Studies in Oregon Ornithology No. 8

Birds of the Coast Range of Lincoln County, Oregon. Vol. I: Birds of Thornton Creek

Darrel Faxon and Range D. Bayer



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COVER: Looking up at the crown of a Douglas-fir through a mixed-forest canopy along Thornton Creek Road on 9 September 1990. Upper left: red alder. Upper right: bigleaf maple.

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Abstract

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Incidental to his outdoor activities such as farming, fern-picking, and horse logging, Darrel Faxon made 17.4 years of detailed observations at Thornton Creek during 1973-1990. He determined bird presence, not bird abundance, and made about 99,800 records, where a record is one bird species found during one day.

Depending upon the calendar month, Faxon averaged 19-24 observation days/month, 13-34 bird species/day, and 34-66 species/month. He noted an average of 101 species each year.

Faxon found 12 species only during casual observations prior to 1973 and 179 species in 1973-1990. He detected 47 waterbird species, so most birds he noted were terrestrial. 30% of waterbird species and 20% of terrestrial species were recorded in only one year, and just 16% of the waterbird species were seen in 16-18 years. However, Faxon noted the majority (50.4%) of terrestrial species in 16 or more years.

For each species, daily relative frequencies of occurrence for each month and average monthly relative frequencies of occurrence for the 1973-1981 and 1982-1990 periods are given. Further, arrival and departure dates are listed for each species for each year, if appropriate.

Faxon's records indicate that many migratory terrestrial species are often not present in the 10 days following their arrival or prior to their departure. Thus, determining arrival or departure dates may be very dependent upon daily observation effort. For example, if there are inadequate daily observations, then the actual arrival date may be missed, and it may be several days or a week before the species may re-appear. This inconsistency of presence after their "arrival" results in many species not being found on their "average" arrival date.

Although Faxon did not record a spring migration wave, he usually noted a major movement of passerines during August-September. In fall, his records also indicate that some raptors appeared to be migrating through.

In addition to his bird observations, Faxon recorded daily precipitation from 1975-1990, and monthly totals are given.

Keywords: Birds, Coast Range, Lincoln County, Migration, Precipitation, Terrestrial Birds, Waterbirds.

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Bayer's Preface (Faxon chose not to write a Preface)

SCOPE.--I had originally planned to have the "Birds of Thornton Creek" as a chapter in a monograph including all records for the Coast Range of Lincoln County. However, the amount of material has steadily increased, and it is now to the point where I am having a very difficult time working with it. Accordingly, I decided to split the material into three volumes:

> Vol. I: Birds of Thornton Creek, Vol. II: Birds of Other Sites, Vol. III: Site Comparisons and Species Accounts.

BACKGROUND.--Darrel's interest in birds has been markedly influenced by Ira Gabrielson and Stanley G. Jewett's 1940 "Birds of Oregon," and Darrel used bird common names from their book for his 1973-1975 field notes.

I sent the first draft of the "Birds of Thornton Creek" to Darrel in February 1983. Since that time there have been at least five revisions, and I had hoped that each of the 1989 and 1990 revisions would be the last because the calculations and recalculations necessary for each revision were not done in a computer database or spreadsheet, but were done laboriously with a hand calculator. I thank Darrel for his patience in waiting for this publication of his efforts.

DIVISION OF LABOR.--Darrel made the observations, recorded the daily species records, and tallied the number of species found each day. He also wrote the details for unconfirmed species, text indicated by his name, and some of the comments for individual species.

For each species, I compiled Darrel's monthly sheets into yearly summaries, calculated daily and monthly frequencies, and computed averages and statistical tests. I organized this volume, wrote text not noted as being by Darrel, contributed to writing the comments for each species, and took and prepared photographs that illustrate this Volume.

WARTS AND ALL APPROACH.--Authors of too many scientific publications, especially journals, have glossed over methodological problems dealing with bird censuses or bird lists. Although authors are in the best position to critically analyze their own methods for shortcomings in their papers, they rarely do so; probably because if they did their papers might not be published. Accordingly, readers of articles may mistakenly interpret results as characterizing bird distribution or seasonality, when, in fact, they may simply be artifacts of human methods.

In this monograph, shortcomings in Darrel's methodology are not glossed over but are examined in Chapter 3. I am not "picking on" Darrel, since all studies involving censuses and observations may include a substantial number of errors, whether the researchers are willing to admit it or not. I feel that this "warts and all" approach better allows the reader to interpret results and to recognize that it may not be determinable if apparent differences or changes in bird distribution or seasonality are real or may merely be illusions arising from gross or subtle variability in human observational methods and interpretation.

ACKNOWLEDGMENTS.--I am grateful to Oregon State University, Hatfield Marine Science Center (HMSC) for employment that facilitated the completion of this monograph. I also thank Janet Webster and Susan Gilmont of the HMSC Library for library assistance.

