May 24, Mildred Lake - Sharp & Richardson (1976)  
**Fc** - Aug. 22, Syncrude lease - Sharp & Richardson (1976)  
- Sept. 21, Milo - Butot (1976a)  

1976.  
**Sa** - 25, May 15, Calgary - BIL  
- May 15, Ft. MacKay - Francis & Lumbis (1979)  
**Fc** - 1, Aug. 23, Ft. Chipewyan - RAE  
- 1, Aug. 28, Kananaskis P.P. - Salt (1976)  
- 7, Sept. 23, Devon - DVW  

1977.  
**Sa** - May 6, Banff N.P. - Holroyd & Gartshore (1978)  
- 3, May 8, Calgary - SEA, JMP  
- 10, May 17, Ft. McMurray - WWS  
**Fc** - Aug. 27, Ft. McMurray - Gulley (1979)  
- 50+, Sept. 4, Chestermere Lake - PEA, PES  

1978.  
**Sa** - 6, May 2, Talbot Lake, Jasper N.P. - Holroyd & Van Tighem (1983)  
- May 3, Ft. McMurray - Gulley (1979)  
- 3, May 7, Conrich - HWP  
**Fc** - 2, Sept. 10, Namaka - RUB  

1979.  
**Sa** - 1, April 28, Calgary - JOR
Barn Swallow (*Hirundo rustica*)

Barn Swallows usually arrived in southern Alberta during the last week of April or the first week of May. For the Ft. MacKay area, Francis & Lumbis (1979) had an arrival date of May 2. The spring peak for Banff and Jasper National Parks was in late May (Holroyd & Van Tighem 1983).

Barn Swallows nest throughout Alberta, but are scarce in the uninhabited regions of the mountains and far north. With human encroachment, Barn Swallows typically move in to nest on human structures. This species frequently attempts to raise two broods in a season, even in the far north (Francis & Lumbis 1979). In some cases, young are still in the nest in September.

Peak fall migration in southern Alberta occurred in late August and early September. During the decade there were late September records for eight years. In 1978, the last birds were recorded in October. In the mountains, fall migration peaks in mid August (Sharpe 1973; Holroyd & Van Tighem 1983).

1971.  
Sa - 4, May 2, Calgary - HAV  
- 2, May 2, Rockyford - JOC  
Fb - 100, Sept. 6, Rosedale - BIL, VGL, WGM  
Fc - 1, Sept. 26, Rosedale - HWP, CAV  
1972.  
Sa - 1, April 26, Calgary - RIP  
Fb - 3 nests, summer, Waterton Lakes N.P. - Sharp (1973)  
Fb - 100, Aug. 26, Milo - EWB  
B - 1 downy fledged young, Sept. 3, Dalemead - BIL, VGL  
- 1 female & 2 young in nest, Sept. 9, Cold Lake P.P. - WWS, CRW  
B/FC - 2 young in nest, Sept. 25, Milo - EWB. No birds in nest next day.  
Sa - 1, April 28, Chestermere Lake - BIL, VGL, CAR  
- 1, May 5, Tofield - GWG, LGG  
Fb - 150, Sept. 5, Brant - RUB  
Fc - 9, Sept. 23, Tofield - LOG  
- 1, Sept. 28, Springbank - SCO  
1974.  
Sa - 1, April 19, Highridge - VGL, CAR  
- 1, April 25, Edmonton - GEB  
- 1, April 28, Cheadle - TSS  
Fc - 3, Sept. 23, Milo - EWB  
1975.  
Sa - 2, April 27, Sherwood Park - JIW  
- 2, April 30, Cheadle - TSS  
- May 12, Mildred Lake - Sharp & Richardson (1976)  
B - nest with young, July 24, Margaret Lake - Höhn & Burns (1976)  
Fb - 200 mostly immatures, Sept. 6, Kathyrn - ANS  
Fc - 8, Sept. 8, Syncrude lease - Sharp & Richardson (1976)  
- 4, Sept. 21, Milo - EWB  
- 30, Sept. 21, Irricana - RUB  
1976.  
Sa - 1, May 1, Ryley - ROB, DVW, LIW  
- 4, May 7, Chestermere Lake - RUB  
- 7, May 11, Jasper N.P. - Holroyd & Karasiuk (1977)  
Fc - Sept. 15, Ft. MacKay - Francis & Lumbis 1979)  
- 8, Sept. 15, Jasper N.P. - Holroyd & Karasiuk (1977)  
- 12, Sept. 21, Brant - RUB  
1977.  
Sa - 3, April 30, Namaka - RUB  
- 1 male, May 2, Ft. MacKay - WWS  
Fc - 2, Sept. 18, Dogpound - RUB  
- Sept. 21, Ft. McMurray - Gulley (1979)  
1978.  
Sa - 1, April 28, Daysland - KWT  
- 2, April 29, Strathmore - RUB  
- April 30, Ft. McMurray - Gulley (1979)
Gray Jay (Perisoreus canadensis)

The Gray Jay is a characteristic permanent resident of coniferous and mixed forests in northern and western Alberta. However, with the clearing of its forest habitat the Gray Jay has disappeared from some areas where it formerly nested. Farley (1932) documents the disappearance of this species from areas east of Red Deer, Penhold and Innisfail. More recently, this species has significantly declined at Elk Island National Park (Burns et al. 1986), a forested area within a largely cleared landscape.

Although Gray Jays are frequently observed throughout forested areas, few nests have been recorded. For example, there are no nest records for Jasper National Park and only one for Banff National Park (Holroyd & Van Tighem 1983).

Francis & Lumbis (1979) tabulated the density of nesting Gray Jays in different habitats in the Ft. MacKay area. The highest density was 12 territories/100 hectares in a young mixed forest plot. In Banff and Jasper National Parks, Holroyd & Van Tighem (1983) found the highest density of Gray Jays in summer in open forests of Engelmann spruce (Picea engelmannii) - subalpine fir (Abies lasiocarpa) / willow (Salix spp.) / ribbed bog moss (Aulacomnium palustre).

Periodically in winter, Gray Jays wander south and east of their usual range (Salt & Wilk 1966). For the decade, the only extralimital winter records were from Pigeon Lake and Lethbridge.

Gill (1974) observed Gray Jays catching deer mice (Peromyscus maniculatus) near the headwaters of the Wildhay River. He suggested that this species may be a more important predator of small mammals than previously believed.

1971. B - 1 pair, May 9, Elk Island N.P. - Burns et al. (1986)
     Eb - 1, May 15, Calgary - RIP, DAS
1973. F - 1 or more successfully preying upon two deer mice, Oct. 25, headwaters of Wildhay River - Gill (1974)
     F - 2, Oct. 9, Elk Island N.P. - DUS
1975. W - 2, Feb. 16, Pigeon Lake - RAS
     B - 2, March 9, Spruce Grove - JIW
     B - 1, March 22, Elk Island N.P. - DUS
1976. B - 1, March 6, Wabamun Lake - RIP
     E - 2, Oct. 4, Calgary - STA, WIA
     Ew - 1, Dec. 27, Lethbridge - Christmas Bird Count
Steller's Jay (*Cyanocitta stelleri*)

In the mountains of Alberta, the Steller's Jay is a highly localized resident of lush coniferous forests along the continental divide. There are no nest records for Alberta.

The most reliable area where this jay has been recorded is Waterton Lakes National Park, but even here it is uncommon and localized. Sharp (1973) lists three records of adults feeding fledglings, including one record for 1972. These records are the only indication of nesting for Alberta.

In Banff and Jasper National Parks, Holroyd and Van Tighem (1983) refer to this species as a rare resident occurring mostly along the west side of the two parks. There are sightings for both parks dating back to the early 1900's. The sightings are of equal frequency for all four seasons. This is in contrast to Salt & Salt (1976), who state that Steller's Jays are only a rare winter visitor to Banff National Park. Holroyd & Van Tighem (1983) had no evidence of breeding for Banff and Jasper National Parks.

In the fall and winter, Steller's Jays are known to wander east of the mountains (Salt & Salt 1976; Godfrey 1986). In this decade, there were records from Beaverlodge, Edmonton and Red Deer.

1971.  
E - 1, April 22, Canmore - WWS  
B - 1, July 3, Jasper - RIP

1972.  
B - 1 pair feeding 2 fledged young, July 15, Lone Lake, Waterton Lakes N.P. - Sharp (1973)  
F - 1, Oct. 15, Lake Louise - MIB

E - 1, Sept. 29, Highwood Pass - WWS

1974.  
B - 6, June 13, Cameron Lake, Waterton Lakes N.P. - WWS

1975.  
W - 1, Feb. 8, Banff - IDT

1976.  
Ew - 1, Jan. 18, Evans Thomas Creek - EMG, WGG (Pinel & Butot 1978)  
B - 1, May 3, Banff - KVT  
Eb - 2, June 29, King Creek - Salt (1976)  
- 1, July 16, Highwood Pass - Salt (1976)  
Ew - 2, Nov. 3, Kananaskis P.P. - Salt (1976)  
W - 3, Nov. 14, Jasper - GHP, PIF

1977.  
B - 6, July 28, Cameron Lake, Waterton Lakes N.P. - EDQ  
W - 11, Dec. 26, Waterton - Christmas Bird Count

1978.  
Ew - 1, Jan. 13, Beaverlodge - GEM  
W - 7, Dec. 30, Waterton - Christmas Bird Count

1979.  
Ew - 2, Feb. 17, Kananaskis P.P. - KAJ, LAJ, ANS  
W - 1, Dec. 16, Banff - Christmas Bird Count  
- 12, Dec. 30, Waterton - Christmas Bird Count

1980.  
E - 1, Nov. 8, Edmonton - JHA, JIL, TWT  
W - 1, Dec. 20, Banff - Christmas Bird Count  
Ew - 1, Dec. 21, Edmonton - Christmas Bird Count  
- 1, Dec. 26, Red Deer - Christmas Bird Count

Blue Jay (*Cyanocitta cristata*)

The Blue Jay is mainly a bird of the mixed woods in the boreal forest, Peace River district and central parklands, with its range extending locally south along the foothills to about the Priddis area. It also nests locally along the Red Deer River into the grasslands as far east as the Drumheller area. There were extralimital summer records during the decade from Hesketh, Beynon,
Big Valley, Dry Island Buffalo Jump Provincial Park, Cremona, Longview, Sundre, Lethbridge, Banff National Park, Notikewin Provincial Park, Coaldale and Pincher Creek.

Sharp (1973) has no records for Waterton Lakes National Park in the breeding season. There are only four breeding season records for Banff National Park and none for Jasper National Park (Holroyd & Van Tighem 1983). The Blue Jay is scarce and restricted mainly to mature mixed woods in the Ft. MacKay area (Francis & Lumbis 1979). The densest population recorded was 3 territories/100 hectares.

In the fall, some Blue Jays move into the grassland areas of southeastern Alberta, where they spend the winter. During the decade, there were records from as far east and south as Bindloss and Writing-on-Stone Provincial Park. Come spring, these birds retreat into wooded portions of Alberta. This pattern of movement has apparently led to the colonization of the Lethbridge area (O'Shea 1979, 1980). In this account, it was shown that the Blue Jay was an occasional fall/winter visitor that eventually became a permanent resident, with the first nest found in 1979. This late summer and fall movement also takes birds into the mountains. There were 12 fall/winter records for the mountains during the decade: three for Waterton Lakes National Park (including the first), two for the Kananaskis area, six for Banff National Park, and one (the first) for Jasper National Park.

1971.  

W - 2, Jan. 5, Millarville - WWS  
- 2, Jan. 13, Cochrane - ARK, JEK  
- 1, March 28, De Winton - LAM, WGM, MIP, RIP  
Eh - old nest found near Hesketh - HWP, CAW (Kondla et al. 1973)  
E - 3, Oct. 15, Lethbridge - O'Shea (1979)  
F - 1, Oct. 31, Water Valley - HAV  

1972.  

Eh - 1, May 7 & 28, Beynon - WWS, CAW, CRW  
- 1, May 20, Big Valley - WWS  
- 1 adult feeding 1 fledged young, July 13, Dry Island Buffalo Jump P.P. - WWS  
F - 11, Sept. 10, Cochrane - CFNS  
E - 2, Sept. 14, Lethbridge - O'Shea (1979)  
- 1, Sept. 22, Waterton - Sharp (1973)  
Ew - 2, Nov. 18, Carseland - CFNS  
W - 1, Dec. 19, Bragg Creek - HWP, BIR, CAR  
Ew - 1, Dec. 29, Lethbridge - O'Shea (1979)  
W - 2, Dec. 29, Cremona - BIL, VGL  


W - 1, Jan. 31, Water Valley - VGL, HWP, CAR  
Ew - 2, March 3, Carseland - BIL, VGL  
- 2, March 25, Drumheller - WWS  
Eh - 2 at a nest, May 27, Cremona - DAH  
- 1, June 22, 24 km west of Longview - HAB, VGL  
- 3, July 8, Sundre - VGL  
E - 3, early Aug., Crimson Lake P.P. - Biggs et al. (1973)  
E - 1, Sept. 8, Ribbon Creek - WWS  
- 1, Sept. 8, Highwood Pass - WWS  
- 3, Sept. 30, Lethbridge - O'Shea (1979)  

1974.  

Eh - 2, April 28, Lethbridge - HES  
E - 1, May 31, Rocky Mt. House - JDJ, BAM  
E - 1, Oct. 6, 20 km west of Banff - DIM, MIM  
- 4, Oct. 14, Red Deer River valley near Bindloss - WWS  
- 5, Oct. 24, Strathmore - WWS  
- 2, Oct. 25, Red Deer River valley near Bindloss - WWS  
Ew - 1, Dec. 29, Banff - Christmas Bird Count
Clark's Nutcracker (Nucifraga columbiana)

The Clark's Nutcracker is a resident of coniferous forests in the mountains of western Alberta. Fisher & Myres (1980) correlate the range of the nutcracker with that of the white-bark pine (Pinus albicaulis) in Canada. Clark's Nutcrackers are common to fairly common residents of Waterton Lakes, Banff and Jasper National Parks (Sharp 1973; Holroyd & Van Tighem 1983). There are no nest records for Banff or Jasper National Parks (Holroyd & Van Tighem 1983). Sharp (1973) has only one nest record for Waterton Lakes National Park. One reason for the scarcity of nest reports is the lack of observers at high elevations during late winter, when this species begins nesting. In the montane region of southwestern Alberta, nutcrackers are often associated with semi-open limber pine (Pinus flexilis)-Douglas fir (Pseudotsuga menziesii) habitat.

The Clark's Nutcracker wanders in the fall, sometimes for considerable distances (Godfrey 1986). Prior to 1972, there were nine records in Alberta away from the mountains, from as far as Brooks, Stettler and Belvedere. Irruptive movements were especially noticeable in 1972 and 1976.

Fisher (1979) documented the first occurrence of this species in Alberta's Cypress Hills. Fisher & Myres (1980) discussed in detail the extralimital occurrences of this species in Canada. They analyzed 67 reports from 1904 to 1976 and correlated the failure of coniferous seed cone crops every three to four years with this irruptive dispersal. Single birds accounted for 70% of the records. About 85% of the total birds involved were sighted from August
to November.

In winter, many Clark's Nutcrackers descend to lower elevations. An exceptionally high number of 277 birds was reported on the Banff Christmas bird count in 1978.

- E - 1, Nov. 12, Edmonton - Lister (1973b)
- - 1, Nov. 12, Carvell Corner - Lister (1973b)
- - 1, Nov. 14, Gunn - Lister (1973b)
- - 1, Nov. 15-20, Ft. McMurray - Lister (1973b)
- - 1, Nov. 16, Grande Prairie - Lister (1973b)
- - 1, Nov. 17, Glenevis - Lister (1973b)
- - 1, Nov. 17, 32 km southwest of Edmonton - Lister (1973b)
- - 1, Nov. 22, Pigeon Lake - Fisher & Myres (1980)
- - 1, Nov. 24, Wabamun Lake - Lister (1973b)
- - 1, Dec. 17, Edmonton - Christmas Bird Count

1973.  **E** - 2, all winter, Leslieville - Lister (1973b)
- - 1, March 3, Edmonton - Lister (1973b)
- - 1, March 11, Edmonton - MOE
- - 1, Nov. 13, Edmonton - BOL


1975.  **Eb** - 1, May 14, Westover Lake - KSC, JOD

1976.  **Eb** - 1, May 10, Porcupine Hills - WWS
- E - 1-30 birds, Aug. 18-Sept. 4, near Elkwater - DEL (Fisher & Myres 1980)
- E - 30+, Sept. 25, upper Trout Creek - KVT
- - 20, Nov. 9, Skyline Ranger Station - KVT
- W - 121, Dec. 19, Banff - Christmas Bird Count

1977.  **E** - 15, April 13, 18 km west-northwest of Cochrane - JMP
- 2, Sept. 16, Jumping Pound - HWP
- 1, Sept. 28, Chain Lakes P.P. - HWP

1978.  **Eb** - 1 adult feeding fledged young, May 8, Whaleback Ridge - CRW
- **W** - 277, Dec. 17, Banff - Christmas Bird Count

1979.  **E** - 1, March 10, Cochrane - JMP
**B** - 1, May 26, 40 km southeast of Nose Mt. - GEC
- **W** - 100, Nov. 22, Jasper - Holroyd & Van Tighem (1983)


Black-billed Magpie (Pica pica)

The Black-billed Magpie is a resident of the province as far north as Hay Lake and Ft. MacKay. Farther north, it occurs mainly as a casual wanderer. With continued clearing and increasing settlement in the north, further range expansion is inevitable.

Gulley (1983) documents the recent increase in numbers in the Ft. McMurray area. Magpies are present in low numbers in the Ft. MacKay area (Francis & Lumbis 1979). In this area, it is mainly restricted to the Athabasca River and its tributaries, where it prefers willow (Salix spp.) dominated areas.

This species is fairly common at lower elevations in the mountain national parks (Sharp 1973; Holroyd & Van Tighem 1983). In Banff and Jasper National Parks, it is almost entirely restricted to the lower Bow and Athabasca River valleys (Holroyd & Van Tighem 1983). Salt (1976) did not observe this species in Kananaskis Provincial Park during the nesting season.

Although it is now common and widespread in southern Alberta, this has not
always been the case. Magpies were common in the Camrose region until the disappearance of the bison (*Bison bison*) in about 1875. By the early 1880's, magpies were no longer found in the region (Farley 1932). They returned to this region by about 1911, and by 1932 they were again common. Houston (1977) documents similar population and distribution trends for other regions in the prairie provinces.

In the fall and winter, magpies wander outside of their breeding areas. In Kananaskis Provincial Park, Salt (1976) recorded magpies as uncommon visitors, found only in the fall. Godfrey (1986) states that they regularly occur as far north and east as the southern Mackenzie and Keewatin districts.

The Black-billed Magpie is omnivorous in its diet, and has been recorded eating a wide variety of items. Goulden (1975) observed a magpie kill a Richardson's ground squirrel (*Spermophilus richardsonii*). It may be that magpies are more active predators than previously thought.

During this decade, there were a number of reports of albinos and partial albinos. These reports involve a minimum of six different birds and were primarily from the Edmonton and Tofield areas. Most birds were partial albinos, which had the areas of black feathering replaced by feathers of a silvery-gray color.

<table>
<thead>
<tr>
<th>Year</th>
<th>Location</th>
<th>Date</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1971</td>
<td>W - 421, Dec. 27, Calgary - Christmas Bird Count</td>
<td></td>
<td>1 albino, June 24, Cardston - PMA specimen</td>
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<td>1 flock of 85, Aug. 2, Dry Island Buffalo Jump P.P. - WWS</td>
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<td></td>
<td>1 adult female partial albino, Aug. 18, Entwistle - PMA specimen</td>
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<tr>
<td>1972</td>
<td>B - 1 albino, May 13, Tofield - BEE, GEB</td>
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<td>1 partial albino, May 13, Tofield - BEE, GEB</td>
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<td>1 partial albino, daily in Aug., Edmonton - FRD, PRD</td>
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<td>1 partial albino, Sept. 19, Sherwood Park - LOG</td>
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<td>1 partial albino, Oct. 7, Tofield - GWG, LOG</td>
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<td>1 partial albino, Oct. 1, Tofield - GEB, PUP, JIW</td>
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<tr>
<td>1973</td>
<td>W - 539, Dec. 30, Calgary - Christmas Bird Count</td>
<td></td>
<td>1 albino, Mary 27, Calgary - Christmas Bird Count</td>
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<td></td>
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<td>1 chase and killed a Richardson's ground squirrel, March 31, 64 km east</td>
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<td>of Edmonton - Goulden (1975)</td>
</tr>
<tr>
<td></td>
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<td>1 albino, April 13, Tofield - DID</td>
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<tr>
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<td></td>
<td>1 partial albino, early June, Edmonton - JOA</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>1 partial albino, Dec. 16/74 to Jan. 4/75, Edmonton - BBE, GEB, PUP, JIW</td>
</tr>
<tr>
<td>1975</td>
<td>B - 1, Aug. 11, Ft. Chipewyan - JOK</td>
<td></td>
<td>1 partial albino, Sept. 24, Edmonton - DVW</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>500 leaving roost at dawn, Dec. 8, Edmonton - ROB, DVW</td>
</tr>
<tr>
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<td>314, Dec. 28, Calgary - Christmas Bird Count</td>
</tr>
<tr>
<td>1976</td>
<td>S - 1 partial albino, March 28, Sherwood Park - ACB, ELB</td>
<td></td>
<td>1 partial albino, March 30 &amp; 31 &amp; April 1 &amp; May 1, Edmonton - BAR</td>
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<td>1, June 17, Ft. Chipewyan - JOK</td>
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<td>8, Aug. 3, Lake Claire - RAE</td>
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<td>880, Dec. 27, Calgary - Christmas Bird Count</td>
</tr>
<tr>
<td>1980</td>
<td>B - 1 immature male partial albino, July 15, Edmonton - PMA specimen</td>
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</tbody>
</table>

**American Crow (**Corvus brachyrhynchos)**

American Crows arrived in southern and central Alberta from early to mid March, slightly earlier than the late March arrival reported by Salt & Salt (1976). Holroyd & Van Tighem (1983) state that the peak of spring migration for Banff and Jasper National Parks is in April. The arrival date for the Ft.
Although wintering mostly achieved MacKay and Houston considered the regularity reported early crows 1973. Previous 1972 for the Salt In lower the provinces. (1977)

In the fall, American Crows begin to gather into large flocks in August. By early October, the majority have left Alberta. Francis & Lumbis (1979) reported birds as late as October 13 for the Ft. MacKay area. In some years, stragglers remained in central and southern Alberta as late as early December.

Previous to the decade, there were few winter records. The occurrence of wintering birds is increasing. Since the mid 1970's, crows have been regularly observed in small numbers during the winter in Banff and Calgary to the extent that they are no longer considered to be extralimital during this season in these two areas. There were also winter records during the decade for nine other locations, as listed in the data.

Houston (1977) documents the dramatic increase of the American Crow in the prairie provinces. Populations changed from scarce and local to widespread and abundant, concurrent with human settlement. Although crows were considered to be locally common at the turn of the century, they had not yet achieved a fraction of their present numbers.

1971. Sa - 1, March 7, Cochrane - NGK, AEM
   Fb - 500, Aug. 29, Irricana - DVW
   FC - 1, Dec. 10, Calgary - KEM

1972. EW - 1, Jan. 7, Calgary - BJJ
      - 1, Feb. 17, Conrich - CPNS
   Fb - 1,000, Sept. 23, Stettler - Houston (1973a)
   EW - 8, Dec. 30, Calgary - Christmas Bird Count

1973. Sa - 4, March 17, Tofield - DID
   FC - 1, Oct. 21, Bow Valley P.P. - VGL
   EW - 3, Dec. 30, Calgary - Christmas Bird Count

1974. Sa - 1, March 13, Brant - VGL, CAR
      - 3, March 23, Thorsby - HIR, MAR
   FC - 1, Nov. 3, Edmonton - JHA, KTS
      - 2, Dec. 2, Calgary - KEM
   EW - 1, Dec. 29, Calgary - Christmas Bird Count
      - 3, Dec. 29, Banff - Christmas Bird Count

      - 1, March 21, Busby - VGL
      - May 1, Syncrude lease - Sharp & Richardson (1976)
   Fb - 1,000+, Sept. 27, Water Valley - Johnston (1976b)
   FC - Oct. 13, Syncrude lease - Sharp & Richardson (1976)
      - 1, Nov. 27, Edmonton - DVW, LIW
   EW - 15, Dec. 21, Banff - Christmas Bird Count

   Sa - 2, March 11, Black Diamond - JIM
      - April 5, Ft McMurray - Gulley (1979)
   FC - 1, Nov. 3, Grande Prairie - DVW
      - 1, Nov. 6, Edmonton - DVW, LIW
   W - 3, Dec. 14, Calgary - WWS
      - 9, Dec. 19, Banff - Christmas Bird Count

1978.

Ew - 4, Jan. 2, Water Valley - Christmas Bird Count
- 1, Jan. 15, Grande Prairie - Christmas Bird Count
Sa - 1, March 5, Wembley - FBR
- 3, March 18, Botha - GRG, PAG
- 4, April 26, Ft. McMurray - BRW

B - May 8, Calgary, Long-eared Owl on crow nest containing 2 crow eggs and 1 owl egg, and crows in same shrub complaining; another Long-eared Owl on nest with 2 owl eggs about 3.7 m away - KRD (Pinal et al. 1991)

W - 8, Dec. 8, Banff - Christmas Bird Count
- 13, Dec. 17, Calgary - WIH
Ew - 2, Dec. 26, Lethbridge - Christmas Bird Count
- 1, Dec. 30, Waterton - Christmas Bird Count

1979.

Ew - 1, Jan. 2, Grande Prairie - GEC
Sa - 1, March 4, Keephills - RAE
- 2, March 11, Calgary - HWP
- 1, March 11, Llyalta - BIL, LOL
Fc - 1, Nov. 10, Sexsmith - EVK
W - 10, Dec. 16, Banff - Christmas Bird Count
- 27, Dec. 16, Calgary - Christmas Bird Count
Ew - 12, Dec. 26, Lethbridge - Christmas Bird Count

1980.

Sa - 1, March 18, Cheadle - TSS
Fc - 1, Nov. 3, Morinville - JHA
W - 15, Dec. 20, Banff - Christmas Bird Count
- 22, Dec. 21, Calgary - Christmas Bird Count
Ew - 3, Dec., Erskine - Christmas Bird Count
- 2, Dec. 26, Grande Cache - Christmas Bird Count
- 7, Dec. 27, Lethbridge - Christmas Bird Count
- 4, Dec. 30, Egg Lake - PIS

Common Raven (Corvus corax)

Houston (1977), in his review of raven distribution in the prairie provinces, concludes that in the days of the buffalo (Bison bison) the raven was common. He noted that in the late 1850's Blakiston found the raven "very generally distributed...most numerous on the buffalo plains of the west". Prior to 1875, ravens were present throughout the breeding season across the present prairie provinces, extending down into the Dakotas (Houston 1977). Macoun, in his trips of 1872, 1879 and 1880 found the raven to be "frequent on the western plains". After the bison disappeared, the raven was no longer to be found in the grasslands and parklands.

The raven was scarce in the mountains of Alberta in the 1940's. In Banff and Jasper National Parks, Holroyd & Van Tighem (1983) did not know exactly when the raven began to significantly increase in numbers. However, Seel (1969) noted that in Waterton Lakes National Park the raven was scarce in 1962, regular in 1963, fairly common in 1964 and common in 1966 to 1968. In 1966, the first nest east of the foothills was reported (Sadler & Myres 1976). In 1973, the first nest for Calgary was reported by Kondla & Danielson (1973), who also gave a summary of raven nests in southwestern Alberta.
In some years, ravens are inclined to wander south and east of breeding areas during the fall and winter. The fall of 1972 was one noticeable incursion year and was detailed by Houston (1973a) and Lister (1973b). In Calgary in 1973, ravens were recorded for only the second time on a Christmas Bird Count. The first report for Lethbridge on a Christmas Bird Count was in 1975. Since 1977, ravens have become regular winter residents in the Calgary area.

1971.  
- E - 6, March 12, Priddis to Cayley - CAW, CRW  
- 2, March 28, De Winton - LAM, WGM, MIP, RIP  
- Eb - adult at nest, May 24, Bragg Creek - BIM (Kondla & Danielson 1973)

1972.  
- Ew - 2, Feb. 10, Springbank - WWS  
- Eb - 3, April 12, Black Diamond to Aldersyde - CAW, CRW  
- nest with young, May 7, Nanton - JHS (Kondla & Danielson 1973)  
- E - 5, Sept 12, Sherwood Park - MAM  
- 3, Sept. 24, Beaverhill Lake - Dekker (1972)  
- 2, Oct. 22, Beaverhill Lake - DID, LOG (Dekker 1972)  
- 7, Oct. 28, Beaverhill Lake - Goulden (1972a)  
- 1, Oct. 29, Bretona - DID, LOG  
- 2, Nov. 4, Elk Island N.P. - DID, LOG  
- 1, Nov. 13, Penhold - HAV  
- 2, Nov. 22, Wabamun Lake - Lister (1973b)  
- Ew - 5, Dec. 6, Drayton Valley - Lister (1973b)  
- 1, Dec. 20, Sylvan Lake - Abrahamson (1973)  
- 3, Dec. 21, Glenview - GEP  
- 4, Dec. 26, Edmonton - LOG  
- 50, Dec. 28, Grande Prairie to Fox Creek - ROV  
- 1, Dec. 31, Wabamun Lake - LOG

- Ew - 15, Jan. 4, Elk Island N.P. - HOH (Lister 1973b)  
- 1, Jan. 6, Calgary - WWS  
- 1, Feb. 8, Parkland - GWG, LOG  
- 1, Feb. 10, Stony Plain - DID, PED  
- 1, Feb. 12, Spruce Grove - VAS  
- E - 2, March 2, Smoky Lake - MAM, PAM  
- 1, March 2, Spruce View - MAM, PAM  
- 1, March 3, Wildwood - GRG, PAG  
- 8, March 10, Drayton Valley - GWG, LOG  
- 2, March 10, Granada - GWG, LOG  
- 10, March 10, Lodgepole - GWG, LOG  
- 2, March 11, Elk Island N.P. - FRC  
- 1, March 17, Onoway - BEB, GEB  
- 22, March 31, Lyalta - SAD  
- Eb - adults at nest, late April, Nanton - BRS (Kondla & Danielson 1973)  
- 3 young in nest, mid May, Calgary - Kondla & Danielson (1973)  
- 5, June 16, Cold Lake - LOG  
- 3, June 22, Calling Lake - LOG  
- 5, July 7, Brazeau Reservoir - LOG  
- 7, July 7, Robb - LOG  
- 2, July 8, Lodgepole - LOG  
- E - 10, Sept. 15-16, Marie Lake - MAM  
- 3, Oct. 20, Beaverhill Lake - DID  
- 3, Nov. 3, Fawcett - REG  
- 2, Nov. 10, Calahoo - REG  
- 5, Nov. 11, Camrose - DID  
- 2, Nov. 12, Ft. Assiniboine - MAM, PAT  
- 1, Nov. 17, Edmonton - TWT  
- 1, Nov. 17, Pendryl - CAT, DVT  
- 14, Nov. 24, Edson - REG
- 2, Nov. 24, Ft. Assiniboine - JOA, MAM, PAM
- 2, Nov. 24, St. Francis - DRH, ERH
Ew - 1, Dec. 8, Wabamun Lake - REG
- 11, Dec. 9, Wildwood - REG
- 15, Dec. 9, Edson - REG
1974.
Ew - 8, Jan. 20, Calgary - WWS
E - 9, March 16, Carseland - BIL, VGL
- 1, March 17, Mazeppa - BIL, VGL
- 1, March 21, Norfolk - VGL
- 1, March 26, Langdon - TSS
- 1, Sept. 13, Glenevis - GEP
- 1, Oct. 26/27, Tofield - DID
- 1, Nov. 23, Wabamun Lake - WAR, ERT
Ew - 11, Dec. 15, Water Valley - Christmas Bird Count
- 2, Dec. 29, Calgary - Christmas Bird Count
1975.
E - 1, March 9, Carseland - HAV
Eb - 1, April 5, Ensign - HWP
1976.
Ew - 12, Jan. 4, Water Valley - Christmas Bird Count
E - 233, Dec. 19, Banff - Christmas Bird Count
1977.
Ew - 36, Jan. 2, Water Valley - Christmas Bird Count
E - 1, March 27, Carseland - RUB
Eb - 1, April 25, 16 km southeast of Calgary - ELH
1978.
Ew - 23, Jan. 2, Water Valley - Christmas Bird Count
E - 1, March 18, Dalemead - RUB
- 22, Nov. 11, Shepard - RUB
Ew - 1, Dec. 17, Stettler - Christmas Bird Count
- 83, Dec. 17, Calgary - Christmas Bird Count
- 12, Dec. 26, Lethbridge - Christmas Bird Count
- 20, Dec. 30, Water Valley - Christmas Bird Count
1979.
Ew - 2, Feb. 15, Shepard - BSD
- 19, Feb. 18, Janet - RUB
E - 1, March 3, Indus - RUB
- 4, March 3, Conrich - BSD
Eb - 1 pair at nest on power pole, April 24, northeast of Okotoks - WWS
Ew - 1, Dec. 9, Janet - RUB, WIH
- 26, Dec. 16, Calgary - Christmas Bird Count
- 12, Dec. 19, Porcupine Hills - Christmas Bird Count
- 5, Dec. 26, Lethbridge - Christmas Bird Count
- 36, Dec. 29, Water Valley - Christmas Bird Count
1980.
Ew - 4, Feb. 22, Cheadle - TSS
- 35, Feb. 24, Calgary to Carseland - MIR
- 1, Dec. 27, Lethbridge - Christmas Bird Count
- 3, Dec. 28, Claresholm - Christmas Bird Count

FAMILY: PARIDAE

Black-capped Chickadee (Parus atricapillus)

The Black-capped Chickadee is a resident of deciduous and mixed woods throughout Alberta. However, in the grasslands it is mostly restricted to wooded areas of coulees and valleys during the nesting season.

In Waterton Lakes National Park, it is an uncommon resident that occurs most
frequently at lower elevations (Sharp 1973). Salt (1976) did not observe this chickadee until August in Kananaskis Provincial Park. In Banff and Jasper National Parks, this species is a fairly common resident, occurring most frequently in valleys at lower elevations (Holroyd & Van Tighem 1983). It was the least common and least widely distributed chickadee species in these two parks. The highest breeding densities were found in aspen (Populus tremuloides)/hairy wild rye (Elymus innovatus)-pea vine (Lathyrus ochroleucus) forest.

Francis & Lumbis (1979) found this chickadee most abundant in deciduous and mixed forests in the Ft. MacKay area where the highest density was 5 territories/100 hectares on three plots.

In the fall and winter, there may be some withdrawal from the far north and from higher altitudes of the mountains (Salt & Salt 1976). The highest number recorded on a Christmas Bird Count was 898 in Edmonton in 1976. Schutz (1978) has an account of a Northern Pygmy-Owl feeding on a Black-capped Chickadee.

1972. F - 150-200, Sept. 2, Okotoks - GEA, WEB, BIL
1977. W - 400, Dec. 27, Calgary - Christmas Bird Count
1978. W - 504, Oct. 8, Cypress Hills - RUB

Mountain Chickadee (*Parus gambeli*)

The Mountain Chickadee is a permanent resident of coniferous woods in the mountains from Jasper National Park to Waterton Lakes National Park. In Waterton Lakes National Park, it is an uncommon permanent resident nesting "almost exclusively in partly open coniferous forest at higher elevations" (Sharp 1973). Salt (1976) found this species everywhere in Kananaskis Provincial Park, but less abundant than Boreal Chickadees. In Banff and Jasper National Parks it is a common permanent resident, with the highest densities in the breeding season found in Douglas fir (*Pseudotsuga menziesii*)/hairy wild rye (*Elymus innovatus*) forest (Holroyd & Van Tighem 1983). These authors also report observations suggesting that one pair raised two broods in a season.

During this decade, there were extralimital breeding season records from Ghost Reservoir, Brown-Lowery Natural Area, and the Whaleback Ridge area. In the Whaleback Ridge area, this is the characteristic chickadee species of open limber pine (*Pinus flexilis*)-Douglas fir woods.

In the fall, some Mountain Chickadees descend to lower elevations within the mountains, while others remain as high as tree line throughout the winter (Holroyd & Van Tighem 1983). From data available it appears that, in most falls, small numbers of Mountain Chickadees move east as far as Calgary and Lethbridge. This appears to be a regular movement. Fall and winter wanderers were usually first recorded in early December, but in the winter of 1973/74 birds were first recorded in Calgary on October 5. During this same fall and winter, there were also numerous reports of one to three individuals scattered throughout the city. Usually, there were only reports of individuals from any one area. In February or March, Mountain Chickadees began moving back to the
mountains. In three different years, birds were observed east of the
mountains as late as March 30, April 1 and April 4, respectively. This fall
and winter movement appeared to occur only from the latitude of Water Valley
and Calgary south to Lethbridge. There has only been one winter record away
from this area, a bird collected at St. Albert on March 2, 1957 (Höhn et al.
1958; Salt & Wilk 1966).

1971. S - 1, April 4, Big Hill Springs P.P. - WWS
      - 1, April 18, Morley - WWS
     Eb - 15, June 13, Brown-Lowery Natural Area - CFNS
1973. S/Wc - 1, April 1, Calgary - SCO
     Wa - 1, Oct. 5, Calgary - HWP, CAR
1974. Wc - 1, April 4, Calgary - HWP, CAR
     Eb - 1, all winter to March 30/75, Lethbridge - MIO, HES
1975. Eb - nest with young, June 7, Whaleback Ridge near Oldman River - CRW
     Wa - 1, Nov. 1, Calgary - HAB
     Eb - 1, Dec. 26, Lethbridge - Christmas Bird Count
1976. E - "family groups", Nov. 9, Porcupine Hills - KVT
1977. Eb - 1 adult & 2 fledged young, June 19, Ghost Reservoir - MGO, TOO
1979. W - 6, Dec. 16, Calgary - Christmas Bird Count
     Eb - 1, Dec. 19, Porcupine Hills - Christmas Bird Count
     - 1, Dec. 26, Lethbridge - Christmas Bird Count

Boreal Chickadee (Parus hudsonicus)

The Boreal Chickadee is a permanent resident of relatively dense coniferous
and mixed woods throughout Alberta, except in the Cypress Hills. Although
Salt & Wilk (1966) did not show this species as occurring in Waterton Lakes
National Park, Sharp (1973) has records for this park dating back to 1952.
She recorded it is an uncommon permanent resident that probably breeds,
although she has no definite nest records. For Kananaskis Provincial Park,
Salt (1976) considered this species to be the most common and widely ranging
chickadee. It was a common to very common permanent resident and the most
common chickadee in Banff and Jasper National Parks, where it inhabited all
types of coniferous forests (Holroyd & Van Tigheim). It achieved its highest
density in the lower subalpine area, where the preferred nesting habitat was
Engelmann spruce (Picea engelmannii)-subalpine fir (Abies lasiocarpa)/willow
(Salix spp.)/hairy wild rye (Elymus innovatus) forest. In the Pt. MacKay
area, Francis & Lumbis (1979) found it common in coniferous-dominated forests
with the highest densities of 9 territories/100 hectares recorded in young and
mature black spruce (Picea mariana) plots.

Boreal Chickadees have been observed during the nesting season as far south
and east as Dry Island Buffalo Jump Provincial Park (Smith & Kondla 1972). In
southwestern Alberta, this species has been found nesting as far east as
Brown-Lowery Natural Area.

In the fall and winter there is some movement from higher to lower elevations
(Salt & Wilk 1966). A small number of birds also move south and east out of
the nesting areas. For example, it was regularly found as far east as
Calgary.

1971. B - 1, June 13, Brown-Lowery Natural Area - CFNS
1972. S - 15, April 22, Calgary - RIP
     Eb - 1, May 11, Calgary - RIP
     - 1, June 7 & July 13, Dry Island Buffalo Jump P.P. - Smith &
     Kondla (1972)
Chestnut-backed Chickadee (*Parus rufescens*)

The Chestnut-backed Chickadee is a permanent resident of coniferous forests, primarily along the Pacific coast. There is an interior population that occurs in southeastern British Columbia and northwestern Montana, west of the Continental Divide.

Prior to the 1970's, there were two sight records for the province. Ussher (1940b) reported one bird in a mixed flock with the other three chickadee species on November 12, 1939 near the headquarters of the Kananaskis Forest Experiment Station. Powell (1979) stated the following: "Said by Hereford to occur in mature timber up Dutch Creek, west of the Gap Ranger Station" sometime prior to 1949.

The observations for the 1970's are listed below. All records for the decade were from Waterton Lakes National Park except for a 1978 observation from Banff. The 1972 sighting was the only summer record for the province. The first documented report for Alberta was of three birds photographed in Waterton during December of 1979. There was also a series of photographs taken by Reinhold Lang of one bird at a feeder in Banff townsite on October 31, 1981 (Holroyd & Van Tighem 1983).

1972.  


1978.  

1979.  

1980.  

1981.  

FAMILY: **SITTIDAE**

Red-breasted Nuthatch (*Sitta canadensis*)

This species arrived in southern Alberta from April 26 to May 17, except in 1974 and 1977, when it arrived on April 8. These arrival dates are significantly later than the middle of April as given by Salt & Salt (1976). In Banff and Jasper National Parks, this species arrives from late April to late May, with the peak occurring in mid May (Holroyd & Van Tighem 1983). Francis & Lumbis (1979) had an early arrival date of April 26 for the Pt. MacKay area. Most spring migrants have usually left southern Alberta by late May. During three years, late spring migrants were observed along the Milk River from early to mid June.

Salt & Wilk (1966) showed the breeding range of the Red-breasted Nuthatch as
covering the entire province. This was erroneous, as this nuthatch requires coniferous or mixed woods for nesting. This range map was corrected in Salt & Salt (1976). However, Godfrey (1986) still shows nesting in the entire province. In the grasslands ecoregion of southeastern Alberta, the Red-breasted Nuthatch nests only in the Cypress Hills. This species is considered to be common in Waterton Lakes National Park (Sharp 1973), and widespread in Kananaskis Provincial Park (Salt 1976). In Banff and Jasper National Parks it is fairly common, with the highest breeding density recorded in aspen (Populus tremuloides)-lodgepole pine (Pinus contorta) forest (Holroyd & Van Tighem 1983). In the Ft. MacKay area, the Red-breasted Nuthatch is found in mature coniferous-dominated habitats, with the highest density of 11 territories/100 hectares recorded in a mature mixed forest plot (Francis & Lumbis 1979).

In the fall, Red-breasted Nuthatches usually begin their southward migration in mid August. Migrants leave the Ft. MacKay area by mid September (Francis & Lumbis 1979), and Banff and Jasper National Parks by late September (Holroyd & Van Tighem 1983). In southern Alberta, the last few fall migrants usually linger into November.

The numbers of wintering birds, and the areas in which they winter, vary greatly from year to year. Weather, and apparently the state of the coniferous cone crop, are influential in determining this (Bock & Leptien 1972; Sadler & Myres 1976). There were three winters (1974/75, 1975/76, 1979/80) when high numbers of nuthatches were reported from many areas. In 1971/72, there were high numbers only in the Banff, Calgary and Drumheller areas. In 1972/73, there was only one winter report. In 1973/74, there were no winter reports. In 1976/77, there were reports of low numbers in the south and no reports from the north. In 1977/78, there were low numbers reported from central Alberta and the mountains, but no reports from the south or north. In 1978/79 and 1980/81, there were scattered reports of low numbers. It was noteworthy that, even in years with high numbers from many localities, many nuthatches apparently disappeared in January. This resulted in few reports from late January to early April.

1971.  
**Sa** - 1, May 8, Calgary - HAV  
**Fa** - 1, Aug. 8, Calgary - WWS  
**Fc** - 2, Nov. 27, Canmore - BIL, VGL  
**W** - recorded during winter months of 1971/72 in the Calgary, Banff and Drumheller areas, with the last observation on March 2/72 near Beynon.

1972.  
**Sa** - 1, May 8, Calgary - CAO  
**E** - 1 cleaning out nest cavity, May 13, Waterton - Sharp (1973)  
**Fa** - 3, Aug. 16, Carseland - CPNS  
**FC** - 1, Nov. 13, Mt. Hoffman - CDB, FRM  
**W** - The only winter report is a single bird observed during the Christmas Bird Count in Edmonton.

**Sa** - 1, May 17, Calgary - HWP, CAR  
**Fa** - 1, Aug. 11, Calgary - HWP  
**Fc** - 1, Nov. 1, Lethbridge - HES  
**W** - No birds were recorded in the six Christmas Bird Count areas of Calgary, Edmonton, Cold Lake, Jasper, Red Deer and Stettler.

1974.  
**Sa** - 1, April 8, Lethbridge - HES  
**Sc/Eb** - 1, April 11, Edmonton - RAH  
**Eb** - 1, June 6, Milk River Canyon - WWS  
**Fa** - 1, July 2, Dinosaur P.P. - BCM, RIP  
**Fa** - 1, Aug. 25, Calgary - HWP  
**W** - recorded during winter months of 1974/75 in the Banff, Calgary, Edmonton and Stettler areas with the last observation on March 1/75 in Calgary. High numbers of 21 and 15 birds were recorded on Christmas Bird Counts in Calgary and Edmonton, respectively.
1975.  

Sa - 1, April 26, Syncrude lease – Sharp & Richardson (1976)  
- 1, April 27, Calgary – MGO, TOO  
Fa - 1, Aug. 29, Calgary – RUJ  
Fa - 2, Nov. 13, Calgary – MRL, VAH  
W - recorded during winter months of 1975/76 in the Banff, Calgary, Edmonton, Lethbridge, Stettler and Water Valley areas with the last observation on March 29/76 in Calgary. The greatest number seen during the Christmas Bird Counts was 15 at Calgary.

1976.  

Sa - 1, May 1, Beynon – HWP  
Sc - migrants occurred regularly until mid June, Milk River Canyon – Wallis (1976)  
Fa - 1, Aug. 13, Carseland – EMG, WGG  
W - recorded on Christmas Bird Counts in low numbers at Banff, Calgary, Edmonton, Water Valley and Lethbridge. No birds were reported on counts held at Bow Summit, Cold Lake, Devon, High River, Red Deer, Sherwood Park, Stettler, Wabamun Lake, Wembley and Winnifred.

1977.  

Sa - 1, April 8, Ardrossan – RIC, CAK  
- 1, April 13, Lake Newell – Nordstrom (1977)  
- April 20, Ft. McMurray – Gulley (1979)  
Sc - 1, May 21, Milk River Canyon – CAW, CRW  
Fa - 1, Aug. 11, Calgary – ADS, DOS  
Fb - Aug. 29, Ft. McMurray – Gulley (1979)  
W - recorded in low numbers on Christmas Bird Counts at Banff, Calgary, Edmonton, Red Deer, Wabamun Lake, Waterton and Water Valley. There were no birds reported from Bow Summit, Calgary, Drumheller, Ft. McMurray, Lethbridge or Stettler.

1978.  

Sa - 1, May 2, Marwayne – SHK  
Sc/Eb - 1, June 3, Writing-on-Stone P.P. – HWP  
Fa - 1, Aug. 18, Calgary – JOR  
W - recorded during Christmas Bird Counts at Banff, Calgary, Edmonton, Lethbridge, Red Deer and Water Valley. The most birds recorded was 18 at Lethbridge. The species was not recorded on counts at Bow Summit, Drumheller, Ft. McMurray, Grande Prairie, Stettler, Wabamun Lake and Waterton.

1979.  

Sa - 1, April 26, Calgary – JOR  
W - Birds were more widespread this winter. They were recorded on Christmas Bird Counts in Banff, Bow Summit, Calgary, Edmonton, Lethbridge, Porcupine Hills, Red Deer, Wabamun Lake, Waterton and Water Valley. The highest number of birds reported was 33 and 17 from Water Valley and Edmonton, respectively. No birds were reported for counts at Cowley, Erskine, Grande Prairie and Stettler.

1980.  

Fa - 1, July 28, Calgary – DAE, JOR  
W - Birds were recorded in low numbers during Christmas Bird Counts at Banff, Bow Summit, Calgary, Claresholm, Edmonton, Lethbridge, Red Deer, Sundre, Wabamun Lake, Waterton and Water Valley. Counts at Cold Lake, Edson, Erskine, Ft. McMurray, Grande Prairie, Stettler, Vauxhall and Wembley failed to record this species.

White-breasted Nuthatch (Sitta carolinensis)

The status of the White-breasted Nuthatch in Alberta is unclear. Most reports are from the fall and winter, with a few scattered nesting season records. Because of this, we have treated this species primarily as a winter visitor. Further research during the nesting season is needed to more clearly
understand this species' status in Alberta.

The breeding population of the White-breasted Nuthatch in Alberta is disjunct (Salt & Salt 1976). In an overview of Canada, Godfrey (1986) shows the eastern breeding range extending as far west as east-central Saskatchewan. In the west, he shows it as occurring across the southern edge of British Columbia. There are also nesting populations south of Alberta in Montana. The eastern subspecies is S. c. cookei, which inhabits mature deciduous woods. The nearest western subspecies are S. c. tenuissima (B.C.) and S. c. nelsoni (north-central Montana), both of which prefer ponderosa pine (Pinus ponderosa) forests.

Salt & Salt (1976) state that since about 1950 this species has become more frequent in Alberta. The first report for the Calgary area was in December 1961 (Sadler & Myres 1976). Since the early 1960's, this species has been regularly reported in the Calgary and Edmonton areas in late fall and winter. The first reports for three national parks were as follows: Waterton Lakes in 1968 (Sharp 1973), Elk Island in 1969 (Burns et al. 1986), and Banff in 1970 (Holroyd & Van Tighem 1983).

There was "one reported breeding occurrence" prior to 1958, but no details were given (Salt & Wilk 1958). The first nest reported for Alberta was near Glenevis in 1960 (Höhn et al. 1961). Salt & Wilk (1966) stated that there were enough summer sightings to indicate breeding within a small region of the province. Based on their data, the breeding range was an elongated oval bounded on the east by Calgary, Red Deer, Edmonton and Athabasca, and on the west by Dickson, Pigeon Lake, Glenevis and Flatbush. This same range was inaccurately depicted on the range maps in Salt & Salt (1976) and Godfrey (1986). It is noteworthy that no other bird species in Alberta occupies such an unusual breeding range. Data for the 1970's indicated a breeding range that was significantly farther west than that described by Salt & Salt (1976). This data included records from Banff, Whitecourt, Goosegrass Lake, Lesser Slave Lake and Grande Prairie. There were two breeding season records for the Cypress Hills.

In Waterton Lakes National Park, Sharp (1973) reported five observations, four of which were from high elevation coniferous forests. One of these four records was during the nesting season. This is anomalous, because this species is invariably associated with mature deciduous forests in Alberta. It is possible that the birds recorded in Waterton Lakes National Park were the western subspecies.

1971.  
W - 1, Feb. 26, Drayton Valley - ISS, TSS  
Wc - 1, March 13, Calgary - RIP  
Eb - 1, May 19, Elkwater - WWS  

1972.  
Wc - 1, March 19, Calgary - CAW, CRW  
Eb - 1, early June, Goosegrass Lake - H. Smith (1975b)  
   - 1, July 5, Crypt Lake, Waterton Lakes N.P. - Sharp (1973)  
Wa - 1, Sept. 16, Elk Island N.P. - DEG  
   - 1, Oct. 5, Waterton Lakes N.P. - Sharp (1973)  
W - 1, Dec. 20, Glenevis - GEP

Wc - 2, March 3, Edmonton - BEB, GEB  
E - 1, July 23-31, Hasse Lake P.P. - Ebel et al. (1973c)  
Wa - 2, Sept 16, Calgary - DBG  
Ew - 2, Nov. 21, Banff - BRG, HAM  
   - 1, Nov. 24 & 25, Lethbridge - Weseloh (1974a)

1974.  
Wc - 2, April 20, Calgary - RUB, HWP, CAR  
Eb - 1 pair, April 29, Whitecourt - per DVS  
E - 1, June 3, Bottrel - Tull (1975)
Dogpound
3 June
Calgary
21, Nov
1975
1977.
Ew/Wa
Ew/Wc
W - 1, July 14 & 24, Dunstable - VGL
Wa - 1, Sept. 2, Dunstable - BIL, VGL
Ew - 1, Sept. 5, Calgary - HWP, CAR
- 1, Nov. 10, Rosedale - HWP, LIP
- 1, Dec. 7, Strathmore - TSS
- 5, Dec. 15, Water Valley - Christmas Bird Count
1975.
Ew - 1, March 2, 3 & 9, Banff - Holroyd & Van Tighem (1983)
WC - 1, April 10, Calgary - HWP, CAR
- 1, April 19, Strathmore - TSS
EB - 2, June 4, Elkwater - CRW
B - 4 (family group), July 23, Lake Isle - JSK, HUS
Wa - 1, Nov. 8, Dogpound - RUB
1976.
Wa - 1, April 4, Wabamun Lake - RAE
Wa - 1, Aug. 29, Pigeon Lake - RIC
Ew - 1, Oct. 22, Grande Prairie - WAM, YVM
Ew - 2, regular during Dec., Grande Prairie - WAM, YVM
- 5, Dec. 19, Banff - Christmas Bird Count
1977.
WC - 1, May 4-30, Banff - Holroyd & Van Tighem (1983)
EB - 1, June 13, Banff - Holroyd & Van Tighem (1983)
- 1 pair adults & 5 young, June 19-30, Grande Prairie - WAM, YVM
EB - late summer, Lesser Slave Lake P.P. - Bradley (1980a)
Wa - 1, Sept. 3, Calgary - JMP
- 1, Nov. 14, Canmore - EMV
- 7, Dec. 17, Banff - Christmas Bird Count
- 5, Dec. 27, Lethbridge - Christmas Bird Count
W - 11, Dec. 18, Edmonton - Christmas Bird Count
1978.
Ew - 1, Jan. 15, Grande Prairie - Christmas Bird Count
- 2, Jan. 28, Yamnuska - Wiseley (1979a)
- 6 observations, March 5-16, Waterton Lakes N.P. - Merilees (1984)
Em - 1, March 18, Banff - Holroyd & Van Tighem (1983)
Ew/Wc - 1, March 25, Canmore - EMV
Ew/Wa - 1, Oct. 5, Lethbridge - MIO
Ew - 2, Oct. 24, Grande Prairie - WAM, YVM
- 1, Nov. 18, Gladstone valley - WWS
- Dec. 12(+/- 1 week), Drumheller - Lang (1979)
- 2, Dec. 16, Grande Prairie - Christmas Bird Count
- 4, Dec. 17, Banff - Christmas Bird Count
- 2, Dec. 26, Lethbridge - Christmas Bird Count
1979.
Ew - 3, March 3, Grande Prairie - WAM, YVM
B - 1, May 27, Winfield - Wiseley (1980a)
Wa - 1, Sept. 1, Water Valley - SFJ
Ew - 1, Nov. 15, Grovedale - WAM
- 4, Dec. 16, Banff - Christmas Bird Count
- Dec. 26(+/- 1 week), Lethbridge - Young (1980)
W - 14, Dec. 29, Water Valley - Christmas Bird Count
1980.
Wa - 1, Aug. 22, Calgary - DAE, JOR
Ew - 4, Dec. 20, Banff - Christmas Bird Count
- 1, Dec. 27, Cold Lake - Christmas Bird Count
- 7, Dec. 27, Lethbridge - Christmas Bird Count
W - 22, Dec. 21, Edmonton - Christmas Bird Count
[Pygmy Nuthatch (Sitta pygmaea)]

In Canada, the Pygmy Nuthatch is a permanent resident in the southern interior of British Columbia (Godfrey 1986). Here, it is practically confined to ponderosa pine (Pinus ponderosa) forests or areas with a high proportion of this tree species (Cannings et al. 1987). Salt & Wilk (1958) list this species as hypothetical for Alberta, but give no details. The next hypothetical record occurred during this decade.

1976.  

**FAMILY: CERTHIIDAE**

Brown Creeper (Certha americana)

The Brown Creeper nests in mature coniferous and mixed woods in central and southwestern Alberta (Salt & Salt 1976). Historically, there are no nesting records south of Edmonton or north of Athabasca (Salt & Wilk 1966). In Waterton Lakes National Park, Sharp (1973) claims that it is a rare permanent resident. However, she has few records of this species, and only one is a breeding season record. Salt (1976) has no summer observations from Kananaskis Provincial Park. Holroyd & Van Tighem (1983) state that this species is a permanent resident in Banff and Jasper National Parks, and that it is less common in the winter. However, they have few records for any season and have only one nesting record for the northeastern edge of Jasper National Park in 1944. Brown creepers probably nest in the Peace River district (Salt & Salt 1976). There were only two records during the decade from the northern third of the province, both in the fall of 1976. There were also extralimital breeding season records from Goosegrass Lake, Brown-Lowery Natural Area, Bragg Creek and the Cypress Hills. It is noteworthy that a family group of five was observed in Saskatchewan's Cypress Hills Provincial Park on July 21, 1979 (Gollop 1979b).

1971.  

**Eh** - 1, May 20, Elkwater - CRW  
**Wa** - 1, Sept. 14, Calgary - RWN

1972.  

**Wb** - 13, Jan. 6, Calgary - RIP  
**Wc** - 1, March 22, Calgary - ANM  
**Eh** - 3, early June, Goosegrass Lake - H. Smith (1975b)  
**E** - 1, June 2, Bow Valley P.P. - CAW, CRW  
**E/F** - 1, Aug. 12, Waterton Lakes N.P. - Sharp (1973)  
**Wa** - 1, Sept. 22, Waterton Lakes N.P. - Sharp (1973)


**Eh** - 1, May 11, Brown-Lowery Natural Area - BAD, BOD  
**E** - 2, June 1, Busby - DEG, GCG  
- 2, June 5, Exshaw - BIL, VGL  
- 1, July 14, Swan Hills - DEG  
**Wa** - 1, Sept. 20, Calgary - VGL, HWP  
**W** - 1, all winter, Lethbridge - HES

1974.  

**Wc** - 1, April 15, Calgary - RHR  
**E** - 2 feeding fledged, young, June 30, Wildwood - REG  
**Wa** - 1, Sept. 13, Calgary - WIA  
- 1, Sept. 13, Cheadle - TSS  
**W** - 2, Dec. 7, Strathmore - TSS  
**Wb** - 9, Dec. 29, Calgary - Christmas Bird Count

1975.  

**Wc** - 4, March 16, Red Lodge P.P. - LIF, WIF  
**Wa** - 1, Nov. 23, Priddis - ANS  
**W** - 4, Dec. 26, Lethbridge - Christmas Bird Count
1976.  
**Wc** - 1, April 18, Calgary - DRD  
**E** - 1 adult feeding 1 young out of nest, June 19, Wildwood - REG  
- 1, June 19 & 26, Waterton Lakes N.P. - WWS  
**Em** - 1, Sept. 8, Wood Buffalo N.P. - RAE  
- 2, Sept. 9, McClelland Lake - Francis & Lumbis (1979)  
**Wa** - 1, Sept. 12, Calgary - WIA  

1977.  
**Wc** - 1, March 5, Edmonton - JEF  
**Eb** - 1, June 10, Bragg Creek - JMP  
- 1 singing, June 12, Battle Creek - CRW  
**Wh** - 8, Dec. 17, Banff - Christmas Bird Count  

1978.  
**Wc** - April 7, Waterton Lakes N.P. - Merilees (1984)  
**E** - 1, July 29, Chimney Rock - CAW  
**Wh** - 13, Dec. 17, Banff - Christmas Bird Count  

1979.  
**Wh** - 8, Dec. 16, Edmonton - Christmas Bird Count  
- 10, Dec. 29, Water Valley - Christmas Bird Count  

1980.  
**Eb** - 2, May 31 & June 1, Elkwater - WWS  

**FAMILY: TROGLODYTIDAE**

**Rock Wren (Salpinctes obsoletus)**

The Rock Wren usually arrived in Alberta during the first half of May. In this decade, there were three extralimital spring migration records for James River Bridge, Banff National Park and Edmonton.

In the breeding season, most Rock Wrens occur in badland and cliff habitats in the grasslands, north to the Red Deer River and west to the longitude of Huxley and Lethbridge. All records outside of this range are extralimital. The range map in Salt & Wilk (1966) is more accurate than that in Salt & Salt (1976).

There were a number of extralimital nesting season records mainly from the foothills and mountains. Sharp (1973) considered this species a very rare summer resident in Waterton Lakes National Park, and listed only two records, both of which were prior to this decade. Salt (1976) had only one record for Kananaskis Provincial Park. Holroyd & Van Tighem (1983) reported this species as a rare summer resident, and had only two records for each of Banff and Jasper National Parks for the decade. There were also three nesting season records from Jasper National Park in the 1940's.

North and northwest of the breeding range, there were extralimital nesting season records from Big Knife Provincial Park, Edmonton, Sylvan Lake, Brazeau Reservoir, and Coal Valley.