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Chap. 1. CONVENTIONS USED IN THIS VOLUME ************* ***** 1-A. Numbering and Labeling of Tables, Figures, Sections, and Subsections-----7 1-B. Other Conventions Used in This Monograph-----7 Explanation of Daily and Average Daily Frequencies-----7 Explanation of Average Monthly Frequency-----7 1-C. 1-D. Expression of Daily Frequencies or Monthly Frequencies as 1-E. Number of Tenths----- 8 ***** 1-A. NUMBERING AND LABELING OF TABLES, FIGURES, case. Reasons for this variability include: 1) a species may have emigrated or immigrated SECTIONS, AND SUBSECTIONS during the month; Tables, Figures, sections, and subsections 2) a species had a home range larger than the are labeled by the Chapter in which they occur and by their numerical order within a Chapter. observation site, so it may have been present in the vicinity but not at the observation Thus, Table 3.5 refers to the fifth Table in site during an observation; Chapter 3 and Figure 5.2 refers to the second figure in Chapter 5. 3) a species varied in detectability during a month, so that the species may have been Sections and subsections are labeled present but was so inconspicuous that it was similarly, except that the second item in their overlooked; label is an uppercase letter referring to a 4) the observer's effort was variable, so that particular section in a Chapter. For example, not all species present were recorded; section 4-D refers to Chapter 4, section D; 5-E-2 5) the observer's effort was sometimes refers to Chapter 5, section E, subsection 2. selective, so that more effort was spent searching for and recording rare species than 1-B. OTHER CONVENTIONS USED IN THIS MONOGRAPH common species. The scientific names of plant and animals are 1-C-3. UTILITY OF DAILY FREQUENCY given in Appendix I. If times are listed, they are given by the 24 hour clock in Pacific Standard Time (e.g., 1300=1 PM PST). Frequencies can be used to detect changes in occurrence or distribution (e.g., Temple and Cary Statistical significance is considered 1987a,b). Frequencies have also been used as achieved if the two-tailed probability (P) is 0.10 or less, which is equivalent to a one-tailed probability of 0.05 or less. indices of abundance to detect changes in bird numbers. In this Volume, Daily Frequencies are important because they can be compared between 1-C. EXPLANATION OF DAILY AND AVERAGE DAILY years to see if there is any change. Daily Frequencies may also be contrasted among a few FREQUENCIES sites in Volume III. 1-C-1. DEFINITION OF DAILY FREQUENCY 1-C-4. AVERAGE DAILY FREQUENCY Frequencies of occurrence have been used to express bird commonness since before Kendeigh (1944). In recent years, frequencies have been used by researchers working with bird lists (e.g., Temple and Cary 1987a,b). In this Volume, Daily Frequencies of occurrence (i.e., the number of days that a species was recorded in a month divided by the Average Daily Frequency for each calendar month (e.g., January) is calculated for the 1973-1990 period by summing the Daily Frequencies for all months (e.g., all January's) with eight or more observation days and dividing by the number species was recorded in a month divided by the of these months (also see section 6-A). total number of observation days that month [section 6-A]) were calculated in number of tenths Average Daily Frequency is useful in giving a rough overall guide to a species' Daily Frequency. (see section 1-E-1), if there were at least eight days of monthly observations. 1-D. EXPLANATION OF AVERAGE MONTHLY FREQUENCY Note that this criterion for calculating a Daily Frequency is arbitrary. If the reader **1-D-1.** INTRODUCTION wishes to have more stringent criteria (e.g., a Average Monthly Frequency is calculated in number of tenths (see section 1-E-1) by dividing minimum of 10 days), the information is given to determine which months to exclude (Table 3.1), but if the reader wishes to be less stringent, the the number of years that a species was recorded in a particular calendar month by the total number of data are not given. years with observations for that calendar month. For example, if a species was observed in the January's of 1974-1977, but not in the January's of 1978-1990, then the species' average Monthly Frequency for January would be 4/17=2 tenths (when 1-C-2. VARIABILITY IN DAILY FREQUENCY One may suppose that Daily Frequencies should rounded to the nearest tenth, see section 1-E-1). In this Volume, average Monthly Frequencies either be all (10 tenths) or none (0 tenths). However, that was often not the

are calculated for two intervals: 1973-1981 and 1982-1990. This was done to see if frequencies differed between the first and last halves of Faxon's observations. In Volume III, Monthly Frequencies will be compared among sites.

1-D-2. PROBLEMS WITH AVERAGE MONTHLY FREQUENCIES

One problem with average Monthly Frequencies is that they can be in error. The most common error is probably that the calculated Monthly Frequency may underestimate the species' true frequency of occurrence because a species was sometimes missed. This error can be reduced by not interpreting small differences in the number of tenths (e.g., three or less) as being a significant difference between months.

Another type of error arises from misidentification, in which a species is reported when it is not present. This could lead to an average Monthly Frequency greater than what it actually is.

1-E. EXPRESSION OF DAILY FREQUENCIES OR MONTHLY FREQUENCIES AS NUMBER OF TENTHS

1-E-1. NUMBER OF TENTHS (1-10)

Most everyone is familiar with percentages (parts per hundred), but percentages may be inappropriate in determining frequencies of occurrence because percentages imply a greater accuracy than there may be.

In this Volume, "perdecages" (parts per ten) are used for frequencies because "perdecage" indicates less accuracy than a percentage. This is because a "perdecage" has one less statistically significant figure. Since "perdecage" is apparently not a word, this concept is referred to as "number of tenths" in this Volume. Since the number of tenths has been rounded-off to the nearest tenth, the result is the familiar 0-10 scale.

1-E-2. .=O TENTHS

Instead of using a zero (0) to represent zero tenths, a period (.) is used. This is done because a "." makes a month when a species was absent stand out visually much better than a "0" because a "0" is not as readily distinguishable from other numbers (1-10).

Examples of increased visual readability of "." compared to "O" for identical MONTHLY FREQ data are:

MONTHL	Y FREQ	5	5	6	2	4			•	2	3	4	5	
MONTHL	Y FREQ Y FREO	8	7 9	5	•	i	:	•	•	3	25	ż	6 9	
MONTHL' MONTHL'														
MONTHL														k
1-F.														