Data on fall migration is limited, with few reports after mid July. It appears that most have left by the end of August. There were only three September records for the decade. More field work is necessary to determine more accurately when Rock Wrens leave the province.

1971.  
**Sa** - 2, May 23, Taylor - CHG, ISS  
**Eb** - 2 at a nest, June 9, Bearspaw Reservoir - CFNS  
**Fc** - 3, Sept. 6, East Coulee - BIL, VGL, WGM  

1972.  
**Sa/Em** - 1 singing bird photographed, May 14, James River Bridge - RIK  
**Sa** - 1, May 17, Dry Island Buffalo Jump P.P. - WWS  
**Eb** - nest on sandstone cliff, early July, Sylvan Lake - Abrahamson (1980)  

**Eb** - 4, June 9, Big Hill Springs P.P. - VGL, CAR  
- 1, Aug. 9, Canmore - GRG
1974. **Sa** - 1, May 19, Sandy Point - GWG, LOG
1975. **Sa** - 1, May 13, Pinhorn Grazing Reserve - WWS
**Em** - 1, May 24, Mt. Eisenhower, Banff N. P. - CRW
**Eb** - 3, June 6, Pine Coulee - BAD, BOD
- 1, July 5, Brazeau Reservoir - MAH
- 2 adults & 5 juveniles, July 30, Big Knife P. P. - GRG, PAG, MAH
1976. **Sa** - 6, May 7, Writing-on-Stone P. P. - WWS
**Eb** - 1, July 4, Mt. Indefatigable - Salt (1976)
1977. **Sa** - 1, May 4, Dry Island Buffalo Jump P. P. - CAW
**Em** - 1, May 14, Edmonton - BIK, ERT, DVW, LIW
**Eb** - 1, May 28/29, Edmonton - Wiseley (1979b)
- 1, June 19, Canmore - JOD, JMP
- 1, July 5, Healy Creek, Banff N. P. - JMP (Holroyd & Van Tighem 1983)
- 1 singing, July 20, Waterton Lakes N. P. - CAW, CRW
- 1, July 26, Big Knife P. P. - CAW, CRW
**Fc** - 1, Sept. 1, Horseshoe Canyon - PES
1978. **Sa** - 1, April 30, Lost River - CAW, CRW, RAW
**Eb** - 1, June 2, lower North Saskatchewan River, Banff N. P. - Holroyd & Van Tighem (1983)
- 1, June 15, Chimney Rock - CAW
1979. **Eb** - 1, June 27, Calgary - JMP
- 1, July 18 & Aug. 13, Gorge Creek - Wiseley (1979a)
**Fc** - 1, Sept. 14, Gorge Creek - Wiseley (1979a)
1980. **Sa** - 1, May 20, Writing-on-Stone P. P. - DAE
**Eb** - 1, June 10, Coal Valley - CAW, CRW
- 1, June 28, Snake Indian Pass, Jasper N. P. - Holroyd & Van Tighem (1983)

[Canyon Wren (*Catherpes mexicanus*)]

The Canyon Wren is essentially a non-migratory resident that occurs as far north as the southern interior of British Columbia, north-central Idaho and southwestern Montana. A highly unusual observation from 1971 is the first hypothetical report for Alberta.

1971. **Ev** - 1 heard singing, July 5, Milk River near Onefour - Smith (1972)

House Wren (*Troglydytes aedon*)

House Wrens arrived in southern Alberta in the middle of May, with the earliest arrival dates ranging from May 2 to 21.

Salt & Salt (1976) depict the range of the House Wren as covering the entire province, but state that it is scarce and local in the extreme north, mountains and prairies. However, in the grasslands this species is actually quite common in deciduous woodlands, particularly in valleys and coulees (Wallis 1976, 1977). Published reports indicate that this species should be considered extralimital in the mountains. Sharp (1973) considers this wren to be common to uncommon in Waterton Lakes National Park. However, the distribution was concentrated in the lowest areas of the north-central part of the park, an area that is not in the mountains. Salt (1976) has no records for Kananaskis Provincial Park. Holroyd & Van Tighem (1983) consider this species to be very rare in Banff National Park, with only one nesting season record (June 1891). These authors have no records for Jasper National Park. Francis & Lumbis (1979) report only one record for their entire Ft. MacKay
study area, and Hohn (1972) had only one old record (1932) for the Lake Athabasca area. In many areas of the far north, House Wrens are absent due to a lack of deciduous woodland.

By early September, many House Wrens have left Alberta. During the decade, the last records were recorded from September 1 to October 10.

1971.
  Sa - 1, May 2, Calgary - FRS
  Fc - 4, Sept 17, Calgary - WWS

1972.
  Sa - 1, May 2, Lethbridge - HES, RYS
  - 1, May 13, Carseland - BIL, VGL
  - 1, May 16, Lacombe - VGL
  Eb - 3, June 18, Bow Valley P.P. - VGL
  B - 2, Aug. 13, Chain Lakes P.P. - CFNS
  Fc - 1, Sept. 30, Calgary - GRW

  Sa - 2, May 15, Vegreville - BYB, ERB
  - 2, May 16, Lethbridge - HES
  Fc - 1, Sept. 28, Calgary - WIA

1974.
  Sa - 1, May 9, Milk River Canyon - WWS
  - 1, May 11, Cheadle - TSS
  - 3, May 16, Dunstable - VGL
  - 1, May 16, Vegreville - ERB
  Fc - 1, Sept. 21, Edmonton - RIP

1975.
  Sa - 1, May 11, Vegreville - BUB, BYB, ERB, PRB
  - 2, May 14, Cheadle - TSS
  - 4, May 18, Grande Prairie - WAM, YVM
  Eb - 1 pair, summer, Syncrude lease - Sharp & Richardson (1976)
  Fc - 1, Oct. 4, Vegreville - BYB, ERB
  - 1, Oct. 10, Calgary - JOD

1976.
  Sa - 1, May 16, Calgary - Butot (1976c)
  - 1, May 18, Mirror - ADB
  - 1, May 20, Sherwood Park - RIC
  Em/Fc - 1, Sept. 5, Ft. Chipewyan - RAE
  Fc - 1, Sept. 14, Calgary - HWP

1977.
  Sa - 1, May 7, Calgary - BIL
  - 1, May 9, Sherwood Park - RIC
  Fc - 1, Sept. 18, Calgary - RUB

1978.
  Sa - 1, May 16, Edmonton - CAF, JOF
  Fc - 1, Sept. 1, Calgary - HWP

1979.
  Sa - 2, May 18, Calgary - JOR
  Fc - 1, Sept. 14, Bottrel - SFJ

1980.
  Sa - 1, May 21, Calgary - OLD
  Fc - 4, Sept. 16, Calgary - OLD

Winter Wren (*Troglydotes troglodytes*)

Limited data indicated that the first Winter Wrens arrived in southern Alberta about the middle of April. For Banff and Jasper National Parks, Holroyd & Van Tighem (1983) reported arrival dates from mid April to late May with a slight peak in early May. Francis & Lumbis (1979) had an arrival date of May 18 for the Ft. MacKay area.

Salt & Salt (1976) illustrate the disjunct breeding ranges of the two subspecies of Winter Wren that occur in Alberta. During the decade, there was nesting season data for the area of separation between the mountain and northeastern Alberta populations. In this area, there were extralimital records from William A. Switzer Provincial Park, Winagami Lake Provincial Park, Fox Creek and the Swan Hills. Future work may show that, where the preferred habitat of mature moist coniferous-dominated forest exists, Winter
Wrens will occur.

In Waterton Lakes National Park, Sharp (1973) stated that this species was common. Salt (1976) found it to be fairly common in Kananaskis Provincial Park. In Banff and Jasper National Parks, Holroyd & Van Tighem (1983) noted that Winter Wrens were fairly common in the Main Ranges, with only a few in the Front Range valleys. In these two parks, it was almost exclusively found in Engelmann spruce (Picea engelmannii)-subalpine fir (Abies lasiocarpa) forests. Griffiths & Pharis (1976) reported that Winter Wrens were locally common in the Swan Hills. In the Ft. MacKay area, Francis & Lumbis (1979) recorded Winter Wrens only on a mature mixed forest plot, where the density was 11 territories/100 hectares. In extreme northern Alberta, this species is largely absent due to a lack of suitable habitat.

Data on fall migration was limited, but it appeared that many Winter Wrens migrated south by the end of August. Francis & Lumbis (1979) had a departure date of September 7 for the Ft. MacKay area. Holroyd & Van Tighem (1983) had only one fall record after the end of August for Banff and Jasper National Parks. Elsewhere in southern Alberta, birds have been recorded until late September.

The first winter record for the province occurred in 1974 at Calgary. The second and third winter records were in 1976 and 1978 at Banff and Jasper, respectively.

1971.   Sa - 1, April 14, Barrier Lake - TSS  
         - 1, Sept. 13, Scarab Lake, Banff N.P. - RUJ  
         - uncommon summer resident, William A. Switzer P.P. - Murray V. Jones & Associates (1973)  
         Em - 1, Sept. 2 & 3, Cheadle - TSS  
         FC - 1, Sept 30, Bow Valley P.P. - SCO  
1974.   Eb - 1, June 11, Fox Creek - Tull (1975)  
         Em - 2, Aug. 31, Nordegg - JDJ  
         FC - 2, Nov. 13 & 27, Calgary - HWP, CAR  
         - 1, Nov. 25, Dec. 3 & 4, Calgary - HWP, CAR  
         - 1, Dec. 29, Calgary - Christmas Bird Count  
1975.   Eb - 1 singing, June 24-26 and not thereafter, Reesor Lake - WWS, CRW  
         FC - 1, Sept. 7, Syncrude lease - Sharp & Richardson (1976)  
         - 1 pair, April 25, Chisholm - ROB, REG  
         P - 2 singing, June 23, Sir Winston Churchill P.P. - CRW  
         FC - 5, Sept. 4, Lake Louise - ADS  
         - Sept. 7, Ft. MacKay - Francis & Lumbis (1979)  
         Em - 1, Dec. 19, Banff - Christmas Bird Count  
1978.   Sa - 1, April 30, Ribbon Creek - MRR  
         Em - 1, Dec. 16, Jasper N.P. - Christmas Bird Count  
1979.   Em/FC - 1, Sept. 27, Calgary - RUB

Sedge Wren (Cistothorus platensis)

The status of the Sedge Wren in Alberta is poorly understood. Previous to the decade, there were reports of this species from seven locations (Höhn et al. 1959; Salt & Salt 1976). Sadler & Myres (1976) had no reports available to them for the 1960's. It is not known if this species has remained undetected due to its secretive habits and limited range in Alberta, or if it has recently moved into the province. Because Salt & Salt (1976) have no defined
breeding range, we have called all records extralimital.

The first definite nesting record for Alberta was of a pair with six young at Gainford in June 1970. During this decade, there were reports from 17 locations. Most records were centered around the Cold Lake-Lac La Biche-Bonnyville area. Within this area, the favored habitat is extensive wet sedge (Carex spp.) meadows with a few scattered willows (Salix spp.). The overall nesting range in Alberta appears to be bounded on the north by Cold Lake, Wolf Lake, Shaw Lake (Lac La Biche) and Newbrook (southeast of Athabasca); on the west by Sangudo, Glenevis and Gainford; and on the south by Ribstone Creek (near Czar) and Dixon Lake (Provost). In this context, the records from near Cereal in 1976 and near Ft. MacKay in 1977 can be considered extralimital.

There were two breeding season records prior to the decade that need to be detailed. A singing male was recorded on June 16, 1957 at Glenevis (Höhn et al. 1958), and another singing male was reported on June 8 and 22, 1958 along the Paddle River north of Sangudo (Höhn et al. 1959).

Migration records are almost non-existent for Alberta. The earliest date was May 26, 1977. This record was of a territorial male in a dwarf birch (Betula pumila)-sedge (Carex spp.) fen near Ft. MacKay. The latest date recorded for the decade was July 28, 1976, but this was of an adult feeding two young. The only fall migration record for Alberta was of a bird collected from a warbler flock near Camrose on September 19, 1927 (Salt & Wilk 1966).

1970.  

- 1970.  

- **Eb** - 1 pair & 6 young photographed, June, Gainford - EAW, JAW (Nordstrom 1978)

1972.  


1975.  

- **Eb** - 3, July 18, Newbrook - DEP (Serr 1975c)

1976.  

- **Eb** - 5 singing, June 5, 9 & 11, Cold Lake (English Bay) - ANG, WPN, WWS, CAW (Nordstrom 1978)
  - 1 singing, June 29 & July 4, 32 km south of Cereal - ARS, DUW (Nordstrom 1978)
  - 2 singing, July 8, Cold Lake (Long Bay) - Nordstrom (1978)
  - 3 singing, July 15, 16 km southeast of Lamont - ARS (Nordstrom 1978)
  - 4, July 16, 8 km east of Lamont - ARS (Nordstrom 1978)
  - 2 singing, July 18, 8 km east of Lamont - ARS (Nordstrom 1978)
  - 1 adult feeding 2 young, July 28, 8 km east of Lamont - ARS (Nordstrom 1978)

1977.  

- **Eb** - 1 singing, May 26, Ft. MacKay - WWS
  - 1 singing, May 31, 16 km south of Wolf Lake - Nordstrom (1978)
  - many, June 6, Cold Lake - Nordstrom (1978)
  - 2, June 7, 16 km south of Wolf Lake - Nordstrom (1978)
  - 4 singing, June 27, Ribstone Creek near Czar - CAW
  - several, July 4, 14.4 km southwest of Wolf Lake - Nordstrom (1978)
  - several, July 7, 5.6 km west-northwest of Shaw Lake - Nordstrom (1978)
  - 1, July 13, 6.4 km southwest of Elinor Lake - Nordstrom (1978)
  - 2, summer, 3.2 km southeast of Dixon Lake - CAW

1980.  

- **Eb** - 30 birds in 2.4 km of marsh, June 22, St. Albert - RAE (Gollop 1980b)
  - a few singing, June 25, Whitney Lakes P.P. - CAW
Marsh Wren (*Cistothorus palustris*)

During the decade, the first spring migrants were recorded from April 23 to May 12. In most years, Marsh Wrens arrived in early May. This is earlier than the arrival time given by Sadler & Myres (1976), but later than that given by Salt & Salt (1976). There was only one spring migration record for the mountains, which was in 1978.

The breeding range of the Marsh Wren as illustrated by *The Birds of Alberta* was expanded from the second edition to the third edition. This expansion was the result of breeding season records from marshes throughout the grasslands and eastern parklands. Preferred habitat is extensive beds of common cattail (*Typha latifolia*)-bulrush (*Scirpus spp.*). Today, in the grasslands these habitats are found largely around man-made water bodies. In extreme northern Alberta, the Marsh Wren is more localized due to a lack of suitable habitat. In the Pt. MacKay area, it was locally common (Francis & Lumbis 1979), while in the Swan Hills it was rare (Griffiths & Pharis 1976). In the mountains and foothills, this species was mostly absent. For the mountain national parks, there was only one observation of a bird during the nesting season (Sharp 1973; Holroyd & Van Tighem 1983).

During August when Marsh Wrens become silent, observations dramatically drop off. It appears, however, that most leave Alberta by mid to late September. A few remain into early October in some years. There were only two fall migration records for the mountains, in 1972 and 1979.

1971.  
*Fa* - 1, Sept. 12, Eagle Lake - CDB, HWP, CRW

1972.  
*Sa* - 2, May 4, Miquelon Lake - WWS  
*Eb* - 2, May 27, Cheadle - TSS  
- 1, June 20, Stobart Lake - BIM  
- 1, July 15, Frank Lake - VGL, RIP  
- 1, July 23, Cheadle - VGL  
- 1, Aug. 16, Namaka Lake - CFNS

*Em/Fc* - 1, Sept. 29, Waterton Lakes N.P. - Sharp (1973)

*Sa* - 7, May 12, Tofield - GWG, LOG  
*Eb* - 1 plus nest with 4 eggs, July 2, Frank Lake - LEH  
- 1 pair, summer, Elkwater Lake - Edwards (1974)  
*Fa* - 3, Sept. 23, Bassano - CFNS

1974.  
*Sa* - 2, May 5, Beaverhill Lake - GWG, LOG  
*Em* - 1, May 18, northwest of Calgary - EMG, WGG  
*Fa* - 5, Sept. 7, Namaka Lake - HWP

1975.  
*Sa* - 4, May 10, Blizzard Lake - BIL  
- May 22, Horseshoe Lake - Sharp & Richardson (1976)  
*Eb* - nesting, July 1, Pakowi Lake - Smith & Wallis (1976)  
*Fa* - 2, Sept. 6, Namaka Lake - HWP  
- Sept. 27, Horseshoe Lake - Sharp & Richardson (1976)

1976.  
*Sa* - 2, May 2, Namaka Lake - HWP  
*Fa* - 1, Sept. 26, Namaka Lake - ANS

1977.  
*Sa* - 1, April 23, Namaka Lake - HWP  
*Fa* - 2, Oct. 2, Eagle Lake - JOD, PES

1978.  
*Sa/Em* - 1, April 30, Vermilion Lakes, Banff N.P. - Holroyd & Van Tighem (1983)  
- 1, May 6, Namaka Lake - RUB  
*Fa* - 6, Oct. 8, Pakowi Lake - RUB

1979.  
*Sa* - 3, May 12, Eagle Lake - DAE

*Em/Fc* - 1, Oct. 8, Banff - Holroyd & Van Tighem (1983)

1980.  
*Fa* - 1, Sept. 14, Eagle Lake - CFNS  
- 4, Oct. 10, Beaverhill Lake - PTS, TWT
FAMILY: CINCLIDAE

American Dipper (*Cinclus mexicanus*)

The American Dipper is a resident of fast-flowing streams in the mountains of southwestern Alberta. However, many dippers in Alberta winter away from breeding areas (Ealey 1977). Spring migration data for the decade was limited. For the 1960's, Sadler & Myres (1976) suggested a possible movement in early March. Holroyd & Van Tighem (1983) stated that migration in Banff and Jasper National Parks occurred in April and May. In the Sheep River/Gorge Creek area, Ealey (1977) found that the first dippers arrived in early April, with all breeding birds present by early to mid May. He also reported that males arrived significantly earlier than females.

During the breeding season, dippers are fairly common at higher elevations in the mountain national parks (Sharp 1973; Holroyd & Van Tighem 1983). There were extralimital late May records for the Calgary, Caroline and Whitecourt areas. Salt & Salt (1976) report a June record from Fleming Lake in the Caribou Mountains of northern Alberta, but give no details.

Ealey (1977) studied the ecology of a breeding population of American Dippers west of Turner Valley along the Sheep River and its tributaries in 1975 and 1976. The breeding population on 41 km of stream was 45 in 1975 and 43 in 1976. Mean clutch size was 4.3. Fledging success was 1.04 and 1.38 young per adult in 1975 and 1976, respectively. No young produced in 1975 returned to nest in the study area in 1976.

Fall migration for the American Dipper is poorly understood. Salt & Wilk (1966) state that there is a "definite migration from the province". Sharp (1973) notes that dippers descend to lower elevations in the fall in Waterton Lakes National Park. Holroyd & Van Tighem (1983) record fall migration as occurring in October and November in Banff and Jasper National Parks.

Ealey (1977) noted that young of the year began wandering in the early fall. Later on, as breeding streams became ice-covered, adults began moving downstream. If parts of the breeding streams stayed open, some dippers overwintered. In some winters, dippers were found as far downstream from the mountains as Whitecourt, Rocky Mountain House, Red Deer, Caroline, Sundre, Water Valley, Calgary, Okotoks and Lethbridge. However, it is still a mystery where the bulk of Alberta's dippers spend the winter. The highest density of wintering dippers in Canada has been reported as occurring along the lower Bow River in Banff National Park (Holroyd & Van Tighem 1983).

J. Salt (1977) mentioned the use of old Cliff Swallow nests by the American Dipper for night roosting and as feeding platforms.

      EB - 1, May 24, Caroline - VGL
1973. EB - 1, May 29, Calgary - GRW
      EW - 1, Dec. 16, Cache Lake - ATC
      - 1, Dec. 23, Nordegg - LYD
      - 5, Dec. 26, Red Deer - Christmas Bird Count
1974. B - 2, June 8, Bragg Creek - HWP
1975. W - 21, Dec. 27, Banff - Christmas Bird Count
      - 6, Dec. 28, Calgary - Christmas Bird Count
1976. EW - 2, Jan. 4, Water Valley - Christmas Bird Count
      W - 37, Dec. 19, Banff - Christmas Bird Count
1977. EB - 1, May 21, Carson Creek - JLC, JDJ
      B - 1 pair feeding young in nest, June 21, Torrens River - BEW
Golden-crowned Kinglet (*Regulus satrapa*)

Golden-crowned Kinglets usually arrived in southern Alberta in the last half of April. In Banff and Jasper National Parks, Holroyd & Van Tighem (1983) reported migration as occurring from late March to early April, with a peak in late April. Francis & Lumbis (1979) had an arrival date of May 13 for the Ft. MacKay area.

The range of this species has been expanded from the second to the third edition of *The Birds of Alberta* to include almost all of northern Alberta west of the Athabasca River. However, this species appears to be absent from much of the far north due to a lack of suitable old growth coniferous forest. Salt & Salt (1976) indicate possible breeding in the Cypress Hills. The first confirmed nesting in the Cypress Hills occurred in 1977. Sharp (1973) records this species as common in Waterton Lakes National Park. Holroyd & Van Tighem (1983) state that it is very common in the summer in Banff and Jasper National Parks. In these two parks, it prefers closed forests of Engelmann spruce (*Picea engelmannii*)-subalpine fir (*Abies lasiocarpa*), or lodgepole pine (*Pinus contorta*)-spruce (*Picea spp.*), with the highest densities recorded in Engelmann spruce-subalpine fir/false huckleberry (*Menziesia ferruginea*) forest. In the Ft. MacKay area, Francis & Lumbis (1979) have recorded this kinglet only during migratory periods. There were extralimital nesting season records from Gregoire Lake during the decade.

In the fall, migration began in late August or early September. It appears that most birds left the province by mid October.

During the winter, Golden-crowned Kinglets are scarce -- they can be found in the grassland ecoregion in a variety of coniferous habitats including isolated stands in river valleys, in coulees, and around human habitations.

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Observers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971</td>
<td>Em/Ph - 2, May 19-28, Elkwater - WWS, CRW</td>
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<td></td>
<td>Fc - 2, Oct. 31, Hesketh - CAW, CRW</td>
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<td>- 9, Oct. 31, Beynon - CAW, CRW</td>
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<td></td>
<td>W - 5, Nov. 27, Canmore - BIL, VGL</td>
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<tr>
<td></td>
<td>Ew - 7, Dec. 5, Beynon - HWP, CAW</td>
<td></td>
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<tr>
<td>1972</td>
<td>W - 15, Jan. 6, Calgary - RIP</td>
<td></td>
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<tr>
<td></td>
<td>Ew - 5, Jan. 8, Hesketh - HWP, CAW</td>
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<tr>
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<td>Sa - 4, April 27, Calgary - BAD, VGL</td>
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<td></td>
<td>- 2, May 2, Lethbridge - HES</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fa - 1, Sept. 15, Calgary - GEA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fc - 2, Oct. 13, Calgary - HWP</td>
<td></td>
</tr>
<tr>
<td>1973</td>
<td>Fa - 1, Aug. 30, Calgary - RUB</td>
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</tr>
<tr>
<td></td>
<td>Fc - 2, Oct. 28, Edmonton - GEB, JWB</td>
<td></td>
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<tr>
<td>1974</td>
<td>W - 5, Jan. 6, Canmore - BIL, VGL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sa - 2, April 21, Lethbridge - HES</td>
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<tr>
<td></td>
<td>Fa - 1, Sept. 16, Pchwett - GRG, PAG</td>
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<tr>
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<td>Ew - 4, Dec. 7, Strathmore - TSS</td>
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<td>W - 50, Dec. 15, Edmonton - Christmas Bird Count</td>
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</table>
Ruby-crowned Kinglet (Regulus calendula)

The first spring migrants usually arrived in Alberta in the second or third week of April. Peak migration occurred in late April and early May.

Ruby-crowned Kinglets nest in coniferous and mixed woods throughout the province. The first confirmed nesting record for the Cypress Hills occurred in 1971. In southwestern Alberta, nesting occurs in the mountains and foothills as far east as Calgary. Holroyd & Van Tighem (1983) found it very common in mature coniferous forests in Banff and Jasper National Parks, with the highest densities occurring in white spruce (Picea glauca)/shrubby cinquefoil (Potentilla fruticosa)/common bearberry (Arctostaphylos uva-ursi) forest. In the Ft. MacKay area, Francis & Lumbis (1979) found it in all spruce (Picea spp.) dominated habitats, but not in jack pine (Pinus banksiana) dominated forests. Black spruce (Picea mariana) muskegs were preferred, with a density of 22 territories/100 hectares recorded in one muskeg plot.

Fall migration can commence in late August, but most Ruby-crowned Kinglets leave Alberta in September. A few birds remain well into October. Holroyd & Van Tighem (1983) state that the peak of fall migration is mid September in Banff and Jasper National Parks. Francis & Lumbis (1979) had a departure date of September 30 for the Ft. MacKay area.

The first winter records for Alberta occurred during the decade. There were six records in four different winters from Beaverlodge, Luscar, Calgary, Lethbridge, Jasper National Park and Banff National Park.

1971.  
Sa - 1 male, April 22, Vermilion Lakes, Banff N.P. - WWS  
Eb - 3, June 13, Brown-Lowery Natural Area - CFNS  
- 1, June 19, Calgary - RIP  
- 2 males, June 19, Reesor Lake - WWS
Eastern Bluebird (Sialia sialis)

The Eastern Bluebird nests locally in southern Saskatchewan as far west as the Cypress Hills (Godfrey 1986). Prior to this decade, the only observation for Alberta was at Beynon on September 29, 1959 (Salt & Beacham 1960) -- a male and several females and/or immatures were observed for several days.

The first confirmed report of Eastern Bluebirds for Alberta was of two males photographed on the outskirts of southwest Calgary from May 28 to June 5, 1977. These birds were not seen again until June 9 when only one male was observed (Pinel & Butot 1978). Interestingly, a male was recorded on June 8, 1977 from Millarville, about 24 km south of the area of the Calgary observations. However, in 1977 there were also reports from Cypress Hills Provincial Park and Edmonton, indicating that there was a slight influx of this species into Alberta in this year.
         - 1 male, June 9-12, Calgary - RUB, JUF, MJP (Pinel & Butot 1978)
         - 1 male, June 8-16 & Aug. 29, Millarville - JNM (Pinel & Butot 1978; Salt 1978)
         - 1 pair, June 18, Cypress Hills P.P. - RIK  
         - 2 pairs, week prior to June 25, Edmonton - Edmonton Journal column by BOL June 25/77.

**[Western Bluebird (Sialia mexicana)]**

The Western Bluebird nests in southern British Columbia and northwestern Montana (Peterson 1990). The first two hypothetical observations of this species in Alberta occurred during the decade. It is noteworthy that the May 29, 1977 report was only one day after the first 1977 report of Eastern Bluebirds.

1976.  **Ev** - 1, March 28, Wabamun Lake - SAP

**Mountain Bluebird (Sialia currucoides)**

With the exception of a very early record in 1980, Mountain Bluebirds arrived in southern Alberta from March 8 to 21. For the previous decade, Sadler & Myres (1976) noted that the species arrived in Alberta during the last third of March, with the peak in late March to early April. In Waterton Lakes National Park, this species first appeared from mid to late March in most years (Sharp 1973). In Banff and Jasper National Parks, spring migration was from mid March to late May, with a peak in early April (Holroyd & Van Tighem 1983).

The Mountain Bluebird nests throughout Alberta north to the latitude of Ft. McMurray; farther north there are records from the Ft. Chipewyan and Wood Buffalo National Park areas, where the species' status is not clear (Salt & Salt 1976). Francis & Lumbis (1979) have no breeding season records for the Ft. MacKay area, and only one 1977 fall migration record. From 1976 to 1978, Gulley (1979) had only six observations for the Ft. McMurray area, and breeding was not indicated. In Waterton Lakes National Park, Sharp (1973) recorded this species as common, although her own data indicated that it was uncommon. Salt (1976) had no nesting records for Kananaskis Provincial Park. In Banff and Jasper National Parks, Holroyd & Van Tighem (1983) called the Mountain Bluebird an uncommon summer resident that, surprisingly, occurred primarily in the upper subalpine.

Peak numbers in the fall occurred from mid August to mid September. It appeared that migration tapered off by late September. The last migrants were usually observed in the first and second weeks of October, with the occasional laggard remaining into early November.

As early as 1958, Salt & Wilk (1958) were able to state that Mountain Bluebirds were rapidly declining in Alberta, primarily due to competition for nest sites with European Starlings. Competition with House Sparrows, habitat destruction and environmental degradation were also important factors in this
decline. Based on the example of the mass use of bird boxes for the similarly declining Eastern Bluebird, some individuals and groups started "Bluebird Trails" in Alberta. The first large scale use of bluebird boxes in Alberta began in the mid 1950's on the Ellis' farm southeast of Lacombe. In the 1970's, this farm had the highest density of nesting Mountain Bluebirds in North America. The first trail to be set up in the Edmonton area was in 1971 and consisted of 125 boxes. Pinel and Robinson (1974, 1975 & 1976), Pinel (1977), Pinel & Riddell (1978 & 1979) and Stiles (1980a, b & c; 1981) reported on the Calgary area, where a trail began in 1973. In 1973, this trail had 191 boxes which produced 30 bluebird nests. The average clutch size was 5.07, and 113 young were fledged. By 1980, this trail had 708 boxes with 235 bluebird nests fledging 992 young. Chalmers (1981) reported on the Lethbridge area trail, which began in 1974. In 1980, 247 young were fledged on this trail. Wilde (1977) and Carter (1979) report on the Hinton area, which began its trail in 1976. In 1978, 140 boxes produced 31 bluebird nests. Finlay (1980a, b & c) provided a general overview of bluebird trails in Alberta. In 1979, there were 1,714 boxes. Of these, 286 were occupied by bluebirds that fledged 1,216 young.

Pinel (1980) discussed the reproductive efficiency and site attachment of Mountain Bluebirds in the Calgary area from 1973 to 1978. The reproductive efficiency varied from a low of 60% in 1977 to a high of 92.8% in 1978, with a mean of 74.1%.

1971.  
Sa - 1 male, March 19, Ponoka - WWS  
Fc - 1, Oct. 2, Calgary - RIP  
    - 5, Oct. 2, Drumheller - HWP, CAW  
    - 1, Oct. 10, Sylvan Lake - MAC  
    - 1, Oct. 10, Banff - BIL, VGL  
    - 1, Nov. 9, Cavendish - WGM

1972.  
Sa - March 8, Waterton Lakes N.P. - Sharp (1973)  
    - 1, March 16, Exshaw - HEJ  
    - 1, March 16, Conrich - TSS  
    - 2, March 18, Beynon - MAB  
Sb - 56, April 2, Cochrane - MAC

Sa - 1, March 16, Beynon - MAB  
    - 1, March 17, Tofield - DID  
Fc - 1, Sept. 30, Lindbrook - GWG, LOG  
    - 2, Oct. 7, Irricana - RUB  

1974.  
Sa - 1, March 11, Beynon - MAB  
    - 1 male, March 17, Cooking Lake - LOG  
Sb - 23, April 2, Rockyford - LIM, DVW

1975.  
Sa - 1 male, March 21, Millarville - HWP  
    - 1 male, March 22, Alcomdale - JHA  
Sb - 50, April 11, Pass Creek, Waterton Lakes N.P. - FKC  
Eb - 1 female, June 4, 40 km north of Ft. McMurray - GRG, MAH

1976.  
Sa - 2, March 20, Galahad - BAG  
Ph - 50, Sept. 10, Wainwright - KVT  
Fc - 1 male & 2 females, Nov. 5, Jasper N.P. - Holroyd & Van Tighem (1983)

1977.  
Sa - March 15, Galahad - DIB  
    - 1, March 22, Cremona - HWP, JOR  
    - 3 males, March 27, west of Wagner Bog - RAE, AAJ, SAJ  
Em/Fc - 2 females, Sept. 29, Ft. MacKay - Francis & Lumbis (1979)
1978.  
Fc - 1, Oct. 29, Waterton - GRW  
Sb - 2, March 21, Cremona - DUC  
- 4 males, March 23, Edmonton - RIC  
- 2, March 24, Dinosaur P.P. - JOD, JMP  
- 2 pairs, March 25, Beaverlodge - RBD  
- April 4, Ft. McMurray - Gulley (1979)  
Fc - Sept. 19, Ft. McMurray - Gulley (1979)  
- 12, Oct. 7, Drumheller - ADS, DOS, PHS  
1979.  
- 3, March 18, Water Valley - JEW  
- 1 female, March 18, Half Moon Lake - JIF  
- 1 female, March 18, Lindbrook - JIF  
Fc - 2, Oct. 7, Spray Lake - CLH, AES  
1980.  
Sb - 1 male, Feb. 27, Pincher Creek - WWS  
Fb - 150, Aug. 17, Calgary - BES  
Fc - 3, Oct. 18, Cochrane - KAM  
- 30, Oct. 21, north of Edmonton - JIL (Harris 1981a)

Townsend's Solitaire (Myadestes townsendi)

This species arrived in Alberta from late March to mid April, with some spring migrants observed until mid May. In Banff and Jasper National Parks, Holroyd & Van Tighem (1983) stated that migration was from early April to late May, peaking in late April and early May. This cordilleran species was a regular transient recorded migrating through the eastern grasslands and parklands.

Townsend's Solitaires occur in the mountains and foothills, where they nest on cliffs or banks in open coniferous forests. In the mountains, the abundance of this species during the breeding season has been listed regionally as follows: uncommon in Waterton Lakes National Park (Sharp 1973); common to abundant in Kananaskis Provincial Park (Salt 1976); fairly common in Kananaskis Country (Wiseley 1979a); and common in Banff and Jasper National Parks (Holroyd & Van Tighem 1983).

The first nesting record for the Cypress Hills occurred in 1971 (Jones 1972). Reports subsequent to this record suggest that this species may be more regular in the Cypress Hills during the nesting season than previously thought. A pair was observed near Elkwater in June of 1980, and in the Cypress Hills of Saskatchewan, a pair was seen feeding three recently fledged young on July 20, 1979 (Gollop 1979b).

Fall migration occurs over an extended period, and birds may wander far to the east. Fall migration begins in mid to late August in some years, and can last until late October or early November. During the decade, migrants regularly occurred in the grasslands and parklands as far northeast as Elk Island National Park. The majority of fall migrants passed through Alberta in September.

Both Salt & Salt (1976) and Godfrey (1986) imply that there are no winter records for Alberta. However, Sadler & Myres (1976) state that Townsend's Solitaires regularly winter in small numbers in southern Alberta, including the prairies. Sharp (1973) had one winter record at Waterton. Wiseley (1979a) reports that this species regularly winters in small numbers at lower elevations in Kananaskis Country. Holroyd & Van Tighem (1983) note that it is rare, but regular, in winter in Banff National Park. Data for the decade showed that Townsend's Solitaires regularly wintered in southern Alberta. There were 17 records in nine winters from Beynon, Calgary, Bow Valley Provincial Park, Banff, Jasper and Edmonton.
1971. Sc - 1, May 6, Irricana - DVW
   - 1, May 19, Elkwater - WWS
   Eb - 2 adults with young in nest on cliff, August 2, Elkwater - ROB,
       ETJ, GAJ (Jones 1972)
   Fc - 1, Oct. 7, Little Bow Lake - CDB
Fc-Ew - 1, Oct. to March 30, 1972, Calgary - WGM, JIS, MJS
1972. Sa - 2, March 23, Carseland - VGL
   Sc - 1, April 29, Carseland - BIL, VGL, RIP
   Fa - 1, Sept. 15, Beaverhill Lake - MRH
   Fc - 1, Oct. 12, Edmonton - ETJ, MAM, PAM, PAT
1973. Ew - 1, Jan. 23 to March 10, Calgary - HAB
   Sa - 1, April 13, Calgary - HWP
   Sc - 2, May 3, Lethbridge - MSH
       - 1, May 4, Calgary - GRW
   Fa - 1, Aug. 25, Calgary - CFNS
   Fb - 5, Oct. 6, Calgary - ANM
   Fc - 1, Oct. 29, Oliver Lake - RBG
       - 1, Oct. 29, Calgary - ANM
1974. Ew - 1, Feb. 10, Beynon - MAB
   Sa - 1, April 12, Tofield - DID, GWG, LOG, TWT, JIW
   Sc - 1, May 6, Milk River Canyon - WWS
       - 1, May 19, Namaka - RUB
   Fa - 1, Sept. 29, Calgary - RUB
   Fc - 2, Oct. 20, Elk Island N.P. - ENHC, ERT
       - 2, Nov. 11, Turner Valley - JDJ
   Ew - 2, Dec. 29, Calgary - Christmas Bird Count
       - 1, Dec. 30, Vermilion Lakes, Banff N.P. - BRG
1975. Sc - 2, April 29, Calgary - JIM
   Fa - 1, Aug. 18, Calgary - CDB
   Fc - 1, Nov. 19, Calgary - HAB
   Ew - 2, Dec. 26, Banff - RAE
1976. Ew - 1, Jan. 11, Calgary - JOD
       - 1, Feb. 26, Jasper - HAC (Harris & Lamont 1976)
   Sa - 1, April 24, Conrich - HWP
Sc/B - 26 males, May 4, Maligne Canyon to Maligne Lake, Jasper N.P. -
       Holroyd & Karasiuk (1977)
   Fc - 1, Nov. 4, upper Kananaskis Lake - DNB (Salt 1976)
   Ew - 4, Dec. 19, Banff - Christmas Bird Count
       - 1, April 11, Cheadle - TSS
   Eb - family group of 7, Aug. 1, Water Valley - SEA, JMP
   Fc - 1, Oct. 21, Calgary - PES
   Ew - 1, Dec. 2 & 8, Calgary - WIA
       - 13, Dec. 17, Banff - Christmas Bird Count
       - 1, Dec. 30, Bow Valley P.P. - CRW, RAW
1978. Sa - 1, April 8, Morley - JMP
       - 1, April 9, Sherwood Park - RIC
   B - 3, June 11, Coal Valley - CAW, CRW
   Fa - 1, Sept. 4, Calgary - CAO
   Fc - 1, Oct. 14, Cremona - RUB
       - 1, Nov. 9, Jasper N.P. - Holroyd & Van Tighem (1983)
   Ew - 3, Dec. 17, Banff - Christmas Bird Count
       - 5, Dec. 25, Calgary - JMP
       - 1, Dec. 31, Edmonton - BRB
1979. Ew - 1, March 7, Edmonton - TWT
   Sa - 1, April 16, Cheadle - TSS
   Sc - 1, May 7, Calgary - RUB (Gollop 1979a)
   B - 1, July 23, Hat Mt. - ELC, GEC
   Fc - 1, Oct. 8, Calgary - ADS, DOS
   Ew - 9, Dec. 16, Banff - Christmas Bird Count
Veery (Catharus fuscensens)

In most years, the first Veerys arrived from May 18 to 24. In 1972, 1974 and 1975, the first migrants were reported in the last few days of April and early May. However, it is possible that these early observations are of Hermit or Swainson's Thrushes which normally return to the province earlier in the spring.

Salt & Wilk (1966) showed the breeding range as the parklands of western and central Alberta, the Peace River country and the Cypress Hills. Salt & Salt (1976) illustrated an expanded breeding range that included the southern half of Alberta north to Athabasca and Valleyview and west to the lower foothills. They made three statements that further qualified this range. Firstly, this species is restricted to suitably wooded river valleys in the grasslands. Secondly, in the mountains it has only been recorded at Banff, and only as a rare summer visitor. Thirdly, that although it was found in the Peace River country in early years, it is now scarce or absent. Godfrey (1986) is in error when he shows the Veery occurring throughout Alberta's mountains.

Sharp (1973) noted that this species was uncommon, but regular, in wetter deciduous woods with dense shrubbery at the lowest elevations in the eastern part of Waterton Lakes National Park. Wiseley (1979a) stated that it was uncommon on the eastern edge of Kananaskis Country, while Salt (1976) did not record this species in Kananaskis Provincial Park. Holroyd & Van Tighem (1983) had two records for the eastern edge of Banff National Park. Weseloh (1976), also had a record for Banff National Park. There were no reports for Jasper National Park (Holroyd & Van Tighem 1983). The Veery was listed as an occasional summer resident in: Police Coulee (Writing-on-Stone Provincial Park) in 1976 (Wershler 1980), the Neutral Hills in 1975 and 1976 (Bradley & Bradley 1977b) and the Wainwright area in 1975 (Bradley & Bradley 1977c).

Most Veerys leave in early September (Salt & Salt 1976). There was a distinct lack of fall records for the decade. In some years, a few individuals lingered into late September or early October.

1971.  
Sa - 2, May 18, Calgary - WIA  
Sc - 3 males, June 17, Cypress Hills P. P. - WWS  
Rb - 1, July 17, Dinosaur P. P. - Kondla (1978)  
Fc - 2, Sept. 8, Elk Island N. P. - Burns et al. (1986)  
Sa - 1, Sept. 12, Calgary - RIP

1972.  
Sa - 1, April 30, Seebe - VGL

Sa - 1, May 19, Miquelon Lake P. P. - VGL  
Eb - 1 male, July 1, Milk River valley near Coutts - LOG  
Fc - 1 male, July 6, Cadomin - LOG

1974.  
Sa - 1, April 28, Cheadle - TSS  
Sc - 1, May 26, Red Deer River near Bindloss - CAW  
Sk - 1, June 1, Vermilion Lakes, Banff N. P. - Holroyd & Van Tighem (1983)  
Sa - 1, July 8, Calgary - CAR  
Sa - 1, Sept. 14, Calgary - CAR

1975.  
Sa - 2, May 7, Edmonton - CAT, DVT

1976.  
Sa - 1, May 20, Calgary - HWP
Gray-cheeked Thrush (**Catharus minimus**)  

Gray-cheeked Thrushes are scarce spring migrants in southern Alberta. The first birds arrived from May 14 to 21, and the last northbound migrants are usually recorded in late May or early June. Although Salt & Salt (1976) stated that this species was an uncommon migrant in the mountains, data indicates that Gray-cheeked Thrushes were rare in the mountains. There was only one recent spring migration record for Banff National Park in 1971. There were no migration records for Waterton Lakes National Park, Kananaskis Provincial Park or Jasper National Park (Sharp 1973; Salt 1976; Holroyd & Van Tighem 1983).

Until recently, the Gray-cheeked Thrush was considered to be only a migrant in Alberta, with the nearest known breeding locations being in north-central British Columbia, southern Mackenzie and north-central Saskatchewan (Godfrey 1986). The first breeding record for Alberta was near Rock Island Lake in the Caribou Mountains, an outlier of subarctic habitat in northern Alberta, in 1973 (Höhnl & Marklevitz 1974). This general area was checked from 1973 to 1977 inclusive. In the first four years, Gray-cheeked Thrushes were observed. In 1977, the area was checked at the end of July, but none were seen and it was deduced that breeding birds had already left the area (Höhnl & Weseloh 1978). In support of this deduction, they noted that American Robins, which had been observed commonly in previous years, were also absent.

In Jasper National Park, there were breeding season records during the latter part of the decade (Haddow et al. 1978; Holroyd & Van Tighem 1983). In 1976 and 1978, there was a singing male in tree islands of subalpine fir (**Abies lasiocarpa** at Amethyst Lake (Haddow et al. 1978). In 1980, there were three singing males at the head of the Snaring River (Holroyd & Van Tighem 1983).

There was also a breeding season record from east of Jasper National Park in 1980. Sadler & Myres (1976) had a record of one singing male on June 27, 1970 from the Highwood Pass, which is similar in habitat to the above areas. In addition, there were three unusual breeding season records from low elevations, including Edmonton (1974), Banff National Park (1979), and Calgary (1980).

There were few fall migration records for this decade, because most Gray-cheeked Thrushes migrate south through eastern North America. The few that did migrate through Alberta were mainly recorded in September, with the fall observations ranging from August 29 to October 5. The first report for Waterton Lakes National Park was of a fall migrant in 1976.

- 1, May 21, Dinosaur P.P. - JHA  
- 1, May 29/30, Banff N.P. - Weseloh (1976)  
1977.  
Sa 4, May 24, Edmonton - TW  
Sa/Fm 2 males, May 27, Ft. MacKay - WWS  
B 3 singing, June 20, Wintering Hills - CAW  
- 1 singing, June 23, Wood Lake - CAW  
- 1+ singing, June 27, Ribstone Creek near Czar - CAW  
Eb 1, June 29, Bryant Creek, Banff N.P. - KIM (Holroyd & Van Tighem 1983)  
Fc 1, Oct. 7, Edmonton - TBW  
1979.  
Sa 1, May 16, Edmonton - VIL (U of A specimen)  
1980.  
Sa 1, May 20, Writing-on-Stone P.P. - DAE
Swainson’s Thrush (Catharus ustulatus)

Swainson’s Thrushes usually arrived in Alberta during the first two weeks of May, although there were arrival dates in late April for two years. The last spring migrants were recorded in late May and early June. This species was recorded much more frequently in spring migration than in the fall.

The Swainson’s Thrush nests mainly in the coniferous and mixed woods of Alberta, south and east to the edge of the parklands. It also nests in the Cypress Hills (Salt & Salt 1976). In Waterton Lakes National Park, Sharp (1973) found it fairly common at all elevations. Salt (1976) found it widespread and common in Kananaskis Provincial Park from the lowest elevations up to 1,900-2,000 m. In Banff and Jasper National Parks, Holroyd & Van Tingham (1983) found it very common, as far north as the Miette and lower Athabasca Rivers. They recorded the highest breeding densities in aspen (Populus tremuloides)-lodgepole pine (Pinus contorta) forest. In the Pt. MacKay area, Francis & Lumbis (1979) found that Swainson’s Thrushes preferred wetter sites
where the dominant vegetation was greater than five meters high, with a continuous shrub layer of two to six meters high. A high density of 55 territories/100 hectares was recorded in a mature mixed forest plot. During the decade, there were extralimital breeding season records from Carseland and Gooseberry Lake.

The first fall migrants appeared in southern Alberta in mid August, and most had left Alberta by mid September. During the decade, there were two fall records from mid October and one from early November.

<table>
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<th>Year</th>
<th>Date</th>
<th>Location</th>
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<td>1971</td>
<td>Sa - 2, May 6</td>
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<td>RUJ</td>
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<td>Sc - 1, May 23</td>
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<td>F - 1, Sept. 5</td>
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<td>1972</td>
<td>Sa - 2, May 6</td>
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<td>GEA, WEB</td>
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<td></td>
<td>Fa - 1, Aug. 20</td>
<td>Calgary</td>
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<td>Fc - 1, Sept. 28</td>
<td>Calgary</td>
<td>HWP</td>
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<td>1973</td>
<td>Sa - 1, May 13</td>
<td>Calgary</td>
<td>BIL</td>
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<tr>
<td></td>
<td>B - 15 singing, June 8, Winagami Lake</td>
<td>P.P. - WWS</td>
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<td></td>
<td>Sc - 1, June 9, Red Deer River near Jenner</td>
<td>GWG, LOG</td>
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<td></td>
<td>Eb - singing, summer, Gooseberry Lake</td>
<td>P.P. - Ebel et al. (1973b)</td>
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<td>Fa - 1, Aug. 15</td>
<td>Calgary</td>
<td>WWS</td>
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<td>Fc - 1, Sept. 20</td>
<td>Edmonton</td>
<td>DEG</td>
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<td>- 2, Nov. 4</td>
<td>Calgary</td>
<td>BIL</td>
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<td>1974</td>
<td>Sa - 1, April 27</td>
<td>Lethbridge</td>
<td>HES</td>
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<td>- 1, June 5, Writing-on-Stone</td>
<td>P.P. - Wershler (1980)</td>
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<td>Eb - 1, July 27</td>
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<td>Fc - 1, Sept. 22</td>
<td>Edmonton</td>
<td>DEG, GCG</td>
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<td>- 1, Oct. 13</td>
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<td>Syncrude lease</td>
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<td>- 11, May 7, Edmonton</td>
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<td>Sc - 1, June 1, Strathmore</td>
<td>TSS</td>
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<td>Fa - 1, Aug. 24</td>
<td>Calgary</td>
<td>MSB, RUB</td>
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<td>Fc - Sept. 27, Syncrude lease</td>
<td>Ward et al. (1976)</td>
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<td>1976</td>
<td>Sa - 4, May 5</td>
<td>Jasper N.P.</td>
<td>Holroyd &amp; Karasiuk (1977)</td>
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<td>- May 9, Ft. McMurray</td>
<td>Holroyd &amp; Karasiuk (1977)</td>
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<td>- 1, May 9, Calgary</td>
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<td>B - 4 singing, June 15</td>
<td>Miquelon Lake</td>
<td>P.P. - CRW</td>
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<td></td>
<td>Fc - 1, Oct. 10, Calgary</td>
<td>Butot (1977a)</td>
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<td>1977</td>
<td>Sa - 1, May 1</td>
<td>Banff N.P.</td>
<td>Holroyd &amp; Van Tighem (1983)</td>
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<td></td>
<td>Eb - 12, Sept. 11, Calgary</td>
<td>HWP</td>
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<td></td>
<td>Fc - Sept. 28, Ft. McMurray</td>
<td>Gulley (1979)</td>
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<td>1978</td>
<td>Sa - 1, May 7</td>
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<td>WIA</td>
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<td></td>
<td>- 1, May 7, Edmonton</td>
<td>PSA</td>
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<td>1980</td>
<td>Sa - 1, May 14</td>
<td>Cheadle</td>
<td>TSS</td>
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<td>Sb - 25+, May 26</td>
<td>Calgary</td>
<td>HWP, JOR</td>
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<td>Sc - 1, May 28</td>
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**Hermit Thrush (Catharus guttatus)**

The Hermit Thrush was a scarce spring migrant in southern Alberta. The first birds usually arrived from April 21 to 30. Francis & Lumbis (1979) gave an arrival date of April 23 for the Ft. MacKay area. Holroyd & Van Tighem (1983) reported that it was an uncommon migrant that arrived in May in Banff and Jasper National Parks.
Hermit Thrushes nest throughout the wooded regions of northern and western Alberta, south and east to the edge of the parklands (Salt & Salt 1976). It does not nest in the Cypress Hills, although two birds were reported in July of 1977 in Saskatchewan's Cypress Hills (Serr 1977d).

Sharp (1973) stated that this thrush is fairly common at higher elevations in Waterton Lakes National Park. Salt (1976) found this species to be less common than the Swainson's Thrush in Kananaskis Provincial Park. There, he observed a few birds at lower elevations, but most occurred at 1,900 meters or higher. Holroyd & Van Tighem (1983) found Hermit Thrushes to be common in Banff and Jasper National Parks. It was more common at higher elevations than Swainson's Thrushes, and preferred Engelmann spruce (Picea engelmannii)-subalpine fir (Abies lasiocarpa) forests. Francis & Lumbis (1979) found it throughout the Ft. MacKay area in a variety of woodland habitats. In the boreal forest of Alberta, typical habitat appears to be relatively open woodland on well-drained soils, especially pine (Pinus spp.) woods. There was an extralimital breeding season record from Dillberry Lake in 1974. In 1975 and 1976, it was recorded as an occasional summer resident in stunted aspen (Populus tremuloides) forests in sand dune terrain in the Wainwright area (Bradley & Bradley 1977c).

In the fall, most Hermit Thrushes migrated through Alberta in September. During the decade, the last fall birds were usually observed sometime during the first three weeks of October.

1971.  
  Ph - 4, Sept. 17, Calgary - WWS
1972.  
  Sa - 1, April 30, Edmonton - WWS  
  Fa - 1, Sept. 16, Calgary - GEA  
  Fc - 1, Oct. 4, Calgary - HWP  
        - 1, Oct. 10, Edmonton - PAT
  Sc - 1, May 25, Calgary - RUB  
  Fc - 1, Oct. 3, Calgary - EDB, EGB  
        - 1, Oct. 12, Edmonton - JOB
1974.  
  Sa - 3, April 27, Dunstable - BIL, VGL  
        - 3, April 28, Calgary - EMG, WGG, HAV
  Fc - 2, July 7, Elk Island N.P. - Burns et al. (1986)  
  Eb - numerous singing, July 23, Dillberry Lake area - KVT, CRW
  Fc - 1, Oct. 1, Edmonton - BRB, GAB  
1975.  
  Sa - April 27, Syncrude lease - Sharp & Richardson (1976)  
        - 1, April 30, Tofield - DID  
        - 1, May 3, Conrich - RUB, HAV
  Sc - 1, May 20, Calgary - LRB  
  Eb - occasional during summer, Wainwright area - Bradley & Bradley (1977c)
  Fa - 1, Sept. 19, Calgary - WIH  
  Fc - Sept. 28, Syncrude lease - Ward et al. (1976)  
        - 1, Oct. 2, Calgary - RUB  
        - 1, Oct. 23, Water Valley - Johnston (1976b)
1976.  
  Sa - April 22, Ft. MacKay - Francis & Lumbis (1979)  
        - 1, May 1, Wainwright - WWS
  Sc - 1, June 2, Calgary - DRD  
  Eb - occasional during summer, Wainwright area - Bradley & Bradley (1977c)
  Fc - Oct. 6, Ft. McMurray - Gulley (1979)  
        - 1, Oct. 6, Jasper N.P. - Holroyd & Karasiuk (1977)
1977.  
  Sa - 1, April 23, Morley - JMP  
        - 1, May 1, Pt. MacKay - WWS
  B - several singing, June 27, Ribstone Creek near Czar - CAW
  Fc - 1, Oct. 9, Bragg Creek - JOT

-77-
Wood Thrush (*Hylocichla mustelina*)

The Wood Thrush is an inhabitant of mature deciduous woodlands in eastern North America. This species apparently nests locally in southern Manitoba, and there are five sight records from Saskatchewan, as far west as Biggar (Godfrey 1986). The following report was the first confirmed record for Alberta.

1980. Ev - 1 photographed, Nov. 1-9, Lethbridge - SHA, BEH

American Robin (*Turdus migratorius*)

The first spring migrants arrived between March 3 and 21, with numbers peaking from mid to late April. For the 1960's, Sadler & Myres (1976) stated that the first migrants arrived from late February to late March, and that the spring migration period was quite extended. Holroyd & Van Tighem (1983) noted that American Robins arrived in Banff and Jasper National Parks from early April to mid May, and that spring migration peaked from late April to early May. Francis & Lumbis (1979) had an arrival date of April 15 for the Ft. MacKay area.

The American Robin nests throughout Alberta. In Waterton Lakes National Park, it was common, especially at lower elevations (Sharp 1973). Salt (1976) found it to be a very common nesting species up to 2,000 meters in Kananaskis Provincial Park. Holroyd & Van Tighem (1983) reported that the American Robin was the most common and widespread thrush in Banff and Jasper National Parks. Francis & Lumbis (1979) found it throughout the Ft. MacKay area, where it preferred dense, tall willow (Salix spp.) with a scattered canopy of aspen (*Populus tremuloides*) or balsam poplar (*Populus balsamifera*). The highest density was 11 territories/100 hectares in a willow plot.

Fall migration peaked in September. There was a very interesting fall peak record in 1976. During the decade, the last robins were reported from October 13 to November 16. In Kananaskis Provincial Park, Salt (1976) had few records from late September and no observations for October. In Banff and Jasper National Parks, Holroyd & Van Tighem (1983) stated that migration occurred in September and October, with the peak from late September to early October. Francis & Lumbis (1979) had a departure date of October 14 for the Ft. MacKay area.

Godfrey (1986) reported that robins rarely winter in southern Alberta. For the 1960's, Sadler & Myres (1976) had records for nine winters from as far north as Edmonton. During the 1970's, robins were reported every winter from as far north as Edmonton, almost exclusively in cities and towns.

1971. W - 3, Jan. 3, Calgary - Christmas Bird Count
      - 2, Feb. 9, Strathmore - WWS
Sa - 1, March 19, Carseland - DVW
Sb - 300, April 11, Banff - RFC
F  - 50, Aug. 28, Forgetmenot Mt. - CDB, WGM
Fb - 300, Sept. 12, Calgary - RIP
Fp - 1, Oct. 20, Jasper - HAV
1972.  
Sa - 1, March 17, Calgary - BIL, VGL  
Fb - 100+, Aug. 28, Calgary - VGL  
Fc - 1, Nov. 10, Clyde - MYD  
W - 1, Dec. 2, Edmonton - MOE  
- 2, Dec. 10, Calgary - CRW  

W - 1, Jan. 28, Edmonton - ELP, JAP  
Sa - 2, Jan. 29, Calgary - RUJ, MUR  
Fb - 100+, Sept. 28, Calgary - WIA  
W - 1, Dec. 16, Edmonton - Christmas Bird Count  
- 1, Dec. 21, Stettler - Christmas Bird Count  
- 6, Dec. 30, Calgary - Christmas Bird Count  

1974.  
W - 1, Jan. 5, St. Albert - HUS  
- 1, Jan. 18, Drumheller - RIP, DAS  
- 1, Jan. 22, Edmonton - PAH  
- 3, Feb. 7, Calgary - HWP  
Sa - 1, March 15, Lethbridge - HES  
- 2, March 17, De Winton - BIL, VGL  
Fc - 1, Oct. 19, Syncrude lease - Sharp et al. (1975)  
- 1, Nov. 1, Dunstable - VGL, RIP  
W - 2, Dec. 15, Edmonton - Christmas Bird Count  
- 3, Dec. 29, Calgary - Christmas Bird Count  

1975.  
W - 1, Feb. 12, Calgary - DVW  
Sa - 1, March 12, Calgary - DVW  
Sa - several hundred, April 26, Syncrude lease - Sharp & Richardson (1976)  
Fc - 1, Oct. 13, Syncrude lease - Sharp & Richardson (1976)  
W - 1, Dec. 7, Edmonton - DVW, LIW  
- 4, Dec. 26, Lethbridge - Christmas Bird Count  
- 1, Dec. 27, Banff - Christmas Bird Count  
- 1, Dec. 28, Calgary - Christmas Bird Count  

1976.  
W - 1, Jan. 23, Calgary - HWP  
Sa - 1, March 17, Calgary - WIA  
- 2, March 27, Galahad - BAG  
- April 15, Ft. MacKay - Francis & Lumbis (1979)  
Fb - 10,000 flying south, Sept. 19, Erskine - EDC. All birds gone on the 20th.  
W - 1, Dec. 19 (+/- 1 week), Banff - Weseloh (1977b)  
- 2, Dec. 21, Calgary - DRD  

1977.  
W - 1, Jan. 2, Water Valley - Christmas Bird Count  
- 1, Jan. 20, Edmonton - RIC  
- 1, Jan. 30, Calgary - ADS, PHS  
- 1, Feb. 16, Calgary - KNM  
Sa - 1, March 12, Lower Kananaskis Lake - McNicholl (1978c)  
- 1, March 19, Calgary - RHR  
- 1, March 31, Galahad - HES  
- 1, April 21, Ft. MacKay - WWS  
- 1, Nov. 11, Wembley - YVM  
- Nov. 30, Ft. McMurray - Gulley (1979)  
W - 1, Dec. 18, Edmonton - Christmas Bird Count  
- 1, Dec. 27, Calgary - Christmas Bird Count  

1978.  
W - 1, Feb. 3, Calgary - WWS  
- 1, Feb. 12, Edmonton - PJC  
### Varied Thrush (Ixoreus naevius)

The Varied Thrush usually arrives in April (Sharp 1973; Holroyd & Van Tighem 1983). In Banff and Jasper National Parks, spring migration occurred from early April to mid May, with peak numbers recorded in late April and early May. There were eight extralimital spring migration records from locations east of the mountains. Half of these records were from Calgary, with birds also recorded at Ralston, Elkwater, Lethbridge and Smoke Lake.

The Varied Thrush nests in the mountains of Alberta and into the foothills south of Grande Prairie (Salt & Salt 1976). In Waterton Lakes National Park, Sharp (1973) stated that it was common in mature coniferous forest at higher elevations. Salt (1976) found this species to be common in Kananaskis Provincial Park, showing some preference for older mixed coniferous woods especially above 2,000 meters. Holroyd & Van Tighem (1983) listed this thrush as fairly common in Banff and Jasper National Parks, where it preferred moist mature coniferous forest, particularly Engelmann spruce (Picea engelmannii)-subalpine fir (Abies lasiocarpa) in the Main Ranges. There were a number of extralimital breeding season records for this decade. Of particular interest is the disjunct nesting population in the Swan Hills, a foothills outlier. The first records for the Swan Hills were reported in 1974 (Griffiths & Pharis 1976).

Most Varied Thrushes left Alberta in September, while a few lingered into late October and early November. As an extralimital migrant east of the mountains, this species was recorded more frequently in the fall than in the spring. During this decade, there were extralimital fall records for nine years.

The first winter record for Alberta was in 1972 at Calgary. During the decade, Varied Thrushes were observed in six different winters from Lethbridge, Calgary, Red Deer and Swan Hills. Two-thirds of the winter records were from Calgary.