If the reader wants to find out information about a particular bird species or taxon, the reader should look in the Index.

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2-A. INTRODUCTION

by Darrel Faxon

2-A-1. OPENING

I have been birding the Thornton Creek area for about 37 years. That is both good and bad. It is good in the respect that I have developed an in-depth understanding of this particular locality, but it is bad because 37 years ago I was only five years old, and thus much of my earlier data were either incorrect, incomplete, or undocumented.

It is only in the last 18 years that I have done a day by day tally of the birds in this area, so, technically speaking, all the material prior to 1973 must be considered as subjective, rather than objective data. It also must be recognized that even now, my birding skills are far from perfect, and thus there have been some oversights in the data included here. For example, Hammond's Flycatchers were not recorded here at all prior to 1977, although I now know them to be easily the second-most common Empidonax found here (section 6-B-100). The reason for this is simple. Hammond's Flycatchers are a canopy species found in Douglas-fir forests, and thus difficult, if not almost impossible to see, much less study. Add to that the notorious reputation the Empidonax have for being difficult to identify, and you begin to understand the nature of the problem. It simply was not until I learned to distinguish their call from that of the Pacific-slope Flycatcher (section 6-B-102) that I even detected the presence of this common bird. This was a dumb mistake, admittedly, but it serves as an illustration of both my development and of the shortfalls of my research.

A similar situation has occurred in identifying geese overflying Thornton Creek during spring and fall migrations. Many flights have been of high-flying birds that were assumed to be Canada Geese. Recent information that has come to light through conversations with other birders and my observations in October 1990 (section 6-B-8) indicates that many of these geese may be White-fronts.

2-A-2. CONCLUDING REMARKS

When one sits down to write of the birds of Thornton Creek, one shortly realizes that it is not satisfactory to write only about the birds themselves, for they are influenced by a variety of factors that contribute to their existence in the area. It becomes necessary, then, to give some treatment to those factors that are influential in the distribution of the birds of this locality. These factors include the general topography of the area, the weather conditions, the type of vegetation present, and, finally, the interrelationships of the different species of birds themselves. All of these factors greatly influence the ever-changing bird life of the area. If there is one thing that has come from my years of study of the birds of Thornton Creek, it is that this change is a continual process, and it is

2-B-1. STUDY AREA TABULATION

Location: T10S, R9W, Sections 20, 29, & 30 Area Studied: ? Habitat(s): Mix Elevation: 50-800 ft (15-244 m) Distance to Coastline: \geq 10.9 mi (\geq 17.7 km).

The Location lists the Township (T), Range (R), and Sections of the Thornton Creek study area.

The extent of the Area Studied each day was variable and wasn't measured, so it is considered unknown (?).

The Habitats where birds were recorded at Thornton Creek were a mixture of several habitats including creek/riparian, ponds, fields, coniferous forest, and deciduous forest.

coniferous forest, and deciduous forest. The Elevation in feet (ft) and meters (m) above sea level is based on estimations of the elevation of the site from a topographical map. Because the elevation studied at Thornton Creek was not constant, the Elevation is given as an estimated minimum-maximum.

Distance to Coastline is the distance in miles (mi) and kilometers (km) of the site from the coastline. It was estimated as the distance westward from the site to the coastline from a topographic map. Since the Thornton Creek study site was large and not well-defined (Fig. 2.1), only a minimum Distance to Coastline is listed.

2-B-2. OTHER DESCRIPTIONS OF STUDY AREA

All observations were at the approximately 640 acre (259 ha) Faxon Farm (Figs. 2.1-2.9), which is in the Thornton and Haxel Creek Valleys. Note that these creeks are small (e.g., Fig. 2.3), and the valleys are narrower than the Siletz River Valley. Differences in valley width, and, subsequently, in the amount of flat land along the valley floor may account for some of the differences in the bird communities between Thornton Creek and wider river valleys.

The Faxon Farm is about 5.5 mi (8.9 km) northeast of Toledo, Oregon. The Thornton Creek Valley runs north and south (Fig. 2.1) and is part of the Yaquina River drainage system. The Thornton Creek mouth is at Yaquina River Mile 29 and is about 5 mi [8 km) upstream of the the head of tide, upstream of Elk City. The elevation of lower Thornton Creek is about 50-60 ft (15-18 m) above sea level with the ridges near the study area about 500-900 ft (152-274 m) high. About 100 acres (40 ha) of the Faxon Farm are pastures (Figs. 2.5-2.7) with two fields in excess of 20 acres (8 ha); the rest of the pasture land is divided about equally among seven other fields.

Most of the study area is not ridge tops or cleared fields but is brush, 25-40 yr old red alder, and a coniferous forest that is mostly 40-60 yr old. There is more alder forest than coniferous forest. The conifers are mainly Douglas-fir with some western hemlock. The understory to the conifers is primarily sword fern while the understory to the alder is usually salmonberry. The areas that are not covered by conifers or alders or are not cleared are mainly salal and salmonberry, although some slopes are predominately bigleaf maple.