### 1971

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<td>Sa - 1</td>
<td>April 5, Barrier Lake</td>
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<tr>
<td>Em - 1</td>
<td>male, April 13 &amp; 18</td>
<td>Calgary</td>
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<td>Fa/Em - 1</td>
<td>Sept. 27, Milo</td>
<td>EWB</td>
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<td>Em - 1</td>
<td>Oct. 7, Calgary</td>
<td>CRW</td>
</tr>
<tr>
<td>Fa/Em - 1</td>
<td>Nov. 13, Calgary</td>
<td>CDB</td>
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</table>

- 2, March 12, Calgary - DRD
- 4, March 31, Bear Lake - WY

Pb - 1, Oct. 16, Wembley - ELC, GEC
- 2, Oct. 25, Calgary - DRD
W - Dec. 12 (+/- 1 week), Drumheller - Lang (1979)
- Dec. 17 (+/- 1 week), Banff - Lang (1979)
- 1, Dec. 17, Edmonton - Christmas Bird Count
- 1, Dec. 25, Calgary - JMP
- 3, Dec. 26, Lethbridge - Christmas Bird Count

1979.
- W - 3, Jan. 17, Calgary - DRD
- 1, Feb. 17, Banff - Holroyd & Van Tighem (1983)
Sa - 1, March 10, Calgary - LRB
- 1, March 31, Beaverlodge - ELC, GEC
Sa - flock of 154, April 29, Calgary - DRD (Gollop 1979a)
W - 1, Dec. 26, Lethbridge - Christmas Bird Count

1980.
- Sa - 1, March 21, Strathmore - GEF
Fc - 1, Nov. 16, St. Albert - PED
W - 2, Dec. 21, Edmonton - Christmas Bird Count
- 1, Dec. 27, Lethbridge - Christmas Bird Count
1972. Fw/Em - 1, March 18, Ralston - BHJ (Houston 1972b)
Sc/Em - 2, May 12, Calgary - RIP
Fa/Em - 1, Sept. 15, Calgary - GEA
Em - 1, Sept. 21-23, Glenevis - GEP
Fc/Em - 1, Oct. 7, Calgary - RIP
Ew - 1, Dec. 10, 26, & 30, Calgary - HAB, BIL, VGL, GRW

Fa/Em - 1, Sept. 30, Milo - EWB
Fc/Em - 1, Oct. 28, Calgary - ANM

1974. Eb - a few adults, May & June, where Highway 33 comes very close to the Freeman River - Griffiths & Pharis (1976)
- 2 building a nest, June 8, east of Nordegg - BEB, GEB
- 10 males singing, July 21 & 22, Goose Mt.(Swan Hills) - DEG, GCG
Fc/Em - 1, Oct. 20, Elk Island N.P. - ENHC, ERT

1975. Ew - 1, Feb. 1, Calgary - Boothman (1975)
Em - 1, May 12, Calgary - BIL

1976. Ew - 1, Feb. 18, Calgary - HWP
Sa - 9, April 18, Jasper N.P. - Holroyd & Karasiuk (1977)
Sc/Em - 1 adult female, May 18, Elwater - GRG, MAH
- 1, June 3, Lethbridge - HES (Serr 1976c)
Fa/Em - 1, Oct. 6, Calgary - GES
Fc - 5, Oct. 16, Jasper N.P. - Holroyd & Karasiuk (1977)
Fc/Em - 1, Nov 16, 17 & 20, Calgary - JEI
Ew - 1, December, Red Deer - Christmas Bird Count (Weseloh 1977b)

1977. Ew - 1, Feb 18, Calgary - JOR
Ew/Sa - 1 male singing, March 13, Lower Kananaskis Lake - McNicholl (1978c)
Sc/Em - 2, May 25, Smoke Lake - JLC
- 72, April 19 & May 6, middle Athabasca River valley, Jasper N.P. - Holroyd & Van Tigham (1983)
- 72, May 12, upper Bow River valley, Banff N.P. - Holroyd & Van Tigham (1983)
Eb - 1 male singing, June 23, Edmonton - ETJ
Fa/Em - 1, Sept. 13, Sherwood Park - JOF
F - 1, Oct. 9, Grovedale - YVM
Fc - 1, Nov. 14, Canmore - EMV

- 1, March 30, Banff - JMP
Eb - 1 apparently near nest, June 15, Chimney Rock - CAW
Fa/Em - 1, Sept. 13, Millarville - HWP
F - 1, Sept. 26, Nose Mt. - BEW
Fc/Em - 1, Oct. 21, Calgary - CLH
Ew - 1, Dec. 17, Calgary - Christmas Bird Count
- 1, Dec. 17, Lethbridge - Christmas Bird Count

1979. Ew - 2, Feb. 3, Swan Hills - WWS
Sa - March 15, Banff - Holroyd & Van Tingham (1983)
Fa/Em - 1, Sept. 16, Calgary - ANS
Ew - 1, Dec. 16, Calgary - Christmas Bird Count

1980. Eb - 1 singing, June 12, Coal Valley - CAW, CRW
- 1, July 4-6, Waiparous Creek - ANS
Em/Fc - 1, Oct. 12, Edmonton - PSA, JHF
FAMILY: MIMIDAE

Gray Catbird (*Dumetella carolinensis*)

Gray Catbirds arrived in Alberta from May 18 to 28. Sharp (1973) indicates that the first arrivals were seen around June 1 in Waterton Lakes National Park, which is at the western limits of this species range in Alberta.

The Gray Catbird nests in tall dense shrubbery, commonly north to Edmonton and less commonly north to Lesser Slave Lake and Cold Lake. The species occurs west to Pigeon Lake and Calgary, and in the Rocky Mountains, it has only been recorded at Banff (Salt & Salt 1976). Sharp (1973) classed it as local at lower elevations in Waterton Lakes National Park, where there are a number of records prior to 1972. Salt (1976) had no records for Kananaskis Provincial Park. Holroyd & Van Tighem (1983) had one record for Jasper National Park, and three records for Banff National Park. Besides the mountain records, there were three other extralimital breeding season records during the decade: Goosegrass Lake in 1972; Bow Valley Provincial Park in 1974; and Saskatoon Lake in 1977.

Most Gray Catbirds left the province in the latter half of August, with the last birds usually recorded during the first two weeks of September. There was an exceptionally late fall record in 1971.

1971. **Sa** - 1, May 23, Taylor - CHG, ISS  
**Fc** - 1, Oct. 2, Drumheller - HWP, CAW

1972. **Sa** - 2, May 23, Calgary - GEA, HAB, BAD, VGL  
**Eb** - 1, early June, Goosegrass Lake - H. Smith (1975b)  
- nest with 2 eggs, June 13, Waterton Lakes N.P. - Sharp (1973)  
- 1 adult & 1 immature, Aug. 13, Waterton Lakes N.P. - Sharp (1973)  

**Em/Fc** - 1, Sept. 18 & 19, Waterton - Sharp (1973)

1973. **Sa** - 1, May 22, Lethbridge - HES  
**Fc** - 1, Sept. 9, Sherwood Park - CAF  
- 1, Sept. 11, Calgary - WWS

1974. **Sa** - 2, May 25, Dinosaur P.P. - LIM, DVW  
**Eb** - 1, summer, Willow Creek P.P. - Crack & Danielson (1974d)  
**Eb** - 1, June 21, Bow Valley P.P. - HWP, CRW

1975. **Sa** - 1, May 18, Calgary - BIL  
**Eb** - 1, June, Banff - Holroyd & Van Tighem (1983)  
**Fc** - 1, Sept. 9, Calgary - HWP

1976. **Sa** - 1, May 21, Dinosaur P.P. - JHA  
- 1, May 24, Calgary - EMG, WGG  
- 1, May 24, Mirror - CDB  
**Fc** - 1, Sept. 14, Calgary - HWP

1977. **Sa** - 1, May 24, Edmonton - TWT  
- 1, May 29, Writing-on-Stone P.P. - HWP  
**Eb** - 1, June 26, Saskatoon Lake - LUL, MCL  
**Fc** - 1, Sept. 11, Calgary - HWP

**Fc** - 1, Sept. 9, Calgary - HWP

1979. **Sa** - 1, May 20, Calgary - BSD

1980. **Sa** - 1, May 28, Calgary - HWP
Northern Mockingbird (*Mimus polyglottos*)

In western North America, the Northern Mockingbird is resident north to the central states (Peterson 1990). Godfrey (1986) stated that this species is slowly spreading into southern Canada and is a very local permanent resident. This is highly misleading for the prairie provinces as records from Alberta, as well as Brazier (1964a), show that this species is clearly an irregular vagrant that occasionally nests.

Data for the decade indicated that the Northern Mockingbird is primarily an irregular vagrant in Alberta. Including the first observation of this species in Alberta in 1928, there have been 40 occurrences up to and including 1980. Over 50% of the records were for the last half of May and June, and nearly 75% were from the grasslands ecoregion. It is noteworthy, however, that there were no records south of the latitude of Lethbridge. Salt & Salt (1976) stated that nests have been found at Provost and Cadogan. Further investigation indicated that these two nests were in fact only one nest near Cadogan, which is not far to the southwest of Provost. Brazier (1964a) raised the question of occurrence of subspecies in the northern Great Plains. No Alberta specimens are available for subspecific determination (Salt & Salt 1976).

Included in the following observations are all the known nesting records and the only wintering record. Because Sadler & Myres (1976) had no records listed after 1967, all records from 1968 to 1980 have been listed. During the decade, there were 11 reports for Alberta.

1928.  
**Eb** - 1 pair raised a brood of 3 young, summer, Didsbury - Salt & Wilk (1958). This was the first observation and first nest record for Alberta.

1942.  
**Eb** - 1 pair nested, summer, Brooks - Bayer & Lang (1974)

1958.  
**Ev** - 1, Dec. 1/1958 to Jan. 26/1959 when it disappeared, Calgary - Salt & Beacham (1960). This was the first wintering record for Alberta.

1964.  
**Eb** - 1 pair & 5 eggs in nest, July 12, Cadogan - Burns (1964). Male first heard on June 10; pair first recorded in June; eggs hatched July 18.

1965.  
**Eb** - 1 pair nested, summer, Lake Newell - Bayer & Lang (1974)

1968.  
**Ev** - 1, June 1, Kinbrook Island P.P. - IRH, WIM (Halladay 1973a)

1969.  
**Ev** - 1, May 29, sandhills near Hilda - LUB, JSK

1971.  
**Ev** - 1 adult, Nov. 9, 6.4 km north of Cavendish - CDB, WGM

1972.  
**Ev** - 1, June 2, south of Cereal - LOG
- 1, Sept. to Dec. 4, Thorhild - MPM, PTM (Lister 1973a)

1974.  
**Ev** - 1, May 24, Jenner - Jones (1988)
- 1, mid Oct., Edmonton - MHD (Houston & Houston 1975)

1975.  
**Ev** - 1, May 14, Tofield - DID

1976.  
**Ev** - 1 singing, June 28, Banff - GEW (Holroyd & Van Tighem 1983)

1977.  

1980.  
**Ev** - 1, May 24/25 (+/- 1 week), Stettler - Wiseley (1981)
- 1, May 31/June 1, Lethbridge - Wiseley (1981)
- 1, July, Edmonton - HAS (BOL - Edmonton Journal of July 12/80)
Sage Thrasher (*Oreoscopites montanus*)

Sage Thrashers nest locally in the Okanagan Valley of British Columbia, in central Montana, and southwestern Saskatchewan (Godfrey 1986; Cannings et al. 1987). In Alberta, there were four reports between 1924 and 1958 (Salt & Salt 1976). Sadler & Myres (1976) did not report any observations for the previous decade, and there were no observations during the 1970's.

Brown Thrasher (*Toxostoma rufum*)

The Brown Thrasher generally arrived in Alberta in mid May, with arrival dates ranging from May 9 to 23. There was an unusually early spring record in 1975 at Calgary.

Alberta is at the extreme northwestern edge of the Brown Thrasher's range in North America. Salt & Salt (1976) report that Brown Thrashers nest north to Cold Lake and Edmonton, and west to Cochrane, Priddis and Lethbridge. These authors also state that the northern and western parts of this range have been occupied only since the early 1950's, and they have no records for the mountains. In Alberta, the preferred habitat of this thrasher is tall shrubbery in the coulees and valleys of the grasslands. Sharp (1973) gave records for August 1952, May 1964 and May 1970 in Waterton Lakes National Park. There were records from the Sheep River Ranger Station in 1975 and from Kananaskis Provincial Park in 1977 (Wiseley 1979a). Gulley (1983) had a June 1980 record for Ft. McMurray.

Most Brown Thrashers leave Alberta by the end of August, with the last fall migrants usually recorded in mid September. Exceptionally late fall birds were recorded in November of 1971 and 1972. The first winter record for the province was in 1970.

1970. **Ew** - 1 female, Jan. 27, Edmonton - RAM (U of A specimen)
1971. **Sa** - 1, May 23, Irricana - CHG, ISS
   **Fc** - 1, Nov. 8, Calgary - EIM
1972. **Sa** - 1, May 9, Calgary - ANM
   **Fc** - 1, Nov. 20, Calgary - HWP
1973. **Sa** - 4, May 12, Lethbridge - HES
   **Fc** - 2, Sept. 9, Tofield - GWG, LOG
1974. **Sa** - 3, May 19, Lethbridge - HES
   **Sa** - 1, May 21, Dillberry Lake P.P. - GWG, LOG
   **Sa** - 1, May 21, Vermillion P.P. - Peters & Ovenden (1974)
   **B** - 1, summer, Willow Creek P.P. - Crack & Danielson (1974d)
   **Fc** - 1, Sept. 3, Edmonton - STJ
   **Sa** - 1, Sept. 14, Calgary - CAR
1975. **Sa** - 1, April 27, Calgary - DRD
   **Sa** - 1, May 14, Edmonton - FRC
   **Em** - 1, May 14, Sheep River Ranger Station - MRL (Wiseley 1979a)
   **B** - 2, June 15, Edmonton - BEB, GEB
   **Fc** - 3, Sept. 3, Calgary - HWP
1976. **Sa** - 1, May 23, Calgary - Butot (1976c)
   **Sa** - 1, May 27, Edmonton - BRB
   **Fc** - 1, Sept. 7, Calgary - HWP
   **Sa** - 1, Sept. 19, Chain Lakes near Endiang - RUB
1977. **Sa** - 1, May 13, Dinosaur P.P. - CAW, CRW
   **Eb** - 1, June 1, Kananaskis P.P. - DNB (Wiseley 1979a)
   **Em** - 1, Aug. 27, Water Valley - RUB
1978. **Sa** - 1, May 15, Bindloss - CRW
   **Fc** - 1, Sept. 10, Calgary - RUB
1979. **Sa** - 1, May 21, Hanna - RUB
The first spring migrants arrived in southern Alberta from April 13 to 27, while the last spring migrants were usually observed in this region in mid May. In Banff and Jasper National Parks, Holroyd & Van Tighem (1983) noted that spring migration occurred from late April to early June, and that migrants usually occurred in flocks of less than 40 birds. In the Ft. MacKay area, Francis & Lumbis (1979) stated that spring migrants arrived on May 10 and departed in early June to continue their journey north.

Various authors indicate that the American Pipit nests above treeline throughout the mountains of Alberta. Sadler & Myres (1976) stated that there were no breeding records for Waterton Lakes National Park, but Sharp (1973) reported it from alpine meadows during the summer. Salt (1976) found single males occupying large territories at only a few sites in Kananaskis Provincial Park, at elevations ranging from 2,100 to 2,650 meters. In contrast, Holroyd & Van Tighem (1983) considered the American Pipit to be very common in Banff and Jasper National Parks at high elevations. They had numerous nest records, with the highest densities of pipits occurring in mountain avens (Dryas spp.)-snow willow (Salix reticulata ssp. nivalis)-moss campion (Silene acaulis) tundra.

In the fall, the first southbound migrants arrived from late August to mid September. In Kananaskis Provincial Park, Salt (1976) found flocks of 150-200 birds for a brief period in early September. Most migrants passed through Alberta in September, with the last birds usually recorded from mid to late October. There was an exceptionally late fall migration record in 1978.

There are no winter records of this species for Alberta. The map in Salt & Wilk (1966), showing a wintering range in extreme southern Alberta, appears to be in error.
Sprague's Pipit (*Anthus spragueii*)

The first spring migrants arrived in southern Alberta from April 22 to May 7.

Sprague's Pipits nest in moderately to lightly grazed native grasslands in southern Alberta west to the foothills, and north through the parklands to Athabasca and into the Peace River district (Salt & Salt 1976). However, away from the grasslands of southeastern Alberta, this species is extremely local in distribution. During the decade, Sprague's Pipits were observed regularly north to Edmonton and Wainwright, and west to Calgary and Lethbridge. Although there were records for the foothills, occurrence in this region appears to be irregular. There was only one record during the decade from the Peace River area. An unusual extralimital observation came from Ft. McMurray in 1977.

Sometime in July or August, Sprague's Pipits stop singing. Because of this fact and their secretive habits, observations from July and August were almost non-existent. Based on extremely limited data, Sadler & Myres (1976) stated that most birds departed by mid September. They listed only two September records. Our data was also sparse, and gave no indication as to whether most birds left in July, August or early September. There were only three September records for the decade.
1971. Sa - 4, May 2, Dorothy - RAO
1972. Sa - 3 singing, May 7, Beynon - WWS
   Eb - 3 males, late May, Waterton Lakes N.P. - Sharp (1973)
   B - 1, May 26, Elk Island N.P. - Burns et al. (1986)
   Eb - 1, June 10, Cochrane - VGL
   - 1, June 10, Madden - VGL
   Fc - 1, Sept. 10, Cochrane - CFNS
1973. Sa - 1, May 2, Carseland - WWS, CAW
1974. Sa - 1, April 22, Lethbridge - HES
   S - 15 singing, April 24, Little Fish Lake - WWS, CAW
   B - 2, June 25, Calgary - HAV
   Fc - 1, Sept. 14, Tofield - BEB, GEB
1975. Sa - 1 singing, April 29, Namaka Lake - WWS
   - 1 singing, May 5, Peace River - RIP
   Fc - 2, Sept. 1, Lyalta - RUB
1976. Sa - 4 males, April 30, Dowling Lake - ROB, DVW, LIW
   - 2 males, May 1, Beynon - HWP
   - 1 male, May 1, Wainwright - WWS
   Eb - 1, June 6, Brown-Lowery Natural Area - CFNS
1977. Sa - 1, May 4, Dry Island Buffalo Jump P.P. - CAW
   - 1, May 4, Edmonton - TWT
   - 1, May 7, Beynon - HWP, JOR
   Eb - 1 male, June 15, Ft. McMurray airport - DVW
1978. Sa - 1, April 27, Calgary - JMP
   B - 20, July 1, Crowfoot - RUB
1979. Sa - 1 male, April 23, Namaka Lake - WWS
   Em/S - 1 male, April 28, Pincher Creek - WWS

FAMILY: BOMBYCILLIDAE

Bohemian Waxwing (Bombycilla garrulus)

The Bohemian Waxwing nests in the northern half of Alberta south to Edmonton, and along the mountains and their foothills southward to Banff (Salt & Salt 1976). During the decade, there were extralimital breeding season observations from Waterton Lakes National Park, Plateau Mountain, Highwood Pass, Kananaskis Provincial Park and Crimson Lake Provincial Park. Holroyd & Van Tighem (1983) reported that it is fairly common in Jasper National Park and the northern part of Banff National Park. Despite this apparent abundance, they had no nest records, and only one observation of an adult carrying nest material. Griffiths & Pharis (1976) recorded Bohemian Waxwings in the summer in the Swan Hills, but no details were provided. Francis & Lumbis (1979) stated that there were only a few summer observations in their Ft. MacKay study area. Gulley (1979) had no summer records in three years of observation at Ft. McMurray, and had only two observations during migration. During the decade, there were only two nest records: Crimson Lake Provincial Park in 1973 and Edson in 1974. The nesting status of Bohemian Waxwings in Alberta is unclear. It is possible that, even in northern Alberta, this species is a scarce breeder.

In the Ft. MacKay area, the last southbound migrants left by September 13 (Francis & Lumbis 1979). In central and southern Alberta, the first fall birds arrived from September 10 to October 24. In the mountains, the first fall birds were recorded in late August (Salt 1976; Holroyd & Van Tighem 1983). Through the course of the winter, flocks of varying size wander in an apparent search for food. At this season, Bohemian Waxwings usually occur north to Jasper and Edmonton. There were a few records from locations north
of Edmonton during the decade including Grande Prairie, Wembley and Ft. McMurray. With the advent of spring, Bohemian Waxwings start to move northward. The last of these winter visitors departed southern Alberta from April 6 to May 15. At Ft. McMurray, the earliest report of spring migrants was April 20 (Gulley 1979).

1971.  
- **Wc** - 14, April 6, Rosebud - HWP, CAW  
- **Eb** - 1, Aug. 7, Highwood Pass - CFNS  
- **Wa** - 1, Sept. 17, Calgary - WWS  
- **Wb** - 1,000, Oct. 13, Banff - Holroyd & Van Tighem (1983)

1972.  
- **Wb** - 1,000, March 3, Calgary - BNB, JHB  
- 1,000, April 2, Calgary - CDB  
- **Wc** - 2, May 15, Calgary - HAB  
- **Wa** - 100, Oct. 3, Calgary - HAB

- **Wc** - 15, April 15, Edmonton - DEG  
- **Eb** - nest with young, late June, Crimson Lake P.P. - CRW. Nest was in tree in black spruce-tamarack wetland.  
- **Wa** - 1, Oct. 2, Calgary - WIA  
- 60, Oct. 2, Jasper - BEB, GEB  
- **Wb** - 1,000, Dec. 31, St. Albert - CAT, DVT

1974.  
- **Wb** - 1,000, Jan. 16, Edmonton - BEB  
- 1,000, Jan. 21, Edmonton - LOG  
- 1,000, Feb. 5, Edmonton - MOE  
- **Wc** - 42, April 17, Edmonton - BRB, GEB, LOG  
- 1, April 21, Rockyford - LIM, DVW  
- **B** - nest with 5 young, June 16, Edson - ARS, REG  
- **Wa** - 40, Oct. 12, Edmonton - MAM, PAM  
- 60, Oct. 21, Calgary - DRD

1975.  
- **Wb** - 1,000, Jan. 5, Edmonton - LAP, ERT  
- 1,000, Jan. 5, Calgary - DRD, SAD  
- **W** - 2 partial albinos, April 1 & 4, Calgary - Amos (1975)  
- 30, April 22, Waterton Lakes N.P. - KEB  
- **Wb** - flock of 750, April 17, Calgary - HWP  
- **Wc** - 2, May 10, Calgary - RUB  
- **Wa** - 200, Sept. 10, Exshaw - GRG, MAH  
- **Wb** - 1,000, Dec. 24, Calgary - DRD, SAD  
- 1,060, Dec. 31, Edmonton - DVW

1976.  
- **Wb** - 2,000, Feb. 4, Calgary - ELH  
- 2,000, March 11, Calgary - JLC  
- **Wc** - 1, April 18, Cochrane - MGO, TOO  
- 8, April 19, Edmonton - DVW  
- **Sa** - April 26, Ft. MacKay - Francis & Lumbis (1979)  
- **Eb** - 4, June 29, Kananaskis P.P. - DNB (Salt 1976)  
- **B** - 1 carrying nesting material, July 6, Jasper N.P. - Holroyd & Van Tighem (1983)  
- **F** - 359, Aug. 27, Jasper N.P. - Holroyd & Karasiuk (1977)  
- **Wa** - 12, Oct. 13, Seebe - EMG, WGG  
- 50, Oct. 13, Calgary - WIA  
- **W** - 1, Oct. 24, Milo - SEA, JOD, JMP  
- **Eb** - 74, Dec. 19, Wembley - Christmas Bird Count

1977.  
- **Wb** - 1,000, Jan. 15, Edmonton - AAJ, SAJ  
- **Sa** - April 20, Ft. McMurray - Gulley (1979)  
- **Wc** - 9, April 20, Calgary - LRB  
- **Eb** - 4, July 16, Plateau Mt. - HWP

1978.  
- **Wb** - 1,439, April 6, Banff - Holroyd & Van Tighem (1983)
Cedar Waxwing (*Bombycilla cedrorum*)

Cedar Waxwings usually appear in southern Alberta in late May, but during the decade the arrival dates varied from May 4 to 29. Sadler & Myres (1976) considered this species a late migrant that arrived in late May or early June. They also stated that some can arrive as early as late March, and they reported a large flock from late April. However, the late March report was probably of overwintering birds, and the larger April flock was undoubtedly Bohemian Waxwings. Sharp (1973) recorded the first arrivals in early to mid June in Waterton Lakes National Park. Holroyd & Van Tighem (1983) noted that few birds arrived before June in Banff and Jasper National Parks. Francis & Lumbis (1979) gave an arrival date of June 1 for the Ft. MacKay area.

Cedar Waxwings nest throughout Alberta, except in the extreme north (Salt & Salt 1976). In Banff and Jasper National Parks, Holroyd & Van Tighem (1983) found this species to be uncommon and primarily restricted to several valleys in both parks. Francis & Lumbis (1979) saw wandering flocks in the summer, but found no evidence of nesting in the Ft. MacKay area. There was an extralimital summer record from the Caribou Mountains in 1975.

In the fall, most Cedar Waxwings left Alberta during late August and September, with the last birds recorded from September 8 to October 10. Salt & Wilk (1966) stated that most leave by the end of August, while Salt & Salt (1976) reported that most leave by the end of September. Francis & Lumbis (1979) had a departure date of September 1 for the Ft. MacKay area.

Salt & Wilk (1966) noted a few winter records. In the 1960's, Sadler & Myres (1976) recorded this species in six winters from Edmonton, Calgary and Strathmore. During this decade, Cedar Waxwings were recorded in nine winters from Edmonton, Calgary, Trochu, Vauxhall and Lethbridge.

1971.

**Ew** - 1, Jan. 3, Calgary - Christmas Bird Count
- 10, Jan. 21, Calgary - RUJ
- 50 in one flock, Feb. 2, Calgary - WWS

**Sa** - 1, May 12, Edmonton - WWS
- 2, May 27, Elkwater - WWS

**Fc** - 7, Oct. 10, Calgary - RIP

1972.

**Sa** - 2, May 28, Beynon - WWS, CAW, CRW

**Fc** - 1, Oct. 1, Waterton - Sharp (1973)


**Sa** - May 4, Banff - BRG (Holroyd & Van Tighem 1983)
- 10, June 4, Calgary - GRW
- 3, June 6, Edmonton - DEG

**Fc** - 2, Oct. 3, Banff - DEG
- 1 immature, Oct. 28, Edmonton - MOE

**Ew** - 2, Nov. 15, Calgary - KEM
- 12, Nov. 29, Edmonton - WIC
- 1, Dec. 16, Edmonton - Christmas Bird Count

1974.

**Ew** - 2, March 12, Edmonton - GRG
- 6, March 15, Edmonton - FNS, GAS
1975.

**Ew** - 1 in a flock of Bohemian Waxwings, Jan. 1, Edmonton - BOL
- 35, Jan. 24, Calgary - PEA
- 3, April 12, Calgary - CAR
**Sa** - 1, May 5, Peace River - RIP
- 16, May 5, Calgary - LRB
- 1, May 21, Spruce Grove - BEB, GEB
- June 1, Syncrude lease - Sharp & Richardson (1976)
**Eb** - 2, June 24, Rock Island Lake, Caribou Mts. - Höhn & Burns (1976)
**Fc** - Sept. 1, Syncrude lease - Sharp & Richardson (1976)
- small flock, Sept. 28, Vegreville - Ebel (1976a)
- 2, Oct. 10, Calgary - JOD
**Ew** - 1, Dec. 21, Edmonton - Christmas Bird Count
- Dec. 26 (+/- 1 week), Lethbridge - Lang (1976)
- 4, Dec. 28, Calgary - Christmas Bird Count

1976.

**Ew** - 1, March 3, Calgary - KVT
- 2, April 3, Calgary - ANS
**Sa** - 5, May 24, Edmonton - Weseloh (1976)
- 1, May 29/30, Banff - Weseloh (1976)
- June 1, Ft. MacKay - Francis & Lumbis (1979)
**Fc** - 13, Sept. 6, Jasper - DVW, LIW
- 100, Sept. 11, Wainwright - KVT
- 50, Sept. 13, Cooking Lake - FRT
**Ew** - 1, Dec. 4, Calgary - RUB
- 77, Dec. 19, Edmonton - Christmas Bird Count

1977.

**Ew** - 2, April 20, Calgary - ANS
**Sa** - 2, May 29, Stettler - Wiseley (1979b)
- 1, June 6, Ft. MacKay - WWS
**Fc** - 10, Sept. 8, Banff N.P. - Holroyd & Gartshore (1978)
**Ew** - 31, Dec. 18, Edmonton - Christmas Bird Count

1978.

**Ew** - 5, Feb. 20, Edmonton - RAE
- 1, March 11, Calgary - RUB
**Sa** - 5, May 28, Banff - Wiseley (1979b)
- 2, May 28, Red Deer - Wiseley (1979b)
- June 12, Ft. McMurray - Gulley (1979)
**Sa/Sb** - 187, May 28, Lethbridge - Wiseley (1979b)
**Fc** - 50, Sept. 13, Slave Lake - ELH
- 3, Sept. 13, Calgary - RUB
**Ew** - 1, Dec. 3, Trochu - Butot (1979b)
- 1, Dec. 17, Calgary - Christmas Bird Count
- 2, Dec. 17, Edmonton - Christmas Bird Count
- 5, Dec. 26, Lethbridge - Christmas Bird Count

1979.

**Ew** - 7, March 17, Calgary - DRD
**Sa** - 1, May 26/27, Red Deer - Wiseley (1980a)
**Fc** - 5, Sept. 23, Meadow Creek, Jasper N.P. - Holroyd & Van Tighem (1983)
- 3, Oct. 6, Calgary - DUC
**Ew** - Dec. 26 (+/- 1 week), Lethbridge - Lang (1979)

1980.

**Sa** - 8, May 24/25, Lethbridge - Wiseley (1981)
**Ew** - 7, Dec. 21, Edmonton - Christmas Bird Count
- 17, Dec. 26, Vauxhall - Christmas Bird Count
FAMILY: LANIIDAE

Northern Shrike (*Lanius excubitor*)

In Alberta, the Northern Shrike is reported to nest in the northeastern corner, from Lake Athabasca northward (Salt & Salt 1976; Godfrey 1986). Records in support of this nesting range include observations in June 1901 and May 1903 (Preble 1908), and August 1933 (Soper 1942), as well as a nest purported to be of this species in June 1897 (Macoun & Macoun 1909). Taverner (1940), in his *Birds of Canada*, states: "There is great confusion in the older breeding records between the two species of shrikes", and "None of the more southern nesting reports of this bird has ever been satisfactorily substantiated." Because of the conflicting historical data and lack of recent breeding season records, it is questionable whether the Northern Shrike should be considered a breeding species in Alberta.

The Northern Shrike is mainly a passage migrant and scarce winter visitor in Alberta. In the fall, most Northern Shrikes appear in October. During the decade, the first fall birds were reported from September 29 to October 13. In the Ft. McMurray area, Gulley (1979) has only six migration period (spring and fall) records from 1976 to 1978. Sharp (1973) lists only three fall/winter records for Waterton Lakes National Park. In Banff and Jasper National Parks, this species is a very rare fall migrant (Holroyd & Van Tighem 1983). There is only one record for Jasper National Park and a few for Banff National Park.

Salt & Wilk (1966) indicate that, in the winter, Northern Shrikes are found mostly south of Lethbridge. Salt & Salt (1976) extend this winter boundary north to Calgary. Data for this decade shows that Northern Shrikes regularly winter in the grasslands and parklands north to the latitude of Edmonton, where they were recorded on eight Christmas Bird Counts. Northern Shrikes may be regular in the winter in the Grande Prairie area, where there were four reports.

Northern Shrikes begin moving northward in March. The last birds were recorded in April, with dates ranging from April 8 to 24. Holroyd & Van Tighem (1983) have only one spring record from Jasper National Park, and only a few records from Banff National Park.

1971.  
  
  *Wc* - 1 adult, April 8, Airdrie - WWS  
  *Wa* - 1, Oct. 12, De Winton - MTM, RAO, HWP, CAW  
  *Em* - 1, Oct. 20, Jasper - HAV

1972.  
  
  *Wc* - 1, April 15, Millarville - BIL, VGL, RIP  
  *Wa* - 1 immature, Oct. 3, Calgary - HAB  
  *Ew* - 1, Dec. 13, Glenevis - GEP

  
  *Wc* - 1, April 24, Irricana - BIL, VGL  
  *Wa* - 1 immature, Sept. 29, De Winton - MRL

1974.  
  
  *Ew* - 1, Feb. 16, Glenevis - GEP  
  - 1, Feb. 17 & March 3, Edson - REG, ARS  
  *Wc* - 1, April 24, Rockyford - LIM, DVW  
  *Wa* - 1, Sept. 29, Irricana - RUB  
  *Ew* - 1, Dec. 7, Glenevis - GEP

1975.  
  
  *Ew* - 1, Jan. 20 & 29, Dimsdale - BIL, VGL  
  *Wc* - 2, April 23, Okotoks - KAM  
  *Wa* - 1 immature, Oct. 5, Ardenode - RUB  
  *Ew* - Dec. 17 (+/- 1 week), Saskatoon Lake - Lang (1976)

1976.  
  
  *Ew* - 1, Jan. 22, Banff - Holroyd & Van Tighem (1983)  
  *Wc* - 1, April 17, Cochrane - EIC, KIC  
  *Wa* - Sept. 30, Ft. McMurray - Gulley (1979)
Loggerhead Shrike (Lanius ludovicianus)

First arrivals were recorded from March 25 to April 24. However, in most years, the majority of Loggerhead Shrikes were not seen until they were on nesting territories in early May.

The Loggerhead Shrike nests locally in southeastern Alberta north to Wainwright and Beaverhill Lake, and west to Calgary. Most Loggerhead Shrikes nest south of Highway 12 (Stettler-Coronation-Altario), east of Highway 56 (Stettler-Drumheller-Bassano), and east of Highway 36 (Brooks-Taber-Coutts). An estimated 50% of the population occurs in two discrete areas of southeastern Alberta: the lower Red Deer/lower South Saskatchewan River area, and the Manyberries/lower Milk River area (W. Smith pers. comm.). In Alberta, Loggerhead Shrikes prefer clumps of shrubs or trees adjacent to areas of short grassland. Typical nest sites are windbreaks and clumps of shrubs, especially willows (Salix spp.) with dead branches, thorny buffalo-berry (Shepherdia argentea) and caragana (Caragana arborescens), along roadsides and railroad tracks; and thorny buffalo-berry in sandhills areas, coulee edges and broader valleys.

In 1986, the Loggerhead Shrike was declared a Threatened Species in Canada by COSEWIC. A number of authors have noted a serious decline in numbers and range contractions in several areas of North America (e.g. Cadman 1985). In Alberta, there appears to have been an expansion of range in the 1950's, followed by a contraction in the late 1970's (Salt & Wilk 1966; Telfer 1988). The number of breeding pairs in Alberta in 1989 was roughly estimated at 350 (W. Smith pers. comm.). More field work needs to be carried out in Alberta to establish, at the very least, some baseline population data.

Although Sadler & Myres (1976) report a number of observations in October and November, it appears that most Loggerhead Shrikes leave Alberta by the end of August, with very few remaining into September (Salt & Salt 1976). A significant number of observations from late fall, winter and early spring are probably mis-identified Northern Shrikes. In the 1970's, the latest fall...
What appears to be the first authentic winter record for Alberta was in February 1974. There were three unusual observations in October and November, all in 1976.

1971.  
- Sa - 1, March 27, Calgary - RIP  
- B/Fc - family with young out of nest, Sept. 11, Beaverhill Lake - EOH

1972.  
- Sa - 1, March 27, Delacour - VGL  
- B - 1, May 20, Ellerslie - EOH  
- Eb - 1, June 1, 6.4 km north of Langdon - VGL  
- Eb - 1, June 1, 3.2 km south of Langdon - VGL  
- B - 2 nests with a total of 12 young banded, June 20, Tofield - ETJ  
- Eb - 2 adults with 4 fledged young just out of nest, July 9, Chestermere Lake - WIH, WGM  
- 2 immatures, July 10, Delacour - VGL  
- B/Fc - family with young out of nest, Sept. 11, Beaverhill Lake - EOH

- Sa - 2, March 25, Carseland - CFNS  
- Eb - 2, May 21, Tofield - PHB, ANC, HEH  
- 1, May 27, Cheadle - HWP  
- Fc - 1, Aug. 28, Namaka Lake - RUB  
- 1, Sept. 15, Tofield - LOG

1974.  
- Eb - 1 adult, Feb. 22, Okotoks - HWP, CAR  
- Sa - 1 adult, March 29, Aldersyde - GRW  
- 1, April 9, Busby - VGL  
- Eb - 1, May 12, Cheadle - RUB  
- B - 2, June 10 & July 24, Pickardville - VGL  
- nest with 6 eggs, June 15, Beaverhill Lake - BEB, GEB  
- 1, July 5, Purple Springs - GRW  
- Eb - 4 young able to fly, July 13, Lyalta - RUB  
- Fc - 1, Aug. 22, Ft. Saskatchewan - RIP  
- 2, Aug. 30, Brooks - RUB

1975.  
- Sa - 1, April 5, Carseland - HWP  
- 1, April 12, Stony Plain - RAE  
- Eb - 1, May 25, Keoma - RUB  
- B - 1 adult & 2 immatures, July 16, Tofield - PJC, RCC. Another adult & 2 immatures were seen on the same day 3.2 km away.

1976.  
- Sa - 2, April 2, Galahad - Acorn (1976b)  
- 1, April 4, Herronton - ANS, LIS  
- B - 1, June 10, Beaverhill Lake - LUB, RIB  
- Fc/Ew - 1, Oct 1, Calgary - HWP  
- 2, Oct. 9, St. Albert - AAJ, SAJ  
- 1, Nov. 5, Huxley - HWP

1977.  
- Sa - 1, April 24, St. Albert - AAJ, SAJ  
- Eb - 1, May 11, Sheep River Ranger Station - MRL (Wiseley 1979a)  
- B - 2, Aug. 13, Tofield - EOH

1978.  
- Sa - 2, April 2, Irricana - ADS, DOS, PHS, RKO

1979.  
- B - 2, May 12, Keoma - RUB  
- 1, June 22, Conrich - BSD
**FAMILY: STURNIDAE**

**European Starling (Sturnus vulgaris)**

The European Starling is mainly migratory in the northern part of its range (Godfrey 1986). Sadler & Myres (1976) record a pronounced influx into the province in late February to early March. Holroyd & Van Tighem (1983) note that the peak of spring migration in Banff and Jasper National Parks is in April. Francis & Lumbis (1979) have an arrival date of April 26 for the Ft. MacKay area. During the decade, arrival dates ranged from March 4 to 12, with peak numbers recorded in late March and early April.

The European Starling was first reported in Alberta in 1934. Ten years later, it was nesting over the southern half of the province, and west to the mountains (Salt & Salt 1976). It was first recorded in Banff National Park in 1948. In Banff and Jasper National Parks, it is now an uncommon resident found almost exclusively in the lower and middle valleys of the Bow and Athabasca Rivers (Holroyd & Van Tighem 1983). By 1952, this species was nesting in the Peace River district and at Ft. Chipewyan (Salt & Salt 1976). Starlings were first recorded at Waterton Lakes National Park in 1953, where they are now common to abundant at low elevations (Sharp 1973).

Even though the starling is widespread in Alberta, it is largely restricted to the vicinity of human habitations. In areas of predominantly native habitat it is scarce. For example, starlings are absent from large areas of continuous forest in western and northern Alberta. This species is detrimental to cavity nesting species such as Buffleheads, small owls, woodpeckers and bluebirds by outcompeting these species for nest sites. In Alberta, a major factor in the decline of Mountain Bluebirds was the loss of nest sites to starlings and House Sparrows.

By the end of August, large flocks of starlings can be seen in fields and pastures. Fall migration peaks in late September and early October.

Salt & Salt (1976) stated that starlings winter in small numbers in central and southern Alberta. In Banff and Jasper National Parks, this species was confined to the townsites in winter (Holroyd & Van Tighem 1983). In northern Alberta, there were winter records for Wembley, Ft. McMurray and Cold Lake. Based on Christmas Bird Counts, the number of European Starlings wintering in Calgary and Edmonton has significantly increased.

<table>
<thead>
<tr>
<th>Year</th>
<th>Area</th>
<th>Date</th>
<th>Count</th>
<th>Notes</th>
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<tr>
<td>1971</td>
<td>Sb</td>
<td>1,000, April 4</td>
<td>Calgary to Langdon Corner</td>
<td>ADB, CDB</td>
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<tr>
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<td>Sb</td>
<td>3,000, March 25</td>
<td>Calgary to Drumheller</td>
<td>CDB</td>
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<tr>
<td>1973</td>
<td>Fb</td>
<td>1,150, Oct. 14</td>
<td>Tofield</td>
<td>LOG</td>
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<tr>
<td>1974</td>
<td>Sa</td>
<td>7,000, April 6</td>
<td>Calgary to 16 km north of Calgary</td>
<td>HAV</td>
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<tr>
<td>1975</td>
<td>Sa</td>
<td>2,000, April 12</td>
<td>Calgary to Cayley</td>
<td>RUB</td>
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<tr>
<td></td>
<td>Fb</td>
<td>1,000+ in two flocks</td>
<td>Oct. 1, Edmonton</td>
<td>BRB</td>
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Solitary Vireo (Vireo solitarius)

Solitary Vireos arrived from May 4 to 24, with the last spring migrants usually recorded in late May and early June. There were only two spring records for Waterton Lakes National Park, both prior to this decade (Sharp 1973). Holroyd & Van Tighem (1983) stated that spring migration in Banff and Jasper National Parks was in May to early June, with a peak in late May. Francis & Lumbis (1979) gave an arrival date of May 25 for the Ft. MacKay area.

The breeding range changed significantly from the second to the third edition of The Birds of Alberta. Data for the decade indicated an even more extensive breeding range, including the foothills and mountains from Jasper National Park south to the Montana border. Typical habitat for this vireo is mixed woods.


Fall migration began in the middle of August and most birds had left Alberta by the middle of September. In some years, individuals lingered until early October.

Salt & Salt (1976) stated that there was only one record of the subspecies V.s. cassinii in Alberta - a specimen from Canmore on May 27, 1891. During the 1960's, there were a few fall reports of this subspecies from Calgary. There is also a specimen in the University of Alberta Museum (#2271) that was collected at Jasper National Park on May 21, 1963. All records of this subspecies for the 1970's are listed below. Because most observers have not differentiated between subspecies, the status of V.s. cassinii in Alberta is not clear. However, based on specimens obtained by the Provincial Museum of Alberta and observations by a few naturalists in the 1980's, it appears that V.s. cassinii nests in the foothills and mountains of southwestern Alberta. There could be a zone of contact between V.s. cassinii and V.s. solitarius west of Calgary.
1971.  
Sa - 2, May 23, Banff - RIP  
Fa - 1, Aug. 20, Edmonton - ETJ (Salt 1973)  
Fc - 2, Sept. 13, Edmonton - ETJ (Salt 1973)  
- 1, Oct. 1, Calgary - RIP  

1972.  
Sa - 1, May 4, Calgary - KEM, LLM  
Fa - 1, Aug. 19, Waterton - Sharp (1973)  
Fa/Fb - 4 solitarius & 1 cassini, Aug. 20, Calgary - WWS  
Fc - 1, Sept. 16, Calgary - GEA  

Fa - 1, Aug. 24, Calgary - WWS  
Fc - 1, Sept. 16, Marie Lake - MAM  

1974.  
Eb - 2 singing, June 2, Bottrel - Tull (1975)  
- 1 singing, June 3, Bergen - Tull (1975)  
- 1, June 4, Sundre - Tull (1975)  
- 1, June 5, Crammond - Tull (1975)  
Sc - 1, June 4 & 5, Calgary - HWP  
B - 2 males, July 7, Vermilion Lakes, Banff N.P. - BCM, RIP  
Eb - 1 cassini, July 8, Pinhorn Grazing Reserve - WWS  
Fa - 1, Aug. 30, Calgary - HWP  
Fc - 1, Sept. 14, Cheadle - TSS  

1975.  
Sa - 1, May 12, Banff N.P. - Karasik (1976a)  
- 2, May 14, Manning - GRG, PAG, MAH  
- 1 male, May 21, Calgary - BIL  
Sc/Eb - 1 male cassini, June 3-6, Elkwater - WWS, CAW  
Sc - 1, June 5, Edmonton - STJ  
Fa - 1, Sept. 1, Edmonton - STJ  
- 1, Sept. 2, Water Valley - Johnston (1976b)  
- 1, Sept. 3, Calgary - HWP  
Fc - 1, Oct. 13, Calgary - JEL  

1976.  
Sa - 2 cassini, May 10, Beauvais Lake P.P. - WWS  
- 1 male singing, May 12, Edmonton - RAE, LAP, ERT  
- May 25, Pt. MacKay - Francis & Lumbis (1979)  
Sc - 1 male singing, June 5, Elkwater - GRG, MAH  
Eb - 2 male cassini, June 19 & 20, Waterton Lakes N.P. - WWS  
- 6 males singing, July 3 & 5, Jasper N.P. - Holroyd & Van Tighem (1983)  
- 1 male cassini, July 28, Beauvais Lake P.P. - WWS  
B - 1, July 25, Edmonton - SAJ  
Fa - 1, Aug. 14, Bow Valley P.P. - HWP  

1977.  
Sa - 1 male, May 9, Pt. MacKay - WWS  
- 1, May 21, Water Valley - JMP  
Eb - nest, late May & June, Sandy McNabb Cmpgd. - PEB (Wiseley 1979a)  
- 1, June 11, Priddis - Butot (1977d)  
Fa - 1, Aug. 15, Calgary - JOR  
Fc - Sept. 9, Banff N.P. - Holroyd & Gartshore (1978)  
- 1, Sept. 12, Calgary - PES  
- 1, Oct. 11, Grande Prairie - WAM, YVM  

1978.  
Sa - 1, May 6, Bottrel - JOD, JMP  
Eb - 1 cassini singing, June 15, Chimney Rock - CAW  
- 1 cassini singing, June 17, Camp Creek - CAW  
- 8 cassini singing, June 20, Pollhaven Grazing Reserve - CAW, CRW  
Eb/Fa - 1, Aug. 5, Jumping Pound - RUB  
Fc - 1, Sept. 9, Grovedale - GEC  
- 1, Sept. 17, Calgary - ANS  

1979.  
Fa - 1, Aug. 19, Calgary - CLH  
- 1, Aug. 21-25, Edmonton - Smith & Assmann (1980)  
Fc - 2, Sept. 10-14, Edmonton - Smith & Assmann (1980)  
Warbling Vireo (Vireo gilvus)

Warbling Vireos usually arrive about the middle of May. For this decade, first arrival dates ranged from May 3 to 22. This is slightly earlier than the latter half of May as recorded by Sadler & Myres (1976). In Banff and Jasper National Parks, spring migration is given as early May to early June, with a peak in late May and early June (Holroyd & Van Tighem 1983).

Warbling Vireos nest throughout Alberta, where they prefer deciduous or deciduous-dominated woods. In the grasslands, they are restricted mainly to riparian woodlands where they can be quite localized. In Banff and Jasper National Parks, it is common with the highest densities occurring in aspen (Populus tremuloides)/hairy wild rye (Elymus innovatus)-pea vine (Lathyrus ochroleucus) forest (Holroyd & Van Tighem 1983). In the Ft. MacKay area, this vireo was found mainly in open deciduous or mixed forests which were dominated by tall deciduous trees. The highest recorded density was 6 territories/100 hectares in a mature balsam poplar (Populus balsamifera)/scrub willow (Salix spp.) plot (Francis & Lumbis 1979).

In the fall, migration begins in August. Most birds leave by the end of August, with a few lingering into September. During the decade, the last fall migrants were observed from August 24 to September 12.

1972.  
Sa - 3, May 14, Calgary - CAW, CRW  
- 3, May 17, Lacombe - BIL, VGL  
Fc - 1, Aug. 27, Carseland - CFNS

Sa - 1, May 3, Dunstable - VGL  
- 1, May 9, Calgary - HWP  
Fc - 3, Aug. 25, Lake Louise - SCO

1974.  
Sa - 1, May 18, Elkwater - GWG, LOG  
- 1, May 20, Calgary - HAV  
- 1, May 20, Cooking Lake - JIW  
Fc - 1, Aug. 28, Calgary - HWP

1975.  
Sa - 1, May 20, Calgary - HWP  
- 5, May 22, Banff N.P. - Karasiuk (1976a)  
Fc - 1, Aug. 24, Calgary - HWP

1976.  
Sa - 1, May 5, Jasper N.P. - Holroyd & Karasiuk (1977)  
- 1, May 12, Calgary - ELH  
- May 15, Ft. MacKay - Francis & Lumbis (1979)  
Fc - 1, Aug. 29, Calgary - HWP

1977.  
Fc - 1, Aug. 28, Jasper - Holroyd & Van Tighem (1983)  
- 1, Sept. 12, Calgary - PES

1978.  
Sa - 1, May 22, Tofield - RUB, ERT, TEW  
Fc - 1, Aug. 29, Calgary - HWP, JOR

1979.  
Sa - 1, May 14, Calgary - JOR  
- 2, May 19, Grande Prairie - ELC, GEC  
Fc - 2, Aug. 31-Sept. 4, Edmonton - Smith & Assmann (1980)  
- 2, Sept. 9, Calgary - HWP

1980.  
Sa - 2, May 11, Calgary - ANS  
Fc - 1, Sept. 8, Calgary - OLD, HWP, JOR
Philadelphia Vireo (Vireo philadelphicus)

The Philadelphia Vireo is a scarce spring migrant in Alberta. During the decade, it usually arrived in late May, with the first arrival dates ranging from May 12 to 26. Salt & Salt (1976) had no records for the mountains. Holroyd & Van Tighem (1983) had no Banff National Park records and only one spring migration record for Jasper National Park. Prior to the decade, there was a spring observation from Canmore on May 29, 1966 (Calgary Bird Club Bulletin 48). During the decade, there were spring mountain records from Bow Valley Provincial Park in 1973 and from the Banff area in 1978.

Philadelphia Vireos nest in northern Alberta south to Cold Lake and Sundre, and west to Breton and Peace River (Salt & Salt 1976). During the decade, there were extralimital breeding season records from Sturgeon Lake, Wembley, the Edson area, Lodgepole, Jasper National Park, Bow Valley Provincial Park and Priddis. In the Ft. MacKay area, this species was found to prefer willow (Salix spp.) or alder (Alnus spp.) uplands and the ecotones between deciduous forests and willow uplands. The highest density recorded was 34 territories/100 hectares (Francis & Lumbis 1979).

In Elk Island National Park, this vireo was formerly considered a common summer resident (Randall 1938), whereas it is now only an uncommon migrant (Burns et al. 1986).

Fall migration begins in mid August, with stragglers lingering into September. The latest record for the decade was September 21. In the Calgary area, the Philadelphia Vireo was reported in the fall much less frequently during the 1970’s than it was in the 1960’s.

Warbling Vireos are regularly misidentified as Philadelphia Vireos, especially in the fall. For this reason, care should be taken with field identifications, especially in light of the fact that the Philadelphia Vireo has a restricted wintering range in tropical rain forests that are rapidly being destroyed.

1971.  
Sa - 1, May 21, Elk Island N.P. - Burns et al. (1986)  
Fa - 2, Aug. 14, Calgary - RIP

1972.  
Sa - 1, May 12, Calgary - HAV  
B - 1, June 15, Pigeon Lake - Salt (1972)  
Fa - 1, Aug. 12, Calgary - WWS  
Fc - 2, Sept. 2, Okotoks - GEA, WEB, BIL  
- 1, Sept. 10, Cold Lake - WWS, CRW

Sc/Eb - 1, June 10, Bow Valley P.P. - VGL, CAR  
Eb - 2 males singing, June 19, Young's Point P.P. - WWS, KVT, CAW  
B - common, summer, Cross Lake P.P. - Peters & Nolte (1973)  
- reported during summer, Crimson Lake P.P. - Biggs et al. (1973)  
Fa - 1, Aug. 22, Calgary - VGL  
Fc - 3, Sept. 2, Calgary - BIL, VGL

1974.  
Sa - 1, May 26, Red Deer River near Bindloss - WWS  
Eb - 1, June 8, Lodgepole - Tull (1975)  
- 5 males, June 13, Sturgeon Lake - Tull (1975)  
- 1 male, June 15, Priddis - HAV  
B - 1, July 3-5, Dillberry Lake P.P. - Renewable Resources (1975)  
P - 1, Sept. 1, Cheadle - TSS  
- 1, Sept. 1, Calgary - WIH  
Fc - 1, Sept. 21, Edmonton - RIP

1975.  
Sa - May 23, Syncrude lease - Sharp & Richardson (1976)  
Sc - 1 male, June 4, Calgary - BIL  
Fc - Sept. 6, Syncrude lease - Sharp & Richardson (1976)  
- 1, Sept. 9, Calgary - HWP
**E** - fairly common summer resident, Gregoire Lake P.P. - Gregg et al. (1976)  
- regularly nests, Lesser Slave Lake P.P. - W. Smith (1976)  
**Eb** - 1, July, Sunwapta Pass, Jasper N.P. - Karasiuk et al. (1978)  
**Fc** - 1, Sept. 7, Ft. MacKay - WWS  
- 2, Sept. 12, Calgary - PES  
**Em** - 1, May 28, Banff - Wiseley (1979b)  
**Eb** - 3, June 18, Wembley - ELC, GEC  
**Fa** - 1, Aug. 19, Calgary - ANS  
**Em** - 1, Aug. 27, Jasper N.P. - Holroyd & Van Tighem (1983)  
**Fc** - 1, Aug. 29, Calgary - HNP, JOR  
1979. **Sc/Ep** - 1 male, June 6, Bottrel - SFJ, JMP  
**Eb** - uncommon summer resident, northeast of Edson - Nordstrom (1982)  
**Fc** - 1, Aug. 31-Sept. 4, Edmonton - Smith & Assmann (1980)  
1980. **Sa** - 1, May 26, Calgary - DAE, HWP, JOR  
**Eb** - uncommon summer resident, northeast of Edson - Nordstrom (1982)

**Red-eyed Vireo (Vireo olivaceus)**

Red-eyed Vireos usually arrive in late May. In three years during the decade, the first arrivals were in mid May, and there was an exceptionally early arrival date for 1975. Spring migration occurred in late May and early June in Banff and Jasper National Parks (Holroyd & Van Tighem 1983). Francis & Lumbis (1979) gave an arrival date of May 21 for the Ft. MacKay area.

The Red-eyed Vireo typically nests in deciduous and deciduous-dominated mixed woods throughout Alberta (Salt 1973). However, it is scarce and localized in the Cypress Hills and in river valleys in the grasslands (Wallis 1976, 1977). It is rare in the foothills and mountains (Sharp 1973; Wiseley 1979a; Holroyd & Van Tighem 1983). In the extreme north, this species is absent from large areas because of the lack of deciduous woods. In the Ft. MacKay area, this vireo prefers aspen (Populus tremuloides) or balsam poplar (Populus balsamifera) forests with openings in the canopy (Francis & Lumbis 1979). High populations were also found in deciduous-dominated mixed forests. The highest density was 56 territories/100 hectares in a mature balsam poplar/scrub willow (Salix spp.) plot.

Most Red-eyed Vireos leave the province by the end of August, with some birds lingering until the middle of September. There was a very late record for 1971. In the fall of 1979, Smith & Assmann (1980) found that the vireo migration in Edmonton was dominated by Red-eyed Vireos, which comprised 74% of all vireos seen. Peak numbers occurred in the last week of August.

1971. **Sa** - 1, May 25, Elkwater - WWS  
**Fc** - 1 male, Sept. 22, Pigeon Lake - RAS (U of A. specimen)  
- 1, Oct. 2, Calgary - RIP  
1972. **Sa** - 1, May 28, Keho Lake - HES  
- 1, May 28, Lethbridge - HES  
**Fc** - 1, Sept. 16, Calgary - GEA  
1973. **Fc** - 1, Sept. 16, Edmonton - JIW  
1974. **Sa** - 1, May 16, Calgary - HAV  
**Fc** - 1, Sept. 7, Edmonton - DEG, GCG  
1975. **Sa** - 1, May 5, Peace River - RIP  
- May 25, Syncrude lease - Sharp & Richardson (1976)  
- 1, May 25, Cold Lake - GRG, PAG, MAH  
- 1, May 27, Longview - KSC, JOD
**FAMILY: EMBERIZIDAE**

**Tennessee Warbler (Vermivora peregrina)**

The first Tennessee Warblers arrived in the second week of May in five years during the decade, with the range of first dates varying from May 8 to 26. In Banff and Jasper National Parks, migrants occurred during mid and late May (Holroyd & Van Tighem 1983). The main movement of spring migrants in Alberta occurs in the third week of May (Salt 1973).

The Tennessee Warbler nests in Alberta south to Wainwright, Pine Lake, Calgary and the Sheep River (Salt 1973). During this decade, there were extralimital breeding season records from the Whaleback Ridge, Waterton Lakes National Park, Bindloss and the Cypress Hills.

In the Pt. MacKay area, Francis & Lumbis (1979) state that it is the most abundant breeding bird species. Here, it is found in any habitat which provides even a small amount of deciduous foliage above two meters.

Fall migration usually begins very early in August and peaks in the last two weeks. The last migrants usually leave by the end of the third week of September. In this decade, there were records of individuals lingering into early October in three years.

Smith & Assmann (1980) studied the warbler migration in Edmonton during the fall of 1979. August 1 to 10 was characterized by small numbers and only two species, 73% of which were Tennessee Warblers. From August 11 to 25, numbers rose and 11 new species occurred. During this time period, 54% of the birds were Tennessee Warblers. The first of two major peaks in this fall migration occurred from August 26 to 30 with Tennessee Warblers accounting for 33% of the 15 species of warblers observed. August 31 to September 9 was characterized by a lull between peaks. This was caused primarily by a decline in the numbers of Tennessee Warblers, although declining numbers of most other warblers contributed to some degree. The second major peak occurred from September 10 to 14. There were very few Tennessee Warblers recorded from this point on. Tennessee Warblers were the second most abundant warbler, with 261 birds observed.

The first winter record of a Tennessee Warbler for Alberta was in 1980. It is noteworthy that during the decade there were eight records of warblers during
November and December comprising six species (Tennessee, Orange-crowned, Nashville, Yellow-rumped, Palm and Black-and-white Warblers).

1971.  
Sa - 1, May 23, Vermilion Lakes, Banff N.P. - RIP  
Eb - 4 males, July 2, Reesor Lake - WWS  
Fa - 13 banded, Aug. 11-16, Edmonton - ETJ (Salt 1973)  
Fb - 55 banded, Aug. 16-21, Edmonton - ETJ (Salt 1973)  
- 45, Aug. 18, Calgary - WWS  
Fc - 1 banded, Sept. 20-25, Edmonton - ETJ (Salt 1973)  
- 4, Oct. 1, Calgary - RIP  

1972.  
Sa - 1, May 14, Lethbridge - HES, RYS  
Eb - 1 male singing, May 28, Waterton Lakes N.P. - Sharp (1973)  
- 1, July 8, Waterton Lakes N.P. - Sharp (1973)  
Fa - 2, Aug. 12, Calgary - WWS  
Fb - 30, Aug. 20, Calgary - WWS  
Fc - 1, Sept. 14, Calgary - GEA  
- 1, Sept. 25, Waterton - Sharp (1973)  

Sa - 2, May 21, Tofield - GWG, LOG  
- several singing males on territories, June, Big Knife P.P. - Ebel et al. (1973d)  
Fa - 1, Aug. 14, Calgary - HWP, CAR  
Fc - 1, Sept. 22, Calgary - RUB  
- 1, Sept. 22, Edmonton - DEG  

1974.  
Sa - May 12, Banff - Holroyd & Van Tighem (1983)  
- 1, May 18, Calgary - EMG, WGG  
- 3, May 18, Elkwater - GWG, LOG  
Sc - 1, May 28, Red Deer River near Bindloss - WWS  
Fa - 2, Aug. 1, Calgary - RUB  
Fc - 2, Sept. 23, Edmonton - DEG  
- 1, Oct. 1, Calgary - RUB, ADM, JIM  

1975.  
Sa - 2, May 11, Peace River - RIP  
- May 18, Hastings Lake - EBC  
- May 20, Syncrude lease - Sharp & Richardson (1976)  
- 1, May 20, Calgary - HWP  
- 1, May 20, Cheadle - TSS  
Fa - 1, Aug. 15, Calgary - HWP  
Fc - Sept. 10, Syncrude lease - Sharp & Richardson (1976)  
- 1, Sept. 14, Edmonton - DEG, GCG  
- 1, Sept. 14, Calgary - RUB  

1976.  
Sa - May 13, Ft. MacKay - Francis & Lumbis (1979)  
- 6, May 19, Jasper N.P. - Holroyd & Van Tighem (1983)  
- 1, May 19, Sir Winston Churchill P.P. - CRW  
Fa - 1, Aug. 17, Sylvan Lake - ADS, DOS, PHS  
Fc - 1, Sept. 7, Calgary - HWP  
- Sept. 17, Ft. MacKay - Francis & Lumbis (1979)  

1977.  
Sa - May 8, Ft. McMurray - Gulley (1979)  
Eb - 1 singing male, July 20, Waterton Lakes N.P. - CAW, CRW  
Fa - 2, Aug. 12, Calgary - BNB  
Fc - 3, Sept. 17, Edmonton - TAW  
- 1. Oct. 4, Calgary - PES  

1978.  
Sa - 1, May 20, Calgary - LRB  
- 2, May 23, Ft. McMurray - BRW  
Eb - 1 singing, June 16, Whaleback Ridge - CAW  
Fa - 3, Aug. 6, Calgary - RUB  
Fc - 3, Sept. 6, Jasper N.P. - Holroyd & Van Tighem (1983)  
- 1, Sept. 15, Calgary - RUB  

1979.  
Sa - 2, May 17, Calgary - DAE, JOR  
Fa - 2, Aug. 10, Calgary - JOR  
Fb - 60+, Aug. 26, Calgary - DRD  
Orange-crowned Warbler (*Vermivora celata*)

Orange-crowned Warblers usually arrived in the first week of May, with first dates for the decade ranging from April 18 to May 13. The peak of spring migration was mid May. Francis & Lumbis (1979) gave an arrival date of May 10 for the Ft. MacKay area.