2-B-3. PONDS

The four ponds (A-D in Fig. 2.1) are rather small, each less than 1 acre (0.4 ha). Three of the ponds (A-C) are in the lower portion of the Study Area while one (D) is in the upper portion (Fig. 2.1). All except D were dug by hand. Ponds A-C are all good birding areas, especially Pond C (Fig. 2.4); but Pond D is poor for birding. Pond A was made 30 or more years ago and is

bond A was made 30 or more years ago and is about 6 ft (1.8 m) deep; it is in a canyon with trees on all sides. Pond B was made in about 1969 and is 3 ft or less (<1 m) deep; this Pond has been filling in and is bordered by pasture on three sides and alders on the fourth side. In 1983, Pond B was enlarged to nearly twice its original size and depth. Pond C (Fig. 2.4) was dug in about 1976 or 1977 in a marsh area; it averages about 4.5 ft (1.4 m) deep but is up to 8 ft (2.4 m) deep and is surrounded by pastureland. In the years since Pond C was put in, 12 new bird species showed up at Thornton Creek that were probably directly attributable to this pond. Pond D is in a sedge marsh that in winter can be 3 ft (0.9 m) deep but is dry in summer; in winter, Mallards and Hooded Mergansers can be seen at this pond.

2-B-4. MARSHES

To even begin to give a fair treatment to the birds of Thornton Creek, one must recognize that nearly all of western Oregon's Coast Range may once have been a virgin forest of Douglas-fir, much of it old-growth. The Thornton Creek Valley itself was a part of the great burn of the mid-1800's from which the nearby site of Burnt Woods got its name. The Thornton Creek Valley lies right in the heart of some of the best timber producing area that was burned. Even today, there are still many standing snags, remnants of the vast forest that was once located here.

When one looks at the present day forest located in the Thornton Creek Valley, much of it deciduous, one must realize that much of the bird life present here was, in all likelihood, not present in this particular location prior to the coming of white man and his logging machines. This is not to suggest that the original overall range of present-day species did not include western Oregon, but it does suggest that many of the species which are now here may be treated as peripheral species in this particular locality (e.g., Western Wood-Pewee, Willow Flycatcher, House Wren, Yellow and MacGillivray's warblers, and Chipping Sparrow). That is, they may be species on the edge of their normal habitat range, and thus can be expected to undergo the same cycles of expansion and contraction as those undergone by species on the edge of their normal range.

In the mid-1970's, Publishers Paper, a large timber company, bought up thousands of acres of land in the Oregon Coast Range. Much of this acreage has been slashed, sprayed, and burned and is being managed to support Douglas-fir forests. None of this has occurred within the direct confines of the Thornton Creek Valley, but it has been done on huge tracts of land on all sides of the Valley. These practices may not ultimately be harmful to many of the common species, but it most likely is devastating to many of the peripheral breeders in this area because it reduces their chances for finding suitable deciduous habitat and the remaining habitat is now "islands" rather than large tracts of suitable continuous habitat as it once was. One cannot totally condemn the practices of private enterprise, even though those practices may, for the present, be disastrous for some species. This really is only intended to point out that peripheral species are, after all, peripheral species, and thus more subject to changes in an environment where they are not truly native. ********

2-D. WEATHER OF THORNTON CREEK by Darrel Faxon

The Thornton Creek Valley, being stacked up against the hills, may be much wetter than areas to the west. It annually receives about 20 in (51 cm) more precipitation than Newport and Toledo, and in 1975-1990, the average annual precipitation was 90.47 in (229.79 cm)(Table 2.1). The average monthly precipitation during this period averaged over 10 in (25.4 cm) from November through March (Table 2.1).

Rainfall can sometimes be erratic during the summer. For example, on 7 June 1985, I recorded 5.31 in (13.49 cm); this was the second highest 24 hour total of rain that I ever recorded. However, snow is rare at Thornton Creek (Table 2.1).

The further east one goes, the more one begins to see the influence of the Willamette Valley on climate. Often in summer, the summit of Cline Hill at the east end of the Yaquina watershed and at the divide of the Coast Range is the meeting place of hot Willamette Valley air and cool marine air moving in from the coast. It is often possible to actually feel a difference in temperature within just a few hundred feet of the summit.

2-E. VEGETATION OF THORNTON CREEK REGION by Darrel Faxon

If one began a trip east from the Pacific Ocean at Newport, one would discover first a narrow zone of lodgepole pine along the outer coast and then a coniferous forest comprised mostly of Sitka spruce. Spruce is the dominant tree for the first several miles inland but gradually begins to give way to Douglas-fir as one continues eastward.

By the time the Thornton Creek Valley is reached, spruce has become decidedly uncommon. It is much more common in the Sam's Creek Valley (the next valley to the west), and nearly nonexistent in the Hayes Creek Valley, the next valley to the east (Fig. 2.1). Thus, the Thornton Creek Valley lies just east of the main body of forest that we might_call the spruce belt.

The further east one goes from the coast, the more the underbrush begins to thin out and become like that of the Willamette Valley. The understory of ground cover under the coniferous forests at Thornton Creek is primarily sword fern and under red alder is usually salmonberry, but the understory is more likely to be salal just a couple of valleys to the east, By the time one reaches the top of Cline Hill to the east, the understory is much thinner, and more likely to be bracken fern.

Much of the Thornton Creek area is currently covered with solid stands of red alder 25-40 years old. Most of this alder sprang up following the logging of second-growth Douglas-fir forest in the 1940's and 50's. For a fairly short period of time following the fir forest, a lot of the land was cutover land, consisting of small cleared areas, slash, and brushpiles that was interspersed with bracken fern and trailing blackberry. This change in vegetation and cover has markedly affected the abundance of some species. For example, during a short period about 30-40 years ago, following the fir forest, California Quail (section 6-B-43) were abundant. Now, since the land has come back mainly to trees and the cleared areas have been made into more or less improved pasture, these quail have all but disappeared.