The Orange-crowned Warbler nests in northern and central Alberta south to the North Saskatchewan River. It also nests in the mountains and foothills of western Alberta, and the Cypress Hills (Salt & Salt 1976). In addition, its range extends along the Red Deer River downstream to the Drumheller area (Salt 1973). During this decade, there were extralimital nesting season records from the David Lake area, Neutral Hills, Big Knife Provincial Park, Whaleback Ridge, and the Pollhaven Grazing Reserve. Over most of its Alberta nesting range, this species is local and uncommon. The authors have found it to be most abundant in the Cypress Hills. Although suitable habitat exists in Waterton Lakes National Park, Sharp (1973) has only one breeding season record. In Banff and Jasper National Parks, Orange-crowned Warblers were considered to be common, preferring deciduous shrubbery near wetlands (Holroyd & Van Tighem 1983). In the Ft. MacKay area, this species preferred dense thickets of tall shrubs under an open coniferous or mixed tree canopy. The highest density recorded was 15 territories/100 hectares in a muskeg plot (Francis & Lumbis 1979). Other nesting habitats in Alberta include hillside thickets, often associated with springs. In the eastern parkland, water birch (*Betula occidentalis*) is often a characteristic species in the habitat.

In southern Alberta, Orange-crowned Warblers are substantially more common during fall migration than spring migration. During the decade, the first fall migrants usually appeared in southern Alberta in the first two weeks of August. However, in 1976, the first fall migrant was not recorded until September 14. The peak of fall migration usually occurred from early to mid September. A few individuals regularly lingered into early October. There was an early winter observation in November of 1975, and a December record occurred in 1979.

In 1979 study of fall warbler migration in Edmonton, Smith & Assmann (1980) found that the Orange-crowned Warbler was the third most common warbler.

1971.  
Sa - 1, May 4, Calgary - FRS  
Eb - 20 males, June 17, Cypress Hills - WWS  
Fa - 15, Aug. 7, Calgary - WWS  
Fc - 3, October 1, Calgary - RIP

1972.  
Sa - 1, April 30, Lethbridge - HES  
- 1, May 11, Miquelon Lake - WWS  
Fa - 6, Aug. 12, Calgary - WWS  
Fc - 2, Oct. 1, Calgary - HAV

Sa - 1, May 12, Lake Newell - CFNS  
- 1, May 13, Elk Island N.P. - JIW  
Eb - several singing males on territories, June, Big Knife P.P. - Ebel et al. (1973d)

FC - 1, Sept. 23, Calgary - RUB  

1980.  
Sa - 2, May 26, Calgary - DAE, HWP, JOR  
- 9, May 26, Edmonton - Thormin (1980a)  
Eb - 2 singing males, July 3, Red Deer River near Bindloss - CAW, CRW. Not seen or heard on the following day.  
Fa - 10+, Aug. 11, Calgary - DAE, HWP, JOR  
Ef - 1, Nov. 28, Edmonton - DVC, SYL
Fa - 1, Aug. 14, Calgary - HWP, CAR
Fc - 1, Oct. 1, Lethbridge - HES
   - 3, Oct. 5, Calgary - WWS
1974. Sa - 1, April 18, Cypress Hills P.P. - GWG, LOG
    - 2, April 24, Calgary - HWP, CAR
Sb - 8+, May 15, Calgary - HWP, CAR
Fa - 3, Aug. 30, Calgary - HWP
Fc - 1, Oct. 8, Calgary - HWP
1975. Sa - 10, May 7, Syncrude lease - Sharp & Richardson (1976)
    - 2, May 7, Edmonton - STJ
    - 4, May 7, Banff N.P. - Karasiuk (1976a)
    - May 9, Manning - GRG, PAG, MAH
    - 4, May 9, Calgary - BIL
 Eb - occasional summer resident, David Lake area - Bradley & Bradley (1977c)
    - uncommon summer resident, Neutral Hills - Bradley & Bradley (1977b)
Fa/Fb - 20+, Sept. 4, Calgary - HWP
Fc - Sept. 27, Syncrude lease - Ward et al. (1976)
Fc/Ew - 1, Nov. 10, Turner Valley - VAH, MRL
1976. Sa - 1, May 8, Vilna - LIW
    - 1, May 9, Calgary - BIL
    - May 8, Ft. MacKay - Francis & Lumbis (1979)
Sb - 15, May 9, Manyberries - WWS
Fa - 1, Sept. 14, Calgary - HWP
Fc - Sept. 18, Ft. MacKay - Francis & Lumbis (1979)
    - 1, Oct. 3, Calgary - LRB, RUB
    - May 10, Ft. McMurray - Gulley (1979)
    - 1, May 10, Calgary - HWP, JOR
 B - several singing, June 24, Red Deer River valley near Lousana - CAW
Fa - 2, Aug. 10, Calgary - JMP
Fc - Sept. 28, Banff - Holroyd & Van Tighem (1983)
    - 1, Oct. 1, Edmonton - TAW
    - 1, Oct. 9, Calgary - JOD
1978. Sa - 1, May 6, Bottrel - JOD, JMP
    - 1, May 13, Ft. McMurray - BRW
 Eb - 1 singing, June 2, Pollhaven Grazing Reserve - CAW
    - 10+ singing, June 10, Coal Valley - CAW, CRW
 Eb - 4 singing, June 13, Bob Creek - CAW
    - 5 singing, June 16, Whaleback Ridge - CAW
Fa - 1, Aug. 3, Calgary - RUB
Fc - 1, Sept. 30, Calgary - RUB
    - 1, May 5, Calgary - JOR
Fa - 5+, Aug. 17, Calgary - HWP, JOR
Eb - 100, Sept. 10-14, Edmonton - Smith & Assmann (1980)
Fc - 3, Sept. 23, Calgary - RUB
    - 1, Oct. 5-9, Edmonton - Smith & Assmann (1980)
Eb - 1 photographed, Dec. 9, Calgary - DIM, PES (Harris 1980b)
1980. Sa - 1, May 11, Calgary - ANS
Sc - 1, May 27, Calgary - DAE, HWP, JOR
Fa - 1, Aug. 14, Calgary - HWP, JOR
Eb - 20+, Sept. 8, Calgary - OLD, HWP, JOR
Fc - 1, Sept. 26, Calgary - OLD
Nashville Warbler (Vermivora ruficapilla)

There are two subspecies of the Nashville Warbler in Canada. The eastern race occurs from west-central Saskatchewan eastwards, while the western race occurs in the southern interior of British Columbia (Godfrey 1986). In Alberta, the subspecific identity of Nashville Warblers has not been determined. Sadler & Myres (1976) speculate that individuals from the western subspecies overshoot the mountains.

The first confirmed record of the Nashville Warbler in Alberta was of one photographed near Banff on May 12, 1974. The first confirmed nesting record was at Link Creek in 1980 (Lein & Wagner 1982). During the decade there were 15 different reports: five in the spring, two in the summer, seven in the fall and one in early winter.

Prior to the decade, there were eight reports from Alberta. An analysis of all observations to the end of 1980 shows that the species is mainly recorded during migration periods. The number of spring and fall observations are almost equal.

1973. **Ev** - 1, Sept. 1 & 2, Calgary - WWS
- 1 male, May 13 & 14, Lethbridge - HES, RYS
- 1, Aug. 21, Strathmore - TSS
- 1 immature male photographed and banded, Aug. 28, Edmonton - ETJ (Houston & Houston 1975)
1975. **Ev** - 1, Aug. 7, Canmore - GRG, PAG, MAH
- 1 banded and photographed, Aug. 27, Edmonton - ETJ
1976. **Eb** - 1 adult male, June 17, 10 km east of Elkwater - GRG, MAH
1978. **Ev** - 1 male singing, May 19, Seebe - JMP
1979. **Ev** - 1, May 10, east of Ft. Saskatchewan - RAE
- 1 male, May 13, Blakiston Beaver Pond, Waterton Lakes N.P. - TEH
- 1, Sept. 10, Calgary - BSD
**Ev** - 1, Nov. 25, Calgary - RUB
- 1 pair carrying insects to one fledgling barely able to fly, July 4, Link Creek - Lein & Wagner (1982)
**Ev** - 1 immature male banded and photographed, Aug. 17, Edmonton - ETJ

Northern Parula (Parula americana)

In Canada, the Northern Parula nests from southeastern Manitoba eastward (Godfrey 1986). The first authenticated record for Alberta was an adult male collected at Gorge Creek on June 6, 1958 (Hohn et al. 1959). There were also sight records for 1958 from Calgary, Wayne and Rosedale (Salt 1973).

The following report was the first and only record since 1958, the only one for the decade, and the fifth for the province.

1971. **Ev** - 1 male, May 25 & June 11, 12 & 15, Calgary - RIP
Yellow Warbler (*Dendroica petechia*)

In the spring, migration is quite precipitous with no Yellow Warblers one day, and many males declaring territories the next day (Salt 1973). During the decade, Yellow Warblers usually arrived in Alberta during the first two weeks of May, slightly earlier than mid to late May as stated by Sadler & Myres (1976). There were late April records in 1977.

The Yellow Warbler is widely distributed in deciduous woodland and shrubbery in the north, prairies and mountains (Salt & Salt 1976). In Kananaskis Provincial Park, there are no breeding season records (Salt 1976). In Kananaskis Country (Wiseley 1979a) and in Banff and Jasper National Parks (Holroyd & Van Tighem 1983), this species is restricted mainly to lower elevation river valleys. Throughout much of the north, it is scarce and local because of a lack of suitable habitat. In the Ft. MacKay area, Francis & Lumbis (1979) found this warbler only in dense thickets of willow (*Salix* spp.) and alder (*Alnus* spp.); the greatest densities were found in extensive stands of scrub willow along the Athabasca River (53 territories/100 hectares).

In the fall, most Yellow Warblers leave Alberta by the end of August. However, a few birds usually linger into early or mid September.

1971.  
Sa - 1, May 2, Calgary - RIP  
Fc - 1, Aug. 29, Calgary - HAV  

1972.  
Sa - 2 males, May 6, Bow Valley P.P. - BIL, VGL  
Fc - 30, Aug. 22, Calgary - WWS  
FC - 1, Sept. 17, Calgary - HWP, CAR  

Sa - 1, May 9, Ellerslie - MIH  
B - 56 males, June 6, Winagami Lake P.P. - WWS  
Fc - 3, Sept. 2, Calgary - BIL, VGL  
- 9, Sept. 9, Edmonton - FRC, DEG  
- 21, Syncrude lease - Sharp & Richardson (1976)  
Fc - 1, Sept. 4, Calgary - HWP  
- 2, Sept. 7, Edmonton - RIP  

1976.  
Sa - May 13, Ft. MacKay - Francis & Lumbis (1979)  
- 1, May 14, Miquelon Lake P.P. - CRW  
- 1, May 15, Dowling Lake - ROB, DVW  
- 1 male, May 16, Feers - REG. Bird originally banded on Aug. 10/72 at same spot by ETU.  
- 1 male, May 19, Calgary - HWP  
- 2, May 19, Jasper N.P. - Holroyd & Karasiuk (1977)  
Fc - 1, Sept. 2 & 6, Boulton Creek - Salt (1976)  
- Sept. 16, Ft. McMurray - Gulley (1979)  

1977.  
Sa - 4, April 23, Jasper N.P. - Holroyd & Van Tighem (1983)  
- several, April 25, Calgary - CAO  
- 3 males, May 8, Galahad - KAS  
- 1 male, May 9, Ft. MacKay - WWS  
- 3, May 11, Grande Prairie - WAM, YVM  

1978.  
Sa - 2, May 16, Edmonton - PSA  
- 5, May 16, Wandering River - RAE  
- 3, May 17, Calgary - RUB, HWP, JOR, ADS, DOS, PHS  
Fc - 1, Sept. 25, Calgary - LRB  

1979.  
Sa - 1 male, May 10, Calgary - ADS, PHS
Chestnut-sided Warbler (*Dendroica pensylvanica*)

Prior to 1938, there were three questionable records of this species for Alberta. Salt (1973) gives details surrounding these observations. From 1938 to 1972, there were only two reports: an adult male at Cold Lake on June 29, 1962 (Nordstrom 1978), and one bird at Wabamum Lake on September 20, 1970 (Sadler & Myres 1976).

Beginning in 1972, there was an explosion of Chestnut-sided Warbler reports for Alberta. The first confirmed record was a male found dead at Edmonton in 1972. From 1972 to 1980 there were 32 reports. Dates of observations ranged from May 27 to September 25; 22 sightings were from late spring and the breeding season, and 10 were from the fall. Birds were observed at a variety of locations from the Milk River in the south to the Edmonton, Cold Lake and Ft. MacKay areas in the north. This species was even recorded in the mountains west of Calgary.

The first confirmed nesting record for the province was from the Cold Lake-Ethel Lake area in 1976. Since that time, Chestnut-sided Warblers have regularly been recorded in the same general area. Here, they are strongly associated with sparse deciduous woods with a dense understory of beaked hazelnut (*Corylus cornuta*).

1972.  
**Ev** - 1 male collected, May 31, Edmonton - AAB, AMB (Salt 1972)  
- 1 male collected, June 15, Pigeon Lake - Salt (1972)  
- 1 male photographed on several occasions, June, Cold Lake P.P. - CHS

**Ev** - 1 male, May 29, 17.6 km west of Onefour - GRG, PAG (Nordstrom 1978)  
- 1 pair, summer, Long Lake P.P. - Friesen & Schafsma (1973)  
- 1 banded, Aug. 20, Jenner ferry - JTJ, GAJ, CHN

1974.  
**Ev** - 1 male, June 4, Calgary - LRB (Pinel & Butot 1978)  
- observed in Mildred Lake area - Sharp & Richardson (1976)

1975.  
**Ev** - 1-3, May 29 & 30, Cold Lake P.P. - GRG, PAG, MAH  
- 1, Aug. 17, Horseshoe Lake - Sharp & Richardson (1976)  
- 1 immature, Aug. 25, Edmonton - ARS (Nordstrom 1978)  
- 4, Sept. 8, Horseshoe Lake - Sharp & Richardson (1976)

1976.  
**Eb** - 19 males & 3 females, June 4-11, Cold Lake-Ethel Lake area - WWS, CAC. All three females were paired and one pair was observed nest-building.  
- 2 males (1 collected), July 7 & 8, 8 km north of Touchwood Lake - ROB, JSK (Weseloh 1977a; Nordstrom 1978)  
**Ev** - 1, Aug. 26, Edmonton - Smith & Assmann (1980)  
- 1 immature, Aug. 31, Boulton Creek - Wiseley (1979a)

1977.  
- 1 male, June 1, Wolf Lake - Nordstrom (1978)  
- 1 male singing, July 3, Calgary - JHC (Pinel & Butot 1978)  
- 1, Sept. 25, Edmonton - TAW

1978.  
**Ev** - 4, May 27/28, Cold Lake area - Wiseley (1979b)

1979.  
**Ev** - 1 male, June 8, Hylo - RIK  
- 1 male, June 15, 8 km west of Calgary - RBP  
- 1 male, June 24, Bow Valley P.P. - EMG, WGG  
- 1, Sept. 9, Edmonton - Smith & Assmann (1980)
Magnolia Warbler (Dendroica magnolia)

Magnolia Warblers are scarce spring migrants in southern Alberta. During the decade, the first spring migrants were recorded in the province from May 20 to 26. Holroyd & Van Tighem (1983) have only a few spring records for Banff and Jasper National Parks. There was only one spring migration record for Kananaskis Country (Wiseley 1979a).

The Magnolia Warbler nests throughout northern Alberta south to about the North Saskatchewan River. Salt & Salt (1976) state that it nests in the mountains south to Banff. However, data indicates that this warbler is extralimital in the mountains and foothills. Holroyd & Van Tighem (1983) list six breeding season records for Banff National Park and two for Jasper National Park. However, only two of these records are after mid June. The six other early June reports are probably spring migrants. Holroyd & Van Tighem (1983) also state that there are no nest records for these two parks.

During the breeding season, Magnolia Warblers are localized, preferring borders and openings of coniferous and mixed woods where they nest in small conifers and shrub thickets. In the Ft. MacKay area, this species occurs in small numbers, with the highest densities recorded in mixed forests in valleys (Francis & Lumbis 1979).

In the fall, the first Magnolia Warblers usually appear in southern Alberta by mid August. Most birds have left the province by mid September, with some lingering into late September in some years. Francis & Lumbis (1979) gave a last fall date of September 18 for the Ft. MacKay area. There was also a very late fall date of October 7 during the decade.

In southern Alberta away from the mountains, the Magnolia Warbler is more common in the fall than in the spring. In contrast, in the mountains, this species is much scarcer in fall than spring. There is only one fall record for Banff National Park and none for Jasper National Park (Holroyd & Van Tighem 1983). The first observation of this species in Waterton Lakes National Park occurred in the fall of 1976.

1971. Sa - 1, May 23, Vermilion Lakes, Banff N.P. - RIP
   Fa - 1, Aug. 29, Calgary - HAV
   F - 1 immature, Sept. 7, Reesor Lake - WWS
   Fc - 1, Sept. 23, Calgary - JAB, RCB
1972. Sa - 2, May 23, Banff - JAB, TRB
   Fa - 2, Aug. 20, Calgary - WWS
   Fc - 1, Sept. 10, Cold Lake - WWS
   - 2, Sept. 11, Calgary - GEA, WEB, VGL
1973. Sa - 1 male, May 20, Beaverhill Lake - GWG, LOG
   S - 4 males, May 29, Calgary - VGL, CAR
   Fa - 1, Aug. 15, Calgary - HWP, WWS
   Eb - 10, Aug. 24, Edmonton - DEG
   Fa - 3 males, Sept. 25, Calgary - DRD
   - 1 male, May 24, Edmonton - STJ
   - 1, May 27, Cold Lake - GRG, PAG, MAH
**Eb** - 1 pair, July 6, Brazeau Reservoir - MAH
**Fs** - 2, Sept. 13, Calgary - ANS
**Em/Fc** - 1, Sept. 19, Banff - Holroyd & Van Tighem (1983)

   - 3, May 20, Cold Lake P.P. - WWS
   - 5 singing, June 21, Sir Winston Churchill P.P. - CRW
**Em/Fc** - 1, Sept. 11, Waterton Lakes N.P. - HAL, JDL
**Fs** - 2, Sept. 14, Calgary - HWP
   - Sept. 18, Ft. MacKay - Francis & Lumbis (1979)

   - 1 singing male, June 19, Banff N.P. - Holroyd & Van Tighem (1983)
**Fa** - 1, Aug. 14, Calgary - JMP
**E** - 3+, Aug. 16, Hand Hills - Wallis (1977)
   - 1, Aug. 22, Empress - Wallis (1977)
**Fc** - 3, Sept. 17, Calgary - ANS

   - 4 singing, May 27, Coal Valley - CAW, CRW. None recorded on
     June 10 in same area.
   - 5, May 28, Banff N.P. - Wiseley (1979b)
**Fs** - 1, Oct. 7, Brooks - RUB

**Fa** - 4, Aug. 16-20, Edmonton - Smith & Assmann (1980)
   - 2, Aug. 25, Calgary - HWP, JOR
   - 1, Aug. 25, Bottrel - SFJ, WHS
**Fc** - 2+, Sept. 24, Calgary - KAM

   - 4, May 26, Edmonton - Thormin (1980a)
   - 1 male, May 27, Calgary - DAE
**Eb** - 1 male, mid July, Jasper N.P. - RAE (Rogers 1980d)
**Fa** - 1, Aug. 11, Calgary - DAE, HWP, JOR

**Cape May Warbler** (*Dendroica tigrina*)

The Cape May Warbler appears to enter Alberta from the east, mainly bypassing
the southern half of the province in the spring. The limited spring data
available indicates that this warbler usually arrives in Alberta in the third
week of May. However, during the decade, first spring records ranged from May
7 to 27. Francis & Lumbis (1979) had an arrival date of May 21 for the Ft.
MacKay area. There were no spring records for the mountains (Sharp 1973; Salt

The breeding range was changed substantially from the second to the third
edition of *The Birds of Alberta*. The new contracted range shows Cape May
Warblers nesting in northern Alberta south to Peace River, Ft. Assiniboine,
Lac La Biche and Cold Lake. Within this breeding range, this warbler is
uncommon (Salt 1973). In the Ft. MacKay area, Francis & Lumbis (1979) found
only a few, in mature mixed woods dominated by tall white spruce (*Picea*
*glauca*). There are no nesting records for the mountains (Sharp 1973; Salt
1976; Holroyd & Van Tighem 1983). During this decade, there were six
extralimital breeding season records from Brown-Lowery Natural Area, Longview,
Ings Creek, Crammond, Wildwood and Valleyview.

Fall migration begins in late August. The few migrants that occur in southern
Alberta have mostly departed by mid September. In this decade, there were two
unusually late mid October records.
1971. Eb - 1 male, June 13, Brown-Lowery Nat. Area - RIP
1972. Em/Eb - 2, May 21, Brown-Lowery Nat. Area - GEA, WEB, BIL, VGL
Fa - 1 female, Aug. 26, Carseland - GEA, WEB
E - 2, Aug. 30, Calgary - RIP
Em/Sa - 1 male, May 25, Crimson Lake P.P. - Biggs et al. (1973)
1974. Eb - 1 singing, June 3, Red Deer River near Crammond - Tull (1975)
F - 1, Sept. 14, Cheadle - TSS
Fc - 1 male, Oct. 14, Red Deer River near Bindloss - WWS
1975. Sa - 1, May 27, Cold Lake - GRG, PAG, MAH
B - 3 singing, May 31, Chip Lake - REG, ARS
Eb - 1 male, June 14, Longview - KSC, JOD
Fc - 1, Oct. 13, Water Valley - Johnston (1976b)
1976. Sa - 1 male, May 19, Sir Winston Churchill P.P. - CRW
- May 21, Ft. MacKay - Francis & Lumbis (1979)
Eb - 1 male, June 12, Valleyview - GRG
- 3 males, June 19, Wildwood - REG
B - 6 singing, June 21, Sir Winston Churchill P.P. - CRW
Fc - 1, Aug. 27, Ft. Chipewyan - RAE
1977. Em/Sa - 1, May 7, Calgary - LOB, BIL
Eb - 1 singing male, June 14, Ings Creek - Wiseley (1979a)
Fa - 1, Sept. 11, Calgary - HWP
Fc - 1, Sept. 25, Calgary - PES
Sc - 1 female, May 27, Coal Valley - CAW, CRW
1979. Em/Sa - 1, May 19, Dinosaur P.P. - WGM
Fa - 1, Aug. 25, Bottrel - SFJ, WHS
Fc - 1, Sept. 1, Bottrel - SFJ

Black-throated Blue Warbler (*Dendroica caerulescens*)

The Black-throated Blue Warbler is an eastern species that is found nesting as far west as extreme southwestern Ontario (Godfrey 1986). Prior to the 1970’s, there were five reports for Alberta (Salt 1973). They were all males collected between 1917 and 1966. During this decade, there were six reports, the sixth to eleventh for the province.

Of the eleven birds reported for Alberta, eight were males and three were females. The three spring records were all of adult males, observed from May 17 to June 3. There were no summer reports. The eight fall reports were represented by three females and five males. The first record of a female Black-throated Blue Warbler in Alberta occurred in the fall of 1976. The dates of fall occurrence ranged from September 8 to October 22 -- three of these reports were in October.

1979. Ev - 1 male, June 1, Calgary - JMP
1980. Ev - 1 female, Sept. 8, Calgary - OLD, HWP, JOR
Yellow-rumped Warbler (*Dendroica coronata*)

In 1973, the American Ornithologists' Union lumped the Myrtle Warbler with the Audubon's Warbler as one species, the Yellow-rumped Warbler (Eisenmann et al. 1973). In Alberta, the Yellow-rumped Warbler is represented by both the boreal Myrtle Warbler (*D. c. coronata*) and the cordilleran Audubon's Warbler (*D. c. memorable*).

The Yellow-rumped Warbler is almost invariably the first warbler to appear in the spring, usually arriving in Alberta in the last half of April. First arrival dates for the decade varied from April 17 to May 1, with males usually appearing a few days before females. Francis & Lumbis (1979) had an arrival date of April 21 for the Ft. MacKay area. In Alberta, the peak of spring migration usually occurs in mid May. Salt (1973) states that the Audubon's subspecies arrives in Jasper National Park two weeks earlier than the Myrtle subspecies. Holroyd & Van Tighem (1983) do not document the status of the two subspecies in Banff and Jasper National Parks. Sharp (1973) lists only three spring records of the Myrtle race for Waterton Lakes National Park. In the spring, the Audubon's race is regularly recorded east of the foothills and mountains.

The Myrtle race nests mainly in northern Alberta south to about the North Saskatchewan River, and in the mountains and foothills south to about Banff and Bragg Creek (Salt & Salt 1976). In the Ft. MacKay area, Francis & Lumbis (1979) found this subspecies to be common in all coniferous and mixed habitats over three meters tall. It preferred tall dense stands to more open ones. In this region, the highest density recorded was 74 territories/100 hectares in a young mixed forest plot with a dense black spruce (*Picea mariana*) dominated understory. There were extralimital breeding season records during the decade from Wallaby Lake, Big Knife Provincial Park and Dry Island Buffalo Jump Provincial Park.

The Audubon's race nests in the foothills and mountains of western Alberta. In Waterton Lakes National Park, Sharp (1973) found it to be common to abundant in relatively open coniferous and mixed woods at all elevations. In Kananaskis Provincial Park, Salt (1976) found Audubon's Warblers to be extremely common. There is also a disjunct population that nests in the Cypress Hills, where it is fairly abundant. It is noteworthy that the Myrtle race is a common migrant in the Cypress Hills, but does not remain to nest.

In a zone of overlap in the mountains and foothills of western Alberta, the Myrtle race shares nesting areas with the Audubon's race (Salt & Salt 1976). According to Salt (1973), the Myrtle race is more common than the Audubon's race in Jasper National Park, while the opposite is true in Banff National Park. In Kananaskis Provincial Park, Salt (1976) has only one breeding season record of the Myrtle race, while in Kananaskis Country, Wiseley (1979a) found the Myrtle race relatively uncommon. Sharp (1973) has only one definite breeding season record of the Myrtle race in Waterton Lakes National Park. Without reference to subspecies, Holroyd & Van Tighem (1983) state that Yellow-rumped Warblers are common in Banff and Jasper National Parks, with lodgepole pine (*Pinus contorta*) forests being preferred.

Hubbard (1969) made extensive collections of this species along the foothills and mountains, from Alberta northwest through British Columbia into southeastern Alaska. He found that specimens from south of Gorge Creek were typical Audubon's Warblers. North of Gorge Creek, in interconnecting valleys and passes of the Rocky Mountains, he found hybrid populations that were essentially intermediate in plumage characteristics. This major zone of hybridization was only about 56 kilometers wide, east to west. On either side of this zone, introgression was found to drop steeply and then gradually
disappear. The total band of introgression from east to west varied from 322 to 483 kilometers wide. Hubbard (1969) also found a positive correlation between phenotype and habitat. The Myrtle race occurs in boreal forest and the Audubon's race occurs in cordilleran forest, while intergrades were found in a mixture of the two forests. He was at a loss to explain why the two phenotypes have remained separate, and he noted: "The implications of these findings are that the two forms interbreed and backcross freely where their ranges meet, but that away from this periphery, factors are operating that prevent massive introgression". He proposed that Myrtle and Audubon's Warblers be termed semispecies.

In the fall, the first migrant Yellow-rumped Warblers usually appear in southern Alberta about the middle of August with the peak usually occurring in mid September. Holroyd & Van Tighem (1983) state that the peak of fall migration in Banff and Jasper National Parks is in late August and early September. The last few Yellow-rumped Warblers are usually recorded in mid October, but there was one November record for the decade. Usually, this species is one of the last warblers to leave the province, along with Palm and Wilson's Warblers.

Smith & Assmann (1980) found this species to be the most numerous warbler species in Edmonton in the fall of 1979.

The first winter record of this species in Alberta occurred in 1980.

1971.  
Sa - 3, May 1, Exshaw - VGL  
Fa - 6, Aug. 7, Calgary - RIP, WWS  
Fc - Oct. 5, Edmonton - ETJ (Salt 1973)  
   - 1, Oct. 10, Calgary - RIP  

1972.  
Sa - 2, April 24, Canmore - VGL  
G - 2 male hybrids, May 6, Calgary - WWS  
Sc - 1, May 23, Cheadle - TSS  
Eb - 2 males & 1 female, July 12, Dry Island Buffalo Jump P.P. - WWS  
   - summer, Bow Valley P.P. - Wallis & Wershler (1972b). Audubon's,  
   - Myrtle and hybrids all nesting.  
Fa - 3, Aug. 14, Calgary - WWS  
F - 3 male hybrids, Aug. 20, Calgary - WWS  
Fc - 1, Oct. 21, Calgary - DOP  

Sa - 1 male & 1 female, April 28, Irricana - RIP, DAS  
   - 1 male, April 29, Perryvale - MIH  
Eb - 1 pair, summer, Big Knife P.P. - Ebel et al. (1973d)  
Fa - 1, Aug. 22, Calgary - BIL, VGL, HWP  
Fc - 2, Oct. 2, Glenelis - GEP  
   - 10, Oct. 25, Calgary - WWS  

1974.  
Sa - 1 male, April 19, Tofield - GRG, PAG, SUT, JLW  
   - 1 male, April 20, Calgary - EDQ  
Sp - 75+, April 29, Lethbridge - MIO, HES  
G - 6 male Audubon's, May 5, Pinhorn Grazing Reserve - WWS  
Sp - 35+, May 15, Calgary - HWP, CAR  
Sc - 1 male Audubon's, May 23, Little Fish Lake - WWS  
   - 1 male Myrtle, May 24, Jenner - ETJ  
   - 6 male Audubon's, May 26, Red Deer River near Bindloss - WWS  
Eb - 1 male Audubon's, July 8, Pinhorn Grazing Reserve - WWS  
Fa - 1 Myrtle, Aug. 7, Pinhorn Grazing Reserve - WWS  
   - 6, Aug 15, Calgary - HWP, WWS, CAW  
Fb - 150, Sept. 15, Calgary - RFC  
Fc - 2, Sept. 18, Syncrude lease - Sharp et al. (1975)  
   - 1, Oct. 3, Edmonton - STJ  
Fc/Ew - 1, Nov. 9, Calgary - WIH  

1975.  
Sa - 1, April 25, Calgary - JIM
- April 26, Syncrude lease - Sharp & Richardson (1976)
- April 27, Devon - LUC
- Sh - 50, May 10, Calgary - ANS
- Sc - 1 Audubon's, May 17, Cheadle - TSS
- Fa - 1 adult male Myrtle banded, May 28, Jenner ferry - ETJ
- Fa - 12, Aug. 31, Water Valley - RUB
- Fc - Oct. 4, Syncrude lease - Sharp & Richardson (1976)
- Fa - 1, Oct. 6, Edmonton - MRB, LIW
- Fc - 2, Oct. 13, Water Valley - Johnston (1976b)

1976. Sa - 1, April 17, Calgary - WGG
- April 21, Ft. MacKay - Francis & Lumbis (1979)
- Eb - 1 male, summer, Wallaby Lake - Bradley & Bradley (1977c)
- Fc - 5, Oct. 6, Jasper N.P. - Holroyd & Karasiuk (1977)
- Fa - 1, Oct. 7, Calgary - RUB
- Fc - 1, Oct. 9, Empress - DRG, DVW, LIW

1977. Sa - 1 male, April 20, Calgary - HWP, JOR
- Fa - 1, April 24, Ft. MacKay - WWS
- Fa - 1, Aug. 15, Calgary - ELH
- Fb - 175, Sept. 12, Calgary - HWP, JOR, PES
- Fc - Sept. 29, Ft. McMurray - Guley (1979)
- Fa - 1, Oct. 10, Calgary - JOT
- Fc - 1, Oct. 10, Edmonton - TAW

1978. Sa - 2 males, April 19, Calgary - HWP, JOR
- Fa - 2, April 27, Ft. McMurray - BRW
- Fa - 2, Aug. 19, Calgary - ANS
- Fc - 1, Oct. 16, Maligne Lake, Jasper N.P. - JMP

1979. Sa - 6+, April 19, Calgary - JOR
- Fa - 1, Aug. 11-15, Edmonton - Smith & Assmann (1980)
- 1, Aug. 16, Calgary - JOR
- Fb - 50, Sept. 23, Calgary - ANS
- Fc - 2, Oct. 8, Calgary - ANS

1980. Sa - 6, April 23, Calgary - OLD
- Fa - 10+, Aug. 11, Calgary - DAE, HWP, JOR
- Fb - 75, Sept. 6, Calgary - DEW, RAW
- Fc - 1, Oct. 14, Calgary - OLD

[Black-throated Gray Warbler (Dendroica nigrescens)]

This species, which nests in southwestern British Columbia, remains hypothetical for Alberta, although there were reports from the Brazeau Reservoir area in four different years by qualified observers.

Prior to the decade, Salt & Wilk (1958) and Salt (1973) indicate that there were some sight records pre-1958, mainly from the southwestern corner of Alberta. Sadler & Myres (1975) report a male at Calgary in 1968. However, they overlooked the 1970 report listed below.

1975. Ev - 1 male, July 6, Brazeau Reservoir - MAH
1980. Ev - 1 territorial male, mid June, near Brazeau Reservoir - MAH, PES, ERT, ALW (Gollop 1980b). One bird was seen in the same area in 1978 and 1979 by MAH (Edmonton Journal: June 14/80).
Townsend's Warbler (*Dendroica townsendi*)

Townsend's Warblers arrived in the mountains from May 6 to 22. Peak migrant numbers were recorded in late May (Holroyd & Van Tingham 1983). Spring records east of the mountains are rare, with only five reported during the decade. An extraordinary extralimital spring vagrant was recorded in the Neutral Hills in June 1975.

Townsend's Warblers are uncommon summer residents of tall fir and spruce woods in the mountains (Salt & Salt 1976). To date, no nests have been found in Alberta, although a pair with a fledged young was observed in 1975. Salt (1973) states that the species is fairly common in Banff National Park, but decreases to the north and south. In Waterton Lakes National Park, it is uncommon to common (Sharp 1973). Salt (1976) found this warbler to be frequent in Kananaskis Provincial Park, where each male required a territory of two to three hectares. In Banff and Jasper National Parks, it is very common in the valleys of the Main Ranges where it inhabits closed, moist coniferous forests (Holroyd & Van Tingham 1983). In these two parks, it prefers white spruce (*Picea glauca*) forests or Engelmann spruce (*Picea engelmannii*)-subalpine fir (*Abies lasiocarpa*) forests. Both Holroyd & Van Tingham (1983) and Salt (1976) found this species to be uncommon in damp lodgepole pine (*Pinus contorta*) forests.

There was a very unusual record of two adults feeding two recently fledged young on July 18, 1979 at Ft. Walsh in Saskatchewan's Cypress Hills (Gollop 1979b).

Fall migration peaks in mid August, with occasional stragglers remaining in some years until mid September. There was an unusually late fall record in 1977. Contrary to Salt & Salt (1976), Townsend's Warblers are regular fall migrants at Calgary. During the decade, migrants were recorded in Calgary from August 21 to September 7. There was an extralimital record from Edmonton in 1973 and from Lethbridge in 1975.


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<tr>
<th>Month</th>
<th>Date</th>
<th>Location</th>
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<tbody>
<tr>
<td>Sa</td>
<td>2</td>
<td>May 20, Banff - HAV</td>
</tr>
<tr>
<td>Fa/Fb</td>
<td>8</td>
<td>Aug. 24, Calgary - WWS</td>
</tr>
<tr>
<td>F</td>
<td>1</td>
<td>Aug. 26, Carseland - GEA, WEB</td>
</tr>
<tr>
<td>Fc</td>
<td>1</td>
<td>Sept. 3, Calgary - WWS</td>
</tr>
<tr>
<td>Em/Fc</td>
<td>1</td>
<td>male, Sept. 14, Edmonton - GRG</td>
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1974.

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<th>Month</th>
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<tbody>
<tr>
<td>Sa</td>
<td>2</td>
<td>males, May 12, Banff - HAV</td>
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<tr>
<td>Em/Sa</td>
<td>1</td>
<td>male, May 12, Calgary - BIL</td>
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1975.

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<tr>
<td>Sa</td>
<td>8</td>
<td>May 22, Banff N.P. - Karasiuk (1976a)</td>
</tr>
<tr>
<td>Em</td>
<td>1</td>
<td>male, May 28, Calgary - WWS</td>
</tr>
<tr>
<td>Em/Eb</td>
<td>1</td>
<td>male, June 18, Neutral Hills - JRS, CAW</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>pair with 1 fledged young, Aug. 1, Banff N.P. - Holroyd &amp; Van Tingham (1983)</td>
</tr>
<tr>
<td>Em/Fc</td>
<td>1</td>
<td>Sept. 4-9, Lethbridge - HES (Serr 1976a)</td>
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1976.

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<tr>
<td>Sa</td>
<td>2</td>
<td>May 20, Jasper N.P. - Holroyd &amp; Karasiuk (1977)</td>
</tr>
<tr>
<td>Em</td>
<td>1</td>
<td>female, May 30, Calgary - HWP</td>
</tr>
<tr>
<td>Fa</td>
<td>1</td>
<td>male, Aug. 30, Calgary - HWP</td>
</tr>
<tr>
<td>Fc</td>
<td>1</td>
<td>Sept. 2, Kananaskis P.P. - Salt (1976)</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>males, Sept. 7, Calgary - HWP</td>
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1977.

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<th>Month</th>
<th>Date</th>
<th>Location</th>
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<tbody>
<tr>
<td>Sa</td>
<td>9</td>
<td>May 9, Banff N.P. - Holroyd &amp; Gartshore (1978)</td>
</tr>
<tr>
<td>Fc</td>
<td>Sept. 2, Banff N.P. - Holroyd &amp; Gartshore (1978)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>male, Oct. 10, Bow Valley P.P. - PES</td>
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1978.

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<th>Month</th>
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<th>Location</th>
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<tbody>
<tr>
<td>Fa</td>
<td>1</td>
<td>female, Aug. 21, Calgary - RUB</td>
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1979.

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<th>Month</th>
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<tbody>
<tr>
<td>Sa</td>
<td>1</td>
<td>May 6, Jasper N.P. - Holroyd &amp; Van Tingham (1983)</td>
</tr>
<tr>
<td>Em</td>
<td>1</td>
<td>male, May 27, Bottrel - SFJ, JMP, RBP</td>
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Black-throated Green Warbler (Dendroica virens)

The Black-throated Green Warbler usually arrives in Alberta in the last two weeks of May. There were unusually early records for 1975 and 1977. Francis & Lumbis (1979) gave an arrival date of May 21 for the Ft. MacKay area. The great majority of Black-throated Green Warblers apparently enter central and northern Alberta from the east. This is reflected by the few spring reports available for the southern third of the province.

The breeding range changed significantly from the second to the third editions of The Birds of Alberta. In the third edition, the northwestern corner of the province was deleted, restricting the breeding range primarily to that part of northern Alberta drained by the Peace and Athabasca Rivers. Within this breeding range, it is sparsely and locally distributed (Salt 1973). This species prefers coniferous or mixed woods where extensive stands of mature white spruce (Picea glauca) still remain (Salt & Salt 1976). In the Ft. MacKay area, Francis & Lumbis (1979) found only two occupied territories, which were in mature riparian balsam poplar (Populus balsamifera)/aspen (Populus tremuloides) dominated mixed forest with some tall white spruce scattered throughout. Although there were a few extralimital June reports in 1974 and 1978, there were no nesting records south of the breeding range depicted by Salt & Salt (1976).

In the fall, Black-throated Green Warblers migrate through southern Alberta from mid August to mid September. Although this warbler is an uncommon migrant in the fall, it is still much more frequent than in the spring, especially in the southern third of the province.

1972. Fa - 3, Aug. 20, Calgary - WWS
       Fc - 2, Sept. 16, Calgary - GEA
       Em/Sa - 1 male, May 16, Calgary - HWP, LIP
       B - 5, June 12, Winagami Lake P.P. - WWS
       Fa - 2, Aug. 17, Calgary - HWP, CAR
       Fc - 1, Sept. 22, Edmonton - DEG
1974. Em/Sa - 4, May 11, Calgary - CAR
       Eb - 1 singing, June 3, Bergen - Tull (1975)
            - 1 singing, June 7, Alder Flats - Tull (1975)
            - 1 singing, June 8, Lodgepole - Tull (1975)
       B - 1 singing, June 10, Windfall Creek - Tull (1975)
            - 1 singing, June 11, Fox Creek - Tull (1975)
       Eb - 3 singing males, June 16, Waterton Lakes N.P. - W. Smith (1975)
       Fc - 1 female, Sept. 2, Calgary - WIH
1975. Em/Sa - 1, May 5, Cheadle - TSS
       Fc - 1, Sept. 2, Edmonton - STJ
1976. Sa - 4 males, May 20, Cold Lake P.P. - WWS
       - May 21, Ft. MacKay - Francis & Lumbis (1979)
       Fc - Aug. 24, Ft. MacKay - Francis & Lumbis (1979)
       - 1 male, May 19, Sheep River Ranger Station - MRL (Wiseley 1979a)
       Fa - 1, Aug. 20, Red Deer River near Bindloss - Wallis (1977)
       Fc - Aug. 24, Ft. McMurray - Gulley (1979)
       Eb - 1 male, June 10, Coal Valley - CAW, CRW
Blackburnian Warbler (Dendroica fusca)

Blackburnian Warblers apparently enter east-central Alberta from the east. This fact, coupled with this species' scarcity in Alberta, has resulted in a total lack of spring migration records during the decade. Salt & Salt (1976) indicate that Blackburnian Warblers arrive in central Alberta shortly after the middle of May.

The breeding range of the Blackburnian Warbler, as presently known, is a small area of east-central Alberta bounded by Bonnyville, Cold Lake, Lac La Biche and Boyle. There are previous references to breeding populations in the Edmonton and Glendevis areas (Salt 1973; Salt & Salt 1976). The Edmonton area breeding range is based on an observation of a singing male in June 1964. Although a few pairs may have nested near Glendevis in the 1940's and 1950's, the habitat was destroyed in the fall and winter of 1956. As a result, Blackburnian Warblers have not been recorded in this area since. There was an extralimital breeding season record from Gregoire Lake in 1976, and a highly unusual record of a pair in 1978 at Banff. In the Alberta breeding range, Blackburnian Warblers appear to prefer stands of mature balsam fir (Abies balsamea) and/or white spruce (Picea glauca), usually within mixed woods. The first nest for Alberta was reported in 1977.

Fall migrants appear to move east or southeast. As a result, there were only two fall migration records for Alberta. Strangely enough, both were from the Calgary area in late August of 1972.

1972.  Em - 1 immature female, Aug. 26, Carseland - GEA, WEB
      - 1 female, Aug. 30, Calgary - RIP
      - 1 male, June 30, Moose Lake P.P. - Ovenden & Peters (1974)
1975.  E - May 30, Cold Lake P.P. - GRG, PAG, MAH
1976.  Eb - 1 male, May 28 & June 15, Gregoire Lake - WWS
       B - 10 males, June 4, Sir Winston Churchill P.P. - WWS
       - regular, June 8-9, July 5 & Aug. 16, Cold Lake - Nordstrom (1978)
       - 5 males & 1 female, July 6, Touchwood Lake - ROB, JSK (Nordstrom 1978)
       - 2 pairs & 2 nests, June 21-July 16, Cold Lake - REG.
       - Photographs were taken of adults feeding young at one nest on July 16. These are the first nest records for Alberta.
       - 4, July 5, Wolf Lake - Nordstrom (1978)
       Eb - 1 male & 1 female, June 27/28, Banff - EUH (Rogers 1978d)
Pine Warbler (*Dendroica pinus*)

There were no records of this eastern warbler for Alberta during the decade. Although Sadler & Myres (1976) had no records of this species for the 1960's, there was an unsubstantiated report of a bird seen at Leduc on June 8, 1965 by H. Burns (ETJ field notes) that was unavailable to those authors.

Palm Warbler (*Dendroica palmarum*)

Palm Warblers usually arrived in central and northern Alberta in the first two weeks of May, although there was an April arrival date in 1975. Because Palm Warblers enter central Alberta from the east, there were only a few reports from southern Alberta. The May reports from Banff National Park and the Sheep River Ranger Station were the first spring migration records for the mountains.

The depiction of the breeding range changed substantially from the second to the third editions of *The Birds of Alberta*. In the third edition, Salt & Salt (1976) expanded the breeding range to cover the northern third of Alberta south to the Grande Prairie area, and perhaps to Rocky Mountain House, Elk Island National Park and Cold Lake. In this decade, there were a number of extralimital nesting season records, including one from Jasper National Park, which is a first for the mountains. Within the breeding range, Gregg et al. (1976) found this warbler common in black spruce (*Picea mariana*) muskegs at Gregoire Lake. In the Ft. MacKay area, Francis & Lumbis (1979) state that this species prefers black spruce muskegs in which the spruce is two to eight meters high and forms an open canopy. They found that extensive areas of habitat are not necessary for nesting; Palm Warblers occurred in small stands of black spruce located in otherwise unsuitable habitat. The density of 179 territories/100 hectares in one subplot was the second highest density of any passerine in the study area.

In the fall, the first migrant Palm Warblers usually appear in southern Alberta in late August and early September. Fall migration usually peaks in mid September. Most birds leave by the end of September, although some regularly linger into the first two weeks of October. In contrast to spring, Palm Warblers are regular fall migrants in southern Alberta away from the mountains. The first fall migration records for the mountains were reported in this decade.

In a 1979 fall warbler migration study in Edmonton, Smith & Assmann (1980) recorded the first Palm Warblers during the first of two major warbler peaks (August 26 to 30). During the second warbler peak (September 10 to 14), it was one of three dominant species.

There was an interesting late fall/early winter record in 1972.

1972.  

- Sa - 1, May 4, Miquelon Lake P.P. - WWS  
- Fa - 1, Aug. 27, Calgary - WWS  
- Ft - 25, Aug. 29, Edmonton - WWS  
- 70, Sept. 10, Cold Lake P.P. - WWS, CRW  
- Fc/Ew - 1, Nov. 14, Calgary - HWP, CAR


- Eb - 2 males, June 8, Sturgeon Lake - GRG  
- E - nest, June 17, near Edmonton - REG (Houston 1973c)  
- Eh - 1 male, June 26, Winagami Lake P.P. - WWS  
- nest with young, late June, Crimson Lake P.P. - CRW  
- Fa - 2, Sept. 1, Calgary - WWS

1974.  

- Em/Sa - 1, May 12, Vermilion Lakes, Banff N.P. - Holroyd & Van Tighem (1983)
Bay-breasted Warbler \textit{(Dendroica castanea)}

This warbler apparently enters Alberta in the spring from the east. In the decade, limited data shows that the first Bay-breasted Warblers arrived in central Alberta between May 17 and 27. Francis & Lumbis (1979) had an arrival date of May 28 for the Ft. MacKay area. There were only six spring records south of Red Deer for the decade. Salt (1973) states that this species is a rare spring migrant anywhere in Alberta.

The breeding range of the Bay-breasted Warbler was substantially changed from the second to the third edition of \textit{The Birds of Alberta}. In the third edition, Salt & Salt (1976) indicate that the breeding range occupies only the eastern half of the northern third of Alberta, south to Cold Lake and Lesser Slave Lake, with an extension to the southwest to Jasper National Park. However, Holroyd & Van Tighem (1983) do not have any summer records for Jasper National Park. During the 1970's, there were extralimital nesting season records from Pigeon Lake, Buffalo Lake and the Cypress Hills. In Alberta, this warbler apparently prefers extensive stands of mature coniferous woods (Salt 1973). Gregg et al. (1976) found this species to be common in mature white spruce \textit{(Picea glauca)}/balsam fir \textit{(Abies balsamea)} forests and mature mixed woods at Gregoire Lake. Francis & Lumbis (1979) state that this species prefers very mature, open white spruce-dominated mixed forest.

Even though this species is scarce during fall migration in southern Alberta, it is still much more regularly observed in this season than in spring migration. The first fall migrants have been reported in southern Alberta as
early as August 11, with the majority of observations reported from late August and early September. During the decade, the last migrants were recorded from September 10 to 29.

1971.  
Eb - 1 male, July 26, Pigeon Lake - RAS (U of A specimen)  
1972.  
F - 2 males & 1 female, Aug. 30, Calgary - RIP  
Fc - 1 immature female, Sept. 6, Pigeon Lake - RAS (U of A specimen)  
Sa - 2 males, May 24, Crimson Lake P.P. - Biggs et al. (1973)  
- 4 males, May 27-31, Winagami Lake P.P. - WWS  
Em/Sc - 1 female caught, June 2/3, Jenner ferry area - ETJ  
B - 6 males, June 13, Winagami Lake P.P. - WWS  
- 1 male, June 13, Sturgeon Lake - GRC  
Fa - 1, Aug. 25, Calgary - WWS  
1974.  
Fc - 1, Sept. 21, Calgary - LRB, RUB  
1975.  
Sa - May 26, Cold Lake - GRC, PAG, MAH  
B - 8, June 24, Lac La Biche - REG  
Eb - 1 male, July 12, Buffalo Lake - LIF, WIF  
Fc - 2, Sept. 10, Edmonton - MRB, LIW  
1976.  
Sa - 2 males, May 27, Gregoire Lake - WWS  
Em - 1, May 29/30, Banff N.P. - Weseloh (1976)  
B - 20+ males, June 4, Sir Winston Churchill P.P. - WWS  
- 10 males, June 5, Cold Lake P.P. - WWS  
Em/Sc - 1 male, June 9, Columbia Ice Fields, Jasper N.P. - WIC  
1977.  
Sa - 1 male, May 17, Moonshine Lake P.P. - CAW  
Fa - 1, Aug. 15, Jasper - Holroyd & Van Tighem (1983)  
- 2, Aug. 20, Calgary - JMP  
Fc - 1, Sept. 11, Calgary - PES  
1978.  
F - 4, Sept. 1, Grande Prairie - WAM, YVM  
Fc - 1, Sept. 10, Calgary - RUB  
1979.  
Eb - 1 singing male, June 15, Spruce Coulee Reservoir - CAW, CRW  
Fa - 1, Aug. 21-25, Edmonton - Smith & Assmann (1980)  
- 1, Aug. 30, Bottrel - SFJ  
1980.  
Em/Sc - 1 male, May 25, Calgary - JOR  
- 1, May 26, Edmonton - Thormin (1980a)  
Em - 1 male, May 31, Reesor Lake - WWS  
Fa - 1, Aug. 11, Calgary - DAE, HWP, JOR  

Blackpoll Warbler (Dendroica striata)

Blackpoll Warblers usually arrive in Alberta in mid May. With two exceptions, arrival dates in the decade ranged from May 8 to 20. In both 1975 and 1977, there was an exceptionally early first date of April 27. Last spring migrants were usually recorded in late May and early June.

Blackpoll Warblers nest in northern Alberta south to about the North Saskatchewan River (Salt & Salt 1976). These authors also state that this warbler nests in the mountains and foothills south to Banff and Bragg Creek. However, the Bragg Creek observations were nests in the 1890's, an event which has not been repeated since (Salt 1973). There are no breeding season records for Waterton Lakes National Park and Kananaskis Provincial Park (Sharp 1973; Salt 1976). Holroyd & Van Tighem (1983) found this species to be a common resident in much of Banff and Jasper National Parks. However, they have no records for south of Banff townsite and only a few from Front Range valleys. In the Ft. MacKay area, Francis & Lumbis (1979) recorded this species on three plots. One consisted of young black spruce (Picea mariana) less than five meters tall, with two to three meter high willows (Salix spp.) forming 10% of
the understory. The other two plots were dominated by dense, three to six meter tall willows.

Fall migration in southern Alberta usually occurs from mid August to mid September, peaking in late August and early September. In the decade, the latest fall migrant was reported on September 22, 1976.

In a study of fall warbler migration in Edmonton, Smith & Assmann (1980) report that the first of two migration peaks occurred from August 26 to 30. During this peak, Blackpoll Warblers (at 19%) were one of three dominant warbler species. The last birds were observed from September 5 to 9.

It is noteworthy that there were no fall migration records for Banff and Jasper National Parks; the latest observation was on July 21, 1978 (Holroyd & Van Tighem 1983). The only record for Waterton Lakes National Park was a fall report of a bird in August 1947 (Sharp 1973).

1971.  
*Sa* - 2, May 8, Calgary - HAV  
*Fa* - Aug. 16, Edmonton - ETJ (Salt 1973)  
-Fb - 1 male, Aug. 18, Calgary - RFC  
-Fc - 24 banded, Aug. 31-Sept. 5, Edmonton - ETJ (Salt 1973)  

1972.  
*Sa* - 1 male, May 17, Lacombe - BIL, VGL  
*Fa* - 2, Aug. 13, Calgary - CAW, CRW  
-Fb - 40, Aug. 22, Calgary - WWS  

*Sa* - 1 male & 1 female, May 13, Calgary - BIL  
-Fc - 1 male, May 13, Lake Newell - HES  
*Sb* - 15 males not on breeding territory, May 23, Winagami Lake P.P. - WWS  
*Sc* - 1 female, June 4, Calgary - RUB  
-B - local summer resident in willow swamp, Young's Point P.P. - Van Tighem & Wallis (1973b)  

1974.  
*Sa* - 1, May 11, Edmonton - JOB, JWB  
- 4, May 12, Calgary - BIL  
*Sc* - 1 male & 1 female, June 1, Lethbridge - HES  
- 1, June 4, Strathmore - TSS  
*Fa* - 2, Aug. 28, Calgary - HWP  
-Fc - 1 Sept. 9, Calgary - WIH  

1975.  
*Sa* - April 27, Ft. McMurray - LYS  
*Sc* - 2 males, June 4, Calgary - CDB  
-B - nest with 5 eggs, June 19, Margaret Lake - Höhn & Burns (1976)  
*Fa* - 2, Aug. 26, Calgary - HWP  
-Fc - Sept. 7, Syncrude lease - Sharp & Richardson (1976)  
- 3, Sept. 9, Calgary - HWP  
- 1, Sept. 10, Edmonton - MIR, LIW  

1976.  
*Sa* - May 20, Pt. MacKay - Francis & Lumbis (1979)  

1977.  
*Sa* - April 27, Banff N.P. - Holroyd & Van Tighem (1983)  
- May 14, Pt. McMurray - Gulley (1979)  
*Fa* - 1, Aug. 11, Cheadle - TSS  
-Fb - 8, Aug. 23, Irvine - CAW  
-Fc - 2, Sept. 12, Calgary - HWP, JOR  

1978.  
*Sa* - 1+, May 18, Irricana - ELH  
- 2, May 18, Blackie - JOR  
- May 23, Pt. McMurray - Gulley (1979)  
*Fa* - 2, Aug. 29, Calgary - HWP, JOR  

1979.  
*Sa* - 1, May 11, Calgary - BSD  
*Sc* - 1 male & 1 female, May 26, Dogpound - SFJ, JMP, RBP  
*Fa* - 1, Aug. 14, Calgary - JOR
1980.  
Sa - 2, May 11, Calgary - ANS  
Sc - 1 male & 1 female, May 26, Calgary - DAE, HWP, JOR  
Fa - 1 male, May 30, Writing-on-Stone P.P. - WWS  
Fa - 1, Aug. 11, Calgary - DAE, HWP, JOR  

Black-and-white Warbler (*Mniotilta varia*)

Black-and-white Warblers usually arrive in central and northern Alberta in mid May, with first dates during the decade ranging from May 7 to 20. In the southern third of Alberta, this species is a rare spring migrant. During the decade, there were spring records from the Cypress Hills, Calgary, Bottrel, Yamnuska, and Banff and Jasper National Parks. The reports for Jasper National Park were the first records from this park.

Salt & Salt (1976) report that Black-and-white Warblers nest in northern Alberta south to Cadogan, Battle River, Battle Lake, Lesser Slave Lake and the Grande Prairie area. There are also summer reports from the Cypress Hills. This warbler is common in the Ft. MacKay area (Francis & Lumbis 1979), where it is found most frequently in areas of tall dense shrubs, with or without a tree canopy, or along the ecotone between a deciduous or mixed forest and a willow (*Salix spp.*) muskeg. Deciduous shrubs, especially willows, which range from three to seven meters in height, seem to be preferable to shorter shrubs. The poor drainage of a site, and/or the proximity of water, increases the value of the habitat to this warbler. The highest density found was 33 territories/100 hectares. During the decade, there were extralimital nesting season reports from Lodgepole, Little Smoky, Banff National Park, the Wainwright area, Waterton Lakes National Park and Elkwater. The reports for Waterton Lakes National Park were the first records for this park.

In the fall, the first migrant Black-and-white Warblers usually appear in southern Alberta in mid August. Most pass through Alberta in the last two weeks of August, while a few linger into September. It is of interest to note that fall migration in 1975 was later than usual, while that of 1977 was earlier. The latest fall record for the decade was September 21, except for an unusually late observation on November 14, 1974.

1971.  
Sa - 1 male, May 19, Elkwater - WWS  
Fa/Pb - 9 banded, Aug. 16-20, Edmonton - ETJ (Salt 1973)  
1972.  
Sa - 1, May 16, Elk Island N.P. - Burns et al. (1986)  
Fa - 1, Aug. 13, Calgay - ANM  
Fc - 1, Aug. 29, Calgary - WWS  
Em/Sa - 2, May 20, Banff - CAF  
Eb - 8 males not on territory, May 23, Winagami Lake P.P. - WWS  
Fa - 1, Aug. 15, Calgary - HWP  
Fc - 1, Sept. 4, Calgary - WWS  
1974.  
Sa - 1, May 19, Edmonton - JIW  
Em/Sc - 1, May 30, Banff - Holroyd & Van Tighem (1983)  
P - 1, June 5, Crammond - Tull (1975)  
Eb - 4, June 8, Lodgepole - Tull (1975)  
- 5, June 11, Little Smoky - Tull (1975)  
Fc - 1, Sept. 8, Edmonton - RIP  
- 1, Sept. 9, Calgary - HWP, CAR  
Ew/Fc - 1, Nov. 14, Nevis - TSS  
1975.  
Sa - May 7, Syncrude lease - Sharp & Richardson (1976)  
- 1 male, May 9, Manning - GRG, MAH  
Em/Eb - 1, June 9, Banff - Holroyd & Van Tighem (1983)  
Eb - occasional summer resident, Wainwright - Bradley & Bradley (1977c)
Fa - 1, Aug. 25, Edmonton - RIC
- 1, Sept. 6, Calgary - HWP
Fc - 1, Sept. 21, Calgary - LRB

Em/Sc - 1, May 25, Maligne Canyon, Jasper N.P. - Holroyd & Karasiuk (1977)
Eb - 1 singing male, June 9, Waterton Lakes N.P. - CRW
- 1 singing male, June 12, Elkwater - CRW

Fa - 1 female, Aug. 7, Calgary - JMP
Fc - 1, Aug. 23, Irvine - CAW
Fc - Aug. 24, Ft. McMurray - Gulley (1979)

1978. Sa - 1, May 13, Ft. McMurray - BRW
Em/Sc - 1, May 27, Yamnuska - Wiseley (1979b)

1979. Sa - 1, May 10, Grande Prairie - ELC, GEC
Sc/Pb - 1 male, June 6, Bottrel - SFJ, JMP
Eb - 1 male, July 1-3, Waterton Lakes N.P. - CAW (Salt 1984)
Fa - 2, Aug. 11-16, Edmonton - Smith & Assmann (1980)
- 2, Aug. 20, Calgary - JOR
Fc - 1, Aug. 31-Sept. 4, Edmonton - Smith & Assmann (1980)
- 1, Sept. 9, Calgary - HWP

1980. Sc - 1 male & 1 female, May 28, Calgary - JOR
Fa - 1, Aug. 11, Calgary - DAE, HWP, JOR

American Redstart (Setophaga ruticilla)

The American Redstart usually arrived in Alberta in the third week of May, with first dates ranging from May 15 to 27. There was an exceptionally early arrival date of May 9 in 1979. Francis & Lumbis (1979) gave an arrival date of May 17 for the Ft. MacKay area. In Banff and Jasper National Parks, migration occurred from mid May to June, with a peak in late May (Holroyd & Van Tighem 1983). In southern Alberta, redstarts are scarce spring migrants. Spring migration is short in duration, usually occurring over a one or two week period.

Salt & Salt (1976) state that the American Redstart nests in northern and central Alberta south to about the latitude of the Battle River. They also show that it nests throughout the mountains and foothills, with a disjunct population in the Cypress Hills. However, in the mountains data indicates that redstarts nest only south to Banff. From Banff to Waterton, there are only a few reports after early June, which may all be of late spring migrants.

There is only one breeding season record for each of Waterton Lakes National Park and Kananaskis Provincial Park (Sharp 1973; Salt 1976). American Redstarts are uncommon in Banff and Jasper National Parks, and are mainly restricted to the Bow River valley, the lower Athabasca River valley, and the Miette River valley (Holroyd & Van Tighem 1983). In these two parks, redstarts prefer tall deciduous shrubbery on alluvial wetlands and avalanche slopes, as well as woodlands with a tall shrub understory near water. The highest densities were in willow (Salix spp.)-green alder (Alnus crispa) thickets.

In the Ft. MacKay area, redstarts were commonest along interfaces in riparian habitats (Francis & Lumbis 1979). Here, they preferred habitats that provided both dense deciduous foliage and open space at all heights between two and eight meters above ground. This is exemplified by interfaces between tall deciduous forests and lakes, rivers, or land habitats with vegetation less than two meters high. The highest density found was 70 territories/100
hectares in a mature balsam poplar (Populus balsamifera)/scrub willow plot. During the decade, there were extralimital breeding season records from Waterton Lakes National Park, Willow Creek Provincial Park, Kananaskis Provincial Park, and the Wainwright area.

As a migrant, this species is much more common in southern Alberta in the fall than in the spring. In the fall, the first migrant American Redstarts usually appear in mid August. However, fall migration in 1978 began later, with the first migrant recorded on August 29. The peak of fall migration usually occurred in late August. Few birds occurred after mid September, with the latest date for the decade being September 27. However, in 1976 and 1980, the last fall migrants were recorded on September 2 and 5, respectively.

In a study of fall warbler migration in Edmonton, Smith & Assmann (1980) recorded the first of two peaks from August 26 to 30. During this peak, American Redstarts were one of the three dominant species and comprised 17% of the total number of migrant warblers.

1971.  
Sa - 1 male, May 20, Elkwater - WWS  
- 1 male, May 20, Cold Lake - COS  
Sc - 1, May 28, Calgary - RIP  
Sa - 1 male, May 19, Calgary - GEA, WEB, BIL, VGL  
Sc - 1 male, May 25, Lethbridge - HES, RYS  
Sc/Eb - 1 male, June 22, Waterton Lakes N.P. - Sharp (1973)  
Fa - 3, Aug. 12, Calgary - WWS  
Fb - 25, Aug. 20, Calgary - WWS  
Fc - 1 male, Sept. 27, Calgary - HWP, CAW

1972.  
Sc - 1, May 27, Calgary - BIL  
- 1 pair, May 27, Tofield - LOG  
Sa/Sh - 7 males & 4 females, May 27, Bow Valley P.P. - VGL, JIM  
Fa - 1 female, May 15, Calgary - HWP  
Fb - 25, Aug. 24, Calgary - WWS  
Fc - 1 immature male, Sept. 20, Calgary - VGL, HWP, BIR, CAR

Sa - 1, May 26, Red Deer River valley near Bindloss - WWS  
Sc - 1 male, June 8, Milk River valley near Wildhorse - WWS  
Sc/Eb - 2 adult males, June 14, Waterton Lakes N.P. - WWS  
Eb - 1, June 27, Willow Creek P.P. - Crack & Danielson (1974d)  
Fa - 1, Aug. 18, Cheadle - TSS  
Fc - 1, Sept. 15, Cheadle - TSS

1974.  
Sa - May 18, Milk River - FAN  
- May 20, Vegreville - BUB, BYB, ERB, PRB  
- 12, May 23, Syncrude lease - Sharp & Richardson (1976)  
Sc - 1 first year male, June 7-9, Calgary - RUB, LRB  
Eb - occasional summer resident, Wainwright area - Bradley & Bradley (1977c)  
Fa - 1 male, Aug. 21, Calgary - WIH  
Fc - 1 male, Sept. 5, Edmonton - LIW  
- 1 first year male, Sept. 9, Calgary - HWP  
- Sept. 9, Mildred Lake - Sharp & Richardson (1976)

1975.  
Sa - May 17, Ft. McMurray - Gulley (1979)  
Eb - 1 subadult male, July 3, Kananaskis P.P. - Salt (1973)  
Fa - 1 female, Aug. 16, Sylven Lake - ADS, DOS  
Fc - 1, Sept. 2, Kananaskis P.P. - Salt (1976)  

1976.  
Sa - 2, May 15, Cardinal Lake - CAW  
- 3, May 16, Edmonton - DRG, DVW  
- 1 male, May 21, Winchell Lake - JMP  
Fa - 1, Aug. 10, Calgary - JMP  
Fb - 10+, Aug. 23, Calgary - JOR  
Fc - 3, Sept. 13, Calgary - PES
1978.  
Sa - 1 male, May 20, Wembley - ELC, GEC
   - 1, May 23, Ft. McMurray - BRW
Sc - 1 male, May 31, Calgary - ADS, DOS, PHS
Fa - 1 immature male, Aug. 29, Calgary - HWP, JOR
Fc - 1 male, Sept. 9, Grovedale - GEC
   - 2, Sept. 10, Carseland - JOD, JMP, GRW

1979.  
Sa - 1 male, May 9, Banff - Holroyd & Van Tighem (1983)
Sc - 1 male, June 3, Calgary - ANS
Fa - 6, Aug. 11-15, Edmonton - Smith & Assmann (1980)
   - 2, Aug. 14, Calgary - JOR
Fc - 3, Sept. 10-14, Edmonton - Smith & Assmann (1980)

1980.  
Sa - 1, May 26, Edmonton - Thormin (1980a)
   - 1 female, May 26, Calgary - HWP, JOR
Sb - 6, May 27, Calgary - DAE, HWP, JOR
Fa - 1, Aug. 11, Calgary - DAE, HWP, JOR
Fc - 1, Sept. 5, Calgary - OLD

Ovenbird (Seiurus aurocapillus)

Ovenbirds usually arrive in Alberta during the last half of May. With the exception of the very early dates in 1975, the first spring migrants during the decade were recorded from May 12 to 27. Francis & Lumbis (1979) reported an arrival date of May 15 for the Ft. Mackay area.

Ovenbirds are fairly common nesting birds in deciduous and mixed woods in northern Alberta, south to about Edmonton (Salt & Wilk 1966). This species occurs locally in the central parklands, and regularly nests along the foothills, but not in the mountains. There is a disjunct population in the Cypress Hills where the species is common.

In Waterton Lakes National Park, Sharp (1973) reported only one nesting season record, which was prior to this decade. However, she noted that Ovenbirds nested just outside the Park in 1972. There were no records for Kananaskis Provincial Park (Salt 1976). Holroyd & Van Tighem (1983) had no records for Banff National Park and only two nesting season records for Jasper National Park, both from the lower Athabasca River valley. There were extralimital nesting season records during the decade from the Lousana, Wintering Hills, Stettler, Wainwright, Dillberry Lake and Dry Island Buffalo Jump Provincial Park areas.

In the Ft. MacKay area, Ovenbirds were fairly common (Francis & Lumbis 1979). They were present in all upland deciduous and mixed forests, while only bottomland deciduous forests that are well-drained, were occupied. Ovenbirds were absent from water-saturated habitats, and preferred a lush, herbaceous-dominated ground stratum. Densities of 27 to 48 territories/100 hectares were recorded in typical nesting habitats. However, a very high density of 138 territories/100 hectares was recorded in an aspen (Populus tremuloides) forest plot with a lush and dense shrub understory. The usual nesting habitat of this species has been described as open deciduous woods, or the deciduous component of mixed woods, with a sparse shrub layer and a dense herbaceous ground cover (Salt 1973).

In the fall, the first migrants usually appear in southern Alberta in the last half of August. Fall migration appears to be contracted, with most birds having left by early September. During the decade, some individuals occasionally lingered until late September, and there was a very late fall report in 1978.
1971.  
Sa - 3 males, May 25, Elkwater - WWS  
Fb - 17 banded, Aug. 21-26, Edmonton - ETJ (Salt 1973)  
Fc - 1, Sept. 10, Calgary - RIP  
- 4 banded, Sept. 10-15, Edmonton - ETJ (Salt 1973)

1972.  
Sa - 1, May 23, Dinosaur P.P. - HES  
Sc - 1 singing, June 2, Bow Valley P.P. - CAW, CRW  
Eb - 2, June 13, 16 km north of Dry Island Buffalo Jump P.P. - WWS  
Fa - 1, Aug. 20, Calgary - WWS  
Fc - 1, Aug. 27, Calgary - WWS

Sa - 2 males, May 21, Wabamun Lake - BEB, GEB, JIW  
- 5 males, May 21, Busby - DEG, GCG  
Sc - 1, June 10, Seebe - VGL, CAR  
- several singing males, summer, Crimson Lake P.P. - CRW  
Fa - 1, Aug. 23, Calgary - RUB  
Fc - 1, Sept. 1, Calgary - BIL, VGL

1974.  
Eb - 3, July 3-5, Dillberry Lake P.P. - Renewable Resources (1975)  
Fa - 1, Aug. 21, Strathmore - TSS  
Fc - 3, Sept. 7, Edmonton - RIP

1975.  
Sa - 1 male, May 7, Edmonton - BEB, GEB  
- May 10, Manning - GRG, PAG, MAH  
- May 12, Syncrude lease - Ward et al. (1976)  
Sc - 1, May 29, Longview - KSC, JCD  
Eb - occasional summer resident, Wainwright area - Bradley & Bradley (1977c)  
Fc - 1, Sept. 20, Calgary - LRB, RUB

1976.  
Sa - May 15, Ft. MacKay - Francis & Lumbis (1979)  
Eb - 1 male, June 12, 13 km south of Stettler - GRG, PAG  
Fc - 1, Sept. 14, Calgary - HWP

1977.  
Sa - 1, May 12, Edmonton - DVW  
- 1, May 15, Cardinal Lake - CAW  
- 2 males, May 18, Ft. MacKay - WWS  
Eb - 4 males, June 21, Wintering Hills - Wallis (1977)  
- 1 male, June 24, Lousana - Wallis (1977)  
B - 2 singing, June 22, Waterton Lakes N.P. - CRW  
Fa - 1, Aug. 19, Calgary - JMP  
- 1, Aug. 19, Red Deer River near Bindloss - Wallis (1977)  
F - 3, Aug. 23-26, Waterton Lakes N.P. - WWS

1978.  
Sa - May 19, Ft. McMurray - Gulley (1979)  
Fa - 1, Aug. 29, Calgary - HWP, JOR  
Fc - 1 immature male, first week of Sept., Devon - LOF (U of A. specimen)  
Fc - 1, Oct. 17, Calgary - KEM, LLM. Flew into building downtown.

1979.  
S - 1, May 27, Calgary - BNB, JHB  
Fa - 1, Aug. 20, Calgary - HWP  

1980.  
Sc - 1, June 1, Calgary - ANS  
Fa - 2, Aug. 14, Calgary - HWP, JOR

Northern Waterthrush (Seiurus noveboracensis)

During the decade, Northern Waterthrushes arrived in Alberta from May 8 to 20. There was an exceptionally early arrival date in 1976. From available data, it appears that spring migration in southern Alberta seldom lasts longer than two weeks.

The Northern Waterthrush nests throughout Alberta, except in the parklands and grasslands (Salt & Salt 1976). However, in the mountains this species is apparently restricted to valleys at lower elevations. Salt (1973) states that it is a bird of the heavily forested regions where mixed woods meet streams,
rivers and ponds. It is of some interest that waterthrushes have not been found nesting in the Cypress Hills.

In Waterton Lakes National Park, this species was restricted to only a few areas at lower elevations where there were shrubby thickets along water bodies (Sharp 1973). Salt (1976) found Northern Waterthrushes along many of the creeks in the central part of Kananaskis Provincial Park. In Kananaskis Country, waterthrushes were fairly common in willow (Salix spp.) thickets along streams and ponds (Wiseley 1979a). Holroyd & Van Tighem (1983) noted that this species was uncommon in Banff and Jasper National Parks, where it preferred tall deciduous shrubbery bordering wetlands.

In the Ft. MacKay area, Francis & Lumbis (1979) found that waterthrushes were strongly associated with the edges of deciduous or mixed woods adjacent to standing or flowing water. Preferred habitat was willow thickets over four meters tall, with grasses or horsetails (Equisetum spp.) for a ground cover and very little moss and leaf litter. Black spruce (Picea mariana) and tamarack (Larix laricina) muskegs were found to be unsuitable. The highest density recorded was 62 territories/100 hectares in a willow plot.

The first fall migrants appear in southern Alberta in mid August in most years. Although most waterthrushes have left by the end of August, a few occasionally linger in some years to mid September. There was an exceptionally late record in October of 1971.

1971. Fc - 1, Oct. 1, Calgary - RIP  
1972. Sa - 1, May 16, Calgary - CAW, CRW  
       Fa - 1, Aug. 15, Calgary - ANM  
       Fc - 1, Sept. 17, Calgary - HWP, CAR  
1973. Sa - 1, May 16, Calgary - HWP, HAV  
       Fa - 4, Aug. 14, Calgary - HWP, CAR  
       Fc - 1, Sept. 9, Edmonton - DEG  
            - 1, Sept. 11, Calgary - MRL, WWS  
1974. Sa - 2, May 20, Calgary - DRD, SAD  
            - 2, May 25, Edson - REG, ARS  
       Eb - 2, mid June, Edson - REG, ARS  
            - seen carrying food, July 1, Edson - REG, ARS  
       Fa - 3, Aug. 15, Calgary - HWP, WWS, CAW  
       Fc - 1, Sept. 2, Edmonton - DEG, GCG  
            - 1, May 9, Calgary - BIL  
            - May 10, Sylvan Lake - HUS  
            - 1, May 10, Edmonton - STJ  
       Sc - 1, May 20, Cheadle - TSS  
       Eb - 2 males, June 19, Edson - REG  
       Fa - 1, Aug. 24, Calgary - HWP  
       Fc - 1, Sept. 6, Edson - RIC  
1976. Sa - 1, April 27, Calgary - HWP  
            - May 13, Ft. MacKay - Francis & Lumbis (1979)  
       Sc - 1, June 7, Police Coulee - Wershler (1980)  
       B - 1 singing male, July 1, Margaret Lake - Höhn (1976a)  
       Fc - Sept. 1, Ft. McMurray - Gulley (1979)  
            - 1, Sept. 2, Kananaskis P.P. - Salt (1976)  
1977. Sa - 1, May 9, Ft. MacKay - WWS  
       Sc - 1, May 26, Calgary - JOR  
       Fa - 1, Aug. 10, Calgary - RKO, ADS  
            - 1, Aug. 12, Dinosaur P.P. - CRW (Kondla 1978)  
       Fc - 2, Aug. 23, Calgary - JOR  
            - 1, Aug. 23, Calgary - JMP  
1978. Sa - 1 male, May 18, Pincher Creek - WWS
1979.  
Sa  -  2, May 20, Calgary - DUC  
Fa  -  3, Aug. 13, Calgary - JOR  
Fc  -  2, Aug. 31-Sept. 4, Edmonton - Smith & Assmann (1980)  
   -  1, Sept. 1, Calgary - CLH  

1980.  
Sa  -  2 males, May 14, Pincher Creek - WWS  
Sc  -  1, May 26, Calgary - DAE, JOR  
Fa  -  4+, Aug. 11, Calgary - DAE, HWP, JOR  

Connecticut Warbler (Oporornis agilis)

The Connecticut Warbler is a rare spring migrant, especially in southern Alberta. Data was limited, but it appeared that the first birds usually arrived in late May or the first week of June. There were unusually early spring arrival dates recorded in 1972.

The Connecticut Warbler nests from the Peace River District east to Cold Lake and south to about the North Saskatchewan River, except in central Alberta where it extends its range southward through the Battle Lake area to the Sundre region (Salt & Salt 1976). There are no records from the mountains (Sharp 1973; Sadler & Myres 1976; Salt 1976; Salt & Salt 1976; Holroyd & Van Tighem 1983). During the decade, there were a number of extralimital breeding season records, mainly from west-central Alberta and the Ft. MacKay area. Griffiths & Pharis (1976) state that this species was fairly common in the Swan Hills. Data for the decade indicates that the breeding range in west-central Alberta extends south to Bottrel.

Godfrey (1986) states that this species frequently nests in spruce (Picea spp.) or tamarack (Larix laricina) bogs. He notes that it also nests on dry ridges with open poplar (Populus spp.) woods, especially in Alberta. Salt (1973) states that this species occurs in deciduous or deciduous-dominated woods with open areas. At Whitney Lakes Provincial Park, it is found in semi-open aspen (Populus tremuloides) woods growing in sandy soil. In the Ft. MacKay area, Francis & Lumbis (1979) found territorial males associated with aspen-jack pine (Pinus banksiana) forest with a dense alder (Alnus spp.) understory. Salt (1973) notes that Connecticut Warblers may be fairly common in an area for several years, then be inexplicably absent for a year or two, and then re-appear.

Data for fall migration is limited. It appears that fall migration in southern Alberta occurs from mid August to early September. The latest fall record for the decade was September 17, 1978.

1971.  
Fa  -  1 banded, Aug. 21, Edmonton - ETJ (Salt 1973)  
   -  1, Aug. 21, Calgary - RIP  
Fc  -  1, Sept. 5, Calgary - WIH  

1972.  
Sa  -  1 female, May 8, Miquelon Lake P.P. - NGK  
   -  1 male, May 17, Lacombe - BIL, VGL  
Fa  -  3, Aug. 20, Calgary - WWS  
Fc  -  1, Aug. 27, Calgary - WWS  

Sa  -  1 male, May 31, Winagami Lake P.P. - WWS  
Sc  -  1 male banded, June 6, Jenner ferry - ETJ  
Fa  -  1, Aug. 17, Calgary - HWP, CAR  
Fc  -  2, Sept. 1, Calgary - WWS  

1974.  
Sa/Eb  -  1, June 5, Crandond - Tull (1975)  
S/Eb  -  1, June 6, Dovercourt - Tull (1975)  
   -  1, June 8, Lodgepole - Tull (1975)  
   -  1, June 11, Fox Creek - Tull (1975)  
   -  1, June 12, Little Smoky - Tull (1975)
Mourning Warbler

Mourning Warblers usually arrive in Alberta in late May and early June. In southern Alberta, it is a very rare spring migrant, with only two reports for the decade.

Mourning Warblers nest from Peace River northeastward and southeastward to the Lake Athabasca area and the Caroline area, respectively (Salt 1973). There are no reports for the mountains or foothills (Sharp 1973; Salt 1973; Sadler & Myres 1976; Salt 1976; Holroyd & Van Tighem 1983). In this decade, there were a number of extralimital breeding season records, primarily from west and southwest of the known breeding range. Typical nesting habitat is deciduous-dominated woods, including second growth aspen (Populus tremuloides) woodland with a tall dense shrub understory.

In the fall, Mourning Warblers are scarce in southern Alberta. The first migrants usually appear shortly after the middle of August. During the decade most birds left Alberta by early September, but a few lingered into mid September. There were unusually late October records in 1975 and 1977.

1971.  
Ec - 1, Sept. 17, Calgary - WWS
* 1972.  
Sa - 1 male singing, May 28, Beynon - Kondla et al. (1973)
Ec - 1 male, June 13, Red Deer River valley near Trenville - WWS
Fa - 1, Aug. 18, Calgary - WWS
Sa - 1 male, May 29, Winagami Lake P.P. - WWS
Fa - 2, Aug. 24, Calgary - WWS
Ec - 1, Sept. 12, Redwater - DEG
* 1974.  
Ec - 1 male, June 8, Lodgepole - Tull (1975)
Fa - 1 male, June 10, Windfall Creek - Tull (1975)
Fa - 1 male, June 11, Fox Creek - Tull (1975)
Fa - 1 male, June 17, Clear Hills - Tull (1975)
Ec - 1 male, Sept. 5, Highridge - RIP

* - 1, June 17, Clear Hills - Tull (1975)
Ec - 1, June 21-30, Sheep River Ranger Station - MRL (Wiseley 1979a)
Fa - 1, Aug. 21, Strathmore - TSS
Ec - 1, Sept. 8, Edmonton - RIP

1975.  
Sa - 1, May 30, Cold Lake - GRG, PAG, MAH
* 1976.  
Sa - 1, June 2, Edmonton - STJ
Ec - Aug. 6, Syncrude lease - Ward et al. (1976)
Ec - 2, Sept. 13, Calgary - ANS, LIS

1976. Sa/Ec  
- June 1, Ft. Mackay - Francis & Lumbis (1979)
Ec - 1, summer, Notikewin P.P. - Mueller et al. (1976)
- territorial males on 2 plots, summer, Ft. Mackay - Francis & Lumbis (1979)

1977.  
Sa - 1, May 14, Bottrel - Butot (1977c)
- 1 male, May 24, Smoky Lake - JLC
Ec - 1 singing, May 25, Reesor Lake - CRW
Ec - 1 adult & 1 fledgling, July 16, Bottrel - Butot (1977d)
Fa - 1, Aug. 19, Red Deer River valley near Bindloss - Wallis (1977)
Ec - 1, Sept. 6, Calgary - HWP

1978.  
Ec - 1, Sept. 17, Calgary - RUB

1979. Sa/Ec  
- 6 males, June 3, Bottrel - SFJ, JMP
Ec - 1 immature, Aug. 27, Edmonton - DVB (U of A specimen)
- 1, Aug. 28, Calgary - HWP, JOR

1980.  
Ec - numerous singing males, June 25, Whitney Lakes P.P. - CAW
Fa - 1, Aug. 14, Calgary - HWP, JOR
Ec - 1, Sept. 8, Calgary - OLD, HWP, JOR

Mourning Warbler (Oporornis philadelphia)
1975.  
Sa - June 1, Syncrude lease - Ward et al. (1976)  
Pc - Sept. 27, Syncrude lease - Ward et al. (1976)  
- 1, Oct. 5, Edmonton - DEG  
1976.  
Sa - May 23, Ft. MacKay - Francis & Lumbis (1979)  
Pc - Sept. 18, Ft. MacKay - Francis & Lumbis (1979)  
1977.  
Sa - 1, May 24, Edmonton - TWT  
- May 27, Ft. McMurray - Gulley (1979)  
Pc - 1, Oct. 2, Calgary - LRB, RUB  
1978.  
Sa - 2, May 27, Ft. McMurray - BRW  
Pb - 2 singing, June 10, Coal Valley - CAW, CRW  
1979.  
Pb - 1, June 30, Priddis - WIH  
1980.  
Sa - 1, May 25, Bottrel - SFJ (Gollop 1980a)  
Pc - 1, Sept. 16, Calgary - OLD  

MacGillivray's Warbler (Oporornis tolmiei)

During the decade, spring arrival dates ranged from May 19 to 27. In Banff and Jasper National Parks, MacGillivray's Warblers arrive in mid and late May (Holroyd & Van Tighem 1983). These dates are significantly earlier than the arrival date of early June as reported by Sadler & Myres (1976).

During the nesting season, MacGillivray's Warblers are found primarily in the mountains and foothills of Alberta. In Waterton Lakes National Park, it is common in shrubby habitats at all elevations, but numbers may fluctuate from year to year (Sharp 1973). For Kananaskis Country, Wiseley (1979a) found this species fairly common in willow (Salix spp.) and green alder (Alnus crispa), from montane river valleys to subalpine avalanche slopes. Holroyd & Van Tighem (1983) found it to be uncommon in Banff and Jasper National Parks, and have no records from north of the Miette and lower Athabasca Rivers in Jasper National Park.

There are two disjunct populations of this species in Alberta away from the mountains. The first is in the Cypress Hills, where it is relatively common. The second disjunct population is found along the Red Deer River valley, where Salt & Salt (1976) illustrate a breeding range from the Drumheller area to the Saskatchewan border. However, a review of available literature indicates that there is a scarce and local nesting population only in the Drumheller area (Kondla et al. 1973; Wallis 1977). Wallis (1976) reports that MacGillivray's Warblers were found locally in shrub patches along the lower Milk River in 1971. However, none were observed in these areas in 1974 or 1975.

In Banff and Jasper National Parks, fall migration occurs from late August to late September, with a peak in early September (Holroyd & Van Tighem 1983). At Calgary, this species is recorded regularly in the fall, but usually in low numbers. There was an extralimital fall record from Edmonton in 1973.

1971.  
Sa - 2, May 21, Elkwater - WWS, CRW  
P - 10, June 17, Elkwater - WWS  
Eb - 6 singing males, July 3, Milk River valley southwest of Onefour - WWS  
- 6 singing males, July 5, Milk River valley east of Pinhorn Grazing Reserve headquarters - WWS  
1972.  
Sa - 1 female, May 19, Waterton Lakes N.P. - Sharp (1973)  
P - 3 males, May 28, Beynon - WWS, CAW, CRW  
Fa - 5, Aug. 20, Calgary - WWS  
Pc - 1, Sept. 17, Calgary - HWP, CAR  
- 1, Sept. 28, Waterton Lakes N.P. - Sharp (1973)  
Eb - 1 adult female banded, June 14, Peers - ETJ  
Em - 1 adult female banded, Aug. 30, Edmonton - ETJ
Common Yellowthroat (*Geothlypis trichas*)

Common Yellowthroats usually appear in southern Alberta in mid May. About two weeks later, the first migrants appear in northern Alberta. In three years, there were unusually early arrival dates of April 24, April 26 and May 9. The peak of spring migration appears to be in late May.

The breeding range of the Common Yellowthroat was expanded from the second to the third edition of The Birds of Alberta. In the latter edition, the species is shown nesting throughout Alberta in suitable habitat (Salt & Salt 1976). This warbler is locally common in wetland shrubs in Waterton Lakes National Park (Sharp 1973). In Kananaskis Provincial Park, yellowthroats are fairly common in tall dense willows (*Salix spp.*) near marshes, or in dense birch (*Betula spp.*)/willow in bogs (Salt 1976). In Banff and Jasper National Parks, this species is common in the Bow, Athabasca and Miette River valleys (Holroyd & Van Tighem 1983). In these areas, it was found in willow shrubbery and sedge (*Carex spp.*) beds at low elevations. Francis & Lumbis (1979) found that Common Yellowthroats preferred willows that were 1.5 to 3 meters high around lakes and marshes in the Ft. MacKay area. It was also found in common cattail (*Typha latifolia*) and bulrush (*Scirpus spp.*) beds.

In the fall, most Common Yellowthroats have left Alberta by early September, but a few linger until mid or late September. During the decade, the last fall records in southern Alberta ranged from September 10 to October 1. Francis & Lumbis (1979) report a last date of late August for the Ft. MacKay area. In Banff and Jasper National Parks, Holroyd & Van Tighem (1983) record a peak in late August. In Kananaskis Provincial Park, Salt (1976) found that a major pooling of birds occurred about August 23, which was followed by a rapid exodus. He recorded the last bird on September 6.

1971.  
**Sa** - 1 male, May 18, Elkwater - WWS  
**Fc** - 1, May 23, Vermillion Lakes, Banff N.P. - RIP  
**Fc** - 1, Oct. 1, Calgary - RIP  
1972.  
**Sa** - 1, May 16, Calgary - CAW, CRW  
**Sa** - 1 male & 1 female, May 21, Calgary - HAV  
- 1 male, May 23, Edmonton - DEG  
**Fc** - 2, Sept. 16, Glennevis - GEP  
- 1 male, Sept. 22, Calgary - VGL  
1974.  
**Sa** - 1, May 18, Cypress Hills P.P. - GWG, LOG  
- 1 male, May 20, Lethbridge - HES  
**Fc** - 1, Sept. 21, Edmonton - DEG  
1975.  
**Sa** - 1, May 9, Calgary - BIL  
- May 28, Syncrude lease - Ward et al. (1976)  
**Eb** - 2 singing, June, Caribou Mts. - Höhn & Burns (1976)  
**Fc** - 1, Sept. 19, Water Valley - Johnston (1976b)  
- Sept. 27, Syncrude lease - Ward et al. (1976)  
1976.  
**Sa** - 2, May 22, Tofield - ERW
- 1 male, May 22, Bear Lake - RIC
- May 23, Ft. MacKay - Francis & Lumbis (1979)
Fc - 1, Sept. 14, Calgary - HWP
- 1, Sept. 29, Jasper N.P. - Holroyd & Karasiuk (1977)

- 2, May 13, Dinosaur P.P. - CAW, CRW
- 1 female, May 14, Bruce Lake - JMP
Fc - 1, Sept. 10, St. Albert - TAW
- 1, Sept. 13, Calgary - JMP

1979. Sa - 1 female, May 17, Calgary - JOR
Fc - 2, Sept. 14, Bottrel - SFJ

1980. Sa - 1, May 26, Edmonton - Thormin (1980a)
- 1 male, May 26, Calgary - DAE, HWP, JOR
Fc - 1 female, Sept. 26, Calgary - OLD

Wilson's Warbler (*Wilsonia pusilla*)

Wilson's Warblers usually arrive in mid May, with first arrival dates for the decade ranging from May 6 to 21. There was an exceptionally early record of April 25 in 1980. Outside of their breeding range in southern Alberta, the last spring migrants are usually recorded in late May or early June. In Banff and Jasper National Parks, Holroyd & Van Tighem (1983) note that spring migration peaks in late May.

Wilson's Warblers nest in two distinct areas of the province, each area occupied by a different subspecies. One subspecies apparently was thought to occupy most of the northern half of the province (Salt & Wilk 1966). More recently, the range of this subspecies was altered to eliminate a large area of northwestern Alberta (Salt & Salt 1976). The other subspecies nests in the mountains and foothills of western Alberta. The large gap between the breeding ranges of the two subspecies does not appear to be easily explained. Suitable nesting habitat appears to exist in this gap, but the only nesting season records to date come from the Swan Hills, where this species is a rare summer nester (Griffiths & Pharis 1976).

Wilson's Warblers usually inhabit dense shrubbery near water. In the Ft. MacKay area, willow (*Salix spp.*) habitats were preferred (Francis & Lumbis 1979), with a highest density of 132 territories/100 hectares recorded from a willow-dominated fen. In the mountains, Wilson's Warblers also inhabit dense shrubbery on avalanche slopes and in mountain meadows (Salt & Salt 1976). In Waterton Lakes National Park, this warbler was fairly common in shrubby habitats at all elevations (Sharp 1973). Salt (1976) found it to be the second most common warbler in Kananaskis Provincial Park, occurring principally in wetlands at low elevations. In Banff and Jasper National Parks, Wilson's Warblers were common in alluvial wetland shrubs, subalpine valley bottoms, avalanche slopes, burntlands and subalpine fir (*Abies lasiocarpa*) krummholz (Holroyd & Van Tighem 1983). The highest densities were found on subalpine fir-willow avalanche slopes.

The first fall migrants are usually recorded in southern Alberta in mid
August, with dates ranging from August 7 to 24 reported for the decade. Peak numbers are generally recorded during late August and early September. In southern Alberta, this species is a common fall migrant and has a more extended fall migration than most other warbler species. The last fall migrants are usually recorded from late September to the third week of October.

1971.  
Sa - 2, May 19, Elkwater - WWS
Fa - 1, Aug. 24, Calgary - RIP, DAS
Fc - 1, Oct. 1, Calgary - JAB
- 3, Oct. 1, Calgary - RIP

1972.  
Sa - 3, May 14, Calgary - CAW, CRW
Fa - 2, Aug. 13, Calgary - WWS, CAW, CRW
Fb - 40, Aug. 20, Calgary - WWS
Fc - 1 male, Oct. 16, Calgary - HWP, CAR

Sa - 1, May 21, Tofield - GWG, LOG
- 1 male, May 22, Calgary - HWP, CAR
- 1 male, May 25, Winagami Lake P.P. - WWS
Fa - 1, Aug. 17, Calgary - HWP
Fb - 60, Aug. 25, Calgary - WWS
Fc - 1 male, Oct. 11, Calgary - RUB

1974.  
Sa - 1 male, May 6, Calgary - HAV
Sc - 1 male, June 8, Calgary - RUB
Sc/EB - 1 male, June 11, Little Smokey - Tull (1975)
Fa - 2, Aug. 11, Calgary - WIA
Fc - 1, Oct. 5, Edmonton - DEG, GCG
- 1, Oct. 14, Calgary - RFC

1975.  
Sa - 1, May 14, Strathmore - TSS
- May 20, Vegreville - BUB, BYB, ERB, PRB
- May 28, Syncrude lease - Sharp & Richardson (1976)
Fa - 1 male, Aug. 18, Calgary - RUJ
Fc - 1, Sept. 20, Edmonton - DEG
- 1, Sept. 26, Water Valley - Johnston (1976b)

1976.  
Sa - May 20, Ft. MacKay - Francis & Lumbis (1979)
Sc - June 2, Gooseberry Lake P.P. - Bradley & Bradley (1977b)
Fa - 1 male, Aug. 12, Sylvan Lake - DOS
Fc - Sept. 19, Ft. McMurray - Gulley (1979)
- 1, Sept. 24, Jasper N.P. - Holroyd & Karasiuk (1977)
- 1, Oct. 25, Calgary - RUB

1977.  
Sa - May 17, Banff N.P. - Holroyd & Gartshore (1978)
- 1, May 17, Cold Lake - WPN
- 2, May 17, Ft. MacKay - WWS
Fa - 1 male & 1 female, Aug. 7, Calgary - JMP
- 1, Aug. 12, Munson ferry - Wallis (1977)
Fc - 1, Oct. 13, Calgary - PES

1978.  
Sa - May 23, Ft. McMurray - Gulley (1979)
Sc - 1 female, May 31, Calgary - RUB
B - 12 singing, June 10 & 11, Coal Valley - CAW, CRW
- 9 singing, June 15, Chimney Rock - CAW
Fa - 1, Aug. 15, Calgary - ANS
Fc - 1 male, Sept. 25, Calgary - JMP

1979.  
Sa - 1 female, May 8, Calgary - BNB
Sc - 1 female, May 27, Calgary - RUB
- 3, May 27, Calgary - ANS
Fa - 6, Aug. 10, Calgary - BSD

1980.  
Sa - 1, April 25, Cheadle - TSS
Sc - 1, June 1, Calgary - ANS
Fa - 4, Aug. 11, Calgary - DAE, HWP, JOR
Fc - 1, Sept. 26, Calgary - OLD
Canada Warbler (*Wilsonia canadensis*)

The Canada Warbler appears to be a late spring migrant, arriving in central and northern Alberta in late May to early June (Salt & Salt 1976). Based on limited data, the first arrival dates during the decade were from May 25 to 29. Francis & Lumbis (1979) had an arrival date of May 29 for the Ft. MacKay area. There was an unusually early extralimital migration record from Banff in 1977. Canada Warblers appear to enter the province from the east, thus by-passing southern Alberta. Previous to the decade, there was only one spring record from the southern third of the province (Sadler & Myres 1976). In the 1970's, there were three records from the south, including two from the Banff-Exshaw area in 1977. Both the first record in any season for Jasper National Park, and the first spring record for Calgary occurred in 1980.

During the nesting season, Canada Warblers occur locally in northeastern and central Alberta mainly in the areas drained by the Peace and Athabasca Rivers. It nests south to about Cold Lake and Glenevis (Salt & Salt 1976). However, Godfrey (1986) extends the breeding range right across northern Alberta into British Columbia. Salt (1973) states that this warbler is a localized inhabitant of willow (*Salix spp.*)/alder (*Alnus spp.*) tangles close to water, and also that no Alberta nest has yet been found. Francis & Lumbis (1979) describe required habitat in the Ft. MacKay area as mesic deciduous or mixed woods, taller than ten meters high, with a substantial deciduous layer taller than 1.5 meters. This habitat must be on a slope of 15 degrees or greater. The highest density recorded was 56 territories/100 hectares in a river valley.

Francis & Lumbis (1979) report a departure date of August 22 for the Ft. MacKay area. The first fall migrants appeared in southern Alberta from August 12 to 20. With three exceptions, the last fall migrants were reported from August 20 to 30. In an extensive review of this species in Alberta, Salt (1973) reports the earliest fall migration date as August 11 and documents only two early September records. In the 1970's, there were three September records, two of which were from late in the month. In southern Alberta, Canada Warblers are much more frequently reported during fall migration than at other seasons. However, even during the fall, this warbler is scarce.

1972.  
- **Fa** - 1 female, Aug. 10, Pigeon Lake - RAS (U of A specimen)  
  - 1, Aug. 12, Calgary - CAW, CRW  
- **Fb/FC** - 4, Aug. 20, Calgary - WWS  
- **Sa** - 1 pair, May 29, Winagami Lake P.P. - WWS  
- **Eb** - 2 singing, June, Young's Point P.P. - Van Tighem & Wallis (1973b)  
  - B - 8 males, June 8, Winagami Lake P.P. - WWS  
- **Fc** - 1, Sept. 8, Edmonton - DEG  
1974.  
- **Eb** - 2 males & 1 female, June 8, near Lodgepole - Tull (1975)  
  - 5 males, June 13, near Sturgeon Lake - Tull (1975)  
  - 2 males, June 16, near Rainbow - Tull (1975)  
1975.  
- **Sa** - May 25, Syncrude lease - Ward et al. (1976)  
- **Fc** - Sept. 27, Syncrude lease - Ward et al. (1976)  
1976.  
- **Sa** - 2 males, May 28, Gregoire Lake - WWS  
- **Fc** - Sept. 20, Ft. McMurray - Gully (1979)  
1977.  
  - **Sa** - May 25, Ft. McMurray - Gully (1979)  
- **Em** - 1, May 28, Yamnuska - Wiseley (1979a & b)  
- **B** - 2, July 14, Notikewan P.P. - CAW  
- **Fa** - 1, Aug. 12, Calgary - JMP  
- **F** - 2, Aug. 17, Hand Hills - Wallis (1977)  
  - 1, Aug. 23, Irvine - CAW
Yellow-breasted Chat (Icteria virens)

The earliest spring reports of Yellow-breasted Chats in Alberta in any particular spring have always been from nesting areas, or potential nesting areas. Limited data for the decade shows that first dates ranged from May 22 to 30.

The breeding range, as defined by Salt & Salt (1976), is primarily the lower valleys of the Red Deer, South Saskatchewan and Milk Rivers. Chats have occurred as far north as the Tolman Bridge and Empress, and as far west as Beiseker and Lethbridge. Outside of the river valleys, the species has also occurred south of the Cypress Hills and in the Manyberries area. In these areas, it is usually found in coulees and small valleys with tangles of shrubbery. Salt (1973) states that the first report of a Yellow-breasted Chat in Alberta was in 1941, and that this species is slowly expanding its range in the province. The heart of its Alberta range is in the lower Milk River valley, although Wallis (1977) states that this species is fairly common in proper habitat along the lower Red Deer River valley. Preferred chat habitat is dense tangles of shrubbery in valleys or coulees. It appears that similar thickets on upland sites are not suitable.

During the decade, there were records from as far north as East Coulee and Bindloss, and from as far west as East Coulee, Carseland, Taber and Writing-on-Stone Provincial Park. There were reports in two years from Reesor Lake in the Cypress Hills. In 1974, there were unusual extralimital breeding season records from the Bow River valley at Carseland and from Bow Valley Provincial Park.

During the decade, there were only two records of Yellow-breasted Chats after late July. Therefore, it is impossible to determine the timing of fall migration. Salt & Salt (1976) state that there are few fall records, and all have been in August. The only fall record prior to this decade was of a single bird observed on August 30, 1968 in Calgary (Sadler & Myres 1976). In 1974, there was a report of a migrant near Cheadle on September 1.

1971.  Sa - 1, May 30, East Coulee - CFNS
       Sc/B - 1 singing, June 11, Reesor Lake - WWS
1972.  Sa - 1 singing, May 27, Lake Newell - CHD
       B - 5-6, June 20, Dinosaur P.P. - BIL, VGL
1974.  Sa - 1, May 26, Red Deer River valley near Bindloss - WWS
       Eb - 1, June 9, Carseland - TSS
          - 1 singing, June 21, Bow Valley P.P. - HWP, KVT, CRW (Pinel & Butot 1978)
       B - 15, June 21, Red Deer River valley near Bindloss - WWS
          - 2 singing, June 23, South Saskatchewan River (White Rock Coulee)
           - WWS
       Fc - 1, Sept. 1, Cheadle - TSS
1975.  B - 1 singing, June 10-25, Reesor Lake - WWS
       - 10, June 27, Milk River valley near Onefour - WWS
1976. **B** - 3 singing, June 6, Lodge Creek - GRG, MAH  
- 1 singing, July 5, Taber P.P. - RIK  
- 6+ singing, July 23, Police Coulee & Van Cleeve Coulee - WWS

**1977.** **Sa** - 1 singing, May 22, Writing-on-Stone P.P. - CRW  
**B** - numerous, June 14-18, Dinosaur P.P. to Bindloss - Wallis (1977)  
**E** - 1, Aug. 19, Dinosaur P.P. - Wallis (1977)  
**1980.** **Sa** - 10 singing, May 29, Writing-on-Stone P.P. - WWS

**Scarlet Tanager** (*Piranga olivacea*)

The Scarlet Tanager nests from southeastern Manitoba eastwards (Godfrey 1986), although there are a few breeding records from Saskatchewan (Kreba 1990). Salt & Salt (1976) report indefinite sightings from Red Deer and other parts of southern Alberta, but give no details. The first confirmed record is a female specimen secured at Calgary on November 2, 1964. It should be noted that Godfrey (1986) erroneously reports this record as May 2, 1964. The only observation for the decade is listed below.


**Western Tanager** (*Piranga ludoviciana*)

Western Tanagers arrive in Alberta during the first two weeks of May. In the fall, migration usually starts in mid August and most birds have left the province by early September. During the decade, there were unusually early fall migration dates for 1975 and 1976. The latest fall record was September 16, 1976.

The Western Tanager nests in northern Alberta south to about the North Saskatchewan River and, in the foothills and mountains, south to the Montana border (Salt & Salt 1976). In Alberta, typical nesting habitat is mature mixed woods adjacent to standing water. Francis & Lumbis (1979) suggest that in the Ft. MacKay area, this species prefers mature mixed woods, especially outside of the river valleys. In Banff and Jasper National Parks, the highest densities of Western Tanagers during the breeding season were found in Douglas fir (*Pseudotsuga menziesii*) forest and other somewhat open, mature coniferous mixed forests (Holroyd & Van Tighem 1983).

The breeding status of this species in the mountain parks needs some clarification. Holroyd & Van Tighem (1983) note that it occurs throughout both Banff and Jasper National Parks at lower elevations, but there is only one nest record for each park. The first nesting record for Banff was not until 1977. Salt (1976) states that this species does not seem to breed in Kananaskis Provincial Park. Sharp (1973) reports that the species breeds in Waterton Lakes National Park, although their numbers appear to fluctuate from year to year.

There were extralimital summer records for Calgary, Cypress Hills, and along the Red Deer River near the Tolman Bridge and at Emerson Bridge Park.

1971. **Sa** - 3 males, May 15, Bragg Creek - RFC  
1972. **Sa** - 3 males, May 6, Seebe - BIL, VGL  
**SB** - 5 males & 3 females, May 8, Exshaw - BIL, VGL  
**Fa** - 2 females, Aug. 12, Calgary - WWS  
**Fc** - 1 male, Sept. 9, Carseland - GEA, WEB  
1973. **Sa** - 1 male, May 3, Calgary - MGO  
**Eb** - 1 male, July 19, Emerson Bridge Park - BIL, VGL  
**Fa** - 1 banded, Aug. 19, Jenner - ETJ
1974.  
Sa - 1 male, May 9, Calgary - HWP  
Sc - 1 female, June 4, Calgary - HWP, CAR  
Fa - 1 male & 1 female, Aug. 19, Calgary - RUB  
Fc - 1 female, Aug. 28, Calgary - HWP  
1975.  
Sa - 1, May 11, Manning - GRG, PAG, MAH  
- May 14, Syncrude lease - Sharp & Richardson (1976)  
- 1, May 17, Carseland - BIL, DVW  
Sc - 1 male, June 4, Calgary - BIL  
Eb - 1 pair, June 12 & 25, Spruce Coulee Reservoir - WWS  
Fa - 1 male, July 30, Calgary - WIA  
Fc - Aug. 24, Syncrude lease - Sharp & Richardson (1976)  
- 1 female, Aug. 31, Lesser Slave Lake P.P. - DEG, GCG  
1976.  
Sa - 1 male, May 9, Wildwood - REG  
- 1 male, May 10, Calgary - HWP  
Sc - 1 male, May 30, Gough Lake - RUB  
Eb - 1, throughout summer, Tolman Bridge - Wallis (1977)  
- 1 female, July 10, Calgary - RUB  
Fa - 1 male, July 31, Calgary - DRD  
Fc - 1 female, Sept. 16, Calgary - RUB  
1977.  
Sa - May 15, Ft. McMurray - Gulley (1979)  
- 2, May 18, Calgary - JOR  
Sc - 1, June 4, Calgary - Butot (1977d)  
B - nest with 2 young, July 19, middle Bow River valley, Banff N.P.  
- Holroyd & Van Tingham (1983)  
Fa - 1 female, Aug. 13, Calgary - BNB  
1978.  
Fa - 1, Aug. 21, Calgary - HWP, JOR  
1979.  
- 1 male, May 10, Calgary - DAE, JOR  
Eb - 1 male, June 15, Spruce Coulee Reservoir - CAW, CRW  
Fa - 1 female, Aug. 21, Calgary - HWP  
Fc - 1, Sept. 1, Bottrel - SPJ  

Rose-breasted Grosbeak (*Pheucticus ludovicianus*)

During the decade, this eastern species usually arrived in Alberta during the third week of May. There were early spring movements in 1975 and 1977. All early spring migration records were of individuals or a few birds. No peak migration movements were recorded for the spring passage.

Salt & Salt (1976) depict the breeding range as northern and central Alberta extending south to about Red Deer and Rocky Mountain House in the western part of the province. However, this species is scarce and local in much of the far north because of a lack of deciduous woods. Francis & Lumbis (1979) found Rose-breasted Grosbeaks breeding throughout their study area near Ft. MacKay. They found optimal breeding habitat to be areas of tall deciduous or mixed forest adjacent to an area of tall willow (*Salix spp.*) with a scattered canopy of taller aspen (*Populus tremuloides*). Rose-breasted Grosbeaks were absent from habitats with a wide gap between the tree foliage and the deciduous shrub foliage. During the decade, extralimital nesting records were recorded for Edson, Bottrel, Bow Valley Provincial Park and the David Lake area. There were also extralimital summer sightings from Kananaskis Provincial Park, Willow Creek Provincial Park and Medicine Hat.

Fall migration commences near the middle of August. Most birds have left the province by the end of August or very early in September. An unusually late fall migrant was recorded in 1972. Sadler & Myres (1976) stated that there were scarcely any fall records for the 1960's. During the 1970's, there were fall migration records for most years. In the Calgary area, this species was
much more numerous during fall migration than it was during the spring passage.

Salt & Salt (1976) noted that in the Rockies, this species was recorded only once at Banff. Sharp (1973) had no records for Waterton Lakes National Park. However, Salt (1976) listed a record for Kananaskis Provincial Park, and Holroyd & Van Tighem (1983) stated that there were two records for Jasper National Park and several records for Banff National Park. All reports from Banff and Jasper National Parks were from balsam poplar (*Populus balsamifera*) or aspen stands in the montane ecoregion.

1971.  
**Sa** - 1 male, May 25, Elkwater - WWS  
**Eb** - nesting pair, June 27, Bottrel - CRW  
1972.  
**Sa** - 1 male, May 20, Bowden - HAV  
**Sc** - 1, June 4, Bragg Creek - RIP, DVW  
**Fa/Fb** - 8, Aug. 20, Calgary - WWS  
**Fc** - 1 immature male, Sept. 22, Calgary - GEA  
**Sa** - 3, May 21, Edmonton & Tofield - GWG, LOG, JIW  
**Eb** - 1 male, June 9-14, Willow Creek P.P. - CDA  
- 1 male, June 21, Medicine Hat - GRG, PAG  
**Sc** - 1 male, June 6, Milk River Canyon - WWS  
**Eb** - 1 female on nest, June 17, Edson - REG  
1974.  
**Sa** - 3 males, May 9, Edmonton - JHA, MMN, KTS  
- 1 male & 1 female, May 10, Lake Newell - LIP, WIF  
- 2+, May 12, Manning & Grande Prairie - GRG, PAG, MAH, WAM, YVM  
1975.  
**Sa** - May 21, Ft. MacKay - Francis & Lumbis (1979)  
**Eb** - 1 male, June 28 & 30, King Creek - Salt (1976)  
- 1 pair feeding young, July 9 & 10, David Lake area - Bradley & Bradley (1977c)  
- 1 female feeding young bird that could barely fly, Aug. 14, Bow Valley P.P. - HNP  
**Fc** - Sept. 6, Ft. McMurray - Gulley (1979)  
1977.  
**Sa** - 1 male, May 11, Edmonton - TWT  
- May 12, Ft. McMurray - Gulley (1979)  
- 5 males, May 15, Lac Cardinal P.P. - CAW  
**Em** - 1 male, May 20, middle Bow River valley, Banff N.P. - Holroyd & Van Tighem (1983)  
**Em/Sc** - 1, May 29, Banff - Wiseley (1979b)  
**Fa** - 1 female & 1 immature male, Aug. 15, Calgary - LRB, RUB  
**F** - 2, Aug. 19, Red Deer River valley near Blindloss - Wallis (1977)  
**Fc** - 1 female, Aug. 23, Calgary - JMP  
1978.  
**Sa** - 1 male, May 16, Spirit River - GEC  
- 1, May 16, Wandering River - RAE  
**Sc** - 1, June 11, Calgary - RUB  
**Fc** - 2 males, Sept. 2, Grande Prairie - WAM, YVM  
1979.  
**Sa** - 1 male, May 18, Grande Prairie - WAM, YVM  
- 2 males, May 22, Bottrel - SPJ, JMP  
**Fa** - 1 male, July 29, Nightingale - RUB  
**Fc** - 2, Aug. 25, Calgary - HWP  
1980.  
**Sa** - 1 male, May 22, Calgary - OLD
Black-headed Grosbeak (*Pheucticus melanocephalus*)

There was little spring migration data for this species in Alberta. It appeared that the Black-headed Grosbeak arrived in southern Alberta in late May or early June. There was an unusually early extralimital record for Calgary in 1973.

Salt & Salt (1976) expanded the known breeding range westward in southern Alberta to include Waterton Lakes National Park. However, Sharp (1973) listed records of males collected by Soper in 1963 at Cottonwood Creek on June 26 and at Sofa Creek on July 3, indicating that this species did not expand its range since 1966 into Waterton Lakes National Park as the different editions of *The Birds of Alberta* imply. Records for the 1970's indicate that this species is more frequently observed in southwestern Alberta than in southeastern Alberta. Most of the extralimital records of Black-headed Grosbeaks in Alberta occur during June. The most northerly reports include a male in 1979 in Banff National Park and a pair in 1974 in the Kootenay Plains.

Fall migration data is lacking for this species. However, it probably leaves the province during August, with possibly a few stragglers remaining until early September. It also appears that a few birds may disperse northward in Alberta to about the latitude of Calgary during August. Identification of females and fall birds should be done with care because of the similarity of this species to the Rose-breasted Grosbeak.

1972.  

- **Eb** - 1 male, June 26, Waterton Lakes N.P. - Sharp (1973)  
- 4, July 5, Waterton Lakes N.P. - Sharp (1973)


- **Em/Sa** - 1 male, May 8, Calgary - RBM  
- **Em** - 1, Aug. 16, Calgary - HWP

1974.  

- **Eb** - 1 pair, May 24 & June 9, Kootenay Plains - CAF, JOF, WAF, JAK  
- several males, June, Waterton Lakes N.P. - W. Smith (1975)  
- 1 pair, June 9, Carseland - TSS  
- 1 male, June 11, Chestermere Lake - IRB, ARW  
- **B** - 1 male, June 23, Empress - WWS  
- **Eb** - 1 female, July 28, Carseland - TSS  
- **Em/Fc** - 1 female, Sept. 2, Strathmore - TSS

1978.  

- **B** - 1 male, June 18, Ft. Macleod - CAW  
- **Eb** - 2 males, June 20, Lee Creek - CAW

1979.  

- **Em** - 1, Aug. 9, Cheadle - TSS

1980.  

- **B** - 1 male, June 16, Red Deer River valley near Bindloss - CAW

Lazuli Bunting (*Passerina amoena*)

The status of this species in Alberta is unclear. Spring migration occurs from the third week in May to mid June. Records during other months are few, but they indicate that Lazuli Buntings leave Alberta during August. Salt & Salt (1976) state that this species breeds in southwestern Alberta in the Rocky Mountains and their foothills from Waterton Lakes National Park north to Jasper and irregularly eastward to Castor, Beynon, Brooks and Lethbridge. Wiseley (1979a) notes that the Lazuli Bunting is a fairly common summer resident of Kananaskis Country, localized in the river valleys of the Sheep and Highwood Rivers, but lists few records. Salt (1976) did not record the
species in Kananaskis Provincial Park. Holroyd & Van Tighem (1983) report only one recent record, in 1977, for Banff and Jasper National Parks. Sharp (1973) states that birds are seen in summer in most years in Waterton Lakes National Park, but their abundance apparently fluctuates.

An analysis of the data indicated that the vast majority of observations were of males from mid May to mid June. The preponderance of male records may be due to their habits, song and colourful plumage, or it may be a true reading of the situation. Males, varying in numbers from year to year arrive in the spring, set up territories, and remain throughout the summer if they are successful in attracting a mate. If females are few in number, they simply leave. This would help to explain the discrepancy in abundance of this species from year to year, and its widely different breeding ranges over the years. The authors believe that the breeding range is mainly the southwestern foothills from the Sheep River south to the Montana border, and eastward along the Milk River drainage. In years when their numbers are higher, they are also to be expected along the Oldman River, lower South Saskatchewan River and lower Red Deer River. During the decade, there were extralimital records from Calgary, Empress and along Ribstone Creek near Czar.

1971. Sa - 1 male, May 26, Beauvais Lake P.P. - KEM, LLM
Eb - 2 males, summer, Sylvan Lake - Abrahamson (1980)  
1972. Sa/B - 1 male & 1 female, June 2, Longview - HAB, VGL  
1973. B - 17 singing males, June 22, Longview - HAB, VGL  
1974. Em/Sa - 1 male, May 31, Calgary - WGG  
B - 1, July 31, Lethbridge - HES  
1975. Sa - 1 male, June 1, Longview - CDB  
Eb - 1 singing male, July 9 & 10, Ribstone Creek near Czar - Bradley & Bradley (1977c)  
1976. B - 1 male, June 7, Writing-on-Stone P.P. - CRW  
- 1 male, June 9, Elkwater - GRG, MAH  
- 1 male, July 5, Taber P.P. - RIK  
- 3 pairs & 3 males, July 21 & 22, Police Coulee - WWS  
- 1 male, June 18, Writing-on-Stone P.P. - CRW  
Eb/F - 1 family, Aug. 22, Empress - Wallis (1977)  
1978. B - 4 males, June 14, Bob Creek - CAW  
- 1 male, July 3, Calgary - Butot (1978d)  
S - 1 male, June 9, Calgary - ADS

Indigo Bunting (Passerina cyanea)

The Indigo Bunting is an eastern species that regularly nests as far west as southeastern Saskatchewan, where it hybridizes with Lazuli Buntings (Godfrey 1986; Kreba 1990). Including the first record for Alberta at Lac la Nonne (1926), there have been twelve reports prior to this decade (Höhn et al. 1959; Salt & Beacham 1960; Sadler & Myres 1976; Salt & Salt 1976). The majority of these reports (83%) have been from the mountains and foothills of southwestern Alberta. These observations include apparent nesting at Gorge Creek in 1958, 1959 and 1964 (Salt & Salt 1976; Sadler & Myres 1976). To date, definite nesting has not been confirmed. It seems likely that most occurrences of Indigo Buntings in Alberta are of males that overshoot their usual range. The three records for this decade were of single males reported in June. The 1977 report is only the second observation from north of the Bow River.

1977. Ev - 1 male, June 27, Ribstone Creek near Czar - CAW
1980.  **Ev** - 1 male, June 1, Elkwater - CAW

Dickcissel (*Spiza americana*)

In 1972 there were two sightings of this accidental species in the Brooks area. These observations represent the second and third reports for the province. The only previous record was of a male collected on June 24, 1940 just north of Walsh (Salt & Salt 1966).

1972.  **Ev** - 1 male, April 20, Brooks - Alberts (1972)  
- 1, early summer, 40 km east of Brooks - SWB (Bayer & Lang 1974)

Rufous-sided Towhee (*Pipilo erythrophthalmus*)

Due to a lack of reports, the migration of this towhee in Alberta is poorly understood. However, it appears that spring arrival occurs during the first two weeks of May. It is noteworthy that all March and April records were extralimital in nature and were from the southwestern mountains. It is a possibility that these extralimital records are overshooting individuals of the subspecies *P. e. oregonius*, which nests in interior British Columbia and arrives in the Okanagan valley in March and early April (Godfrey 1986; Cannings et al. 1987). However, the only subspecies so far recorded for Alberta is *P. e. arcticus* (Salt & Salt 1976).

The Rufous-sided Towhee is a nesting species of southeastern Alberta that favours the dense undergrowth along prairie coulees, creeks and rivers. Not too unexpectedly, extralimital breeding season records for the decade were reported from Red Deer and Big Hill Springs Provincial Park, areas slightly north and west of the regular breeding range. However, unexpected reports originated from extreme western Alberta, specifically Flyingshot Lake, Lake Louise, and Waterton Lakes National Park.

In the fall, it appears that most birds leave the province by early September, with an occasional laggard remaining until early October.

The first winter records of this species in Alberta occurred during the decade.

1971.  **Em/Sa** - 1, April 15 & 24, Lake Louise, Banff N.P. - RMH
1972.  **Ew/Em** - 1, March 24 & 27, Seebe - MAC  
**Em/Sa** - 1, April 29, Waterton Lakes N.P. - Sharp (1973)  
**Sa** - 1 male, May 13, Rosedale - WYF  
**Fc** - 1, Sept. 15, Calgary - GRW
1973.  **Sa** - 1, May 24, Calgary - VGL, CAR  
- 1, May 27, Big Valley - CAF, JOF, ELP, JAP  
**Eb** - 1, June 28, Big Hill Springs P.P. - VGL  
**Fc** - 1 adult female, Oct. 6, Calgary - SCO
1974.  **Sa** - 1 male, May 4, Pinhorn Grazing Reserve - WWS  
- 1 male, July 29, Waterton Lakes N.P. - WWS
1975.  **Sa** - 2 males, May 13, Pinhorn Grazing Reserve - WWS  
- 1, May 13, Red Deer - KRW, MRW
1976.  **Sa** - 1 male, May 1, Beynon - HWP  
**Fc** - 2, Sept. 10, Wainwright - KVT
1977.  **Sa** - 1 male, May 13, Dinosaur P.P. - CAW, CRW
1978.  **Sa** - 1 male, May 21, Calgary - SEA, ANC, KDG, JMP  
**Eb** - 1 female, July 26, Flyingshot Lake - GEC  
**Ew** - 1, Dec. 17, Edmonton - Christmas Bird Count
American Tree Sparrow (*Spizella arborea*)

The American Tree Sparrow is a spring and fall transient throughout Alberta. Spring migrants usually arrive in southern and central Alberta during the latter half of March, with numbers peaking in mid April. The last spring migrants leave the province to continue their journey northward by late April and early May. Spring arrival and departure dates are two weeks later in the Ft. MacKay area of northern Alberta (Francis & Lumbis 1979).

This species reappears in Alberta on its southward migration in mid September. Francis & Lumbis (1979) reported a fall departure date of October 9 for the Ft. MacKay area. The species lingers in southern Alberta to late October or early November. In southern Alberta, peak numbers are usually recorded in mid October.

Even though the American Tree Sparrow is generally a transient throughout Alberta, records for the mountains are scarce. Sharp (1973) and Salt (1976) report only fall migration records for Waterton Lakes National Park and Kananaskis Provincial Park, respectively. Holroyd & Van Tighem (1983) record it as a very rare migrant. They list only two fall records for Jasper National Park, and two fall and four spring records for Banff National Park.