With respect to some other bird distributions specific to certain types of vegetation, Varied Thrushes are known to breed in the spruce belt, but I have few summer records of them here (section 6-B-136). By the same token, Blue Grouse (section 6-B-136). By the same token, Blue Grouse (section 6-B-13) and Western Meadowlarks (section 6-B-181) are more common directly to the east; the Blue Grouse on the higher elevation ridges and the meadowlarks in the open country near Nashville where they have reportedly bred. American Kestrels, too, are found in the open country to the east around Nashville and to the west near some of the larger tideflats that have been converted into meadows, but kestrels are rare stragglers at Thornton Creek (section 6-B-38).

In summary, the Thornton Creek Valley is a somewhat unique ecological habitat for Lincoln County. It is not in the spruce belt as are valleys to the west, but neither is it influenced as heavily by the Willamette Valley as are valleys to the east. This contributes to a bird life which is somewhat different from any of the surrounding areas.

Figure 2.1. Study Area (dotted) at Thornton Creek. A-D=Ponds, House=Faxon's House, 19-21, 28-30, and 31-33 are circled because they are Sections in Township 10S, Range 9W. Note that Section lines do not always form perfect squares.

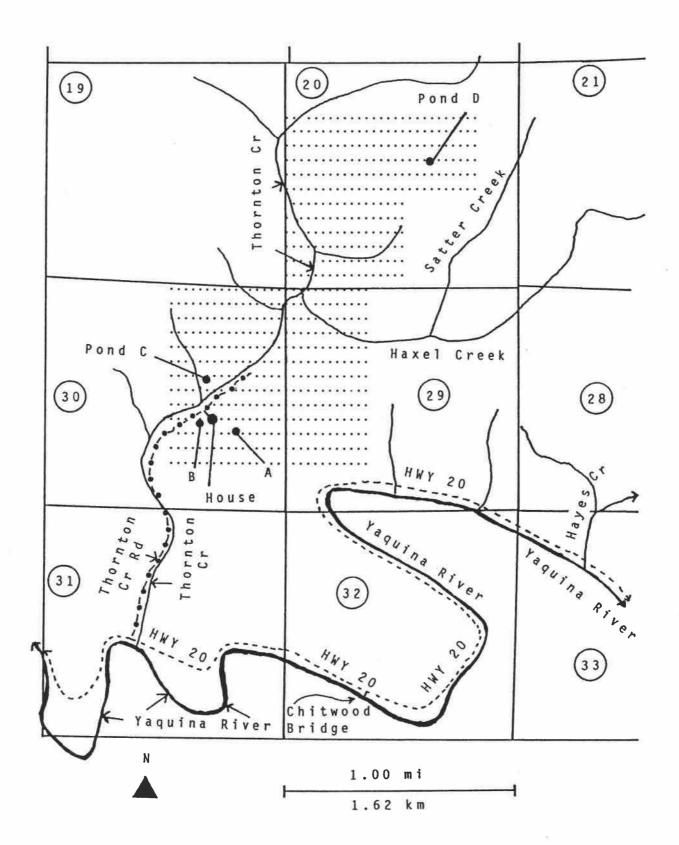




Figure 2.2 (above). View S/SW of the narrow Thornton Creek Valley floor along the gravel Thornton Creek Road. This photograph is just south of Faxon's Study Area. Note the number of trees and shrubs along the Valley floor.

Figure 2.3 (below). Thornton Creek (left of three red alder trees in middle of photo) south of Faxon's Study Area along Thornton Creek Road. There was little streamflow, and the Creek could be stepped across when this picture was taken on 9 September 1990. Note the abundance of vegetation, including red alder, along the stream banks.



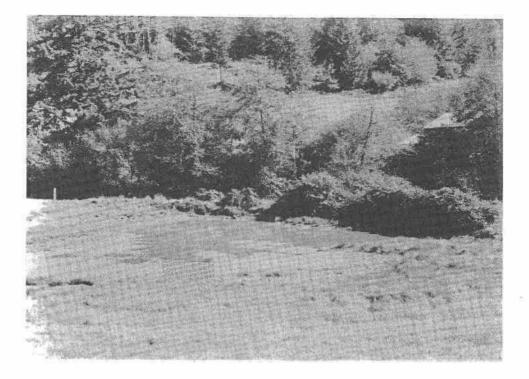
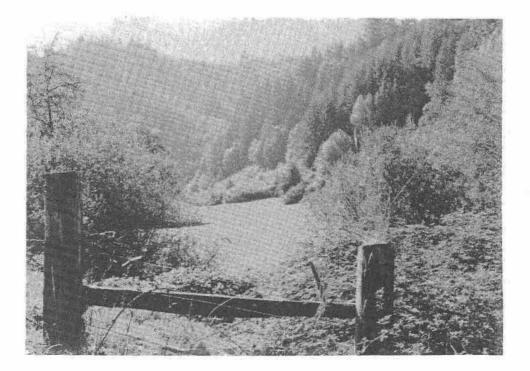


Figure 2.4 (above). View E/SE along a field and over Pond C towards Thornton Creek (which is at the line of trees and shrubs running approximately along the middle of the photo) in Faxon's Study Area. The Pond was partially dried when this photo was taken on 9 September 1990. Note the shiny-white metal roof of a barn at the middle right-hand edge of the photo; the barn is on the other side of Thornton Creek. Also note the abundance of vegetation along the Creek, and the rising hill with forest just beyond Thornton Creek. See Fig. 2.1 for the perspective of this photo.