This species winters erratically in southern Alberta. During the decade, American Tree Sparrows were reported in six winters, all of the records being south of the latitude of Didsbury. There were no winter records for the mountains.

**1971.**  
*Sa* - 1, March 30, Cheadle - ISS  
*Sc* - 7, April 23, Brownvale - MAC, ALE, MEM, COS  
*Fa* - 3, Sept. 28, Calgary - RIP  
*Fc* - 2, Oct. 24, Calgary - RIP  

**1972.**  
*Sa* - 1, March 19, Cheadle - TSS  
- 6, March 19, Chestermere Lake - ADB, CDB  
- 12, March 19, Carseland - CFNS  
- 3, March 19, Beynon - MAB  
*Sc* - 1, April 29, Calgary - HWP  
*Fa* - 5, Sept. 25, Waterton Lakes N.P. - Sharp (1973)  
*Fc* - 2, Oct. 28, Calgary - RIP  

**1973.**  
*Sa* - 3, March 15, Beynon - MAB  
- 3, March 17, Gadsby - GRG, PAG  
*Sc* - 212, April 12, Tofield - GWG, LOG  
*Fa* - 1, April 24, Calgary - HWP, CAR  
- 8, April 30, Tofield - LOG  
*Fc* - 10, Sept. 23, Bassano - CFNS  

**1974.**  
*Sa* - 1, March 18, Cheadle - TSS  
*Sc* - 157, April 13, Rockyford - LIM, DVW  
*Fa* - 1, April 28, Dunstable - VGL  
- 1, May 5, Windfall - JLC  
*Fc* - 1, Sept. 14, Cheadle - TSS  

**1975.**  
*W* - 9, Feb. 23, Calgary - JOD  
*Sa* - 4, March 28, Aldersyde - GRW
1976.

**Sc** - 1, April 23, Calgary - BOC, HWP
**Fa** - 4, Sept. 16, Milo - EWB
**Fc** - 1, Nov. 2, Irricana - RUB
**W** - 8, Dec. 26, Lethbridge - Christmas Bird Count

- 1, March 27, Botha - GRG, PAG
- 1, April 20, Morinville - PED
- 1, May 8, Banff - Holroyd & Van Tighem (1983)
- May 20, Ft. MacKay - Francis & Lumbis (1979)
- 2, Sept. 6, Spirit River - GRG
- 1, Sept. 25, Calgary - RUB
- 1, Nov. 2, Kananaskis P.P. - Salt (1976)

1977.

**W** - 3, Feb. 6, Dogpound - SEA, JMP
**Sa** - 2, March 25, Calahad - KAS
**Sc** - 5, March 27, Edmonton - RAE, AAJ, SAJ, ERW, TBW
**Fa** - 5, Sept. 22, Ft. MacKay - WWS
- 1, Sept. 23, Calgary - PES
**Fc** - 2, Dec. 11, Dogpound - RUB
- 1, Dec. 27, Calgary - Christmas Bird Count
- 2, Dec. 27, Lethbridge - Christmas Bird Count

1978.

**W** - 1, Jan. 2, Water Valley - Christmas Bird Count
- 1, Feb. 6, High River - GRW
- 9, Feb. 26, Pekisko - GRW
- 3, April 1, Cochrane - JMP
**Sc** - 1, May 5, Calgary - CLH
- 3, May 17, Ft. McMurray - RAE
**Fa** - 2, Sept. 24, Eagle Lake - CPNS
**Fb** - 20+, Oct. 11, Pekisko - HWP, JOR
**Fc** - 6-12, Oct. 28, Calgary - DUC
**W** - 8, Dec. 26, Lethbridge - Christmas Bird Count

1979.

**W** - 1, Feb. 11, Lyalta - RUB
**Sa** - 1, April 13, Strathmore - TSS
**Sc** - 4, May 5, Bear Lake - ELC, GEC
**Fa** - 5, Oct. 7, Calgary - ANS
**Fc** - 1, Oct. 29, Bottrel - JMP
- Dec. 26 (+/- 1 week), Lethbridge - Young (1980)
- 3, Dec. 29, Water Valley - Christmas Bird Count

1980.

**W** - 2, Jan. 20-Feb. 17, Calgary - WWS
**Sa** - 5, March 9, Calgary - DAM, MIR
**Fa** - Sept. 14, Beaverhill Lake - DVC, RAE, SYL
- 1, Sept. 23, Calgary - OLD
**Fb** - 20+, Oct. 10, Stavely - HWP
- 25, Oct. 14, Calgary - OLD
**Fc** - 1, Nov. 10, Calgary - OLD
**W** - 4, Dec. 21, Calgary - Christmas Bird Count
- 2, Dec. 27, Lethbridge - Christmas Bird Count
Chipping Sparrow (Spizella passerina)

The arrival of the first spring migrants in southern Alberta appears to be quite variable. In some years during the decade, they arrived as early as mid April, while in others, the first birds were not seen until early May. Sadler & Myres (1976) noted a similar trend. Regardless of when the first birds arrived, it appears that peak numbers of migrants in southern Alberta are recorded in mid May. In the Ft. MacKay area, the first spring arrivals did not appear until mid May (Francis & Lumbis 1979). Holroyd & Van Tighem (1983) reported April 30, 1977 as the earliest spring migration date for Banff and Jasper National Parks.

The breeding range depicted in The Birds of Alberta was revised from the second to the third edition. In the newer edition, the breeding range is extended to include all of Alberta. This is misleading because Chipping Sparrows are absent from large areas of southeastern Alberta during the nesting season. Occasionally, they may nest along the river valleys, or around farmsteads or towns in southeastern Alberta where they seem to have a preference for small conifers.

Autumn migration commenced in late July and August, peaking in the first half of August in southern Alberta. In most years, the last birds left the province by the third week in September. Occasionally, the species was recorded in early October, as in 1973 and 1980.

1971. Sa - 3, April 11, Calgary - JOP
       Sh - 50, May 19, Elkwater - WWS
       Fc - 5, Sept. 19, Cataract Creek - CFNS
1972. Sa - 1, April 15, Brant - BIL, VGL, RIP
       Sh - 100, May 18, Waterton Lakes N.P. - Sharp (1973)
       Fb - 35+, July 21, Conrich - VGL
       Fc - 1, Aug. 31, Calgary - BIL, VGL
1973. Sa - 6, May 5, Calgary - GRW
       Sh - 20, May 22, Calgary - DRD
       Fc - 2, Oct. 13, Langdon - CPNS
1974. Sa - 1, April 24, Calgary - HWP, CAR
       Sh - 100, May 9, Pinhorn Grazing Reserve - CAW
       - 40-60, May 12, Namaka - RUB
       Eb - several singing males, June & July, Pinhorn Grazing Reserve - Wallis (1976)
       - 1, July 17, Little Fish Lake - Wallis & Wershler (1985)
       Fb - 100, Aug. 5, Edmonton - JHA, KTS
       Fc - 3, Sept. 14, Cheadle - TSS
1975. Sa - 6, May 5, Calgary - LRB
       - 1, May 10, Manning - GRG, PAG, MAH
       - May 13, Syncrude lease - Ward et al. (1976)
       Sh - 20-25, May 10, Lake Newell - LIP, WIF
       Eb - 3 males, June 29, Pinhorn Grazing Reserve - WWS
       Fc - 2, Sept. 14, Calgary - RUB
       - Sept. 25, Syncrude lease - Ward et al. (1976)
1976. Sa - 1, May 6, Calgary - GES
       - May 13, Ft. MacKay - Francis & Lumbis (1979)
       Fc - Sept. 23, Ft. MacKay - Francis & Lumbis (1979)
       - 2, Sept. 25, Calgary - ANS
1977. Sa - 1, April 27, Galahad - KAS
       - 4, April 30, Maligne River, Jasper N.P. - Holroyd & Van Tighem (1983)
       - 1, May 1, Calgary - ANS
       - May 7, Ft. McMurray - Gulley (1979)
       Sh - 200, May 16, middle Bow River valley, Banff N.P. - Holroyd & Van
Clay-colored Sparrow (*Spizella pallida*)

During the decade, the first spring migrants arrived in southern Alberta between April 26 and May 11. In Banff and Jasper National Parks, spring migration was during mid May and early June (Holroyd & Van Tighem 1983). Francis & Lumbis (1979) recorded spring arrival in the Ft. MacKay area as mid May.

The breeding range as depicted in *The Birds of Alberta* was revised from the second to the third edition. In the most recent edition, the Clay-colored Sparrow was portrayed as a nesting species throughout Alberta. This is misleading as many mountain areas are devoid of this species. In Banff and Jasper National Parks, it is restricted to valleys, being most common along the lower and middle Bow River and lower Athabasca River (Holroyd & Van Tighem 1983). Salt (1976) reported only a few records of singing males in Kananaskis Provincial Park. In Waterton Lakes National Park, Sharp (1973) recorded this sparrow in shrubby habitats at lower elevations, mainly in the eastern portion of the park.

Francis & Lumbis (1979) describe the breeding habitat in the Ft. MacKay area as deciduous shrubs in which willow (*Salix spp.*) forms some percentage of the canopy. They determined that Clay-colored Sparrows had a preference for shorter, scattered or open willow as opposed to taller, dense willow. Interestingly, they also found this species to have a preference for wet habitats such as muskegs and fens. In Alberta south of the boreal forest, deciduous shrubbery in drier open areas is the breeding habitat.

Autumn migration commenced in August, and late birds usually left the province during the last two weeks of September.

1971.  
| Sa | 1, May 9, Cheadle - ISS |
| Fc | 5, Sept. 12, Calgary - RIP |

1972.  
| Sa | 1, April 28, Standard - NGK |
| Fc | 1, May 8, Miquelon Lake - WWS |

| Sa | 8, May 9, Vegreville - BYB, ERB |
| Fc | 1, May 16, Calgary - HWP |
| Sh | 2, Oct. 13, Carseland - CFNS |

1974.  
| Sa | 1, May 11, Vegreville - BYB, ERB |
| Fc | 1, May 11, Edmonton - JIW |
| Fb | 1, May 12, Cheadle - TSS |

1975.  
| Sa | 1, May 9, Edmonton - BEB, GEB |

(Tighem 1983)  

Fc - 2, Sept. 24, Calgary - PES  
Sa - 1, April 28, Calgary - RKO, ADS  
- 10, May 3, Edmonton - PSA  
Sh - 50, May 18, Irricana - ELH  
Fc - 5, Sept. 4, Calgary - RUB  

1978.  
Sa - 3, April 25, Grande Prairie - ELC, GEC  
- 2, April 28, Calgary - DOS, PHS  
Fc - 20, Sept. 2, Bottrel - SFJ  
Fc - 1, Sept. 15, Bottrel - SFJ  

1980.  
Sa - 1, May 4, Calgary - ANS  
Fc - 1, Oct. 7, Calgary - OLD
- 1, May 9, Calgary - BIL, HWP
    - 2 or 3, Sept. 22, Water Valley - Johnston (1976b)
1976.
- Ga - 1, May 7, Writing-on-Stone P.P. - CAW, CRW
- 2, May 12, Sherwood Park - RIC
- 2, May 15, Calgary - HWP, ANS
- May 16, Ft. MacKay - Francis & Lumbis (1979)
- Fc - 1, Sept. 30, Calgary - RUB
1977.
- Ga - 1, May 4, Galahad - KAS
- 1, May 6, Calgary - BIL
- 1, May 10, Ft. MacKay - WWS
- Fb - 1 singing, July 16, Plateau Mt. - HWP
- Fc - 1, Oct. 1, Calgary - RUB
1978.
- Ga - 1, April 29, Namaka - RUB
- Fc - 1, Sept. 17, Calgary - RUB
1979.
- Fb - 50, Aug. 25, Bottrel - SFJ, WHS
- Fc - 1, Sept. 23, Calgary - RUB
1980.
- Ga - 4, May 10, Traver's Reservoir - HWP
- Fc - 1, Sept. 5, Calgary - DOS

Brewer's Sparrow (Spizella breweri)

The two subspecies of Brewer's Sparrow that nest in Alberta form two disjunct populations: one (S.b. breweri) on the prairies of southeastern Alberta, the other (S.b. taverneri) at high elevations in the Rocky Mountains. These subspecies have distinctive songs. Because so little is known about these sparrows in Alberta, more research needs to be conducted on all aspects of their biology including such topics as taxonomy, migration, and habitat requirements. As there are differences in migration data and breeding ranges between the two subspecies, each is discussed separately.

Spizella breweri breweri

Records for the decade are few, but it appears that this subspecies arrived in southern Alberta during the first three weeks of May.

The breeding range of this subspecies in Alberta is not well known. To the authors, it appears to occur in southeastern Alberta north to the Red Deer River in the Empress-Bindloss area. As one moves west along the Red Deer River, numbers decline with only the occasional record from Dinosaur Provincial Park and Drumheller. The western limits of this subspecies' range is not known. Even within this limited range, populations are localized. This race occurs in sandhills and parts of the arid mixed grasslands where sagebrush (Artemisia cana) or silverberry (Elaeagnus commutata) is dominant.

There were no fall records for this subspecies during the decade.

Spizella breweri taverneri

Spring records for this mountain subspecies were limited, but it appeared that the first migrants probably arrived in late May or early June. Holroyd & Van Tighem (1983) listed the earliest record for Banff and Jasper National Parks as June 1, 1979. Sharp (1973) and Salt (1976) did not give migration dates for Waterton Lakes National Park and Kananaskis Provincial Park, respectively. The extralimital records from Calgary in 1972 and Police Outpost Provincial Park in 1977 occurred in June, indicating possibly stray migrants of this race.

In Waterton Lakes National Park, this subspecies breeds in relatively low numbers near timberline (Sharp 1973). Salt (1976) reported it as uncommon or
rare, and localized in Kananaskis Provincial Park, while Wiseley (1979a) recorded several during June and July in the Fortress Mountain area. Holroyd & Van Tighem (1983) stated that this subspecies occurred in both Banff and Jasper National Parks in the summer, being least common in southern parts of Banff National Park. They also reported that there were no nest records from Banff National Park, but several from Jasper National Park. S. b. taverneri occurred primarily in the upper subalpine zone, inhabiting willow (Salix spp.) and birch (Betula spp.)-willow shrubbery as well as subalpine fir (Abies lasiocarpa) krummholz and the edges of avalanche slopes.

Fall migration occurred in August. The latest records for the decade were in the last week of August in 1976 and 1978.

1971.  
P - 1, July 6, Dinosaur P.P. - Kondla (1978)

1972.  
Eb - 1 male, June 8, 15 & 26, Calgary - GEA, CDB, WEB, RUJ, WGM

1974.  
Sa - 1 male, May 27, Red Deer River valley near Bindloss - WWS
P - 6 males, June 22, Red Deer River valley near Bindloss - WWS
- 10 males, June 23, Sandy Point area - WWS
- 1, July 2, Dinosaur P.P. - BCM, RIP

1975.  
Sa - 30 males, May 15, Onefour area - WWS

1976.  
Sa - 3 males, May 7, Pakowki Lake - WWS
S - 2 pairs & 4 males, May 21 & 22, C.F.B. Suffield - Karasiuk (1976b)
Eb - 1 male, summer, Drumheller - Wallis (1977)

1977.  
P - summer resident, Writing-on Stone P.P. - Wershler (1980)
- 1 male, Aug. 6, Poboktan Pass, Jasper N.P. - KVT
Fc - 1 adult & 1 immature, Aug. 26, Boulton Creek - Salt (1976)

1978.  
Sa - 1 banded, May 21, Jenner - ETJ
Fc - Aug. 25, Mistaya River, Banff N.P. - Holroyd & Gartshore (1978)

1979.  
Em/Sa - 1 male, May 12 & 29, Bottrel - SFJ
Sa - 1, June 1, Brazeau River, Jasper N.P. - Holroyd & Van Tighem (1983)

1980.  
Sa - 2 males, May 30, Lost River - WWS

Vesper Sparrow (Poecetes gramineus)

Vesper Sparrows usually arrived in southern Alberta from mid to late April. Francis & Lumbis (1979) gave an arrival date of May 6 for the Ft. MacKay area. Holroyd & Van Tighem (1983) stated that spring migration occurred in May in Banff and Jasper National Parks.

Salt & Salt (1976) depict a breeding range that includes the entire province. However, this species occurs primarily in the grasslands and parklands of southern Alberta, and is absent from large areas of northern and western Alberta. In much of southern Alberta, preference is shown for grassy coulee and valley slopes and grasslands with scattered low shrubbery. Sharp (1973) stated that the nesting distribution in Waterton Lakes National Park was restricted to the grassland areas in the eastern portion of the park. Salt (1976) did not record the species in Kananaskis Provincial Park. Holroyd & Van Tighem (1983) noted that Vesper Sparrows are uncommon summer residents in the lower valleys in Banff and Jasper National Parks. They further noted that the species almost certainly bred in these areas, but no nests had been found.

In northern Alberta, Francis & Lumbis (1979) reported that this species was very limited in occurrence in the Ft. MacKay area. Sharp & Richardson (1976) recorded them breeding in disturbed habitat on Syncrude Lease 17. Gulley (1979) had only three sightings of this species from 1976-1978 inclusive in
the Ft. McMurray area. The Vesper Sparrow may increase in the boreal forest as more open areas are created by human activity.

Fall migration commenced in August with most birds having left the province by mid September. In 1972 and 1973, the last migrants were seen in early October.

1971.  
Sa - 2, April 25, Frank Lake - WGM, VGL  
   - 1, April 25, Beiseker - TSS  
Fc - 4, Sept. 18, East Coulee - RAO  
1972.  
Sa - 1, April 29, Carseland - BIL, VGL, RIP  
Sb - 80+, May 7, Calgary to High River - RIP  
Fc - 1, Oct. 9, Calgary - GRW  
Sa - 2, April 28, Beaverhill Lake - JIW  
Fc - 5, Oct. 6, Tofield - LOG  
1974.  
Sa - 1, April 15, Dunstable - CAR  
Fc - 3, Sept. 20, Leduc - RIP  
1975.  
Sa - 1, April 26, Vermilion Lakes, Banff N.P. - Holroyd & Van Tighem (1983)  
   - 2, April 30, Peace River - RIP  
   - 1, May 1, Cheadle - TSS  
Fc/Fb - 15, Sept. 14, Irricana - RUB  
1976.  
Sa - 1, April 23, Irricana - RUB  
   - May 6, Ft. MacKay - Francis & Lumbis (1979)  
Fc - 3, Sept. 26, Irricana - RUB  
1977.  
Sa - 1, April 23, Carseland - RUB  
1978.  
Sa - 2, April 15, Wembley - DVW  
   - 2, April 30, Springbank - RUB  
Fc - 1, Sept. 10, Namaka - RUB  
1979.  
Sa - 1, April 27, Clairmont - ELC, LRD  
   - 1, April 28, Chestermere Lake - RUB  
Fc - 1, Sept. 8, Bottrel - SFJ  
1980.  
Sa - 2, May 4, Chancellor - GLH  
Fc - 6, Sept. 14, Eagle Lake to Carseland - CFNS  

Lark Sparrow (Chondestes grammacus)  

In Alberta, this easily identifiable species appears to be somewhat erratic in occurrence and abundance. There are few spring records, but there is some indication that the first migrants arrived in Alberta during the last three weeks of May. In late May and June, there were extralimital records from Bob Creek, Carseland, Round Lake, Wallaby Lake and Grande Prairie.

During the nesting season, Lark Sparrows occur in southeastern Alberta north to the Red Deer River. The western limits of the breeding range are approximately from Big Valley to Lethbridge. Within this region, the species was extremely local in distribution, favoring river valleys and associated coulee slopes. In these areas, it shows an affinity for scattered sagebrush (Artemisia cana) in edge habitats that often include badlands or scattered cottonwoods (Populus spp.). Outside of the river valleys, this species has been found in sandhill habitats in the Empress-Suffield-Hilda area. Extralimital breeding was recorded in 1975 near David Lake, an area of aspen parkland on sandy soil.

The dates for fall departure are unknown. The latest date on which this
species was observed during the decade was August 9, 1972.

1972.  F - 1, Aug. 9, Dry Island Buffalo Jump P.P. - WWS
1973.  Em/Eb - 1, June 9-14, Bob Creek - CDA
1974.  Sa  - 6, May 25, Dinosaur P.P. - LIM, DVW
        Em/Eb - 1 adult female, June 3, Round Lake - PMA specimen. Salt & Salt (1976) state that this bird was collected from a flock of 6 birds.
        F - 5, Aug. 7, Pinhorn Grazing Reserve - WWS
1975.  Sa  - 1, May 10, Lake Newell - LIF, WIF
        Eb - 1 male, May 27, Wallaby Lake - Bradley & Bradley (1977c)
        Sa  - 1, May 27, Writing-on-Stone P.P. - WWS, CAW, CRW
        Em - 2, May 30, Carseland - HWP (Pinel & Butot 1978)
1976.  Sa  - 1, May 7, Writing-on-Stone P.P. - WWS, CAW, CRW

[Black-throated Sparrow (Amphispiza bilineata)]

The Black-throated Sparrow is a southwestern desert species that occurs as far north as extreme southern Idaho (Peterson 1990). Godfrey (1986) lists a 1959 specimen record and a 1981 sight record, both from British Columbia. The following hypothetical record is the first report for Alberta.

1979.  Ev - 1, May 15-18, Barrhead - MAN, PIN (Gollop 1979a; Godfrey 1986)

Lark Bunting (Calamospiza melanocorys)

There were spring arrival dates for eight years during the decade. In five of these years, Lark Buntings were first reported from May 20 to 25. In 1974 and 1976, the first migrants were recorded during the last week of April, while in 1979, the first bird was not observed until June 5. During the decade, there were two extralimital spring migration observations for Edmonton and Mannville, both in 1976.

The Lark Bunting reaches the northern edge of its North American breeding range in the grasslands of Alberta and Saskatchewan, where it is often associated with open sagebrush areas. In Alberta, the abundance of this species appears to vary considerably. The highest numbers of birds were recorded in the summers of 1974 to 1976 inclusive. No birds were reported during 1978 and few were observed in 1979. It is interesting to note the parallel between the high number of birds from 1974 to 1976, and the fact that the earliest spring migration records for the decade occurred during these same years. In years of low breeding populations (e.g. 1978, 1979), the earliest observation was June 5. There was one extralimital June record, at the Kootenay Plains in 1973.

The fall migration of this species in Alberta is poorly known. There is some indication that birds gather in flocks in late July and early August and move southward almost immediately. It is noteworthy that two out of the three records of last fall migrants for the decade were extralimital in nature. Single males were recorded on August 26, 1971 near Millarville, and on September 20, 1979 at Ruth Lake.

1971.  Sa  - 1 male, May 23, Bare Creek - WWS
        Em/Fc - 1 male, Aug. 26, Millarville - BIL, VGL
1972.  Sa  - 1 male, May 23, Dinosaur P.P. - HES, RYS
1973.  Sa  - 1 male & 2 females, May 25, Endiang - GWG, LOG
The National area, Francis Savannah recorded the Savannah Gulley National autumn only resident, 1979.

1975. **Fb/Fc** - 100-150, Aug. 6, Foremost - RUB

1976. **Em/Sa** - 1 male, April 26, Edmonton - JOK

1977. **Sa** - 1, May 22, Writing-on-Stone P.P. - CRW

1979. **Sa** - 1, June 5, Lost River - CRW

1980. **Sa** - 1 male, May 20, Writing-on-Stone P.P. - DAE

**Savannah Sparrow (Passerculus sandwichensis)**

Savannah Sparrows arrived in southern Alberta during the last two weeks of April, with numbers peaking in the first week of May. Francis & Lumbis (1979) gave an arrival date of May 8 for the Ft. MacKay area.

The Savannah Sparrow nests throughout Alberta, occurring in lush grassy areas associated with wet meadows, haylands, and native and exotic grasslands. In the drier parts of the mixed grassland ecoregion, it is very localized. Francis & Lumbis (1979) found this species to be sporadic in the Ft. MacKay area, where large expanses of apparently suitable habitat were not utilized. Their data indicated a preference for moist or water-saturated sites. They recorded a breeding density of 18 territories/100 hectares in a tamarack (Larix laricina) muskeg plot. In Banff and Jasper National Parks, Holroyd and Van Tighem (1983) stated that the Savannah Sparrow was a very common summer resident, and one of the commonest breeding sparrow species. Salt (1976) had only one summer record for Kananaskis Provincial Park. This species was a regular breeding bird in grasslands at lower elevations in Waterton Lakes National Park (Sharp 1973).

During the decade, fall migration in southern Alberta appeared to peak in the first half of September with a few laggards remaining into October. The latest record was October 24, 1976. Holroyd & Van Tighem (1983) stated that autumn migration was from mid August to early October in Banff and Jasper National Parks. The last migrants were generally observed in the Ft. McMurray area during the second and third week of September (Sharp & Richardson 1976; Gulley 1979; Francis & Lumbis 1979).

1971. **Sa** - 1, April 28, Cheadle - ISS
**Fc** - 1, Oct. 17, Calgary - CFNS

1972. **Sa** - 1, April 22, Canmore - GEA, WEB
**Fc** - 2, Oct. 1, Blizzard Lake - FAN

1973. **Sa** - 1, April 21, Beaverhill Lake - GWG, LOG
- 8, April 23, Seebe - BIL, VGL
**Sh** - 110, May 6, Tofield - GWG, LOG
**Fc** - 2, Oct. 14, Beaverhill Lake - LOG

1974. **Sa** - 1, April 21, Rockyford - LIM, DVW
**Fc** - 3, Sept. 13, Syncrude lease - Sharp et al. (1975)
- 1, Sept. 22, New Sarepta - JOA, MAM, PAM

1975. **Sa** - 1, April 24, Frank Lake - HWP, CAR
- 4, April 26, Edmonton - RAE
- May 5, Syncrude lease - Sharp & Richardson (1976)
Ec - Sept. 12, Syncrude lease - Sharp & Richardson (1976)
- 4, Oct. 5, Edmonton - RAE
- 1, Oct. 9, Carseland - RUB
1976. Sa - 2, April 28, Sherwood Park - RIC
- May 8, Ft. MacKay - Francis & Lumbis (1979)
Ec - Sept. 25, Ft. McMurray - Gulley (1979)
- 1, Oct. 24, Blackie - CFNS
1977. Sa - 1, April 15, Galahad - KAS
- 2, April 30, Ft. MacKay - WWS
Ec - 1, Oct. 9, Canmore - JMP
1978. Sa - 8, April 29, Namaka - RUB
- May 3, Ft. McMurray - Gulley (1979)
1979. Sa - 1, April 25, Bear Lake - ELC, GEC
- 2, April 25, Calgary - JOT
1980. Sa - 1, April 21, Calgary - OLD
- 2, April 22, Banff N.P. - Holroyd & Van Tighem (1983)
Fb - 50, Sept. 14, Eagle Lake to Carseland - CFNS

**Baird's Sparrow (Ammodramus bairdii)**

Data for the decade indicates that Baird's Sparrows arrived in southern Alberta during the third week of May. There were extralimital records during the spring migration period for the Millarville-Priddis area in 1975 and for Banff in 1977.

The Baird's Sparrow is found in southeastern Alberta north to about the latitude of Beaverhill Lake and west to about the longitude of Calgary. Typical habitat includes lush ungrazed to lightly grazed grasslands, and dry grassy slough and lake bottoms. Occasionally, singing birds are found in exotic haylands and croplands. During the decade, key populations were found in the Kennedy Creek area of the mixed grasslands and in the Little Fish Lake area of the northern fescue grasslands. There were extralimital nesting season records from Millarville and Minburn. Significant numbers of birds were recorded in selected areas in 1973 and 1980. More extensive field work is required in Alberta to evaluate the status of this species. This is especially important when one considers the restricted breeding range of the Baird's Sparrow in North America and its narrow range of habitat preferences. This species was listed as "Threatened" in 1989 by the Committee on the Status of Endangered Wildlife in Canada.

Fall migration is poorly understood. This is due to the fact that once males stop singing, this secretive species is seldom reported. The only fall reports were from the end of August and early September in 1975, and both reports were extralimital.

1972. Sa - 2 males, May 28, Little Fish Lake - RAS (U of A specimen)
1973. Sa - 6, May 25, Endiang to Big Valley - GWG, LOG
- 21 males, June 9, Cereal - GWG, LOG
- 31 males, June 10, Big Stone - GWG, LOG
- 1 banded, Aug. 19, Jenner - ETJ
1974. Sa - 1, first week of July, Chauvin - LOG
- 1, first week of July, Tofield - JIW
- 1, July 3-5, Dillberry Lake P.P. - Renewable Resources (1975)
1975. Sa - singing males, July 9 & 10, Ribstone Creek near Czar - Bradley &
Bradley (1977c)
Em/F - 3, Aug. 30, Priddis - RUB
Grasshopper Sparrow (Ammodramus savannarum)

Data for this decade indicates that Grasshopper Sparrows arrived in southern Alberta in the last half of May. There was an extralimital spring record for Saskatoon Lake in 1978.

Salt & Wilk (1966) state that there were no authenticated records of this species in Alberta until 1945, and list records only for the Lost River and Calgary areas. Sadler & Myres (1976) had no records for the 1960's. Reports from the early 1970's were the foundation for the range as depicted in Salt & Salt (1976). Extralimital breeding season records in the early 1970's came from Elkwater, Czar, Bindloss, C.F.B. Suffield, and the Empress-Hilda area. During the late 1970's, there were more extralimital records from southern Alberta, including Wardlow, Dinosaur Provincial Park, Police Outpost Provincial Park and Hanna. Also, there were three highly unusual extralimital reports from Banff, Thunder Lake and Saskatoon Lake.

The Grasshopper Sparrow is essentially a species of southeastern Alberta, ranging north to the Empress area and west to the Calgary area. Within this range, it is very localized and shows a distinct preference for sandhill habitats. It also occurs less commonly in sandy mixed grasslands, and hayfields.

There is no fall migration data for Alberta, either for this decade or previously. Once the males stop singing, there are no records. This fact, plus the possibility that this species leaves the province soon after the young are fledged, could explain the absence of late summer and fall records.

1972. Eb - 2 males, June 13, Elkwater - CAW, CRW
1973. Eb - 1 male, June 24, 16 km south of Czar - GRG, PAG
   - "a number with young", summer, Elkwater - Edwards (1974)
1974. Eb - 4 males, June 24, Red Deer River valley near Bindloss - WWS
   - quite common in some areas of Middle Sand Hills from Empress to Hilda - W. Smith (1975)
1977. Sa/Eb - several, May 13, Wardlow - CAW, CRW
   Eb - 1 male, May 18, Banff - KIM (Holroyd & Van Tighem 1983). This record is highly unusual because of location.
   - 1 singing male, June 18, Dinosaur P.P. - CAW (Kondla 1978)
   - 1 male, June 23, Police Outpost P.P. - CRW
1978. Em/Eb - 1 male, May 27, Saskatoon Lake - ELC, GEC
   Eb - 11, May 28, Lethbridge area - Wiseley (1979b)
   Eb - 1, June 14, Thunder Lake - PED, JAP (Bob Lister column: Edmonton Journal June 21, 1980)
   - 1, June 25, Hanna - Gollop (1980b)
Le Conte's Sparrow (*Ammodramus leconteii*)

Le Conte's Sparrows arrived in Alberta during late April and early May. This is earlier than indicated by Salt & Salt (1976), who give an arrival of mid May for this species. There is some indication from the 1973 data that peak spring migration may occur about a week after the first arrivals are recorded.

This sparrow prefers damp grassy meadows and sedge (*Carex spp.*) marshes. Its known nesting range increased significantly during the decade. Extralimital nesting records were recorded from Namaka, Carseland, Cheadle, Longview, Elkwater and Waterton Lakes National Park. Salt & Salt (1976) illustrated this expanded range, except for Elkwater and Waterton Lakes National Park.

In the Ft. MacKay area, Francis & Lumbis (1979) found this sparrow most abundant in an open "bog" plot where it had a preference for the ecotone between small sedge clearings and surrounding swamp birch (*Betula pumila*). In this plot, they recorded a density of 38 territories/100 hectares.

Holroyd & Van Tighem (1983) noted that there were no records for Banff National Park, but it appeared to breed locally in Jasper National Park. They had summer records from the lower Brazeau River near Isaac Creek, the Pocahontas Ponds and Pyramid Lake. Salt (1976) had no records for Kananaskis Provincial Park, but Powell et al. (1975) reported it as an uncommon resident near Barrier Lake. In Waterton Lakes National Park, Sharp (1973) considered the species a rare summer resident along the lower river-lake system.

In the fall, it appears that Le Conte's Sparrow moved south in September. The latest fall record for the decade was September 30, 1980.

<table>
<thead>
<tr>
<th>Year</th>
<th>Sa</th>
<th>Eb</th>
<th>Sb</th>
<th>FC</th>
<th>Notes</th>
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<tr>
<td>1971</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>10-12 (3-4 adults, rest immatures), July 30, Namaka - BIL, VGL</td>
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<td>1972</td>
<td>-</td>
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<td>2, April 30, Waterton Lakes N.P. - Sharp (1973)</td>
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<td>30</td>
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<td>30, May 6, Beaverhill Lake - GWG, LOG</td>
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<td>1</td>
<td>6</td>
<td>3</td>
<td>1, June 10, Carseland - VGL</td>
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<tr>
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<td>-1</td>
<td>6</td>
<td>-</td>
<td>3, June 22, Longview - HAB, VGL</td>
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<td>-</td>
<td>1</td>
<td>1, Sept. 1, Tofield - LOG</td>
</tr>
<tr>
<td>1974</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>2, April 30, Calgary - CAO</td>
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<tr>
<td></td>
<td>-</td>
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<td>1</td>
<td>1</td>
<td>1, May 4, Tofield - DID</td>
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<td></td>
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<td>1</td>
<td>1, June 14, Cheadle - TSS</td>
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<td>1, Sept. 7, Dunstable - VGL</td>
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<td>1975</td>
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<td>-</td>
<td>2, April 29, Cheadle - TSS</td>
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<tr>
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<td>1</td>
<td>1</td>
<td>1, May 10, Tofield - BEB, GEB</td>
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<td>1</td>
<td>1</td>
<td>1, May 14, Manning - CRG, PAG, MAH</td>
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<tr>
<td></td>
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<td>-1</td>
<td>1</td>
<td>-1</td>
<td>1, male, June 18, Elkwater - WWS</td>
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<td>1, Sept. 13, Syncrude lease - Ward et al. (1976)</td>
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<td>-1, Sept. 19, Bottrel - Butot (1976a)</td>
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<td>1976</td>
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<td>1, male, May 5, Ft. MacKay - Francis &amp; Lumbis (1979)</td>
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<td>-1, Sept. 20, Ft. MacKay - Francis &amp; Lumbis (1979)</td>
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<tr>
<td>1977</td>
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<td>1</td>
<td>-</td>
<td>-1</td>
<td>1, May 6, Ft. MacKay - WWS</td>
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<tr>
<td>1978</td>
<td>2</td>
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<td>-</td>
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<td>2, May 2, Calgary - CAO</td>
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<td></td>
<td>-</td>
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<td>1</td>
<td>1</td>
<td>1, May 11, Ft. McMurray - BRW</td>
</tr>
<tr>
<td>1979</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-1</td>
<td>1, April 29, Didsbury - ADS, DOS, PHS</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>-1</td>
<td>11 (6 males), June 6, Isaac Creek, Jasper N.P. - Holroyd &amp; Van Tighem (1983)</td>
</tr>
<tr>
<td>1980</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>-1</td>
<td>2, April 30, Chancellor - GLH</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3</td>
<td>-</td>
<td>1</td>
<td>3 males, June 11, Pocahontas Pond, Jasper N.P. - Holroyd &amp; Van Tighem (1983)</td>
</tr>
<tr>
<td></td>
<td>5</td>
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<td>-</td>
<td>-1</td>
<td>5, Sept. 30, Bruce Lake - Steeves (1981)</td>
</tr>
</tbody>
</table>
Sharp-tailed Sparrow (Ammodramus caudacutus)

There were many more records of Sharp-tailed Sparrows during this decade than in the previous decade. The first spring migrants were recorded from May 5 to 29, which was considerably earlier than mid June as indicated by Salt & Salt (1976).

As a breeding species, Salt & Salt (1976) stated that it breeds locally across northern Alberta south to Pigeon Lake and Red Deer. Sedge (Carex spp.) marshes with scattered willows (Salix spp.) are typical habitat. There were extralimital nesting season records for the decade from Elkwater Lake, Shooting Lake, Botha, Dillberry Lake Provincial Park, Sounding Lake, Czar, Priddis and Raven. It has not been recorded during the nesting season in any of the mountain national parks (Sharp 1973; Holroyd & Van Tighem 1983). In the Ft. MacKay area, Francis & Lumbis (1979) stated that Sharp-tailed Sparrows were rare, and nested in only one muskeg plot where the density was 3 territories/100 hectares.

Fall migration records for Alberta are scarce. It appears that the last fall migrants are recorded in northern Alberta in the second week of September. There were no fall records from southern Alberta.

1972. **Eb** - 1, July 4, Elkwater Lake - WWS
       **B** - 2, July 23, Elk Island N.P. - Burns et al. (1986)
1973. **Sa** - 1 pair, May 23, Winagami Lake P.P. - WWS
       **Eb** - 1 male, June 23, Shooting Lake - GRG, PAG
       **B** - 6, July 21, Beaverhill Lake - LOG
       - 1 male, summer, Young's Point P.P. - Van Tighem & Wallis (1973b)
1974. **Sa** - 1 male, May 5, Beaverhill Lake - GWG, LOG
       **Eb** - 1 male, June 9, Botha - GRG, PAG
       - 1, July 3-5, Dillberry Lake P.P. - Renewable Resources (1975)
       - 1, July 10, Highridge - BIL
1975. **Sa** - May 24, Mildred Lake - Sharp & Richardson (1976)
       **Eb** - occasional, summer, Ribstone Creek marshes near Czar - Bradley & Bradley (1977c)
       **Fc** - Sept. 9, Horseshoe Lake - Sharp & Richardson (1976)
       **B** - 30 males, June 5-11, Cold Lake area - WWS
       **Eb** - 1, July 3, Priddis - KSC, JOD (Pinel & Butot 1978)
       - 1, July 24 & 25, Priddis - WIH, RUB (Pinel & Butot 1978)
       **Fc** - Sept. 7, Ft. McMurray - Gulley (1979)
1977. **Sa** - 1 male, May 29, Lac la Biche - WPN
       **Eb** - 1 male, June 27, Ribstone Creek near Czar - CAW
       - 1 male, July 2, Sounding Lake - RUB
       - uncommon, summer, 40 km northeast of Edson - Nordstrom (1982)
1980. **Eb** - 1 male banded, June 10 & 11, Shooting Lake - ETJ

Fox Sparrow (Passerella iliaca)

The first spring migrants generally arrived in Alberta during the last half of April. Francis & Lumbis (1979) gave an arrival date of April 21 for the Ft. MacKay area. In Banff and Jasper National Parks, spring migration was in late April and May (Holroyd & Van Tighem 1983).

The Fox Sparrow breeds in the mountains, and in northern Alberta south to the edge of the boreal forest. The only extralimital summer record was from the Pollhaven Grazing Reserve in 1978. In Waterton Lakes National Park, Sharp
(1973) considered this species an uncommon to common summer resident with birds recorded breeding at higher elevations near timberline as well as in shrub wetlands at lower elevations. Salt (1976) recorded it as relatively common in Kananaskis Provincial Park, breeding in the dense fir (Abies lasiocarpa) or spruce (Picea spp.) stands of the passes and upper slopes near Highwood Pass, Elk Passes, up the Maude-Lawson corridor, and on the slopes of the "Battleship Group". Holroyd & Van Tighem (1983) classified the Fox Sparrow as a fairly common summer resident throughout Banff and Jasper National Parks, occurring from the lower subalpine to alpine ecoregion. They further noted that there were no nest records for these parks, but adults had been observed carrying nesting material and feeding fledged young.

In the Ft. MacKay area, Francis & Lumbis (1979) found the Fox Sparrow to breed throughout their study area. Greatest densities (46 territories/100 hectares) were recorded in an area of mature willow (Salix spp.) along a meandering river with numerous oxbows.

Salt (1976) stated that he had no records of this species after August 27 in Kananaskis Provincial Park. Holroyd & Van Tighem (1983) noted that Fox Sparrows migrated during late August and September in Banff and Jasper National Parks. In the parklands and grasslands of southern Alberta, where this species does not nest, fall migrants were first noticed in early September, with some birds lingering as late as the end of October in some years.

1971.  
Fa - 1, Sept. 19, Calgary - WIA

1972.  
Sa - 1, May 2, High River - FAC, ANM
Sc - 1, May 19, Calgary - RIP
* - 15 males, June 11, Alderson-Carthwell trail, Waterton Lakes N.P. - CAW, CRW
Fa - 1, Sept. 20, Calgary - GEA
Fc - 1, Oct. 5, Calgary - RUJ

Sa - 2, April 29, Perryvale - MIH
Fc - 1, Oct. 2-7, Edmonton - RNM

1974.  
Sa - 1, May 9, Rockyford - LIM, DVW
Fa - 1, Sept. 3, Cheadle - TSS
Fc - 1, Sept. 28, Ft. MacKay - Sharp et al. (1975)
   - 1, Oct. 20, Edmonton - DEG, GCG

1975.  
Sa - April 27, Syncrude lease - Sharp & Richardson (1976)
   - 1, April 30, Tofield - DID
   - 1, May 9, Manning - GRG, PAG, MAH
Fc - Oct. 20, Syncrude lease - Sharp & Richardson (1976)

1976.  
Sa - 1, April 18, Lac la Biche - DVW, LIW
   - 1, April 19, Maligne Canyon, Jasper N.P. - Holroyd & Karasiuk (1977)
   - April 21, Ft. MacKay - Francis & Lumbis (1979)
* - nest with 3 large fledglings, July 7, Highwood Pass - Salt (1976)
Fa - 1, Sept. 9, Calgary - RUB
Fc - 1, Sept. 29, Five Lakes, Jasper N.P. - Holroyd & Karasiuk (1977)
   - 1, Oct. 6, Ft. Chipewyan - RAE

1977.  
Sa - 1, April 23, Ft. MacKay - WWS
   - May 7, Banff N.P. - Holroyd & Gartshore (1978)
Fc - 1, Oct. 5, Calgary - HWP

1978.  
Eb - 2 males, June 2, Pollhaven Grazing Reserve - CAW
Fc - 1, Sept. 24, Calgary - JMP

1979.  
Fa - 1, Sept. 13, Calgary - KAM
Fc - 1, Sept. 23, Calgary - RUB

1980.  
Fc - 1, Oct. 29, Edmonton - PSA
Song Sparrow (*Melospiza melodia*)

Song Sparrows generally arrived in Alberta during the first three weeks of April. In 1978, there were March records from Waterton Lakes and Banff National Parks.

This species nests throughout Alberta, but it is scarce and local in the grasslands where it is restricted to riparian shrubbery. Holroyd & Van Tighem (1983) recorded this sparrow as a fairly common, but localized, summer resident of lower valleys in Banff and Jasper National Parks. It was found most commonly in the lower Bow River valley. Salt (1976) stated that it was scarce and localized in Kananaskis Provincial Park, while Sharp (1973) considered the Song Sparrow uncommon in Waterton Lakes National Park, preferring lower elevation brushy habitats. In the Ft. MacKay area, Francis & Lumbis (1979) found this species breeding throughout their study area. Here, it was most common in stands of willows (*Salix spp.*) bordering a stream or river, and territorial males were observed only in riparian habitats.

There were fewer records of the Song Sparrow during the fall than during spring or summer. It appears that, in most years, the last fall migrants left Alberta in October. In 1975, there were no fall records after the second week of September.

The first winter records for Alberta were reported during the decade, with observations from Edmonton, Jasper, Calgary, Strathmore and Banff.

1971.  
Sa - 1, April 22, Vermilion Lakes, Banff N.P. - WWS  
   - 1, April 25, Calgary - RIP  
   - 2, April 25, Ardenode - ISS, TSS  
Fc - 1, Nov. 1, Calgary - KAM  
Ew - 1, Dec. 19, Edmonton - Christmas Bird Count  
1972.  
Sa - 12+, April 2, Delacour - GEA, WEB, BIL, VGL  
   - 1, April 8, St. Albert - PED  
   - 2, April 25, Ardenode - ISS, TSS  
Fc - 1, Nov. 1, Calgary - KAM  
Ew - 1, Dec. 19, Edmonton - Christmas Bird Count  
Sa - 1, April 7, Aldersyde - CFNS  
   - 1, April 8, St. Albert - PED  
   - 2, April 25, Ardenode - ISS, TSS  
Fc - 1, Oct. 7, Calgary - RUB  
   - 1, Oct. 24, Glenelis - GEP  
Ew - 1, Dec. 17, Edmonton - BOL  
1974.  
Sa - 1, April 8, Edmonton - JIW  
   - 1, April 19, Rockyford - LIM, DVW  
Fc - 2, Sept. 28, Ft. MacKay - Sharp et al. (1975)  
   - 2, Oct. 20, Edmonton - ELP, JAP  
   - 1, Nov. 15, Calgary - HWP  
1975.  
Sa - 1, April 24, Calgary - HWP  
   - 1, April 26-27, Stettler - ENHC  
   - April 30, Syncrude lease - Sharp & Richardson (1976)  
Fc - Sept. 3, Syncrude lease - Sharp & Richardson (1976)  
   - 1, April 15, Calgary - HWP  
   - 1, April 26-27, Stettler - ENHC  
   - April 30, Syncrude lease - Sharp & Richardson (1976)  
   - 3, Sept. 9, Calgary - HWP  
1976.  
Sa - 1, April 8, Calgary - HWP, PES  
   - 5, April 8, Galahad - Acorn (1976b)  
   - April 20, Ft. MacKay - Francis & Lumbis (1979)  
   - April 20, Ft. McMurray - Gulley (1979)  
Fc - Oct. 8, Ft. McMurray - Gulley (1979)  
Ew - 1, Nov. 15-Dec. 17, Calgary - HWP, JOR  
   - 1, Dec. 5, Strathmore - SEA, JIM  
1977.  
Ew - 1, Jan. 6-Feb. 14, Calgary - HWP  
Sa - April 2, Banff N.P. - Holroyd & Gartshore (1978)
- 3, April 8, Beaverhill Lake - RAE
- 1, April 16, Cochrane - JMP
- 1 male, April 28, Ft. MacKay - WWS

Fc - 1, Oct. 19, Calgary - JMP

- 2, March 30, Vermilion Lakes, Banff N.P. - JMP

Fc - 1, Oct. 8, Pakowki Lake - RUB


1979.  Sa - 1, April 17, Cheadle - TSS


Ew - 3, Dec. 16, Edmonton - Christmas Bird Count

1980.  Sa - 1, April 9, Calgary - OLD

Fc - 1, Oct. 8, Edmonton - PSA

Lincoln's Sparrow (*Melospiza lincolnii*)

During the decade the first spring migrants arrived from April 26 to May 6. Peak migration occurred in mid May and the last spring migrants passed through southern Alberta by the end of May. In the Ft. MacKay area, Francis & Lumbis (1979) listed a spring arrival date of May 13.

Salt & Salt (1976) describe the breeding range of the Lincoln's Sparrow as the northern half of Alberta south to about the Battle River, and in the mountains and foothills south to the United States border and east to Calgary and Red Deer. During the decade, there were extralimital summer records from the Hand Hills and along the Ribstone Creek near Czar.

In the Ft. MacKay area, Francis & Lumbis (1979) recorded this species in wet habitats with deciduous shrubs taller than 0.5 meters. They also stated that the suitability of the habitat improves with increasing dominance of the deciduous component. The greatest density was recorded in an area dominated by swamp birch (*Betula pumila*) and sedges (*Carex spp.*) where 122 territories/100 hectares were recorded.

Holroyd & Van Tighem (1983) state that this is one of the most abundant sparrows in Banff and Jasper National Parks during the summer. It is most common in the middle Bow River and lower Athabasca River valleys. Salt (1976) found it breeding commonly in "bogs" and marshes throughout Kananaskis Provincial Park until mid or late July, after which it was rarely recorded. Sharp (1973) considered the species to be an uncommon summer resident in Waterton Lakes National Park.

Salt & Salt (1976) indicate that Lincoln's Sparrows move through southern Alberta towards the middle of September. Data from the decade indicated a much earlier fall movement. Sharp (1973) noticed a sudden increase in this species in August in Waterton Lakes National Park. Salt (1976) noted that Lincoln's Sparrows were seldom recorded after late July in Kananaskis Provincial Park. In Banff and Jasper National Parks, Holroyd & Van Tighem (1983) stated that autumn migration was during August, with only small numbers remaining into September. Outside of the mountains in southern Alberta, the last fall migrants were usually recorded during the last two weeks of September and the first week of October.


Fa - 2, Aug. 20, Calgary - WWS

Fc - 3, Sept. 24, Waterton Lakes N.P. - Sharp (1973)
1973. **Sa** - 1, April 28, Carseland - BIL, VGL, CAR  
**Fa** - 1, Aug. 20, Calgary - WWS  
**Fc** - 1, Sept. 24, Edmonton - DEG  

1974. **Sa** - 1, April 26, Rockyford - LIM, DVW  
**Sc/Eb** - 1, June 3, Cheadle - TSS  
**Fc** - 1, Sept. 17, Calgary - BOC, HWP  

1975. **Sa** - 1, April 26, Calgary - BIL  
- May 12, Mildred Lake - Sharp & Richardson (1976)  
**Eb** - fairly common, summer, Ribstone Creek near Czar - Bradley & MacKay (1977c)  
**Fa** - 1, Sept. 10, Calgary - RUB  
**Fc** - 1, Oct. 2, Calgary - RUB  

1976. **Sa** - 1, April 27, Calgary - RUB, HWP  
- May 13, Ft. MacKay - Francis & Lumbis (1979)  
**Fc** - 4, Sept. 16, Five Lakes, Jasper N.P. - Holroyd & Karasiuk (1977)  
- Sept. 29, Ft. MacKay - Francis & Lumbis (1979)  

1977. **Sa** - 1 male, May 3, Ft. MacKay - WWS  
**Eb** - 2 territorial birds, June 20, Hand Hills - Wallis (1977)  
**Fa** - 1, Aug. 19, Red Deer River valley near Bindloss - Wallis (1977)  
**Fc** - Sept. 12, Ft. McMurray - Gulley (1979)  
- Sept. 23, Banff N.P. - Holroyd & Gartshore (1978)  
- 1, Sept. 24, Calgary - RUB  
- 1 immature, Oct. 12, Edmonton - VIL (U of A specimen)  

1978. **Sa** - 2, May 6, Bottrel - JOD, JMP  
- 3, May 11, Ft. McMurray - BRW  
**Fc** - 1, Sept. 21, Calgary - RUB  

1979. **Sa** - 1, May 5, Wembly - ELC, GEC  
**Sc** - 1 male, May 25, Milk River Canyon - CAW  
**B** - 1 male, July 7, Paine Lake - CAW  
**Fc** - 1, Oct. 8, Banff N.P. - Holroyd & Van Tighem (1983)  

1980. **Sc** - 5+, May 27, Calgary - DAE, HWP, JOR  
**Fc** - 1, Oct. 15, Edmonton - PSA  

Swamp Sparrow (*Melospiza georgiana*)

Swamp Sparrows generally arrived in Alberta in mid May. There was a total of three extralimital spring records during late May for Banff and Jasper National Parks. There were no migration records for Waterton Lakes National Park and Kananaskis Provincial Park (Sharp 1973; Salt 1976), and few for southern Alberta.

This sparrow nests locally in northern and central Alberta, southward through the Peace River district to the Battle River. There were two extralimital nesting season records for the decade, from Jasper National Park and Raven in 1978 and 1979 respectively. Francis & Lumbis (1979) found them to be a common summer resident in the Ft. MacKay area. In this area, Swamp Sparrows preferred wet areas with taller deciduous shrubs. Willows (*Salix spp.*) seemed to be the preferred shrub, although swamp birch (*Betula pumila*) taller than one meter were also utilized. Alder (*Alnus spp.*) was apparently unsuitable for this sparrow. In a willow-dominated plot, Francis & Lumbis (1979) recorded their highest breeding density, 237 territories/100 hectares.

The last Swamp Sparrows leave Alberta during late September and early October. There are few fall records from outside of the nesting range.

1972. **Sa** - 1, May 15, Calgary - WWS  
**B** - birds in three areas, summer, Elk Island N.P. - Burns et al. (1986)  
**Fc** - 1 female, Sept. 26, Pigeon Lake - RAS (U of A specimen)
Sh - 15, May 21, Tofield - GWG, LOG
Em - 1 found dead, June 17, Lake Louise, Banff N.P. - RAS (U of A specimen)

1974. Sa - 2 males, May 18, Beaverhill Lake - JIW
S - 1, May 21, Hand Hills - WWS
Fc - 1, Sept. 20, Leduc - RIP

1975. Sa - 1, April 27, Calgary - Butot (1975c)
- May 14, Syncrude lease - Ward et al. (1976)
Em - 1, May 22, Vermilion Lakes, Banff N.P. - Karasiuk (1976a)


1977. Sa/E - 55 males, May 6, Ft. MacKay - WWS. All males were on territories on a study plot 500 meters by 100 meters.
Em - 1, Sept. 27, Banff - Holroyd & Van Tighem (1983)

Eb - 1 singing male, June 28, Edith Lake, Jasper N.P. - JRS (Holroyd & Van Tighem 1983)
Fc - 1, Sept. 13, Goodfare - GEC

1979. Sa - 1, May 11, Calgary - Butot (1979c)
Eb - 1, June 23, Raven - WIH, WGM


White-throated Sparrow (Zonotrichia albicollis)

This species usually arrives in Alberta in late April and early May, with migrants peaking in mid May in southern Alberta.

Salt & Salt (1976) depict the breeding range as northern and central Alberta, with an extension in the western parklands south to near Red Deer. South of Red Deer, it is scarce and local in the foothills and western parklands to about the Calgary area. There was one extralimital nestin season record for the decade from the David Lake area. Francis & Lumbis (1979) found that White-throated Sparrows bred in a wide variety of habitat types in the Ft. MacKay area. Shrub-dominated habitats, with or without a scattered tree canopy, appeared to be preferred. In Banff and Jasper National Parks, this species occurred regularly only in the lower Athabasca River valley during the breeding season (Holroyd & Van Tighem 1983). Wiseley (1979a) reported it as a rare summer resident in Kananaskis Country, with records of territorial males from the Highwood and Sheep Rivers in late June to early July.

In southern Alberta, the first fall migrants start to pass through in late August. Peak fall migration usually occurs in late September; only a few birds remain until mid October. The White-throated Sparrow is much more common during fall migration than spring migration in southern Alberta.

There were reports of wintering birds during the decade from Goose Lake, Edmonton, Calgary, Canmore and Banff. Previous to the decade, there was only one winter record, a single bird in January 1970 in Calgary (Sadler & Myres 1976).

1971. Sa - 1, April 26, Calgary - RIP
Fa - 1, Sept. 12, Calgary - RIP
Fb - 20, Oct. 30, Turner Valley - CDB
Fc - 1 immature, Nov. 14, Calgary - WIA
1972.  
<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Sa</td>
<td>2, May 4, Calgary - KEM, LLM</td>
<td></td>
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<tr>
<td>Sb</td>
<td>10+, May 14, Calgary - HWP</td>
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<tr>
<td>Sc</td>
<td>1, May 23, Bow Valley P.P. - CAW, CRW</td>
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<tr>
<td>Fb</td>
<td>2 males, June 13, Red Deer River valley near Trenville - WWS</td>
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<tr>
<td>Fa</td>
<td>1, Aug. 24, Calgary - WWS</td>
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<tr>
<td>Fb</td>
<td>25, Sept. 26, Calgary - HWP, BIR, CAR</td>
<td></td>
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<tr>
<td>Fc</td>
<td>25, Sept. 27, Calgary - RIP</td>
<td></td>
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<tr>
<td>Fc</td>
<td>25, Sept. 30, Calgary - FAN</td>
<td></td>
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<tr>
<td>Sa</td>
<td>1, Oct. 12, Calgary - HWP, CAR</td>
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<tr>
<th>Date</th>
<th>Location</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Sa</td>
<td>1, Feb. 3, Goose Lake - AUH, TOH</td>
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<tr>
<td>Fa</td>
<td>1 male, May 5, Lac St. Anne - NAM, WGM</td>
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<tr>
<td>Fb</td>
<td>1 immature, Aug. 26, Calgary - GEA, BIL</td>
<td></td>
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<tr>
<td>Fc</td>
<td>12, Sept. 23, Calgary - RUB</td>
<td></td>
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<tr>
<td>Fc</td>
<td>1, Sept. 30, Edmonton - DEG</td>
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<tr>
<td>Fc</td>
<td>1, Oct. 10, Calgary - HWP</td>
<td></td>
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<tr>
<td>Sa</td>
<td>2, Dec. 16, Edmonton - DOR</td>
<td></td>
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1974.  
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<th>Date</th>
<th>Location</th>
<th>Notes</th>
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<tr>
<td>Sa</td>
<td>1, April 27, Tofield - LOG</td>
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<tr>
<td>Fb</td>
<td>30+, Aug. 30, Sundre - CAR</td>
<td></td>
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<tr>
<td>Fa</td>
<td>3, Oct. 6, Calgary - ANM</td>
<td></td>
</tr>
<tr>
<td>Fc</td>
<td>1, Oct. 20, Edmonton - ELP, JAP</td>
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1975.  
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<th>Date</th>
<th>Location</th>
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<tr>
<td>Sa</td>
<td>1, April 19, Calgary - MSB</td>
<td></td>
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<tr>
<td>Fc</td>
<td>1, April 27, Edmonton - FRE</td>
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<tr>
<td>Fb</td>
<td>2 males, July 9 &amp; 10, David Lake - Bradley &amp; Bradley (1977c)</td>
<td></td>
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<tr>
<td>Fa</td>
<td>3, Sept. 6, Calgary - ANS</td>
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<tr>
<td>Fb</td>
<td>30, Oct. 10, Calgary - WIA</td>
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<tr>
<td>Fc</td>
<td>30, Dec. 21, Edmonton - Christmas Bird Count</td>
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<tr>
<td>Fb</td>
<td>1, Sept. 8, Calgary - LRB, MSB, RUB</td>
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<tr>
<td>Fa</td>
<td>1, Sept. 10, Calgary - RUB</td>
<td></td>
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<tr>
<td>Fc</td>
<td>1, Oct. 25, Pt. MacKay - Francis &amp; Lumbis (1979)</td>
<td></td>
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<tr>
<td>Fb</td>
<td>1 adult, Dec. 10, Calgary - KVT</td>
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<tr>
<td>Fb</td>
<td>1, Feb. 2, Calgary - JOT</td>
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<tr>
<td>Fa</td>
<td>1, May 6, Pt. MacKay - WWS</td>
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<tr>
<td>Fa</td>
<td>1, May 7, Calgary - LRB, BIL</td>
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<tr>
<td>Fa</td>
<td>1, May 7, Kingman - KWT</td>
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<td>Fc</td>
<td>5, Sept. 8, Calgary - HWP</td>
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<tr>
<td>Fc</td>
<td>29, Pt. McMurray - Gulley (1979)</td>
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</tr>
<tr>
<td>Fb</td>
<td>29, Pt. McMurray - Gulley (1979)</td>
<td></td>
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<tr>
<td>Fc</td>
<td>1, Oct. 11, Calgary - PES</td>
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<tr>
<td>Fb</td>
<td>1 immature, Dec. 13, Canmore - EMV</td>
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<tr>
<td>Fb</td>
<td>1, Dec. 17, Banff - Christmas Bird Count</td>
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1976.  
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<th>Date</th>
<th>Location</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Sa</td>
<td>1, May 2, Edmonton - PSA</td>
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</tr>
<tr>
<td>Fa</td>
<td>1, Sept. 9, Calgary - WEM</td>
<td></td>
</tr>
<tr>
<td>Fc</td>
<td>1, Oct. 15, Calgary - RUB</td>
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1978.  
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<th>Date</th>
<th>Location</th>
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<tr>
<td>Sa</td>
<td>1, May 2, Edmonton - PSA</td>
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</tr>
<tr>
<td>Fa</td>
<td>1, Sept. 9, Calgary - WEM</td>
<td></td>
</tr>
<tr>
<td>Fc</td>
<td>1, Oct. 15, Calgary - RUB</td>
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1979.  
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<tr>
<th>Date</th>
<th>Location</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Sa</td>
<td>1, May 14, Wembly - ELC, GEC</td>
<td></td>
</tr>
<tr>
<td>Fc</td>
<td>1, Oct. 28, Calgary - RUB</td>
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</tr>
<tr>
<td>Fb</td>
<td>1, Dec. 16, Edmonton - Christmas Bird Count</td>
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<tr>
<td>Fa</td>
<td>1, Sept. 8, Calgary - OLD, HWP, JOR</td>
<td></td>
</tr>
<tr>
<td>Fc</td>
<td>2, Oct. 9, Banff - Holroyd &amp; Van Tighem (1983)</td>
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1980.  
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<tr>
<th>Date</th>
<th>Location</th>
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<tbody>
<tr>
<td>Sa</td>
<td>2, May 11, Calgary - ANS</td>
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<tr>
<td>Fb</td>
<td>10+, May 27, Calgary - DAE, HWP, JOR</td>
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</tr>
<tr>
<td>Fb</td>
<td>1, Sept. 8, Calgary - OLD, HWP, JOR</td>
<td></td>
</tr>
<tr>
<td>Fc</td>
<td>2, Oct. 9, Banff - Holroyd &amp; Van Tighem (1983)</td>
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</table>
Golden-crowned Sparrow (Zonotrichia atricapilla)

Spring migration data is limited for this species, but it appears that it arrives in the province during the first three weeks of May. There were four extralimital spring migration records, one near Cheadle and three from Grande Prairie, in the Peace River district. It is interesting that Sadler & Myres (1976) also recorded a May extralimital record for the Peace River district during the 1960's.

In Alberta, the Golden-crowned Sparrow nests in Banff and Jasper National Parks east to Mountain Park (Salt & Salt 1976). There are no records for Waterton Lakes National Park. Holroyd & Van Tighem (1983) recorded this species throughout Jasper National Park and northern Banff National Park. In this region, it bred in the upper subalpine and the lower edges of the alpine. Holroyd & Van Tighem (1983) found it most abundant in heather-everlasting meadows, mountain marigold-globe-flower meadows, and mountain avens-snow willow-moss campion tundra, where there are scattered clumps of stunted subalpine fir (Abies lasiocarpa) and Engelmann spruce (Picea engelmannii). Brown et al. (1975) recorded this sparrow as common in the Horn Ridge to Coal Ridge area, thereby suggesting extralimital nesting in this area. The 1972 report of an adult and two immatures on Plateau Mountain may be an indication of extralimital nesting, or the birds reported may have been migrants.

Holroyd & Van Tighem (1983) state that fall migration in Banff and Jasper National Parks occurs in late July and August, with scattered records to early October. During the decade, there were three extralimital fall migration records from Calgary and Bottrel in September and October.

1972.  
<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Record</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, May 15</td>
<td>Jasper - KEM, LLM</td>
<td>Sa - 1, May 15, Jasper - KEM, LLM</td>
</tr>
<tr>
<td>1 adult &amp; 2 immatures, Aug. 13</td>
<td>Plateau Mt. - CFNS</td>
<td>Eb/Em - 1 adult &amp; 2 immatures, Aug. 13, Plateau Mt. - CFNS</td>
</tr>
<tr>
<td>1, Sept. 19</td>
<td>Bottrel - SPJ (Pinel &amp; Butot 1978)</td>
<td>Eb - common at treeline, June 25-July 9, Horn Ridge to Coal Ridge (Kakwa Falls area) - Brown et al. (1975)</td>
</tr>
<tr>
<td>1</td>
<td>Sept. 19</td>
<td>Em - 1, Sept. 19, Bottrel - SPJ (Pinel &amp; Butot 1978)</td>
</tr>
<tr>
<td>2 singing males</td>
<td>June 27</td>
<td>B - 2 singing males, June 27, Cardinal Divide - CRW</td>
</tr>
<tr>
<td>1</td>
<td>May 22</td>
<td>Em - 1, May 22, Grande Prairie - WAM, YVM</td>
</tr>
<tr>
<td>2</td>
<td>May 23</td>
<td>- 2, May 23, Grande Prairie - WAM, YVM</td>
</tr>
<tr>
<td>2, April 30</td>
<td>Grande Prairie - LRD</td>
<td>Em/Sa - 2, April 30, Grande Prairie - LRD</td>
</tr>
</tbody>
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White-crowned Sparrow (Zonotrichia leucophrys)

The first spring migrants were regularly reported in southern Alberta from April 19 to 28, except for one earlier observation in 1978. Peak numbers were usually recorded in the first or second week of May in southern Alberta. Francis & Lumbis (1979) stated that White-crowned Sparrows were a scarce spring migrant in the Pt. Mackay area, and gave an arrival date of May 13. During spring migration in Kananaskis Provincial Park, Salt (1976) described the gathering of White-crowned Sparrows in localized areas, from which they rapidly moved out and upward to establish territories. These concentrations of birds probably occurred as a result of unfavourable breeding conditions at higher elevations during the early arrival period.

This species has an interesting breeding range in Alberta. It is found in the
Cypress Hills as well as in the foothills and mountains of western Alberta, north through the western part of the Peace River district and across extreme northern Alberta (Salt & Salt 1976). The extreme north-central part of this range was not known just a decade earlier. Höhn & Burns (1975) found this species nesting in the Caribou Mountains in 1973 and 1974. Not only did they record extralimital breeding, but they found both gambelli and oriantha subspecies to be present. Francis & Lumbis (1979) did not find this species breeding in the Ft. MacKay area.

In Banff and Jasper National Parks, Holroyd & Van Tingham (1983) noted that this species was a very common summer resident. It was most common in shrubby meadows in the subalpine. Salt (1976) found it common to abundant in Kananaskis Provincial Park. Sharp (1973) recorded this sparrow as a common summer resident in Waterton Lakes National Park, where it ranged in elevation from the banks of the lower Waterton River to subalpine krummholz.

Lein (1979) studied the song pattern of White-crowned Sparrows (Z. l. oriantha) in the Cypress Hills. He found that this disjunct population had a distinctive song pattern markedly different from birds of the same geographic race in the Rocky Mountains of western Alberta. This suggests that the Cypress Hills population is truly isolated and does not exchange individuals with populations in the main range of the oriantha subspecies.

The first southbound migrants usually occur in southern Alberta in late August or early September. Most birds pass through during September, but in some years a few stragglers remain until late October.

There were three winter records for the decade, two from Banff and one from Calgary.

1971.  
Sa - 1, April 26, Calgary - RIP  
Fa - 2, Sept. 14, Calgary - CDB  
Fc - 2, Oct. 7, Calgary - WWS

1972.  
Sa - 3, April 25, Calgary - RIP, WWS  
Fa - 1, Aug. 20, Calgary - WWS  
Fc - 1, Oct. 4, Calgary - HWP  
- 1 immature, Oct. 15, Manyberries - CAW, CRW

Sa - 1, April 27, Calgary - HAB, HWP, BIR, CAR  
Sa - 20, May 15, Calgary - GRW  
Eh - nest with 4 eggs, June 6, Eva Lake - Höhn & Burns (1975)  
Fa - 1 immature, Aug. 27, Calgary - RUB  
Fe - 20, Sept. 27, Calgary - WIA  
Fe - 2, Oct. 3, Banff - DEG, GCG  
- 2 adults & 3 juveniles, Oct. 6, Calgary - SCO

1974.  
Sa - 1, April 23, Lethbridge - HES  
- 2, April 24, Calgary - HWP, CAR  
- 3, April 28, Dunstable - BIL, VGL  
Sa - 43, May 4, Rockyford - LIM, DVW  
Sc - 1, June 4, Cheadle - TSS  
Eh - pair feeding young, early July, Pitchimi Lake - Höhn & Burns (1975)  
- adults and fledged young common, mid July, Rock Island Lake - Höhn & Burns (1975). Both subspecies, oriantha and gambelli, were present in the above two extralimital breeding localities. An adult and an immature oriantha were collected on July 17 & 18 at Rock Island Lake - PMA specimens.  
Fa - 1 juvenile, Sept. 1, Calgary - RUB  
Fc - 3, Oct. 8, Little Smoky - ETB

1975.  
Sa - 1, April 25, Calgary - HWP, CAR  
- 1, May 2, St. Albert - CAT, DVT
- 2, May 2, Nigel Pass, Jasper N.P. - JRS, CRW
- 30, May 3, Calgary - WIA
- 2 immatures, Aug. 30, Priddis - RUB
- 1 April 20, Calgary - HWP
- 2, May 21, Dinosaur P.P. - JHA
- 2 immatures, Sept. 1, Calgary - RUB
- 1 immature, Oct. 30, Ghost Reservoir - SEA, JOD, JMP
- April 26, Banff N.P. - Holroyd & Gartshore (1978)
- 2, April 28, Grande Prairie - AUA, KAA
- 2, April 28, Galahad - KAS
- 12, April 28, Clairmont Lake - MRS
- 1, April 28, Calgary - HWP
- 1 immature, Aug. 30, Calgary - BNB
- 15+, Sept. 12, Calgary - HWP, JOR
- 1 immature, Nov. 23, Calgary - HDM, JEM
- 3, Dec. 17, Banff - Christmas Bird Count
- April 3, Canmore - EMV
- April 28, Ft. McMurray - Gulley (1979)
- 143, May 6, Banff - Holroyd & Van Tighem (1983)
- 1 immature, Sept. 28, Kananaskis P.P. - ELH
- 1, Sept. 28, Calgary - RUB
- 1 immature, Sept. 23, Calgary - RUB
- 1, Dec. 17(+/- 1 week), Banff - Lang (1979)
- 1 April 19, Calgary - ANS
- 1, April 27, Grande Prairie - GEC
- 1 immature, Sept. 9, Calgary - HWP
- 1 immature, Sept. 23, Calgary - RUB
- 1, Sept. 26, Calgary - OLD

Harris' Sparrow (Zonotrichia querula)

Both Salt & Salt (1976) and Sadler & Myres (1976) noted that spring adults are rarely seen in Alberta. Sadler & Myres (1976) had only one record for the 1960's, a very unusual early April report. During the 1970's, Harris' Sparrows were observed every spring in southern Alberta, with first arrival dates recorded over the short time period of May 8 to 16. In the Ft. MacKay area, Francis & Lumbis (1979) gave a spring arrival date of May 21. The northward migration through Alberta was completed by the end of May. Almost all spring migrants passed through eastern Alberta. There was only one extralimital spring migrant record, from Seebe in 1977.

The breeding range of this sparrow is north of Alberta, and the majority of the population follows a migration route through Saskatchewan and Manitoba. There was one extralimital nesting season observation for Alberta in 1976, undoubtedly a straggler from spring migration.

Harris' Sparrows are more frequent in southern Alberta during fall migration than spring migration. However, in the fall they are still relatively uncommon. Unlike spring migration, the autumn migration stretches over a much greater time span, with birds recorded from early September to early November. During the decade, peak numbers occurred in late September and early October. Extralimital fall migrants were recorded in Kananaskis Country and at Banff.

During the latter part of the decade, there were winter records for Banff,
Strathmore and Lethbridge.

1971.  **Sa**  - 1 adult, May 9, Calgary - HAB, NAM, WGM

1972.  **Sa**  - 1 adult, May 12, Miquelon Lake - WWS
       **Fa**  - 2 juveniles, Oct. 4, Calgary - RUJ
       **Fb**  - 21, Oct. 7, Beynon & Dorothy areas - WWS, CAW, CRW
       **Fc**  - 1 immature, Oct. 29, Calgary - BIL, VGL

       **Em/Fc**  - 2, Oct. 28-Nov. 5, Kananaskis Forest Experiment Station - Powell (1979)

1973.  **Sa**  - 1, May 16, Vegreville - BYB, ERB
       **Sc**  - 1, May 26, Calgary - RUB
       **Fa**  - 2, Sept. 15, Edmonton - JAP
       - 1, Sept. 27, Calgary - WIA
       **Fc**  - 1 immature, Nov. 6, Edmonton - MOE
       - 1 immature, Nov. 15, Calgary - JEG

1974.  **Sa**  - 1, May 9, Rockyford - DVW
       - 1, May 9 & 10, Calgary - HWP, CAR
       **Fa**  - 1, Sept. 3, Cheadle - TSS

       **Em/Fc**  - 1 immature, Nov. 24, Banff - ANS

1975.  **Sa/Sc**  - 2, May 8-17, Vegreville - BYB, ERB
       **Sa**  - 1, May 9, Spruce Grove - ALH, ANH
       - 1, May 9 & 11, Calgary - BIL, HWP
       - 1, May 11 & 15, Erskine - LML
       - 1, May 15, Syncrude lease - Sharp & Richardson (1976)
       **Fa**  - 1 adult, Sept. 17, Vermilion P.P. - GRG, MAH
       - 4 immatures, Sept. 22, Water Valley - Johnston (1976b)
       - 3 adults, Sept. 29, Elkwater - GRG
       **Fc**  - 1 immature, Oct. 14, Calgary - RUB
       - 1, Oct. 18, Edmonton - BEB, GEB

       - 1, May 21, Calgary - HWP
       **Eb**  - 1 adult, June 15, Bleriot ferry - REG
       **Fa**  - 3, Sept. 9, Edmonton - BEB, GEB
       **Fc**  - Sept. 26, Ft. MacKay - Francis & Lumbis (1979)
       - 1 immature, Oct. 8, Calgary - HWP

1977.  **Sa**  - 1, May 8 & 9, Galahad - KAS
       - 1, May 9, Ft. McMurray - Gulley (1979)
       **Em**  - 1, May 13, Seebe - ELH
       **Fa**  - 1, Sept. 14, Ft. MacKay - WWS
       **Fb**  - 10, Sept. 28, Sounding Lake - WWS, CAW

       **Em/Fc**  - 1 immature, Oct. 11, Banff - Holroyd & Van Tighem (1983)
       **Fc**  - Oct. 12, Ft. McMurray - Gulley (1979)
       - 1, Oct. 14, Edmonton - BEB

       **Eb**  - 2 adults, late Nov.-early Dec., Banff - Brunton et al. (1978)

1978.  **Sa**  - 10, May 13, Ft. McMurray - BRW
       **Sb**  - 20, May 16, Ft. MacKay - RAE
       **Sc**  - 2, May 27/28, Ft. McMurray - Wiseley (1979b)
       **Fa**  - 1 immature, Sept. 28, Calgary - JMP
       **Fc**  - 1 immature, Oct. 9, Calgary - JMP

1979.  **Sa**  - 1 adult, May 11, Calgary - JOR
       **Sc**  - 1, May 19, Botha - GRG, PAG
       **Eb**  - 1, Dec. 79-March 80, Strathmore - TSS

       **Fc**  - 1, Oct. 10, Edmonton - PSA

       **Eb**  - 1, Dec. 27, Lethbridge - Christmas Bird Count
Dark-eyed Junco (Junco hyemalis)

During the decade, the boreal Slate-colored Junco and the western Oregon Junco, including the pink-sided subspecies nesting in the Cypress Hills, were considered to represent a single species -- the Dark-eyed Junco (Eisenmann et al. 1973). Hybrids between the Slate-colored and Oregon subspecies were frequently observed in Alberta.

The Dark-eyed Junco arrived in southern Alberta in small numbers during the last two weeks of March. In the Ft. MacKay area, Francis & Lumbis (1979) had an arrival date of April 11. Peak numbers were recorded in Alberta during April. This was the most abundant spring migrant in Banff and Jasper National Parks, next to the American Robin (Holroyd & Van Tighem 1983).

As a species, the Dark-eyed Junco breeds in the coniferous and mixed wood forests of northern, central and southwestern Alberta. It also breeds in the Cypress Hills. Salt & Salt (1976) outline the ranges of the different subspecies as follows. A brown form (J.h. montanus), formerly a subspecies of the Oregon Junco, breeds in the Rocky Mountain regions north through Jasper National Park; a paler brown form (J.h. mearnsi) breeds in the Cypress Hills. The Slate-colored Junco (J.h. hyemalis) occupies most of the rest of Alberta, except the northern mountain regions (Jasper National Park) where another gray subspecies (J.h. cismontanus) occurs. These different races interbreed where their ranges meet and overlap.

Sharp (1973) noted that the Oregon Junco was a common summer resident in Waterton Lakes National Park, where it was widely distributed, but most common in coniferous and mixed wood habitats. She further noted that Slate-colored Junco migrants were recorded in some years, and a few possibly summered in the park. Salt (1976) found the species common in Kananaskis Provincial Park. Of the birds observed, only a few were Slate-colored.

Holroyd & Van Tighem (1983) found the Dark-eyed Junco to be one of the commonest and most widespread breeding species in Banff and Jasper National Parks. They reported that the Oregon Junco subspecies bred throughout the parks, while the Slate-colored Junco subspecies bred mainly in the lower valleys of the Bow, Red Deer, North Saskatchewan and Athabasca Rivers.

In the Ft. MacKay area, Francis & Lumbis (1979) recorded this species (Slate-colored race) breeding throughout their study area in forested habitat with conifers present. It was found nesting in greatest densities in areas of very dense young black spruce (Picea mariana). Extralimital nesting season records were recorded at Beynon, Jenner, and Kananaskis Provincial Park. Birds were banded at the last two sites, and it is noteworthy that both of these were reported to be the pink-sided form, known to nest in Canada only in the Cypress Hills.

Fall migration usually peaks in late September and the first two weeks of October. Most juncos have left Alberta by the end of October, with some fall migrants lingering to late November. Salt (1976) noted an earlier migration for Kananaskis Provincial Park. There, he found groups of birds accumulating in mid August and an abrupt departure of the mass of the population from about August 28 to September 5.

It appears that Dark-eyed Juncos regularly winter in small numbers in southern Alberta. There were records from Edmonton, Devon, Penhold, Red Deer, Caroline, Jasper, Water Valley, Canmore, Banff, Calgary, Lethbridge and Waterton. The highest winter numbers were recorded in 1978 and 1979 in Edmonton.
McCown's Longspur (Calcarius mccownii)

This species of the dry mixed grasslands was infrequently recorded during the decade. Records indicate that the first spring migrants arrived in small numbers in late April or early May.

McCown's Longspurs have been found nesting in southern Alberta north to Youngstown and west to Lethbridge and Calgary. During the 1970's, observations indicated that perhaps a more accurate description of the western limits of this species' breeding distribution would be Lethbridge to Vulcan to Drumheller. Even within this defined breeding range in southern Alberta, the
McCown's Longspur is uncommon and locally distributed. Like the Chestnut-collared Longspur, this species inhabits grazed grasslands. However, the McCown's Longspur occurs in a narrower range of habitats, being more restricted to drier, more sparsely vegetated, heavily grazed sites. There was an extralimital breeding record near Stettler in 1975. Because of this species' restricted breeding and wintering ranges in North America, it deserves much more attention and study.

Fall records were very few, indicating perhaps that the vast majority of birds left Alberta in August, with a few stragglers persisting until the end of September. There was an extralimital fall migration record in 1972 from Beaverhill Lake.

1972.  
  Sa - 2, April 23, Chestermere Lake - HAV  
  B - 10-20, May 22, Wardlow - HES, RYS  
  Em - 1, Sept. 12, Beaverhill Lake - FLD, TDD, MAM (McNicholl 1977)

1974.  
  Sa - 115 in small groups, April 30, Onefour area - WWS  
  S - 1, May 11, Cheadle - TSS  
  FC - 1, Aug. 24, McGregor Lake - RUB

1975.  
  Sa - 1, May 8, Cheadle - TSS  
  Em - 1 pair nested near Stettler - Serr (1975c)

1976.  
  Sa - 1 male, May 3, Acadia Valley - WWS  
  1977.  
  B - 2, June 4, Pakowki Lake - HWP  
  - 1, June 12, Little Bow Lake - HWP, JOR  
  Ec - 1, Sept. 29, Sage Creek - WWS

Lapland Longspur (Calcarius lapponicus)

In southern Alberta, the Lapland Longspur is an early spring migrant, arriving in late March and early April. During the decade, arrival dates for first spring migrants ranged from March 16 to April 13. Numbers of spring migrants peaked during the first three weeks of April. The last spring migrants left southern Alberta, to continue northward, from late April to mid May in most years.

In northern Alberta, it appears that the first spring migrants did not arrive until late April. The last spring migrants were usually observed in the latter half of May, indicating that this species moved quickly through northern Alberta during spring migration en route to its Arctic nesting areas. During the decade, there were no spring migration records for the mountain national parks (Sharp 1973; Holroyd & Van Tighem 1983).

Lapland Longspurs again appear in Alberta as southbound migrants by late August. In most years of the decade, fall migrants were not noticed in central and southern Alberta until the first two weeks of September. Peak fall numbers were generally observed during the first half of October, and there were few records of fall migrants after the end of the month. The fall migration was more widespread than the spring migration, with a number of records from the mountains. Francis & Lumbis (1979) noted that the fall migration in the Ft. MacKay area occurred at a much slower rate than spring migration, and flocks of birds appeared to linger in suitable habitat.

Extralimital winter records for the decade came from Calgary, Cheadle, Beynon, Standard, Rosebud, Blackie, Lethbridge, Kathryn, Lyalta, Vimy and Banff. There were only four winters in which this species was not recorded in Alberta. During the previous decade, Sadler & Myres (1976) listed only one extralimital winter record.

1971.  
  Fw - 1, Feb. 23, Calgary - WWS

-165-
Sa/Sh - 1,000, April 5, Cheadle - ISS
Sc - 20, April 25, Carseland - VGL, WGM
Fa - 100, Sept. 14, Calgary to Beynon - HWP, CAW
Fb - 800, Oct. 10, Drumheller - RTO, HWP, CRW
Ew - 18, Dec. 5, Cheadle - HWP, CAW
   - 6, Dec. 5, Beynon - HWP, CAW
1972.  Ew - 75, Jan. 8, Standard - HWP, LIP, CAW
   - 5, Jan. 15, Rosebud - CAW, TRW
Sa - 3, March 19, Cheadle - TSS
   - 1, March 19, Dalemead - CAW, CRW
Sh - 2,000, April 10, Cheadle - TSS
   - 2,000, April 23, Chestermere Lake - HAV
Sc - 1, May 11, Beaverhill Lake - WWS
Fa - 2, Aug. 29, Edmonton - WWS
   - 25+, Sept. 9, Janet - GEA, WEB
Fb/Fc - 3,000+, Oct. 12, Strathmore - TSS
1973.  Sa - 8, March 16, Frank Lake - VGL
   - 7, March 24, Tofield - LOG, LOW, POW
Sh - 5,000, April 1, Tofield - Renaud (1973)
   - 10,400, April 7, Tofield - Renaud (1973)
Sc - 25, May 5, Conrich - HWP, LIP
   - 300, May 21, Tofield - Renaud (1973)
Fa - 30, Sept. 9, Shepard - HWP
Fb - 2,000, Oct. 14, Airdrie - HAV
Fc - 80, Oct. 21, Frank Lake - DRD, SAD
   - 40, March 28, Pekisko - HWP, CAR
   - 20, March 28, Connemara - HWP, CAR
Sh - several thousand, April 9, Cheadle - TSS
   - 5,000, April 12, Dalroy - RUB
   - 5,000, April 20, Cheadle to Carseland - RUB
   - 32,000, April 25, Tofield - GWG, LOG
Sc - May 4, Longview - V. Lang (1974b)
   - 1, May 26, Tofield - GWG, LOG
Fa - 20, Sept. 7, Syncrude lease - Sharp et al. (1975)
   - 30, Sept. 7, Delacour - RUB, HWP
Fc - 29, Oct. 18, Syncrude lease - Sharp et al. (1975)
   - 9, Oct. 19, Eagle Lake - HWP, LIP
   - 1, Nov. 8, Dunstable - RIP
1975.  Sa - several flocks, April 13, Cheadle - TSS
   - 10, April 13, Tofield - DID, MKM, WAR, LYS, ERT
Sh - several thousand, April 24, Cheadle - TSS
Sc - 2, May 2, Cheadle - TSS
   - 1,000, May 3, Tofield - JIW
   - May 31, Syncrude lease - Sharp & Richardson (1976)
Fa - Aug. 31, Syncrude lease - Sharp & Richardson (1976)
   - 300, Sept. 13, Strathmore - RUB
F - 25, Sept. 18, Banff - Holroyd & Van Tighem (1983)
Fc - 1, Oct. 13, McGregor Lake - EWB
   - Oct. 16, Syncrude lease - Sharp & Richardson (1976)
Ew - 2, Dec. 27, Banff - Christmas Bird Count
1976.  Sa - 1, March 21, Cheadle - TSS
   - 6, March 21, Brant - PES
   - April 28, Ft. McMurray - Gulley (1979)
Sh - 1,500, April 18, Frank Lake - WWS
Sc - 350+, April 24, Delacour - HWP
   - May 18, Ft. MacKay - Francis & Lumbis (1979)
Fa - 11, Aug. 31, Ft. Chipewyan - RAE
F - 50, Sept. 20, Plateau Mt. - RUB
Fc - Oct. 6, Ft. McMurray - Gulley (1979)
April - Dec. 1972

Fa - 1, Aug. 10, Ft. MacKay - WWS

- 10, May 17, Ft. MacKay - WWS
- Sept. 11, Beaverhill Lake - TBW

1977.

Ew - 1, Jan. 16, Blackie - ADM, JIM

Fa - 2 males, March 31, McGregor Lake - RUB

Sc - 200+, April 16, Namaka - HWP

- 10, May 17, Ft. MacKay - WWS

F - 3, Sept. 19, Banff N.P. - Holroyd & Gartshore (1978)

Pc - 50+, Oct. 18, Carlseland - HWP, JOR

Sw - 1, Dec. 17, Banff - Christmas Bird Count

1978.

Sa - 2 flocks, March 26, Cheadle - TSS

Sc - 5,000, April 23, Cheadle - JOR

- 45, May 31, Ft. McMurray - BRW

Pc - 75, Oct. 22, Calgary to McGregor Lake - CFNS

Sw - 7, Dec. 25 (+/- 1 week), Lethbridge - Lang (1979)

1979.

Ew - 1, Jan. 29, Kahyn - CLM

- 9, Feb. 11, Lyalta - RUB

Sa - flock, March 18, Cayley - BIL, LOL

Sc - 1, May 8, Bottrel - SFJ

Pc - 1+, Aug. 30, Bottrel - SFJ

1980.

Sa - large flock, April 4, Cheadle - TSS

Fa - 1, Aug. 25, Coal Valley - CAW, CRW

- 300, Sept. 14, Eagle Lake to Carlseland - CFNS

- 50, Sept. 14, Beaverhill Lake - PTS, TWT

Sw - 1, Dec. 13, Vimy - JIL

Smith's Longspur (Calcarius pictus)

Smith's Longspurs are an uncommon and locally occurring migrant. However, the number of recorded observations of this species was greater during this decade than in the previous decade. Still, more data needs to be gathered to give a more accurate account of the migratory status of this species in Alberta. Salt & Salt (1976) state that Smith's Longspurs do not reach southern Alberta until around the middle of May. Observations for the decade from southern Alberta indicate that the first birds can arrive from early April to early May, with peak numbers occurring in mid May. Smith's Longspurs have been recorded much more often, and in greater numbers during spring migration than during fall migration.

Fall migration occurred from late August to late September. Almost all of the fall records were from northern Alberta, except in 1972 when single birds were observed at Cold Lake and Beaverhill Lake. The available data makes one wonder if this species may have a more easterly migration route during the fall.

Because of the vulnerability of the Smith's Longspur owing to its restricted wintering range in the United States, the migration status of this species in Alberta should be more intensively studied. It appears from the data that Beaverhill Lake is an important stop-over area during the spring for this species.

1971.

Sa - 1, April 6, Cheadle - ISS (Pinel & Butot 1978)

1972.

Fa - 1, Sept. 4, Cold Lake - WWS, CRW

F - 1 male, Sept. 14, Beaverhill Lake - WIG


Sa - 1, April 23, Orion - GRG, PAG

- 3, May 5, Tofield - DID, GWG, LOG

Sh - 100's, May 12, Beaverhill Lake - Dekker (1977b)

- 200, May 14 & 15, Beaverhill Lake - Dekker (1977b)
Chestnut-collared Longspur (Calcarius ornatus)

The first spring migrants arrived in the grasslands of southern Alberta from April 11 to 29. In most years, the first migrants occurred in the last third of April, which is in agreement with Sadler & Myres (1976), and much later than early April as suggested by Salt & Salt (1976). There were extralimital spring migration records from the Neutral Hills and Ft. MacKay.

The Chestnut-collared Longspur is a common species in grazed mixed grasslands of southern Alberta. It is locally distributed in southern Alberta west to Lethbridge and Calgary and north to the southern fringes of the aspen parkland. Occasionally, it nests at scattered points outside this area as far north as Beaverhill Lake.

There are few fall records of this species, indicating adults and young may be leaving Alberta in August. It appears that a few flocks remain in Alberta until late September in some years.

1971. Sa - 5, April 25, Beiseker - JJC, TSS
   - 6 males & 6 females, April 25, Conrich - VGL, WGM
1972. Sa - 2, April 12, Frank Lake - WVS, CAW, CRW
   Fc - 4, Sept. 12, Beaverhill Lake - FLD, TDD, MAM (McNicholl 1977)
1973. Sc - 3 males, April 26, Frank Lake - BIL, VGL
   Fc - 10, Sept. 27, McGregor Lake - WWS
1974. Sa - 2, April 20, Chestermere Lake - RUB
   - 3, April 20, Frank Lake - EWB, LIM, DVM
   - males abundant, April 20, Little Bow Lake - NGK
1975. Sa - 1 male, April 26, Hussar - LIF, WIF
1976. Sa - 2, April 11, Frank Lake - WWS
   Em - 1, May 2, Neutral Hills - WWS
   - 1 pair, May 20, Ft. MacKay - RAE (Francis & Lumbis 1979)
   B - 200 (mostly males), July 3 & 4, Burdett - RUB
1977. Sa - 6, April 16, Chestermere Lake - RUB
   B - 1 singing male, May 22, north shore Beaverhill Lake - RIK
   - 2 nests (1 with 4 young; 1 with 3 young & 2 eggs), June 28,
   Bittern Lake - ETJ
   Fc - 50, Sept. 29, Sage Creek - WWS
1978. Sa - 15, April 29, Chestermere Lake - RUB
   B - 500+, July 7, Pakowki Lake - RUB
1979. Sa - 10, April 23, Namaka Lake - WWS
**Snow Bunting (Plectrophenax nivalis)**

The Snow Bunting is an arctic breeder that generally arrives in central and southern Alberta from the north in October. During the decade, the first fall birds were recorded from October 4 to November 7. There is a September record from Ft. MacKay in 1976.

The first winter record for northern Alberta occurred during the decade when two birds were observed on the Christmas Bird Count at Ft. McMurray in 1980. The Snow Bunting occurs throughout central and southern Alberta during the winter, although in the mountain national parks, its distribution is more restricted. In Waterton Lakes National Park, Sharp (1973) noted that this species occurred almost exclusively in the lower prairie-parkland areas. Average winter flock size was 20 birds, and ranged from one to sixty birds per flock. Holroyd & Van Tighem (1983) noted that wintering flocks in Banff and Jasper National Parks occur primarily in the middle and lower Bow River and Athabasca River valleys.

Spring migration in southern Alberta occurs in March and April as large flocks form for their northward journey. During the decade, the last spring migrants left southern Alberta from April 14 to May 11. Francis & Lumbis (1979) noted that spring migration in the Ft. MacKay area occurred over a short time period during the last half of April and early May.

Abrahamson (1976) reported a very unusual occurrence of extralimital summer birds at Sylvan Lake in 1975.

<table>
<thead>
<tr>
<th>Year</th>
<th>Location</th>
<th>Date</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971.</td>
<td>Wb</td>
<td>7,500, Jan. 24</td>
<td>Kathryn - VGL, CRW, DVW</td>
</tr>
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<td></td>
<td>Wc</td>
<td>25, April 10</td>
<td>Bottrel - ROL, DVW</td>
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<td>1,000+, April 24</td>
<td>Fairview - MAC, ALE, MEM</td>
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<td></td>
<td>Wa</td>
<td>5, Nov. 2</td>
<td>De Winton - CDB</td>
</tr>
<tr>
<td>1972.</td>
<td>Wb</td>
<td>5,000, Jan. 9</td>
<td>Calgary - LAM, WGM, RIP</td>
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<td></td>
<td>Wc</td>
<td>75, May 11</td>
<td>Beaverhill Lake - WWS</td>
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<td></td>
<td>Wa</td>
<td>50-100, Oct. 8</td>
<td>Beaverhill Lake - DID</td>
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<td></td>
<td>100, Oct. 12</td>
<td>Strathmore - TSS</td>
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<tr>
<td>1973.</td>
<td>Wc</td>
<td>115, April 14</td>
<td>Tofield - GWG, LOG</td>
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<td></td>
<td>Wa</td>
<td>15, Oct. 6</td>
<td>Beaverhill Lake - LOG</td>
</tr>
<tr>
<td></td>
<td>Wb</td>
<td>10,000, Dec. 23</td>
<td>Vulcan - EWB</td>
</tr>
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<td>1974.</td>
<td>Wb</td>
<td>5,000, March 17</td>
<td>Ensign - BIL, VGL</td>
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<td>Wc</td>
<td>1, April 30</td>
<td>Rockyford - LIM, DVW</td>
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<td>6, May 11</td>
<td>Tofield - DID</td>
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<td>Wa</td>
<td>3, Oct. 4</td>
<td>Syncrude lease - Sharp et al. (1975)</td>
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<td>50, Oct. 4</td>
<td>Tofield - JIW</td>
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<td>1, Oct. 14</td>
<td>Calgary - RFC</td>
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<td>Wb</td>
<td>5,000+, Oct. 14-20</td>
<td>Tofield - DID, MIH, ROS, JIW</td>
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<tr>
<td>1975.</td>
<td>Wc</td>
<td>80, April 22</td>
<td>Calgary - WWS</td>
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<td></td>
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<td>few</td>
<td>May 3</td>
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<td></td>
<td>Eb</td>
<td>2, July</td>
<td>Sylvan Lake - Abrahamson (1976)</td>
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<td>Wa</td>
<td>Oct. 11</td>
<td>Lesser Slave Lake - DVW, LIW (Ebel 1976a)</td>
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<td>1, Oct. 19</td>
<td>McGregor Lake - CFNS</td>
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<tr>
<td>1976.</td>
<td>Wc</td>
<td>many</td>
<td>May 1</td>
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<td>Wa</td>
<td>Sept. 19</td>
<td>Ft. MacKay - Francis &amp; Lumbis (1979)</td>
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<td>1, Oct. 14</td>
<td>Kananaskis P.P. - Salt (1976)</td>
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<td>2, Oct. 16</td>
<td>Irricana - RUB</td>
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<tr>
<td>1977.</td>
<td>Wb</td>
<td>15,000</td>
<td>April 12</td>
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<tr>
<td></td>
<td>Wc</td>
<td>455, April 16</td>
<td>Beaverhill Lake - DRG, DVW, LIW</td>
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<td>1, May 8</td>
<td>Ft. MacKay - WWS</td>
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<td></td>
<td>Wa</td>
<td>50, Oct. 8</td>
<td>Beaverhill Lake - DID</td>
</tr>
</tbody>
</table>
1978. 
**Wh** - 4,000, Nov. 13, Frank Lake - GRW  
**Wo** - 1, April 23, Chestermere Lake - JOR  
**Wa** - 1, May 27/28, Ft. McMurray - Wiseley (1979b)  
**Wa** - 1, Nov. 7, Balzac - CAO  

1979. 
**Wh** - 2,500, Feb. 21, Barrhead - WWS  
**Wa** - 70+, Oct. 22, Pollockville - HWP  

1980. 
**Wo** - 1, April 14, Namaka - RAW  
**Wa** - 35, Oct. 10, Beaverhill Lake - PTS, TWT  
**Ew** - 2, Dec. 23, Ft. McMurray - Christmas Bird Count

**Bobolink (Dolichonyx oryzivorus)**

The number of records of this sporadically occurring eastern species increased during the 1970's, when compared to those compiled by Sadler & Myres (1976) for the previous decade. The great majority of Alberta observations came from the spring migration period ranging from the third week of May to the third week of June.

In Alberta, the Bobolink primarily occurs in moist meadows along creeks and adjacent to wetlands. The vast majority of observations are from the grassland and aspen parkland regions. In the dry mixed grasslands of southeastern Alberta, this species is rare. There were extralimital foothill and mountain records from Bottrel, Norman Lake, Kananaskis Provincial Park, Banff National Park, and an extralimital northern record from Ft. McMurray in 1980.

In years when nesting does occur in Alberta, Bobolinks probably leave the province shortly after the young fledge. The latest records for the decade were two early August observations.

1972. 
**Sa** - 1 male, May 22, Frank Lake - GEA, WEB, BIL, VGL  
**S** - 1 male, May 24, Waterton Lakes N.P. - Sharp (1973)  
- 2 males, May 25, Calgary - CHD, DKM  
**S** - 3 males & 1 female, June 13, Elkwater - CAW, CRW  
- 1 male, June 13, Lousana - WWS  
**B** - 1 newly fledged male, Aug. 6, road kill north edge of Waterton Lakes N.P. - Sharp (1973)  

**Sa** - 2, May 27, Round Hill - ETJ  
- 2 males, May 27, Calgary - DEA, ELA, PEA  
**S** - 1 male, June 2, Talbot - GWG, LOG  
- 1 male, June 2, Milo - EWB  
- 1, June 9, Cereal - GWG, LOG  
- 7 males, June 9-14, Willow Creek P.P. - CDA  
- 2 males, June 10, Willingdon - GRG, PAG  
**B** - 1 male, June 30, Del Bonita - LOG  
- 6 males & 2 females, July 1, Milo - BEB, GEB  
- 1 male, Aug. 1, Beaverhill Lake - LAK  

1974. 
**Sa** - 1 male, May 25, 12.8 km southwest of Dinosaur P.P. - LIM, DVW  
**S** - 1 male, May 28, Botha - PMA Specimen  
- 1, June 19, Cheadle - TSS  
**Eb** - 3 males & 1 female, June 29, Kananaskis P.P. - Salt (1976)  
**B** - 2, July 14, Tofield - BEB, GEB  

1975. 
**Em/Sa** - 1 male, May 24 & 25, Banff - Holroyd & Van Tighem (1983)  
**S** - 1 male, June 8, 16 km west of Millarville - KSC, JOD  
- 2 males, June 17, Pekisko - HWP
Red-winged Blackbird (*Agelaius phoeniceus*)

In most years, Red-winged Blackbirds arrive in southern Alberta in late March or early April. Records of first spring arrivals for the decade ranged from March 7 to April 22. The first spring observations were usually of single males or very small flocks heavily predominated by males. Holroyd & Van Tighem (1983) recorded spring migration for this species in Banff and Jasper National Parks as occurring from late March to the end of May, peaking in mid May.

Red-winged Blackbirds nest throughout Alberta in suitable habitat. Favorite haunts include dense beds of emergent vegetation in ponds, lakes and slow-moving streams, as well as willows (*Salix spp.*) growing along these areas. Salt (1976) found only a few pairs in local breeding areas in Kananaskis Provincial Park, and their duration of occupation was very brief with dates of arrival and departure being mid June and early August, respectively. In Banff and Jasper National Parks, the Red-winged Blackbird occurs throughout the lower valleys, with most birds observed along the Bow and Athabasca River valleys. Sharp (1973) found that this species was heavily parasitized by Brown-headed Cowbirds in Waterton Lakes National Park.

The timing of autumn migration appears to vary regionally throughout the province. Holroyd & Van Tighem (1983) note that it occurs during early and mid August in Banff and Jasper National Parks. In northern Alberta in the Ft. Mackay area, Francis & Lumbis (1979) record late departure dates in mid October. Data from central and southern Alberta indicates that large flocks form in late summer and feed in grainfields. These large flocks may persist until mid October. During the decade, the last fall migrants were recorded from October 17 to November 23.
In the 1970’s, there were winter records of Red-winged Blackbirds for Tofield, Calgary, Galahad, Irricana, Camrose, and all three mountain national parks.

1971.  
**Sa** - 1, April 10, Cheadle - ISS  
**Fb** - 4,000, Sept. 7, Stettler - LML  
**Fc** - 1 male, Oct. 17, Calgary - CFNS  

1972.  
**Sa** - 10 males & 5 females, March 18, Canmore - GEA, WEB  
- first males, April 14, Stettler - LML (Houston 1972c). First females were noted at this location on May 11.  
- first males, April 19, Waterton - Sharp (1973). First females observed on May 12.  
**Fb** - 1,000, Sept. 9, Cold Lake - WWS, CRW  
- 700, Oct. 1, Blizzard Lake - FAN  
**Fc** - 6 males, Nov. 13, Red Deer - HAV  

**Sa** - 3, March 7, Nightingale - BAD, BOD  
- 1 male, March 7, Canmore - VGL  
**Fb** - 6,000, Oct. 14, Tofield - LOG  
**Fc** - 1,000, Oct. 20, Tofield - LOG  
**Ew** - 1 male wintered at feedlot, Tofield - LOG, LAK, TWT. Began singing about March 10/74.  

1974.  
**Sa** - 2, April 13, Rockyford - LIM, DVW  
- 4 males, April 16, Nisku - JIW  
**Fc** - 1 male, Nov. 23, Aldersyde - GRW  

1975.  
**Ew** - 1 male, Feb. 28, Calgary - TAD, KAW  
**Sa** - 1 male, April 22, De Winton - DRD, SAD  
- April 22, Tofield - DID  
- first males, April 28, Horseshoe Lake - Sharp & Richardson (1976). First females were seen on Syncrude lease by these authors on May 8.  
- Oct. 12, Syncrude lease - Sharp & Richardson (1976)  
- 2, Nov. 9, Wabamun Lake - RAE  

1976.  
**Sa** - 1, March 21, Cheadle - TSS  
- 2 males, April 7, Galahad - KAS. First females were seen in the Galahad area by KAS on May 4.  
- April 9, Ft. McMurray - Gulley (1979)  
**Fc** - Oct. 12, Ft. MacKay - Francis & Lumbis (1979)  
- 130, Oct. 24, Blackie - CFNS  

1977.  
**Ew** - 1 male, Feb. 23, Galahad - KAS  
**Sa** - 1 male, March 13, Waterton - KEB  
- March 30, Banff N.P. - Holroyd & Gartshore (1978)  
- 2 males, April 7, Galahad - KAS  
- 2 males, April 8, Namaka - RUB  
- 3 males & 1 female, April 8, Milo - RUB  
- 2 males, April 11, Sherwood Park - RIC  
- 1 male, April 24, Ft. MacKay - WWS  
**Ew** - 2, Dec. 15, Waterton - KEB  

1978.  
**Ew** - 2, Feb. 20, Irricana - BRA  
**Sa** - 1 male, April 10, Lindbrook - KWT  
**Fc** - 34, Oct. 27, Red Deer - RUB  
- 2, Dec. 17, Banff - Christmas Bird Count  

1979.  
**Ew** - 1, Feb. 5, Jasper dump - Holroyd & Van Tighem (1983)  
**Ew/Sa** - 1, March 17, Camrose - PUS, ERT, TWT  
**Sa** - 2 males, April 13, Namaka Lake - WWS  

1980.  
**Sa** - 1, March 29, Cheadle - TSS
Western Meadowlark (*Sturnella neglecta*)

The first spring migrants generally arrive in southern Alberta in late March. During the decade, first spring dates ranged from March 7 to April 2.

The Western Meadowlark is a typical bird of ungrazed to moderately grazed grassland and sagebrush in southern Alberta, and is slowly expanding its range northwards as forests are cleared. It was first recorded in Red Deer in 1892, and in Edmonton in 1897 (Salt & Wilk 1966). By the 1960’s, the species was found to be reasonably common in the Athabasca area and in the Peace River district (Salt & Wilk 1966). Western Meadowlarks have also moved westward into the foothills and lower mountain valleys (Wiseley 1979a; Holroyd & Van Tighem 1983). During this decade, there were extralimital migration and breeding season records for the first time from northeastern Alberta. This species reaches the northwestern edge of its North American range in Alberta.

Western Meadowlarks are late fall migrants in southern Alberta. The majority have left the province by mid October, but stragglers remain until late November or very early December.

There were winter records for the decade from Calgary, Tofield, Vegreville, Water Valley, and Lethbridge.

1971.  
**Ew** - 1, Feb. 23, Calgary - WWS  
**Sa** - 1, April 2, Calgary - BNB  
**Fc** - 1, Nov. 8, Cavendish - WGM  
1972.  
**Sa** - 1, March 12, Calgary - BJJ  
**Fc** - 1, Oct. 29, Beaverhill Lake - LOG  
- 1, Oct. 29, Conrich - BIL, VGL  
**Sa** - 3, March 7, Rosebud - BAD, BOD  
**Fc** - 1, Nov. 18, Ardenode - MRL, RWN  
1974.  
**Sa** - 1, March 23, Calgary - WWS  
**Fc** - 1, Dec. 1, Langdon - WIH  
**Ew** - 1, Dec. 27, Tofield - WIG, PAT  
1975.  
**Sa** - 1, March 20, Conrich - TSS  
- 1, April 12, Edmonton - RAE  
**Fc** - 1, Nov. 8, Mayerthorpe - Ebel (1976a)  
- 1, Nov. 8, Irricana - RUB  
1976.  
**Sa** - 1, March 27, Drumheller - CDB  
- 1, March 28, Botha - GRG  
**Eb** - 1, May 21, Boulton Creek - Salt (1976). This was his only record for Kananaskis Provincial Park.  
- 5, June 1-3, Ft. McMurray - Gulley (1983)  
- 1, July 16, Ft. Chipewyan - JOK  
**Em** - 1, Oct. 7, McClelland Lake - Francis & Lumbis (1979)  
**Fc** - 1, Nov. 1, Namaka - RUB  
**Ew** - 1, Dec. 19 & 23, Vegreville - Brimacombe (1977)  
1977.  
**Ew** - 1, Jan. 10, Vegreville - Brimacombe (1977)  
**Sa** - 1, March 26, Botha - GRG, PAG  
- 1, March 27, Frank Lake - RUB  
- 1, March 27, Rockyford - ADM  
- 1, March 27, Carseland - ADS, DOS, PHS  
**Fc** - 3, Oct. 16, Pollockville - HWP, JOR  
**Em/Fc** - 1, Oct. 17, Syncrude lease - Francis & Lumbis (1979)  
1978.  
**Ew** - 1, Jan. 2, Water Valley - Christmas Bird Count  
**Sa** - 1, March 18, Shepard - LOB, BIL  
**Fc** - 1, Nov. 18, Peace River - ELC, GEC  
1979.  
**Sa** - 1, March 21, Strathmore - MIR
Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*)

This species arrived in southern Alberta from March 31 to April 20. In seven years during the decade, they arrived from April 13 to 20. These arrival dates were earlier than the beginning of May as reported by Salt & Salt (1976). As with Red-winged Blackbirds, the first arrivals were almost exclusively males. In the mountains, they were considered a scarce to uncommon spring migrant, occurring from late April to the end of May (Holroyd & Van Tighem 1983). It appeared that the first spring migrants did not reach northeastern Alberta until late April or early May, about two to three weeks after the species arrived in southern Alberta.

The Yellow-headed Blackbird reaches the northernmost limits of its nesting range in Alberta. Outside of the mountains, this species breeds locally through most of Alberta except the northwestern corner. The Yellow-headed Blackbird has been found nesting west and north to Saskatoon Lake, Loon Lake and Lake Athabasca (Salt & Salt 1976). Dense beds of common cattails (*Typha latifolia*) and bulrushes (*Scirpus spp.*) standing in shallow water are preferred nesting habitat for Yellow-headed Blackbirds.

Salt & Wilk (1966) found this species to be scarce on the prairies because of its localized habitat. Sadler & Myres (1976) regarded the species as abundant in southern Alberta. Data for the 1970's likewise indicated that the Yellow-headed Blackbird was common in suitable habitat in southern Alberta. This species has become more abundant in southern Alberta during the past 25 years, possibly due to more development of permanent wetland habitats in the grasslands.

There were few summer records for the mountain national parks (Sharp 1973; Holroyd & Van Tighem 1983). Salt (1976) did not record this species for Kananaskis Provincial Park.

After the nesting season in southern Alberta, flocks of Yellow-headed Blackbirds may be seen in fields, often times in the company of Brewer's Blackbirds or Red-winged Blackbirds. Most Yellow-headed Blackbirds have left the province by the end of September, but a few remain in southern Alberta into late October and early November. In the Ft. McMurray and Ft. MacKay areas of northern Alberta, the last birds are usually seen sometime during the first three weeks of September (Francis & Lumbis 1979; Gulley 1979).

The first winter record for this species in Alberta occurred in 1980 at Lethbridge.

1980.  Sa - 1, March 31, Cheadle - TSS  
       Fc - 2, Oct. 10, Beaverhill Lake - PTS, TWT  
            - 1, Oct. 13, Balzac - CAO  
       Ew - 4, Dec. 27, Lethbridge - Christmas Bird Count

1971.  Sa - 3 males & 1 female, April 18, Hussar - HAV  
       Fb/Fc - 200, Sept. 23, Frank Lake - CDL
1972.  Sa - 2 males & 1 female, April 9, Frank Lake - BIL, VGL  
       Fc - 30, Oct. 1, Blizzard Lake - FAN
1973.  Sa - 1 male, April 16, Edmonton - ADR  
            - 1 male, April 21, Delacour - HWP, LIP  
       Fc - 1 male, Oct. 3, Jasper - BEB, GEB
1974.  Sa - 2, April 17, Cheadle - TSS  
            - 1 male, April 20, Tofield - DID  
       Fc - 6 males, Oct. 20, High River - DRD, SAD, SUM
1975.  Sa - 1, April 13, Nisku - BRB, GAB
         - 3, April 13, Cheadle - TSS
         FC - 2 males & 1 female, Nov. 11, Pakowki Lake - HWP
1976.  Sa - 1, April 4, Edmonton - PED
         - 1 male, April 10, Brooks - LIF, WIP
         FC - Sept. 23, Ft. MacKay - Francis & Lumbis (1979)
         - 1 male, Oct. 24, Blackie - CFNS
1977.  Sa - 2 males, April 13, Didsbury - HWP, JOR
         - April 29, Ft. McMurray - Gulley (1979)
         FC - Sept. 8, Ft. McMurray - Gulley (1979)
1978.  Sa - 1, March 31, Cheadle - TSS
         FC - 4, Oct. 27, Red Deer - RUB
1979.  Sa - 23 males, April 20, Namaka - RUB
         - 1 male, April 23, Grande Prairie - EDL
1980.  Sa - 8, April 20, Calgary to Langdon - ADS, DOS
         - 2, April 20, Cheadle - TSS
         Ew - 2, Dec. 27, Lethbridge - Christmas Bird Count

Rusty Blackbird (Euphagus carolinus)

Rusty Blackbirds migrate through southern Alberta in small numbers in April, suggesting that the main spring influx of birds into northern Alberta comes from the east. This route is substantiated by an analysis of data from the mountain parks. Holroyd & Van Tighem (1983) listed this species as a rare spring migrant for Banff and Jasper National Parks. Sharp (1973) and Salt (1976) did not record this species for Waterton Lakes National Park and Kananaskis Provincial Park, respectively.

In Alberta, this species is most often associated with black spruce (Picea mariana) and tamarack (Larix laricina) in fens, bogs and swamps. Nesting data for this species in Alberta is scarce. It has been reported nesting in the foothills as far south as Okotoks (Salt & Salt 1976). More intensive field work is required on this species in Alberta to more accurately determine its breeding range, especially in light of identification problems with Brewer's Blackbirds. It may be that this species does not nest as far south as previously indicated. In western Alberta, suitable habitat seems to exist as far south as the Rocky Mountain House area. There are also no recent summer records from Jasper or Banff National Parks (Holroyd & Van Tighem 1983).

In the fall, migrants are usually observed during September, October and into early November. They occur in larger numbers in the fall in central and southern Alberta than they do in the spring. Still, southern Alberta does not experience the large flocks that can be seen in central Alberta. This indicates that the majority of fall migrants leave Alberta by flying eastward.

The number of winter records for Rusty Blackbirds increased dramatically during the 1970's. Salt & Salt (1976) noted that they wintered on at least one occasion at Camrose and perhaps also at Calgary. During this decade, there were winter records from Calgary, Edmonton, Canmore, Camrose, Timeu, Shiningbank Lake, Banff, Dogpound, Sheep River area, Jasper and Westlock. It is noteworthy that almost all of these winter records were from western Alberta.

         Fa - 2, Sept. 19, Fallentimer Creek - CDB, HWP, CRW
         FC - 3, Oct. 19, Calgary - RIP
1972.  Sa - 1 male, April 2, Calgary - CAW, CRW, MEW
         Fa - 1, Sept. 30, Calgary - RIP
         Fb - 8, Oct. 19, Calgary - HWP, CAR

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<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Species</th>
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<tbody>
<tr>
<td>March 1</td>
<td>Edmonton - RAE</td>
<td>Fa/Fb</td>
</tr>
<tr>
<td>March 7</td>
<td>Canmore - VGL</td>
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<tr>
<td>Fa/Fb</td>
<td>185, Oct. 14, Tofield - LOG, They were roosting with European Starlings and Red-winged Blackbirds.</td>
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<tr>
<td>Sa/Fc</td>
<td>2 males, Jan. 6, Canmore - BIL, VGL</td>
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1974.

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<tr>
<th>Date</th>
<th>Location</th>
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<tbody>
<tr>
<td>March 2</td>
<td>Calgary - HWP</td>
<td>Fa</td>
</tr>
<tr>
<td>Nov. 20</td>
<td>Camrose - JIW</td>
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<tr>
<td>Fa/Fb</td>
<td>200, Oct. 12, Tofield - MAM, PAM</td>
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<tr>
<td>Fa/Fb</td>
<td>2, Oct. 27, Syncrude lease - Sharp et al. (1975)</td>
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<tr>
<td>Sa/Fc</td>
<td>1 male, April 13, Dunstable - BIL</td>
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<tr>
<td>Fa/Fb</td>
<td>2, Oct. 27, Syncrude lease - Sharp &amp; Richardson (1976)</td>
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1975.

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<tbody>
<tr>
<td>Jan. 26</td>
<td>Shiningbank Lake - REG, ARS</td>
<td></td>
</tr>
<tr>
<td>Fa</td>
<td>3, Sept. 12, Carseiland - HWP</td>
<td></td>
</tr>
<tr>
<td>Sa</td>
<td>5, April 5, Conrich - RUB</td>
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<tr>
<td>Fa</td>
<td>4, Oct. 12, Calgary - ANS</td>
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<tr>
<td>Fa</td>
<td>October 23, Syncrude lease - Sharp &amp; Richardson (1976)</td>
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<tr>
<td>Fa</td>
<td>4, Oct. 31, Calgary - HWP</td>
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<tr>
<td>Sa</td>
<td>1, Nov. 5, Penhold - RIP</td>
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1976.

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<tbody>
<tr>
<td>April 25</td>
<td>Yamnuska - MIM (Wiseley 1979a)</td>
<td></td>
</tr>
<tr>
<td>Fa</td>
<td>3, Sept. 12, Carseiland - HWP</td>
<td></td>
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<tr>
<td>Fa</td>
<td>12, Oct. 24, Banff - Holroyd &amp; Van Tingham (1983)</td>
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<tr>
<td>Fa</td>
<td>2, Dec. 19, Banff - Christmas Bird Count</td>
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1977.

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<tr>
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<tr>
<td>Feb. 19</td>
<td>Calgary - PES</td>
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<tr>
<td>Mar. 16</td>
<td>Calgary - JIM</td>
<td></td>
</tr>
<tr>
<td>Sa</td>
<td>2 males, April 11, Galahad - KAS</td>
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</tr>
<tr>
<td>Fa</td>
<td>2, Apr. 20, Mildred Lake - WWS</td>
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<tr>
<td>Fa</td>
<td>2, Oct. 4, Calgary - PES</td>
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<tr>
<td>Fa</td>
<td>Oct. 12, Ft. McMurray - Gulley (1979)</td>
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<tr>
<td>Feb. 5</td>
<td>Jasper dump - Holroyd &amp; Van Tingham (1983)</td>
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<tr>
<td>Sa</td>
<td>1 pair, April 26, Grande Prairie - GEC</td>
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<tr>
<td>Fa</td>
<td>1, Oct. 24, Calgary - HWP</td>
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<tr>
<td>Fa</td>
<td>1, Dec. 16, Banff - Christmas Bird Count</td>
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1979.

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<th>Location</th>
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<tbody>
<tr>
<td>Sa</td>
<td>1 pair, April 26, Grande Prairie - GEC</td>
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</tr>
<tr>
<td>Fa</td>
<td>1, Oct. 24, Calgary - HWP</td>
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<tr>
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<td>1, Dec. 16, Banff - Christmas Bird Count</td>
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1980.

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<tbody>
<tr>
<td>Nov. 16</td>
<td>Eagle Lake - ANS</td>
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<tr>
<td>Fa</td>
<td>5, Nov. 16, Eagle Lake - ANS</td>
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**Brewer's Blackbird (Euphagus cyanocephalus)**

Brewer's Blackbirds arrived in small numbers in Alberta from April 14 to 26.

Salt & Salt (1976) indicated that this species bred commonly in southern and central Alberta north to about Calling Lake, Gift Lake and the Meikle River north of Peace River. They further stated that Brewer's Blackbirds bred west into the foothills, but were scarce at Waterton Lakes, Banff and Jasper National Parks. Sharp (1973) considered the species to be an uncommon to common summer resident of lower elevations in Waterton Lakes National Park. Holroyd & Van Tighem (1983) called it a common summer resident in Banff and Jasper National Parks. Extralimital nesting records for the decade came from the Ft. MacKay and Ft. McMurray areas, as well as Wood Buffalo National Park. Kondla & Pinel (1971) found Brewer's Blackbirds to be a common host species for the parasitic Brown-headed Cowbird in observations of nests at Calgary and Dinosaur Provincial Park.

In Alberta, this species is mainly associated with exotic and disturbed habitats such as town parks and roadsides. It appears to be scarce and local in native habitats, which include scattered low shrubbery along coulee slopes and creeks in the grasslands.

Large flocks of Brewer's Blackbirds were seen in southern Alberta in August and September. Smaller groups still persisted in October, but only a few laggards remained late into the month or into early November.

Winter records for the decade came from Canmore, Beiseker, Banff and Egg Lake.

1971.  
Fb - 3,000, Aug. 28, Stettler - LML (Houston 1972a)  
- 1,000, Sept. 26, Cochrane - CFNS  
- 500, Oct. 7, Frank Lake - CDB, RDB  
Fc - 1, Oct. 23, Calgary - RIP

1972.  
Ew - 1 male, March 18, Canmore - GEA, WEB  
Sa - 2 males & 1 female, April 21, Conrich - BIL, VGL  
Fc - 1 male, Nov. 24, Canmore - BIL, VGL

Ew - 2 males, March 7-10, Canmore - BIL, VGL, CAR  
- 1 male & 1 female, March 25, Beiseker - CDB, WWS  
Sa - 5 males & 2 females, April 26, Cooking Lake - JIW  
- 3 males, April 26, Frank Lake - BIL, VGL  
Fb - 2,500, Sept. 23, Milo - EWB  
- 1,000, Sept. 30, Tofield - JIW  
Fc - 2, Oct. 21, Tofield - GW, LOG  
- 2, Oct. 21, Frank Lake - GRW

1974.  
Ew - 2 males, Jan. 6, Canmore - BIL, VGL  
Sa - 1 male, April 17, Ellerslie - JOA  
- 3 males, April 24, Springbank - KAM  
Fb - 5,000, Sept. 22-24, Tofield - RIP, JIW  
Fc - 2, Nov. 29, Cheadle - TSS

1975.  
Sa - 1 male, April 17, Aldersyde - GRW  
- 15, April 30, Peace River - RIP  
Eh - 12 territories, summer, Syncrude lease - Sharp & Richardson (1976)

1976.  
Fc - 1, Nov. 4, Olds - RIP  
Sa - 1 pair, April 14, Sherwood Park - RIC  
Sa/Em - April 28, Ft. MacKay - Francis & Lumbis (1979)  
Eh - several, summer, Ft. MacKay - Francis & Lumbis (1979)  
Em - 22, Sept. 15, High Level - DVW  
- 40, Sept. 15, Paddle Prairie - DVW  
Ew - 4, Dec. 19, Banff - Christmas Bird Count

1977.  
Sa - 1, April 16, Lindbrook - DVW, LIW

-177-
- April 22, Ft. McMurray - Gulley (1979)
Eb - 1 female, June 18-26, Ft. MacKay - WWS
Fc - Oct. 12, Ft. McMurray - Gulley (1979)
Ew - 1, Dec. 17, Banff - Christmas Bird Count

1978.  Sa - 1 pair, April 24, Grande Prairie - ELC, GEC
Fb - 1,000+, Sept. 24, Namaka - CFNS
Fc - 20+, Oct. 11, Nanton - HWP, JOR

1979.  Sa - 50, April 14, Priddis - DRD
- 1 male, April 26, Grande Prairie - ELC, GEC

1980.  Sa - 1, April 13, Calgary to Rockyford - CFNS
Eb - nest with 4 eggs, June 2, Wood Buffalo N.P. - TIT (PNRS)
Fc - 1, Oct. 13, Edmonton - PSA
Ew - 1, Dec. 30, Egg Lake - PIS

Common Grackle (Quiscalus quiscula)

The first spring migrants arrived in small numbers in Alberta from April 6 to 25 during the decade.

The Common Grackle breeds throughout Alberta except in the mountains, but it is local and scarce on the prairies and in northern Alberta (Salt & Salt 1976). Sharp (1973) stated that the species had been seen only twice in Waterton Lakes National Park. Holroyd & Van Tighem (1983) had no summer records of this species for Banff and Jasper National Parks. Salt (1976) had only one record for Kananaskis Provincial Park.