Figure 2.5 (below). View W/SW over Thornton Creek (which is just beyond the fence and is overgrown with shrubs and trees) from Thornton Creek Road just north of the Faxon's driveway (see Fig. 2.1). This photo, along with Fig. 2.4, illustrates the forests and hills adjacent to the narrow Thornton Creek Valley floor. See Fig. 2.1 for the perspective of this photo.



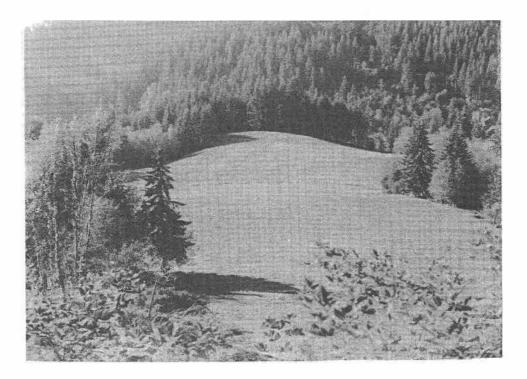


Figure 2.6 (above). Field in northern portion of Faxon's Study Area. Note the surrounding young mixed forest surrounding parts of the field and the Douglas-fir forest in the background.

Figure 2.7 (below). A different view of the same field as in Fig. 2.6. Note the mixed forest at the edge of the field and the Douglas-fir forest on Coast Range hills in the background.





Figure 2.8 (above). View through some of the young Douglas-fir forest at Faxon's Study Area. Note leaves of scattered deciduous trees.

Figure 2.9 (below). View into ravine at Faxon's Study Area. Note the scattered young Douglas-fir and red alder.



rainfall daily near his house (Fig. 2.1) at an elevation of 80-120 ft (24-37 m) above sea level. The rain gauge was 4 ft (1 m) above the ground and about 50 ft (15 m) from the closest trees in an open area. Faxon measured daily precipitation

to the nearest hundredth of an inch. If it snowed, Faxon melted it and measured it as water, not as inches of snow. In 1975-1990, Faxon recorded snow on 30 December 1978, 1-5 and

Table 2.1. Monthly and annual total precipitation
(i.e., rainfall + snow + sleet + hail) in22 January 1982, 4 February 1985 (trace),
26 November 1985, 16 December 1987, 1-3 February
1989, and 13 February 1990 (about 5 in [13 cm] of
snow). Only the 1-5 January 1982 snowstorm snow). Only the 1-5 January 1982 shows torm produced significant amounts of snow, and the precipitation total for those five days was 3.79 in (9.63 cm) of water. A groundcover of more than 2 in (5 cm) of snow was very rare. Total=sum of monthly precipitation measured to the nearest hundredth of inch, AV=average, SD=Standard Doviation MN=minimum and SD=Standard Deviation, MIN=minimum, and

MAX=maximum. S=month with snow.

Year	Jan	Feb	Mar	Apr	May	Jun	ปนไ	Aug	Sep	0ct	Nov	Dec	Total
1975	17.95	12.86	12.10	7.06	3.42	2.28	1.02	3.69	0.01	13.80	16.74	18.12	109.05
1976	16.00	15.43	9.84	5.24	3.31	1.25	1.32	2.21	1.85	2.99	3.45	4.06	66.95
1977	3.66	8.99	13.25	2.32	7.61	1.66	0.26	4.11	7.61	5.43	18.37	20.88	94.15
1978	12.45	7.03	2.61	8.82	6.89	3.53	0.75	3.78	4.86	1.61	8.02	10.195	70.54
1979	6.10	18,70	7.83	6.79	4.99	1.42	1.38	1.11	2.90	10.67	9.13	15.57	86.59
1980	14.46	10.56	8.70	6.96	2.75	2.98	0.90	0.53	2.62	2.35	12.13	20.41	85.35
1981	3.86	9.42	7.16	8.33	6.64	8.74	0.56	0.45	2.94	10.05	10.84	25.54	94.53
1982	19.42S		10.23	9.78	1.25	2.40	1.12	0.83	3.45	7.27	10.23	19.81	102.49
1983	22.41	18.25	17.44	6.44	4.59	5.19	3.47	2.36	0.90	4.04	24.17	16.47	125.73
1984	9.73	13.61	11.73	9.86	10.92	8.25	0.44	0.24	3.64	10.87	24.69	11.11	115.09
1985	1.31		11.39	4.86	3.13	7.04	1.15	1.01	4.94	9.75	13.06S	4.99	71.58
1986	14.69	28.05	9.96	7.68	5.82	1.52	2.00	0.28	7.43	4.24	12.42	5.00	99.09
1987	11.78	9.38	12.78	3.96	3.84	0.77	2.83	0.47	0.47	0.48	6.76	18.485	72.00
1988	16.35	5.20	10.85	5.37	7.39	3.10	1.39	0.28	2.68	1.54	20.88	11.10	86.13
1989	13.44		17.69	3.07	4.84	2.04	1.75	4.26	0.62	3.57	7.36	7.45	74.09
1990	20.85	16.71 S		9.77	4.39	2.84	0.83	1.63	1.03	9.12	14.38	7.50	94.16
AV	12.78	12.99	10.54	6.64	5.11	3.44	1.32	1.70	3.00	6.11	13.29	13.54	90.47
SD	6.37	5.81	3.93	2.37	2.37	2.52	0.85	1.50	2.30	4.11	6.23	6.71	17.19
MIN	1.31	5.20	2.61	2.32	1.25	0.77	0.26	0.24	0.01	0.48	3.45	4.06	66.95
MAX	22.41	28.05	17.69	9.86	10.92	8.74	3.47	4.26	7.61	13.80	24.69	25.54	125.73
w reco	orded.												