In the grassland regions of the province, the Common Grackle is primarily restricted to towns, cities, and summer resorts near lakes where spruce trees have been planted. Further north, it is also known to nest in marshy wetlands. Francis & Lumbis (1979) found this species to breed throughout their Ft. MacKay study area, being most common in open wet habitats. The highest density of nesting territories that they recorded was 39 territories/100 hectares in a sedge (Carex spp.) fen plot.

In the fall, the last Common Grackles usually left Alberta sometime in the first three weeks of October.

The winter records for Calgary and Ardrossan listed below were the first for Alberta.

1971.  Sa - 1, April 25, Strathmore - TSS
1972.  Sa - 1, April 25, Lethbridge - LIH
- 3, April 26, Strathmore - TSS
Eb - 1 pair, June 22, Waterton Lakes N.P. - Sharp (1973)
Fc - 1, Sept. 25, Calgary - HWP
1973.  Sa - 5 pairs, April 12, Sherwood Park - DKP, NEP
Eb - 54, Sept. 25, Calgary - CAR
Fc - Ew - 1, Oct. 25-Dec. 1, Calgary - HWP, CAR
1974.  Sa - 1, April 16, Rockyford - LIM, DVW
- 4, April 20, Cooking Lake - LOG
Em - 1, autumn, Banff - Holroyd & Van Tighem (1983)
Fc - 1, Nov. 16, Calgary - HWP, LIP
1975.  Sa - 2, April 24, Calgary - CAR
- 8, April 27, Sherwood Park - JIW
- May 2, Syncrude lease - Sharp & Richardson (1976)
Eb - 20+ including a partial albino with almost a solid white head,
Brown-headed Cowbird (*Molothrus ater*)

The first spring migrants arrived in southern Alberta in late April or early May, with dates of first arrivals for the decade ranging from April 20 to May 13. Within a week of the first birds, large numbers could usually be observed on spring migration. In the mountains and in northern Alberta, the first spring birds were seen in late April or early May, with peak numbers observed in mid May (Holroyd & Van Tighem 1983; Francis & Lumbis 1979).

Brown-headed Cowbirds breed throughout Alberta. In Banff and Jasper National Parks, they are far more common in the lower and middle Bow River, lower Cascade River and lower Athabasca River valleys than elsewhere (Holroyd & Van Tighem 1983). It is the most common blackbird species in these national parks in summer. Wiseley (1979a) found it to be a common summer resident in Kananaskis Country and further notes some host species for this parasitic species in the region including Hermit Thrush, Solitary Vireo, Warbling Vireo, Tennessee Warbler, Yellow-rumped Warbler, Yellow Warbler, Red-winged Blackbird, Dark-eyed Junco, Vesper Sparrow, White-crowned Sparrow and Chipping Sparrow. Kondla & Pinel (1971) record some interesting instances of cowbird parasitism in southern Alberta.

The few autumn records of this species in Alberta indicated that most Brown-headed Cowbirds had left the province by the end of August or early September. Maximum numbers seemed to occur in early August. There were unusually late fall records in 1976 and 1978.

1971.  
Sa - 1 male, May 2, Calgary - RIP  
1972.  
Sa - 1 male, May 9, Calgary - ANM  
B - 65-70, June 2, Longview - HAB, VGL  
Sa - 1 male, May 5, Conrich - RUB  
- 5 males, May 5, Beaverhill Lake - JIW  
Pc - 4, Oct. 3, Tofield - LOG  
1974.  
Sa - 12, April 24, Tofield - GWG, LOG  
- 5, May 4, Rockyford - LIM, DVW  
B - 60, May 31, Banff - DRD, SAD
Northern Oriole (*Icterus galbula*)

The Baltimore Oriole and Bullock's Oriole, formerly classified as distinct species, are now considered to be conspecific, and the species is named Northern Oriole. The ranges of the two subspecies overlap in southern Alberta, principally in the Milk River valley. Scattered individuals of the Bullock's race were seen north to the Red Deer River valley. There was a highly unusual extralimital migration record of the "Bullock's" race for Jasper National Park in 1979.

In the spring, Northern Orioles usually arrive in mid May. In 1977 and 1980, they arrived considerably earlier. There were a number of extralimital spring migration records for this species from western and northern Alberta.

The Northern Oriole breeds in southern and central Alberta north to the Peace River district, Lesser Slave Lake and Cold Lake and west to Waterton Lakes National Park, Bragg Creek, Rocky Mountain House and Edson (Salt & Salt 1976).

Northern Orioles are early fall migrants. They are common in mid August, but by the end of the month only a few birds are left in the province. The last fall records for the decade ranged from August 21 to September 8.

1971.  
\[ Sa \] - 1, May 18, Calgary - WIA  

1972.  
\[ Sa \] - 1 male, May 17, Calgary - HAB  
\[ Eb \] - 1, June 21, Bow Valley P.P. - WWS  
\[ Fc \] - 2, Aug. 28, Calgary - RUJ  

\[ Sa \] - 1 male, May 16, Calgary - HAV  
\[ Eb \] - 1 adult male Bullock's banded, June 22, Jenner ferry - ETJ  
\[ Fc \] - 1 male, Aug. 27, Calgary - HWP, CAR  

1974.  
\[ Sa \] - 1, May 18, Tofield - JOA, JIW  

1975.  
\[ Sa \] - 2, May 9, Calgary - BIL  
\[ Sb \] - 250, May 11, Priddis - ANS  
\[ Fc \] - Sept. 18, Syncrude lease - Sharp & Richardson (1976)  
\[ Fc \] - Sept. 9, Ft. McMurray - Gulley (1979)  
\[ Fc \] - Sept. 13, Banff N.P. - Holroyd & Gartshore (1978)  
\[ Sb \] - 9, May 10, Jasper N.P. - Holroyd & Karasiuk (1977)  

1976.  
\[ Sa \] - April 20, Ft. MacKay - Francis & Lumbis (1979)  
\[ Sa \] - 1 male, May 7, Calgary - HWP  
\[ Fc \] - 1, May 10, Jasper N.P. - Holroyd & Gartshore (1979)  
\[ Sa \] - May 2, Banff N.P. - Holroyd & Gartshore (1978)  
\[ Fc \] - 1, Nov. 8, Jasper dump - Holroyd & Van Tighem (1983)  

1977.  
\[ Sa \] - May 2, Banff N.P. - Holroyd & Gartshore (1978)  
\[ Sb \] - 300, May 9, Banff - Holroyd & Van Tighem (1983)  
\[ Fb \] - 175, Aug. 3, Banff - Holroyd & Van Tighem (1983)  

1978.  
\[ Sa \] - 1, May 6, Calgary - HWP, JOR  

1979.  
\[ Sa \] - 4 males & 1 female, May 13, Wembley - ELC, GEC  

1980.  
\[ Sa \] - 2, May 4, Shepard - ANS

were widely separated. The Rosy Finch (Leucosticte arctoa) breeds at high altitudes in the Rocky Mountains, where it is somewhat local in distribution. Holroyd & Van Tingham (1983) consider this species ubiquitous in summer in the alpine areas of Banff and Jasper National Parks. In Kananaskis Provincial Park, Salt (1976) found the Rosy Finch at widely separated alpine sites during the breeding season, where most records were of single birds.

Fall migration lasts from August until early November, peaking in late September and October. With the advent of snow in the high country, Rosy Finches can be observed at lower elevations in the mountains and foothills. In extreme southern Alberta, flocks wander further eastward along the Milk

- 1 male, May 19, Calgary - HWP
- 1 male, May 19, Medicine Hat - HES
Em - 1 male, May 26, Norman Lake - HWP
- 1, June 2, Banff - Holroyd & Van Tingham (1983)
B - large numbers in Milk River canyon, equally divided between Baltimore and Bullock's forms; also numerous hybrids - W. Smith (1975)

Fc - 1 male, Aug. 30, Calgary - HWP
1975.
Sa - 1, May 8, Edmonton - DEB
- 2, May 9, Sylvan Lake - HUS
- 1 male, May 13, Calgary - HWP
Fc - 1 male, Sept. 8, Calgary - HWP
1976.
Sa - 1 male, May 12, Olds - BIL
Em - 1, May 25, McClelland Lake - Francis & Lumbis (1979)
- 1, May 26, Sandy McNabb campground - MRL (Wiseley 1979a)
- 1 male, May 29, Gregoire Lake - Gregg et al. (1976)
- 1, May 30, LaFont Island - Francis & Lumbis (1979)
B - summer, Writing-on-Stone P.P. - Wershler (1980). Both Baltimore and hybrids present, but no Bullock's observed.

1977.
Sa - 1 male, May 1, Edmonton - DVP
- 1, May 2, Calgary - Butot (1977c)
- 1 male, May 3, Saskatoon Lake - MCL
Fc - 2 males, Aug. 21, Calgary - ANS
1978.
Sa - 1 male, May 16, Edmonton - PSA
- 1 male, May 18, Calgary - HWP
Fc - 1 female, Aug. 28, Calgary - DRD
1979.
Sa - 1, May 18, Calgary - ELH
Em - 1 male Bullock's, May 27, lower Miette River, Jasper N.P. - RAR (Holroyd & Van Tingham 1983)
Fc - 1, Sept. 1, Bottrel - SFJ
1980.
Sa - 1, April 29, Strathmore - TSS
Em - 1 male Baltimore, Jacques Creek, Jasper N.P. - Holroyd & Van Tingham (1983)

FAMILY: FRINGILLIDAE

Rosy Finch (Leucosticte arctoa)

Spring migration into the foothills and mountains occurs from mid March to early May. Peak numbers are usually experienced in April, with some flocks of 1,000 birds having been recorded during the decade. There was an extralimital spring migration record for Stettler in 1972.

The Rosy Finch breeds at high altitudes in the Rocky Mountains, where it is somewhat local in distribution. Holroyd & Van Tingham (1983) consider this species ubiquitous in summer in the alpine areas of Banff and Jasper National Parks. In Kananaskis Provincial Park, Salt (1976) found the Rosy Finch at widely separated alpine sites during the breeding season, where most records were of single birds.

Fall migration lasts from August until early November, peaking in late September and October. With the advent of snow in the high country, Rosy Finches can be observed at lower elevations in the mountains and foothills. In extreme southern Alberta, flocks wander further eastward along the Milk
River drainage. It appears that most Rosy Finches leave the province during the winter, but some overwinter in the chinook belt of southern Alberta.

Nordstrom and Butler (1976) record roosting by this species in American Dipper and Cliff Swallow nests during fall and winter. More attention should be paid to subspecies identification by birdwatchers. The coastal form, Hepburn's, has been observed in Alberta and is listed as a scarce winter visitor by Salt & Salt (1976). The 1980 records of this race indicate that it could possibly be a spring migrant through southwestern Alberta in some years.

1971.  
Sa - 21, March 30, Barrier Lake - TSS  
Fc - 75, Oct. 22, Hinton - HAV

1972.  
Sa/Sb - 1,000, April 2, Morley - MAC  
Em - 1, April 28 & 29, Stettler - LML (Houston 1972c)  
Fc - a few flocks, early November, ranch near Waterton Lakes N.P. - Sharp (1973)

Sa - 30, March 26, Morley - TSS  
Sb - 300+, April 8, Cochrane - DBG, MKO  
Fc - 6, Nov. 28, 9.6 km south of Lethbridge - HES

1974.  
Fc - 50-100, Nov. 11, Banff - PEA, SAD, RRM, JOP, STP

W - 1 male Hepburn's, Dec./74-March 1/75, Pigeon Lake - RAS

1975.  
Fc - 1, Nov. 7, Water Valley - Johnston (1976b)  
- 30+, Nov. 12, Pinhorn Grazing Reserve - HWP  
- 1 Hepburn's, Nov. 15-21, Edmonton - RAH (Edmonton Journal: Nov. 22/75)

W - 1, Dec. 27 (+/- 1 week), Banff - Lang (1976)

W - 40, Jan. 24, Cochrane - KAM  

1976.  
Sa - 50-60, March 28, Cochrane - BOF, GAF  
Sb - 500, April 3, Black Diamond - FOD, ELH, JIM

1977.  
W - 17, Jan. 6, Banff - Holroyd & Van Tighem (1983)  
Sa - 20, March 21, Linnet Lake, Waterton Lakes N.P. - KEB  
- April 2, Banff N.P. - Holroyd & Gartshore (1978)  
Sb - 1,000, April 17, Vermilion Lakes, Banff N.P. - Holroyd & Van Tighem (1983)  
B - 2 (adult feeding fledged young), July 16, Plateau Mt. - HWP  
F - 1 Hepburn's, Oct. 26, Pinhorn Grazing Reserve - CAW  
Fc - 1, Nov. 6, Indus - JOR  
- 2, Nov. 12, Banff - JOD, JMP

1978.  
W - 15, Jan. 17, Cochrane - KAM  
Em/Sa - 4, March 24, Calgary - WIH  
Sa - 40, March 24, Ghost Reservoir - DUC  
Sb - 330, April 8, Morley - JMP  

1979.  

W - Dec. 26 (+/- 1 week), Lethbridge - Young (1980)

1980.  
Sa - 200, March 23, Cochrane - PES  
S - 75 Hepburn's, April 5, Cardston - Gollop (1980a)  
Sc - 2 Hepburn's, April 21, Bottrel - SFJ (Gollop 1980a)  
W - 2 reports from different parts of Edmonton, December - Edmonton Journal of Dec. 20/80
Pine Grosbeak (Pinicola enucleator)

This species breeds north of Alberta, and also through British Columbia extending eastward into the Rocky Mountains of Alberta. Salt & Wilk (1966) show a breeding range in the Rockies encompassing Banff and Jasper National Parks. Salt & Salt (1976) illustrate a larger range extending southward through the Rockies to the American border. In the mountains of Alberta, this species appears to prefer mature subalpine coniferous woods. Extralimital summer records away from the mountains include observations from the Caribou Mountains, Swan Hills, and Little Smoky.

Pine Grosbeaks are most commonly observed in Alberta as fall and winter visitors, with most records occurring from October to December inclusive. Their abundance seems to vary considerably from year to year. The first fall birds generally arrive in October, with dates for the decade varying from October 8 to November 18. The highest number of sightings from southern Alberta during the decade was in the fall of 1977.

The last spring Pine Grosbeaks in southeastern Alberta were usually seen in late March, but a few stragglers were recorded in some years into early May.

1971.  
Eb - 6 males & 6 females, June 13, Millarville - CFNS  
Wa - Oct. 8, Edmonton - Houston (1972b)  
- 2, Oct. 10, Calgary - RIP  

1972.  
Wh - 25, Jan. 8, Hesketh - HWP, LIP, CAW  
Wc - 1 female, April 18, Calgary - CAW  
Eb - 1 female, May 19, Cameron Lake, Waterton Lakes N.P. - Sharp (1973)  
Wa - 2, Oct. 11, Calgary - BIL, VGL  
Wh - 40, Nov. 5, Edmonton - MAM  
- 40, Dec. 10, Calgary - HWP  

Wc - 1 immature male, March 19, Calgary - SCO  
Eb - 1 female, June 6, between Eva and Margaret Lakes - Höhn & Burns (1975)  
Wa - 1, Oct. 14, Glenevis - GEP  
- 5, Oct. 21, Calgary - CFNS  
- 1 male, Oct. 21, Seebe - VGL  

1974.  
Wh - 50, Jan. 20, Edmonton - DEG, GCG  
- 50, Feb. 26, Calgary - SCO  
Wc - 1 female, May 11, Calgary - BIL  
Eb - 2 males, July 20, Goose Mt. (Swan Hills) - DEG, GCG  
Wa - 3, Nov. 4, Edmonton - BEB  
- 1 male & 1 female, Nov. 10, Seebe - MGO, TOO  

1975.  
Wc - 1 female, March 11, Calgary - WIA  
- 5, March 22, Mearns - JHA  
Wa - 9, Oct. 25, Cynthia - RIC  
- 6 females, Oct. 29, Calgary - HAB  

1976.  
Wc - 2, March 22, Edmonton - LIN  
- March 27, Ft. MacKay - Francis & Lumbis (1979)  
E - 1 pair, June 7, Cameron Lake, Waterton Lakes N.P. - JHT  
Wa - 2, Sept. 28, Ft. Chipewyan - RAE  
- 5, Nov. 6, Bottrel - JOD, JMP  
- 1 male & 1 female, Nov. 6, Calgary - DRD  

1977.  
Wc - 1, April 2, Bottrel - JMP  
Wc/Eb - 1 male, May 22, Little Smoky - ETE, EVC, JLC, JDJ  
Wa - 1 female, Oct. 11, Calgary - WIA  
Wh - 35+, Oct. 31, near Willow Creek P.P. - HWP, JOR
Purple Finch (*Carpodacus purpureus*)

Spring migrants arrive in Alberta from the east. The first spring birds generally arrive in central Alberta in April, with dates for the decade ranging from April 8 to May 12. Purple Finches are very rare extralimital spring migrants in the grassland ecoregion of southern Alberta. During the decade, they were recorded only at Calgary in May of 1978 and 1979. However, in the mountains of southern Alberta, this species was a fairly common spring migrant in late April and May (Holroyd & Van Tighem 1983). Francis & Lumbis (1979) reported a spring arrival date of April 26 for the Ft. MacKay area.

The Purple Finch breeds locally in northern and central Alberta south in the foothills to Bottrel and the Porcupine Hills, and in the Rocky Mountains to the Banff-Jasper area (Salt & Salt 1976). Preferred breeding habitat in the Ft. MacKay area is mixed forests with an open canopy, or along the interfaces between mixed forests and shorter habitats (Francis & Lumbis 1979). Jack pine (*Pinus banksiana*) was not suitable as breeding habitat.

Holroyd & Van Tighem (1983) regard this species as an uncommon summer resident for Banff and Jasper National Parks. However, only a few birds have been recorded in several valleys in these parks, but there are no nest records to date. Salt (1976) does not list this species as occurring in Kananaskis Provincial Park. More field work is required in the mixed wood foothills of southwestern Alberta from Calgary to Waterton to clarify the status of this species in that region. This is especially true in Waterton Lakes National Park, where the similar Cassin's Finch is found.

There were extralimital summer records from Miquelon Lake Provincial Park, Elk Island National Park, Bow Valley Provincial Park, Buffalo Lake, Calgary, Innisfail and the Highwood River.

Weber (1976) noted that this species was the most voracious predator of sawfly larvae during an outbreak of spruce sawflies in Elk Island National Park in 1972.

It appears that fall migration in Alberta again involves a mainly eastward movement of this species. However, there are substantially more fall than spring records for the grassland ecoregion. Fall migration occurs mainly in August, but a few remain well into October.

The first extralimital winter records for the province occurred during this decade, and were from Edmonton, Erskine, Red Deer and Jasper National Park.

1970.  
- **Ew** - Dec. 27 (+/- 1 week), Edmonton - Turner (1971)

1971.  
- **Sa** - 2 males, May 12, Edmonton - WWS
- **P** - 2, June 27, Bottrel - CRW
- **Fa** - 2, Aug. 13, Elkwater - WWS

1972.  
- **Sa** - 7, April 30, Edmonton - WWS
- **Eb** - 1 pair (female building nest), May 11, Miquelon Lake P.P. - WWS
- birds in 7 areas, May 21–July 28, Elk Island N.P. - Burns et al. (1986)
- 1 male, early June, Bow Valley P.P. - Wiseley (1979a)

**Fa** - 1, Aug. 12, Calgary - CAW, CRW

**Em** - 1 female, Aug. 27, Calgary - WWS

1973. **Sa/Sh** - 8, April 15, Edmonton - DKP, NEP

**Sa** - 3 males & 1 female, April 21, Goose Lake near Whitecourt - AUH, TOH

**Ew** - 1 male, June 30, Cascade Amphitheatre, Banff N.P. - WWS

**Fa** - 1, Aug. 18, Calgary - WWS

**FC** - 2 males, Oct. 4, Edmonton - MAM

1974. **Sa** - 1 male, April 14, St. Albert - PED

**Sh** - 10, April 30, Vegreville - BUB, BYB, ERB, PRB

- 8, May 13 & 14, Edmonton - JIW

**FC** - Oct., lower Red Deer River valley - Wallis (1977)

- 1 male, Oct. 19-Nov. 13, Edmonton - RAH (Heath 1974)

**Ew** - 3, Dec. 15, Edmonton - Christmas Bird Count

1975. **Sa** - 2, April 26, Edmonton - DYG

- April 26, St. Albert - CAT, DVT
- April 26, Pt. McMurray - LYS

- 1 male, April 29, Little Smoky - ETB

**Sh** - 10-12, May 4-10, Vegreville - BUB, BYB, ERB, PRB

**FC** - 1, Oct. 15, Calgary - LOB, BIL

**FC/Ew** - 1-7, Oct. 25-Dec. 22, Erskine - LML (Acorn 1976a)

1976. **Sa** - 1 male, April 8, St. Albert - PED, CAT

- April 26, Pt. Mackay - Francis & Lumbis (1979)

**Eb/Fa** - 6 immatures, Aug. 8, Buffalo Lake - RUB

**F** - 1 female, Sept. 7, Calgary - HWP


- 1 female, Oct. 17, Red Deer - HLH

**Ew** - 1, Dec., Red Deer - Christmas Bird Count (Weseloh 1977b)

1977. **Sa** - 1, April 16, Redwater - RAE

- 1 male, April 20, Wembley - YVM
- April 21, Pt. McMurray - Gulley (1979)

**B** - 1 male, June 4, Bottrel - JMP

- 3, June 29, Banff N.P. - Holroyd & Gartshore (1978)

**Fa** - 5, Aug. 18, Dinosaur P.P. - Wallis (1977)

1978. **Sa** - 1 male, April 14, St. Albert - PED

- 1 male, April 21, Wembley - ELC, GEC

**Sh** - 10, April 29, Banff - Holroyd & Van Tighem (1983)

- 10, May 28, Banff N.P. - Wiseley (1979a)

**Em/Sh** - 6-10, May 6-26, Calgary - CLH


**Em** - 1 male & 1 female, May 5-7, Calgary - CLH

**Eb** - 1 immature male, June 3, Calgary - ANS

- 1, June 20, Highwood River area - Wiseley (1979a)

**Fa** - 2, Aug. 16, Milk River Canyon - CAW

1980. **Eb** - 1 banded bird found dead, July 7, near Innisfail - PMA files.

The bird was banded near St. Paul, Minnesota on April 14, 1980.

**Ew** - 3, Dec., Erskine - Christmas Bird Count (Young 1981)
Cassin's Finch (Carpodacus cassinii)

There are more records of the Cassin's Finch for this decade than the previous one, but still too few to get a good picture of migration periods and breeding range.

It appears that this species arrives in Alberta in late May or early June. Fall migration records are practically non-existent, except for some October records from Jasper National Park in 1976.

The Cassin's Finch is scarce in Alberta, occurring in localized pockets of montane and subalpine coniferous forest habitats. This species breeds in Waterton Lakes National Park, but the exact extent of its breeding range in Alberta is not known. There are a few scattered summer records north to Banff. Outside of Waterton Lakes National Park, the majority of summer records come from the lower Bow River valley near Banff. However, Brunton et al. (1978) state that this species is fairly common in Canmore and has been for some years and that it was common in Kananaskis Provincial Park in the spring and early summer of 1977. This indicates that this finch has been overlooked, or has expanded its range significantly. Wiseley (1979a) reports that the Cassin's Finch may have recently increased in abundance in the Kananaskis area.

1971.  
   Em - 3, May 21, Reesor Lake - WWS, CAW  
   B - 4 males & 1 female, July 4, Cameron Lake, Waterton Lakes N.P. - Sharp (1973)

1972.  
   B - 1 pair, July 8, Goat Lake, Waterton Lakes N.P. - Sharp (1973)  
   - 1 female, July 14, Alderson Lake, Waterton Lakes N.P. - Sharp (1973)

1975.  
   Em - 1 pair, May 16-18, Pyramid Lake, Jasper N.P. - W. Salt (1977)  
   Eb - 1 subadult male, June 24, Elkwater - WWS, CRW

1976.  
   Em/Eb - 1 male, June 9, Porcupine Hills fire tower - CAW  
   Eb - 1 male, July 2, Upper Kananaskis Lake - Salt (1976)  
   - 1 male, July 10, Highwood Pass - Salt (1976)  

1977.  
   Eb - 8 (several adult males) at a feeder, May 31-June 19, Banff - Brunton et al. (1978)  
   - 2 males & 2 females, July 21, Banff - DRG, GRW

1978.  
   Em - 7, May 28, Banff area - Wiseley (1979b)  
   Eb - 1 male & 1 female, July 8, Banff - GRW

House Finch (Carpodacus mexicanus)

The records summarized represent the fourth to eleventh for the province. The first autumn records for Alberta occurred in 1973 and 1978. This decade also produced the first records away from the mountains, with sightings from Calgary and Busby.

   Ev - 1 male, March 10-April 21, Calgary - RUB (Pinel & Butot 1978)  
   - 1 male, Sept. 29-Oct. 14, Calgary - RUB (Pinel & Butot 1978)

1975.  
   Ev - 1 female, April 28-May 8, Calgary - WIA, RUB, RUJ (Pinel & Butot 1978)  
   - 1 female, May 21, Vermilion Lakes N.P. - JIW

1976.  
   Ev - 1 male, June 9, Waterton - CRW

1977.  
   Ev - 4 immature males singing, April 25, Waterton Lakes N.P. - MOB, JDL

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**Red Crossbill (Loxia curvirostra)**

This species nests and feeds in coniferous trees, including pines (*Pinus* spp.). Nesting occurs irregularly from January to June throughout northern Alberta, in the foothills and mountains, and in the Cypress Hills. There was an interesting summer record from the Lousana area in 1977. Most records from the grassland and aspen parkland ecoregions occurred in the fall and winter along river valleys, and most locations have some coniferous woods. There were interesting August and early September records away from conifers in the following grassland areas: Cheadle, Little Fish Lake, Dinosaur Provincial Park and Douglas Creek.

The erratic nature of this species was exemplified by Christmas Bird Count figures for the decade. In Calgary, Red Crossbills were recorded on two counts, while in Edmonton they were observed on five counts. The highest number of birds recorded on a Christmas Bird Count was 51 at Banff in 1976.

**1971.**

- **B** - 1 pair & 2 young, June 3, Elkwater - WWS. Young were fledged but dependant.
- **Fa** - 1, July 20, Calgary - RIP
- **F** - 1, Oct. 31, Beynon - CAW, CRW
- **W** - 1, Oct. 31, Hesketh - CAW, CRW

**1972.**

- **W** - 3, Jan. 8, Hesketh - HWP, LIP, CAW
- **Wc** - 1, March 2, Beynon - CAW, CRW
- **Fa** - 1 female, Sept. 3, Cheadle - TSS
- **Pb** - 30, Sept. 15, Calgary - RIP
- **Wb** - 35, Nov. 5, Edmonton - MAM
- **Wb** - 25, Nov. 25, Calgary - NAM, WGM
- **Wc** - 34, Dec. 19, Edmonton - Christmas Bird Count
- **Wc** - 30, Dec. 30, Calgary - Christmas Bird Count

**1973.**

- **Wb** - 40, Feb. 10, Calgary - GRW
- **Wc** - 2 males, May 4, Calgary - NAM, WGM
- **Fa** - 3, Aug. 13, Calgary - HWP
- **F** - 2, Nov. 11, Lethbridge - HES
- **Fc** - 4, Nov. 20, Calgary - HWP, BIR

**1974.**

- **B** - 1 male, 1 female & 4 immatures, June 28, Bow Valley P.P. - EMG, WGG
- **Fa** - small groups, Aug., Little Fish Lake - Wallis & Wershler (1985)
- **Wc** - 1, March 26, Rockyford - JOC
- **B** - adults with dependent young, May 17, Sheep River Ranger Station - MRL (Wiseley 1979a)
- **Fa** - 2 males, Aug. 3, Calgary - JOD
- **F** - 30+, Sept. 25, Porcupine Hills - KVT
- **Fc** - 1, Oct. 31, Water Valley - JOD, JMP
- **W** - 51, Dec. 19, Banff - Christmas Bird Count

**1977.**

- **Sb** - 40-45, April 13, Cochrane - JMP
- **Eb** - 10, June 24, Red Deer River valley near Lousana - Wallis (1977)
- **Fa** - Aug. 12, Dinosaur P.P. - CRW (Kondla 1978)
- **F** - 2, Aug. 17, Douglas Creek - Wallis (1977)
- **Fc** - 4, Nov. 28, Canmore - EMV

**1978.**


- **Eb** - 1, June 5, Calgary - KAM
White-winged Crossbill (Loxia leucoptera)

This species has a similar breeding range to the Red Crossbill, including the Cypress Hills where it was recently found. The White-winged Crossbill is more numerous in Alberta than the Red Crossbill, and it has been found nesting erratically in Alberta over a longer time period, January to August. Like the Red Crossbill, this species inhabits coniferous forests. However, unlike the Red Crossbill, this species does not frequent pine woods.

During the decade, this species was recorded on seven of the Christmas Bird Counts in Calgary, and on six of the Edmonton Counts. Highest numbers of birds recorded were 118 (Edmonton 1974), 197 (Water Valley 1974), 171 (Calgary 1974), 117 (Banff 1976), and 148 (Banff 1980). Holroyd & Van Tighem (1983) saw little evidence of population fluctuations from year to year in Banff and Jasper National Parks during the period 1975-1981. Most often flocks consisted of fewer than ten birds, with the largest flock recorded being 30 birds. These observations were similar for the Red Crossbill.

1971. B - 2 males & 3 females, June 13, Millarville - CFNS  
Pa - 8, July 21, Calgary - RIP  
Fb - 50+, Aug. 7/8, Highwood Pass - CFNS  
F - 1, Oct. 31, Beynon - CAW, CRW  
Fb - 70+, Nov. 7, Calgary - RIP  
W - 16, Dec. 5, Beynon - HWP, CAW  

1972. Wc - 35+, Jan. 8 & 29, Hesketh - HWP, LIP, CAW  
Wb - 200-250, Jan. 23, Calgary - CFNS  
- 85, Feb. 13, Hesketh - CAW  
Wc - 5, April 6, Hesketh - VGL, RIP, CAW  
Eb - 1 male & 1 female, June 3, Priddis - BIL, VGL  
Pa - 100, July 24, Dry Island Buffalo Jump P.P. - WWS  
Pa - 3, Sept. 1, Calgary - BIL, VGL  

1973. Eb/Fa - 1 male, July 12 & 19, Calgary - WIH  
F - 2, Sept. 13 & 15, Strathmore - TSS  
Wb - 118, Dec. 15, Edmonton - Christmas Bird Count  
- 197, Dec. 15, Water Valley - Christmas Bird Count  
- 171, Dec. 29, Calgary - Christmas Bird Count  

1975. Wc - 100, March 1, Calgary - HAV  
Eb - 2, June 24, Cypress Hills P.P. - CRW  
Pa - 7, Aug. 11, Calgary - HWP  


1977. B - 10, June 11, Brown-Lowery Natural Area - ANS  
Eb - 8, June 17, Calgary - ANS  
B - 1 pair & 4 young, Aug. 7, Sylvan Lake - ADS  

1979. Wc - 7, March 24, Conrich - BSD  
Eb - 1 male, June 15, Calgary - JMP  

1980. Eb - 10, May 31, Graburn Creek, Cypress Hills P.P. - CAW, CRW  
Wb - 148, Dec. 20, Banff - Christmas Bird Count  

Common Redpoll (Carduelis flammea)

The Common Redpoll is a winter visitor to Alberta, arriving in southern Alberta in most years in late October. In southern Alberta in 1971 and 1973, the first fall arrivals were exceptionally early. In some winters, this species appeared to be more abundant than in others, as exemplified in Christmas Bird Count data.

Spring migration occurred in March and April. In some years, the last northbound migrants were seen into May. The latest spring migrants were recorded in 1972.
There were some very interesting nesting records and summer observations during the decade. Birds were observed during the summer in the Caribou Mountains (1975), at Ft. Chipewyan (1976) and Coal Valley (1978). There were confirmed nesting records from Edmonton (Lister 1975; Godfrey 1976).

Some historical nesting records came to light during the decade when McNicholl (1978b) revealed a 1924 record from Red Deer, and Godfrey (1976) discussed a 1942 or 1943 nest near Camrose. Salt & Salt (1976) illustrated a breeding range for the Common Redpoll in extreme northeastern Alberta, but provided no details in support of this previously unknown breeding area.

1971.  
Wa - 2, Sept. 21, Calgary - MAC  
Wb - 150, Oct. 31, Water Valley - HAV  
1972.  
Wb - 150, April 3, Indus - HAV  
Wc - 1 pair, May 13, Waterton Lakes N.P. - Sharp (1973)  
- 2, May 14, Calgary - VGL  
- 1, May 17, Tolman Bridge - WWS  
Wa - 50, Oct. 22, Beaverhill Lake - DID, LOG  
Wb - 150, Dec. 24, Botha - GRG  
Wc - 20, March 31, Calgary - ADB, CDB  
Wa - 1, Sept. 9, Edmonton - FRC  
- 10, Sept. 13, Calgary - WWS  
1974.  
Wb - 200+, Feb. 27, Calgary - HWP, CAR  
Wc - 3, April 7, Calgary - CAO  
- 25, April 14, Ryley - GWG, LOG  
Eb - nest with 3 eggs, April 22, Edmonton - MJE (Lister 1975)  
- 1 pair & nest with 4 young, May 6, Edmonton - MFJ (Lister 1975)  
- 1 pair & nest with 4 young, May 6, Edmonton - MRM (Lister 1975)  
- 1 pair & nest with 4 young, May 12, Devon - WEH (Lister 1975)  
Of the 4 nestings, 3 were successful. The nest in the garden of MRM met disaster. The female disappeared on May 6, and next morning, the young were dead in the nest.  
Wa - 89, Oct. 13, Syncrude Lease - Sharp et al. (1975)  
- 80, Oct. 26, Botha - GRG  
- 20, Oct. 26, Calgary - ANM  
1975.  
Wb - 300, Dec. 8, Caroline - RUB  
Wc - 1, April 30, Strathmore - TSS  
Eb - 2, June 25, unnamed lake near Rock Island Lake - Höhn & Burns (1975)  
- 2 adults & 4 fledglings, May 17, Edmonton - ETJ (Godfrey 1976)  
Wa - Nov. 9, Edmonton - BEB, GEB  
- 40, Nov. 10, Millarville - VAH, MRL  
- 3, Nov. 10, Calgary - RUB  
Wb - 200, Nov. 11, Dogpound - VAH, MRL  
- 250, Dec. 11, Spruce Grove - DVS, DVW  
- 628, Dec. 21, Edmonton - Christmas Bird Count  
- 947, Dec. 28, Calgary - Christmas Bird Count  
1976.  
Wc - 5, April 3, Kavanagh - PJC, RCC  
- 15, April 3, Calgary - RUB  
- 1, April 20, Jasper N.P. - Holroyd & Karasiuk (1977)  
Eb - flocks, Aug. 7, Ft. Chipewyan - RAE  
Wa - Oct. 15, Red Deer - HLH  
1977.  
Wb - 100, Jan. 2 & 3, High River - GRW  
Wc - 33, April 4, Aldersyde - GRW  
Wa - Oct. 21, Ft. McMurray - Gulley (1979)  
- 15, Oct. 24, Grovedale - ELC, GEC  
- 12, Oct. 31, Stavely - HWP, JOR
**Hoary Redpoll** (*Carduelis hornemanni*)

Recorded observations of this species during the decade were scarce. This fact, coupled to problems in separating this species from the much more abundant Common Redpoll, make interpretation of the data difficult.

The vast majority of records occur from December to April, indicating that this species may arrive later in Alberta from the north than the Common Redpoll. Holroyd & Van Tighem (1983) state that this species is an uncommon winter resident in Banff and Jasper National Parks, arriving in December and departing by mid-April.

1971.  
- **Wa** - 1, Nov. 14, Calgary - RIP

1972.  
- **Wc** - 3, April, Elk Island N.P. - Burns et al. (1986)
- **W** - 6, Dec. 19, Edmonton - Christmas Bird Count
- **W** - 7, Dec. 30, Calgary - Christmas Bird Count

- **W** - 4, Jan. 21, Water Valley - CFNS
- **W** - 3, Jan. 27, Bottrel - BIL, VGL
- **Wc** - 2, March 25, Tofield - GWG, LOG, LOW, POW

1974.  
- **Wc** - 1, March 24, Rockyford - LIM, DVW
- **W** - 4, March 28, St. Albert - CAT, DVT

1975.  
- **W** - 1, March 1, Pigeon Lake - RAS
- **Wc** - 3, April, Elk Island N.P. - Burns et al. (1986)
- **Wb** - 11, Dec. 11, Spruce Grove - DVS, DVW
- **W** - 2, Dec. 27, Banff - Christmas Bird Count

1976.  
- **W** - 3, Jan. 19, Galahad - KAS
- **Wc** - 1, April 3, Calgary - RUB
- **W** - 2, Nov. 20, Drayton Valley - WWS
- **Wb** - 16, Dec. 19, Edmonton - Christmas Bird Count

1977.  
- **W** - 4, March 6, Big Prairie - SEA, JMP
- **Wc** - 2, April 3, Edmonton - AAJ, SAJ
- **Wa** - 1, Nov. 12, Calgary - PES
- **Wb** - 30, Nov. 20, Bottrel - JOD, PES
- **W** - 3, Dec. 17, Wabamun Lake - Christmas Bird Count
- **W** - 12, Dec. 18, Edmonton - Christmas Bird Count
- **Wb** - 30, Dec. 24, Longview - GRW
- **W** - 12, Dec. 27, Calgary - Christmas Bird Count

1978.  
- **Wb** - 120, Jan. 2, Water Valley - Christmas Bird Count
Pine Siskin (Carduelis pinus)

In most years during the decade, the first migrants were observed in May and migration peaked in late May. Holroyd & Van Tighem (1983) noted that the Pine Siskin was a common spring migrant in Banff and Jasper National Parks, occurring from mid March to late May, and peaking in mid to late May. Francis & Lumbis (1979) had an arrival time of early May for the Ft. MacKay area.

The Pine Siskin nests in most of Alberta except in the southeastern parklands and prairies where it is restricted to the Cypress Hills. Within this nesting range, the species can be local in distribution. In the Ft. MacKay area, Francis & Lumbis (1979) heard singing territorial males in open, mature, pine-dominated mixed forest. They also recorded numerous wandering flocks of siskins in the summer, most often in pure coniferous or conifer-dominated habitats. In Banff and Jasper National Parks, Holroyd & Van Tighem (1983) found the Pine Siskin to be ubiquitous in summer, and the most common species in these parks. It is interesting that Holroyd & Van Tighem (1983) have only one nest record, and one record of fledged young for this abundant species. Perhaps, most of the summer resident birds in Alberta represent post-breeding dispersals from the south and west as suggested by Sadler & Myres (1976).

Autumn migration again occurs over an extended period from mid August to early November, peaking from late August to mid September. Flock size tends to be greater in the fall than in the spring.

Although small flocks are seen during some winter months, the Pine Siskin is not a regular winter resident in Alberta. During the decade, there were scattered records from a variety of different regions for every winter except 1976/77. The high number of winter reports could be the result of redpolls and crossbills being misidentified as siskins.

1971.  
Sa - 2, May 24, Elkwater - WWS  
Pb - 100, Oct. 3, Calgary - HAV  
Fb - 1, Oct. 31, Hesketh - CAW, CRW  
Ew - 50, Dec. 10, Ya Ha Tinda - CDB, PRM  
- 5, Dec. 19, Edmonton - Christmas Bird Count  
- 15, Dec. 27, Calgary - Christmas Bird Count

1972.  
Ew - 20, Jan. 3, Calgary - HAV  
Sa - 40+, April 1, Canmore - GEA, WEB, BIL, VGL  
Pa - 50+, Aug. 17, Conrich - CFNS  
Pb - 100, Aug. 30, Calgary - CFNS  
Fb - 5, Nov. 6, Calgary - CAR

Ew - 2, Jan. 21, Water Valley - CFNS  
- 10, March 6, Edmonton - BEB  
Sa - 1, June 4, Calgary - HWP  
Eb - 12, July 2, Finnegan - LOG  
Pb - 100, Sept. 9, Calgary - SCO  
Fb - 7, Nov. 10, Bottrel - HWP  
Ew - 7, Dec. 26, Edmonton - DEG, GCG

1974.  
Ew - 1, Jan. 17, Calgary - SCO  
- 3, Feb. 10, Rockyford - JOC  
- 7, Feb. 23, Jasper N.P. - GWG, LOG
- 1, March 10-21, Calgary - JEG
Sa - 2, May 15, Calgary - HWP, CAR
Sh - 60, May 25, Dinosaur P.P. - LIM, DVW
Sc - 20, June 4, Strathmore - TSS
Fa/Fh - 80, Aug. 8, Calgary - STA, WIA
Fc - 3, Oct. 30, Calgary - HWP
Ew - 1, Dec. 15, Edmonton - Christmas Bird Count
- 18, Dec. 29, Calgary - Christmas Bird Count
1975. Sa - 7, April 11, Edmonton - DEG, GCG
Pb - 65+, Oct. 10, Calgary - JOD
Fc/Fw - 1, Dec. 6 & 7, Dogpound - RUB
Ew - 9, Dec. 21, Edmonton - Christmas Bird Count
- 1, Dec. 28, Calgary - Christmas Bird Count
- May 7, Ft. MacKay - Francis & Lumbis (1979)
Fc - 4, Nov. 5, Dry Island Buffalo Jump P.P. - HWP
1977. Sa - 2, April 13, Cochrane - JMP
Fc - 1, Nov. 12, Banff - JMP
Ew - 2, Dec. 18, Edmonton - Christmas Bird Count
- 3, Dec. 27, Calgary - Christmas Bird Count
- 2, June 3, Writing-on-Stone P.P. - HWP
Ew - nest with 3 young, July 14, Howse River, Banff N.P. - Holroyd & Van Tighem (1983)
Fc - 2, Nov. 25, Calgary - ANS
- 2, Dec. 17, Edmonton - Christmas Bird Count
- 1, Dec. 17, Red Deer - Christmas Bird Count
- 1, Dec. 26, Calgary - HDM, JEM
1979. Ew - 10, March 17, Edmonton - JHA
- 14, Dec. 16, Edmonton - Christmas Bird Count
1980. Ew - 5, Jan. 19, Calgary - AJF
- 1, March 26, Calgary - OLD
Fa - 30, Aug. 6, Calgary - ANS
Fc - 2, Nov. 11, Calgary - ANS
Ew - 12, Dec. 26, Red Deer - Christmas Bird Count
- 14, Dec. 27, Lethbridge - Christmas Bird Count

**American Goldfinch (Carduelis tristis)**

The first spring migrants arrived from May 13 to 27 during the decade. They were usually observed as single birds, but within a week or two, numbers peaked.

The American Goldfinch nests in central and southern Alberta from about Athabasca southward, and rarely in the Peace River district. It has been recorded in the mountains only at Waterton Lakes National Park, Carmore and Seebe (Salt & Salt 1976). In southeastern Alberta, it is restricted to tall shrubbery in wooded valleys, coulees and shelterbelts. Extralimital summer records for the decade came from Banff, Ft. Chipewyan, and Ft. McMurray.

Fall migration starts in mid August. The last fall migrants are usually recorded from mid September to mid October, and in some years a few birds will linger into November.

The first winter reports of this species for Alberta came from three different locales in 1979/80. These winter reports were part of a general winter
invasion in the prairie provinces (Harris 1980b). There were more than 1,000 birds recorded from 24 locales in Manitoba, and 43 birds from 2 locations in Saskatchewan.

1971.  
Sa - 1 male, May 23, Cheadle - TSS  
   - 10, May 23, Nanton - DIK  
Fc - 5 males & 3 females, Nov. 14, Calgary - WIA

1972.  
Sa - 3, May 18, Trochu - WWS  
Eb - 1 male, July 31 & Aug. 4, Banff - Holroyd & Van Tighem (1983)  
Fc - 1, Sept. 27, Calgary - HWP, CAW

Sa - 1 male, May 18, Vegreville - ERB  
Fb - 20, Sept. 2, Calgary - SCO  
Fc - 5, Sept. 28, Calgary - SCO

1974.  
Sa - 1 male, May 22, Calgary - BIL  
   - 1 male, May 29, Dunstable - VGL  
Sb - 35, May 29, Rockyford - LIM, DVW  
Fb - 200+, Aug. 29, Sundre - CAR  
Fc - 1, Oct. 5, Edmonton - DEG

1975.  
Sa - 1 female, May 18, Milk River - FAN  
   - 1, May 21, Calgary - BIL  
Fc - 2, Oct. 10, Calgary - JOD

1976.  
Sa - 1, May 13, Olds - BIL  
   - 1 male, July 18, Ft. Chipewyan - JOK  
Fc - 2, Oct. 11, Dalemead - HWP

1977.  
Sa - 1, May 19, Edmonton - TWT  
Em-Eb - 9, June 6-July 18, Ft. McMurray - Gulley (1983)  
Fc - 1 male, Nov. 5, Calgary - EDQ, PES

1978.  
Sa - 1 male, May 27, Bow Valley P.P. - JOR  
   - 3 males & 1 female, May 27, Didsbury - ADS, DOS  
   - 1, Sept. 24, Calgary - JMP

1979.  
Em - 1, June 4, lower Bow River, Banff N.P. - Holroyd & Van Tighem (1983)  
Fc - 5, Sept. 14, Bottrel - SFJ  
Ew - several, Dec. 2, Wabamun Lake - CHH (Harris 1980b)  
   - 6, Dec. 16, Edmonton - Christmas Bird Count  
   - 10, Dec. 26 (+/- 1 week), Lethbridge - Young (1980)

1980.  
Ew - small flock, Jan. 5, Edmonton - DVB (Edmonton Journal: Jan. 12/80)  
Sa - 2 males, May 27, Calgary - DAE, HWP, JOR  
   - 1, May 27, Cheadle - TSS  
Fc - 1, Sept. 16, Calgary - OLD

**Evening Grosbeak (Coccothraustes vespertinus)**

The Evening Grosbeak is a winter visitor in much of central and southern Alberta. The first fall birds usually appear in southern Alberta in late September or early October. The number of birds that overwinter varies considerably, indicating that in some years most Evening Grosbeaks leave the province.
Spring migration occurs from mid March to mid May. Evening Grosbeaks are not as numerous during spring migration as compared to the fall.

The Evening Grosbeak probably breeds in low numbers locally throughout northern Alberta and in the Rocky Mountains (Salt & Salt 1976). Few nests have been found to date, with the majority coming from the Peace River country. During the decade, there were extralimital summer records from Calgary and Dry Island Buffalo Jump Provincial Park. During the breeding season, this species is most often recorded in mature mixed wood habitats.

Salt & Salt (1976) noted that the only evidence of nesting for Alberta was at Dunvegan where newly fledged young were observed on July 26, 1903. Bent (1968) acknowledges this record, and reports another nest that Stansell (1909) had located 48 km northwest of Edmonton in June of 1908, which contained a dead fully fledged young male. The nest was 12 meters up in a white birch (*Betula papyrifera*) tree.

<table>
<thead>
<tr>
<th>Year</th>
<th>Location</th>
<th>Date</th>
<th>Number</th>
<th>Notes</th>
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<tbody>
<tr>
<td>1971.</td>
<td><strong>Wc</strong> - 3, May 26, Elkwater - WWS, CAW&lt;br&gt;<strong>Wa</strong> - 4 males &amp; 1 female, Oct. 7, Calgary - WWS&lt;br&gt;- Oct. 8, Stettler - Houston (1972b)&lt;br&gt;- 1 male &amp; 1 female, Oct. 9, Sylvan Lake - MAC&lt;br&gt;<strong>W</strong> - 2, Nov. 9, Cavendish - WGM</td>
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<td>1972.</td>
<td><strong>Wc</strong> - 1 female, May 23, Calgary - HAB, VGL&lt;br&gt;<strong>Eb</strong> - 1, July 13, Dry Island Buffalo Jump P.P. - WWS&lt;br&gt;<strong>Wa</strong> - 2 males &amp; 5 females, Oct. 3, Calgary - HAB&lt;br&gt;<strong>Wb</strong> - 100, Dec. 27, Calgary - SCO&lt;br&gt;<strong>Wb</strong> - 150, March 10, Calgary - SCO</td>
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<td>1973.</td>
<td><strong>Wc</strong> - 1 banded, March, Edmonton - McNicholl (1978a). This bird was recovered at Pinawa, Manitoba in June 1973.&lt;br&gt;<strong>Wc</strong> - 2 males &amp; 1 female, May 24, Calgary - HAB&lt;br&gt;<strong>Eb</strong> - 2 males, July 25, Calgary - HAB&lt;br&gt;<strong>Wa</strong> - 1, Sept. 12, Edmonton - MOE&lt;br&gt;- 2, Sept. 27, Calgary - WIA&lt;br&gt;<strong>W</strong> - 3, March 30, Bowden - LIM, DVW&lt;br&gt;<strong>Wa</strong> - 1 completely yellow, April 5-7, St. Albert - PED&lt;br&gt;<strong>Wb</strong> - 2 females, Oct. 30, Calgary - BOC, HWP</td>
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<tr>
<td>1974.</td>
<td><strong>Wc</strong> - 1 recovered, March, Edmonton - McNicholl (1978a). This bird was banded at Moscow, Idaho in April 1973.&lt;br&gt;<strong>W</strong> - 1 banded, March, Edmonton - McNicholl (1978a). This bird was recovered at Peace River in Aug. 1976.&lt;br&gt;<strong>W</strong> - 1 banded, April, Edmonton - McNicholl (1978a). This bird was recovered at Bismarck, North Dakota on June 10, 1976.&lt;br&gt;<strong>Wb</strong> - 43+, April 28, Calgary - DRD&lt;br&gt;<strong>Wc</strong> - 12, June 3, Elkwater - CRW&lt;br&gt;<strong>Wa</strong> - 1, Oct. 5, Calgary - LOB, BIL&lt;br&gt;<strong>Wb</strong> - 702, Dec. 21, Edmonton - Christmas Bird Count&lt;br&gt;- 501, Dec. 28, Calgary - Christmas Bird Count&lt;br&gt;<strong>W</strong> - 3, March 30, Bowden - LIM, DVW&lt;br&gt;<strong>Wa</strong> - 1 completely yellow, April 5-7, St. Albert - PED</td>
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<tr>
<td>1976.</td>
<td><strong>Wb</strong> - 100, April 8, St. Albert - PED</td>
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<td>1977.</td>
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<td>1978.</td>
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</table>
Wc - 1 male & 4 females, April 29, Calgary - DRD
E - 1, May 31, Bob Creek - CAW
   - 2, June 17, Camp Creek - CAW
   - 1 pair & 2 juveniles, July 18, Wembley - LEW
Wg - 30, Oct. 9, Calgary - ANS

1979. Wc - 2, June 1, Calgary - JMP
   E - 2 pairs feeding young barely able to fly, July 11, Wembley - YVM
   - 1 pair & 5 young, Aug. 2-17, Grande Prairie - YVM

1980. Wh - 976, Dec. 21, Edmonton - Christmas Bird Count

**FAMILY: PASSERIDAE**

**House Sparrow (Passer domesticus)**

The House Sparrow is a resident throughout Alberta wherever there is human settlement. The range as depicted by Salt & Salt (1976) is misleading as there are vast areas in the mountains and northern forests where there are no House Sparrows. Sharp (1973) noted that, in Waterton Lakes National Park, this species was common, seen from March to November, and restricted exclusively to the townsite. Holroyd & Van Tighem (1983) called this species a permanent resident of Banff and Jasper National Parks, restricted almost exclusively to the vicinity of Banff and Jasper townsites and the Lake Louise service centre. Wiseley (1979a) noted the House Sparrow as absent to rare in Kananaskis Provincial Park and along the Sheep River in Kananaskis Country. Francis & Lumbis (1979) reported this species as a year round resident in Ft. McMurray and Ft. Chipewyan.


1972. W - 75 including 1 female with white outer tail feathers, Nov. 15, Calgary - HWP, CAR
   - 3 sparrow nests within 3 meters of an active Swainson’s Hawk nest, Aug. 5, Conrich - McGillivray (1978)
LIST OF CONTRIBUTORS

Three-letter designations have been chosen for each observer. The list of observers is alphabetized initially by the first letter of the surname, then by the first letter of the given name, and finally, if required, by the middle letter of the designation.

A
AUA - Audrey Anderson
BRA - Bruce Anderson
CDA - C. Davison Ankney
DEA - Des Allen
EDA - Ed Andrusiak
ELA - Elizabeth Allen
GEA - Gerry Ansell
HSA - Helge S. Abrahamson
JAA - Jason Attwell
JBA - John Acorn
JOA - John Alway
KAA - Karl Anderson
MIA - Michael Anderson
PEA - Peter Allen
PMA - Prov. Museum of Alberta
PSA - Peter Assmann
SEA - Stuart Alexander
SHA - Shirley Arner
STA - Stanley Amos
WIA - Winnie Amos

A
IRB - I.R. Burgess
JAB - Jean Brignall
JHB - John Baker
JOB - John Back
JWB - James W. Back
KAB - Kay Ball
KEB - Keith Brady
LOB - Lois Bleakley
LRB - Loretta Butot
LUB - Ludo Bogaert
LYB - Lynn Bradley
MAB - Myrtle A. Biggs
MIB - M. Batrum
MOB - Monty Brigham
MRB - M.S. Bradstreet
MSB - M. Butot
PAB - Pat Baker
PEB - Peter Boxall
PHB - Philippe Blain
PRB - Pat Brimacombe
PTB - Peter Bricknell
RCB - Rick Brignall
RDB - R.D. Bird
RIB - Ria Bogaert
ROB - Rod Burns
RUB - Rudi Butot
SWB - Swen Bayer
TOB - Tony Bull
TRB - Trevor Brignall
WEB - Wendy Beirnes

B
AAB - Mr. A. Blades
ACB - Alec Bilesky
ADB - Ann Bird
AMC - Mrs. A. Blades
ANB - Ann Bull
BEB - Betty Bulmer
BND - Brenda Baker
BRB - Bruce Bembridge
BUB - Bruce Brimacombe
BYB - Betty Brimacombe
CDB - C.D. Bird
DAB - Dave Buchwald
DIB - D. Blumhagen
DNB - Dan Brunton
DVB - Dave Boag
EDB - Edith Brown
EGB - Earl Brown
ELB - Elizabeth Bilesky
ERB - Ed Brimacombe
ETB - E.T. Blowers
EWB - Ed Baldwin
GAB - Gail Bembridge
GEB - Gerald Bulmer
GUB - Guadalupe Buchwald
HAB - Hattie Boothman

C
ANC - Anna Cairns
ATC - Arthur R. Carlyle
BOC - Bob Cooper
DGC - Douglas Currie
DUC - Doug Collister
DVC - Dave Cuthiell
EBC - Edmonton Bird Club
EDC - Edith Clark
EIC - Eileen Cooper
ELC - Ellen Craig
ENHC - Edmonton Nat. History Club
EVC - Evangeline Case
EWC - Ed Carol
FAC - Frances Cunningham
FKC - Frank Coggins
FRC - Fred Coffey
GAC - G.A. Chambers
GEC - G.E. Craig
HAC - H. Campbell
JHC - John Clark
JJC - John Corbin
JLC - Jim Case
JOC - John Cammaert
JRC - J.R. Creasey
KIC - Keith Cooper
KSC - Kim St. Clair
LUC - Lu Carbyn
MAC - Marlene Caskey
PJC - P.J. Clayton
RCC - R.C. Clayton
RFC - R.F. Clarke
RIC - R. Cromie
WIC - W.T. Carlyle

D
BAD - Barb Danielson
BOD - Bob Danielson
BSD - B.S. Donegan
CHD - Chris Dunkley
DID - Dick Dekker
DRD - Daphne Denton
FLD - Florence Down
FOD - Floras Dewitt
FRD - Frank D'Obrenan
JOD - Joel Duncan
KAD - Karl Done
KRD - Karl Dow
LOD - Lorne Duncan
LRD - Lorna Dahl
LYD - Lyle Dorey
MHD - Mrs. Henry Dyer
MYD - Mary Donald
OLD - Olga Droppo
PED - Peter Demulder
PRD - Perry D'Obrenan
RBD - Robert Dahl
SAD - Sandy Denton
TAD - Tracy Duncan
TDD - Ted Down

E
ALE - A. Elliot
DAE - Dave Elphinstone
DEE - Dave Baley
ERE - Eric Emery
FRE - Fran Evernden
MJE - Mrs. J. Harold Elliot
MOE - Moira English
RAE - G.R.A. Ebel

F
AJF - Arthur J. Fisher
BOF - Bob Fisher
CAF - Cam Finlay
GAF - Garry Fisher
GEF - George Freeman
GHF - G.H. Finney
JAF - Janice Foster
JEF - J. Faragini
JHF - John Farragher
JIP - Jim Faragher
JOF - Joy Finlay
JUF - J. Farrish
LIF - Lillian Foster
LOF - Lois Fenna
MJF - Mrs. J. Farrish
PIF - P. Finney
PJF - Paul J. Fellers
WAF - Warren Finlay
WIF - Wilbur Foster
WYF - Wayne Fleming

G
ANG - Anna Gautier
BAG - B. Grovet
BRG - Bruce Gordon
CHG - Chuck Gordon
DBG - David B. Gregg
DEG - Deirdre Griffiths
DOG - Don Groft
DRG - D. Gravelle
DTG - D.T. Goodwin
EMG - E.M. Gregg
ERG - Erling Glodes
CCG - Graham Griffiths
GEG - Gean Groft
GRG - Graeme Greenlee
GWG - Gwen Goulden
JEG - Jean Grieg
KDG - Kirk de Graff
KEG - Ken Goble
LOG - Loran Goulden
PAG - Pat Greenlee
RSG - Robert Guy
REG - R. E. Gehlert
WGG - W.J. Gregg
WIG - William Glasgow

H
ALH - Alice Hendry
ANH - Andy Hendry
AUH - Audrey Hoosen
BEH - Betty Haig
CAH - Charles Hewson
CHH - Charles Harper
<table>
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<tr>
<th>CLH - Clay Hunt</th>
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<tr>
<td>DAH - Dave Hale</td>
<td>ARK - Archie Kerfoot</td>
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<tr>
<td>DRH - Doris Hopkins</td>
<td>BIK - Bill Koski</td>
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<td>ELH - Eleanor Hebron</td>
<td>CAK - C. Kullman</td>
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<td>DIK - Diane Keats</td>
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JVL - J. LaValley
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LUL - Louise Lavallee
MAL - Mary Lore
MCL - Marcel Lavallee
MRL - M. Ross Lein
ROL - Rod Lazerte
SIL - Simon Lunn
SYL - Sylvia L'Hirondelle
TOL - T. Lang
VGL - Virginia Lang
VIL - Vic Lewin

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ADM - Andrew Minty
AEM - Alex McDonald
ANM - Anna Mazurek
BAM - B. Maclean
BBM - Bob Myriuk
BCM - B. Mactavish
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BLM - Bill Mathews
CLM - Clayton McGougan
DAM - Daphne Murray
DIM - Diane McIvor
DKM - D. Milliken
DOM - Dorothy Matthews
DVM - David McCorgquodale
EIM - Eddie McMackin
FRM - Fred Marsh
GEM - Georgia Myriuk
GWM - Gwen McBride
HAM - H. Mortimer
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JIM - Jim Minty
JNM - Janet MacKay
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KEM - Ken MacLennan
KIM - Keith McDougall
KNM - Ken Mykulak
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LIM - Linda McKeane
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MTM - M.T. Myres
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PAM - Pat McNicholl
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PTM - Peter Macyk
RAM - R.A. Morton
RB M - Rob Mitchell
RNM - Ron McElhaney
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SUM - Susan Mitchell
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WGM - W.G. McKay
WIM - William Munro
YVM - Yvonne MacAlister

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CHN - Chris Newell
FAN - Fed. of Alberta Naturalists
MAN - Marg Norris
FIN - Phillip Norris
RWN - R. Wayne Nelson
WPN - Wayne Nordstrom

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JEO - Jennifer O'Brien
MGO - Marg Oliver
MIO - Michael O'Shea
MKO - Mark Oliver
RAO - Rob Owens

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DIP - David Porter
DKP - Dik Pyper
DOP - Doug Penhale
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GEP - George Peggy
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PUP - Paul Pearlstone
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RIP - Richard Palindat
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BIR - Bill Robinson
CAR - Carol Robinson
DOR - Don Robinson
EVR - Evelyn Roessler
FBR - F.B. Ramsden
HTR - Hil Reine
JAR - Jean Richards
JOR - John Riddell
MAR - Marg Reine
MIR - Mike Rogers
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LITERATURE REFERENCES

The following references were reviewed to abstract pertinent observations and information. The authors did not use data from all of the references listed below. Nevertheless, all references reviewed are listed. By doing so, the reader can see what literature was consulted, and it illustrates the great volume of literature that was written on Alberta passerine birds during this decade.


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NATURAL HISTORY OCCASIONAL PAPER TITLES