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Chap. 3. METHODS AND SHORTCOMINGS 3-A. Methods of Observation----- 18 Shortcomings ----- 18 3-B. 3-C.

3-A. METHODS OF OBSERVATION

3-A-1. INTRODUCTION

Most observations were around the buildings near the House in the SW corner of the Study Area (Fig. 2.1). Observations were made while Faxon worked out of doors and often averaged about 8 hours/day until about 1986 (when injuries and other commitments often resulted in shorter daily observations).

It is important to note that Faxon's observations were made incidentally to his other activities and duties; Faxon did not attempt to do systematic surveys of all birds present in the Study Area.

3-A-2. OPTICAL AIDS USED

Binoculars were always used for observations during spring and fall bird migration and near the house; otherwise, binoculars were not always feasible.

3-A-3. DESCRIPTION OF FAXON'S OUTDOOR ACTIVITIES

Faxon made his observations while engaged in various activities around the Faxon Farm. Many of his activities were outside, where he could notice birds. For example, Faxon wrote about his 1973-1986 activities:

"Every morning from somewhere around 6 to 7:30 AM I milk the cow and do some chores around the barn, or, in the summer, perhaps work in the garden. Following breakfast, I am back outside from shortly after 8 AM until around 12:30 PM. My work is quite varied, but practically all of it is outside, or at least partly so. That is, even if I am working inside the barn, I am only a step or two from being completely outside. Much of the time in the summer I spend logging with horses, so noise from machinery is not a problem, in terms of not being able to hear birds around me."

"Other jobs include moving cattle around, fixing fence, clearing land and so forth. In the winter time I spend a lot of time planting, bud-capping, and clearing brush around Douglas-fir seedlings. Also, usually two or three days a week I pick sword fern to sell. My afternoon schedule is much the same as the morning, causing me to be outside from 1:30-6 PM most days."

Since February 1986, injuries have hampered Faxon's activities, so he has not been able to be outdoors as much as in previous years. Further, beginning in February 1988, he has spent at least one weekday each week away from the Farm doing pastoral work as a minister. Thus, since about February 1986, Faxon has not spent as much time and effort birding here as previously.

Newspaper articles about Faxon's and his father Milt's horse logging (which is unusual in this area), or Faxon's birding are in Mavity (1977), Bragg (1989a,b), and Viall (1989).

3-A-4. OBSERVATION DAYS/MONTH

From April 1973 through December 1990, the average number of observation days per month ranged between 19 and 24 days with only nine months having less than 10 observation days (Table 3.1). The only months with no observations during this period were in July 1983 (when one of Faxon's horses kicked him and sidelined him the whole month) and July and November 1986 (Table 3.1).

The dates when Faxon made no observations or recorded five or less bird species are given in Table 3.2.

3-A-5. FAXON'S WRITTEN BIRD NOTES

During the first few days of the month, Faxon wrote his bird observations on graph paper as he made them. Later in the month, species that were observed or heard each day were checked off on the sheet of graph paper at lunch and/or at the end of the day.

Bayer compiled these records from Faxon's written observations, from Faxon's field note columns in the "Sandpiper" (which is the newsletter of Yaquina Birders and Naturalists) from September 1985 through 1990, and from correspondence with Faxon.

3-A-6. PRE-1973 AND 1991 OBSERVATIONS

The main body of these observations are based on Faxon's April 1973-1990 observations. Prior to April 1973, Faxon made some incidental observations, which are included in this compilation as incidental notes for individual species. Faxon continued his observations in 1991, but only notes of particular interest about individual species are included in this Volume. **3-B.** SHORTCOMINGS

3-B-1. INTRODUCTION

In ornithological undertakings there are usually shortcomings, and "The Birds of Thornton Creek" is no exception. The shortcomings are included here, so that readers can better interpret, understand, and learn from this compilation.

3-B-2. SHORTCOMING: VARIABILITY IN AREAS OBSERVED

Because of changing outdoor chores, Faxon did not cover exactly the same areas each day. Some activities such as summer haying would result in Faxon being at some areas that he would not be at

in other seasons. Further, Faxon's activities at an area could change seasonally; for example, in coniferous forests, Faxon picked fern or planted trees in winter, but, in summer, he often was logging and using a chain saw. Nevertheless, some areas, such as around the house and barns were usually birded daily throughout the year.

3-B-3. SHORTCOMING: VARIABILITY IN OBSERVATION EFFORT

Another shortcoming is that Faxon's observation effort was somewhat variable. Although observation effort was not directly quantified, indices of observation effort include the number of observation days each month (Table 3.1), the number of bird species seen each day (Table 3.3), and the number of bird species found each month (Table 3.4).

DAILY VARIATION.--One indication of variable observation effort is that there was often a wide range in the number of species seen daily during a month (Table 3.3). Although some of this variation could be attributed to changes in bird presence among days, it is likely that much of the variation is a result of changing observation effort because of variability in Faxon's activities and in the time available during a day to note birds.

MONTHLY VARIATION.--Other evidence that observation effort fluctuated is that the number of observation days/month (Table 3.1) and the number of species/month (Table 3.4) differed among years for the same month.

In fact, there appears to be some patterns to the changes in observation effort among years (Fig. 3.1). For example, in 1973-1975, Faxon was just beginning to take systematic notes, was learning to identify some birds that he hadn't previously known, and was learning to identify more birds by call alone. Thus, it is not surprising that in these years, Faxon typically had more months in which he noted as great or greater than average number of observation days, but fewer months with at least an average number of species (Fig. 3.1). 1976 was a transition year.

In 1977-1979, a more experienced Faxon had more months with an above average number of observation days and species, but, after a transition year in 1980, his effort appeared to have dropped in 1981-1984 with usually few months having an average number of observation days and species (Fig. 3.1).

1985 was another transition year, and the 1986-1988 pattern was a reversal of the 1973-1975 pattern with fewer months with at least an average number of observation days, while more months had at least an average number of species (Fig. 3.1). The reversal between 1973-1975 and 1986-1988 probably resulted because Faxon's skills and efficiency as an observer had improved and thus offset the reduced number of observations in 1986-1988.

Similarly to 1981-1983, the number of months with at least an average number of observation days and species was low in 1989 and 1990 (Fig. 3.1).

RELATIONSHIP BETWEEN DAILY AND MONTHLY VARIATION.--An examination of Fig. 3.1 makes it appear that the number of Faxon's observation days/month might often be unrelated to the number of species/month; this was confirmed statistically. Only in the June-August period was there a significant relationship between the number of observation days and the number of species/month (Table 3.5).

The average number of species/day was inversely related to the number of observation days/month (i.e., with increasing numbers of observation days, the average number of species/day decreased)(Table 3.5). This relationship was significant in most periods within a year, but not in May (Table 3.5).

The number of species/day and species/month were significantly correlated for all intervals during the year (Table 3.5). Thus, if Faxon spent a lot of effort each day and recorded more than the average number of species, he was also more likely to record more species that month.

SEASONAL VARIATION.--Faxon's observation effort also appeared to vary somewhat seasonally. Because of more daylight, Faxon could observe longer during summer days than during winter days. Further, the average number of observation days was greater in April-May and July-August than throughout the rest of the year (Table 3.1), so it appears that Faxon's coverage might have been more comprehensive in spring and summer than in fall and winter.

3-B-4. SHORTCOMING: OVERLOOKING SPECIES THAT WERE PRESENT

The presence of a few species was consistently missed. This applies mainly to Hammond's Flycatchers before 1977 and to owls. Hammond's Flycatchers were overlooked before 1977 because Faxon had not yet learned their call. Owls were not regularly observed because Faxon was not actively birding in the evening.

In some months in recent years, Faxon failed to record some common species that were probably present. Some of these species include European Starling, Steller's Jay, Dark-eyed Junco, and Northern Flicker. These lapses in documentation should not be construed as these species being absent. Rather they indicate that Faxon's effort may have sometimes emphasized and been selective for rarities, instead of common species.

for rarities, instead of common species. Variability in areas censused (section 3-B-2) and in observation effort (section 3-B-3) could also have resulted in some species being overlooked or missed that were actually present.

3-B-5. SHORTCOMING: NO CONFIRMATION OF RARITIES

It is unfortunate that Faxon did not have a good camera and telephoto lens or a collecting permit to document the rare birds that he has seen at Thornton Creek. Since he saw many of these rarities during migration when they were present only for short periods of time and other birders were generally unavailable to come to Thornton Creek, he was unable to have other observers confirm these rarities.

When one compares Faxon's rarities with some of those found at the Farallon Islands near San Francisco (e.g., DeSante and Ainley 1980), one is struck by many of the similarities. This is not to say that work at the Farallones confirms Faxon's sightings, but it indicates that intensive field work results in the discovery of birds that are not expected to be present.

3-B-6. SHORTCOMING: NO MEASURE OF SPECIES' ABUNDANCE

Faxon also did not record the abundance of each species. However, censusing terrestrial birds is difficult at best (e.g., see Ralph and Scott 1980, Verner 1985), and it simply was not feasible for Faxon to do so at Thornton Creek. Thus, frequencies given here refer to the frequency of occurrence and not to abundance. The problem with this is that a species represented by a lone individual could have a higher frequency per month than a species that is represented by 50 or more individuals.

3-B-7. SHORTCOMING: LACK OF RECORDS SPECIFIC TO INDIVIDUAL HABITATS OR SITES

It would have been much more informative if Faxon had separated his daily bird records for each habitat (e.g., creek, riparian, pond, field, brush, coniferous forest, and deciduous forest) or site (e.g., records just for Pond C or just for the field west of the Faxon house). Such records could also be used to predict what birds may be present at similar habitats or sites.

Although he may not have birded some habitats or sites very often (e.g., about once a month for Pond D), these records might still have been adequate to point out differences in bird distribution or seasonality compared to sites such as Pond C that were birded nearly every day.

While it is unfortunate that Faxon did not separate records for each habitat or site, the exponentially increased record keeping that would have resulted from doing so would probably have discouraged Faxon from making 18 years of records.

3-C. TOLERABLE OBSERVATION EFFORT (TOE)

The term Tolerable Observation Effort (TOE) is used to emphasize that if certain criteria of observation effort are attained, effort is judged Tolerable (i.e., moderately good or passable), and observations are considered as presence/absence data, not just presence data. However, TOE does not indicate an effort in which all species present were recorded; TOE suggests only that effort was probably sufficient to find most, if not all, conspicuous or common species and, perhaps, some of the more inconspicuous or uncommon species.

A TOE month is one:

- with three or more systematic censuses per month by an experienced observer, no matter how many species were recorded;
- or 2) when the number of recorded species was 60% or more of the maximum for three or more years for that month (i.e., 60% MAX) and there were at least five species recorded.

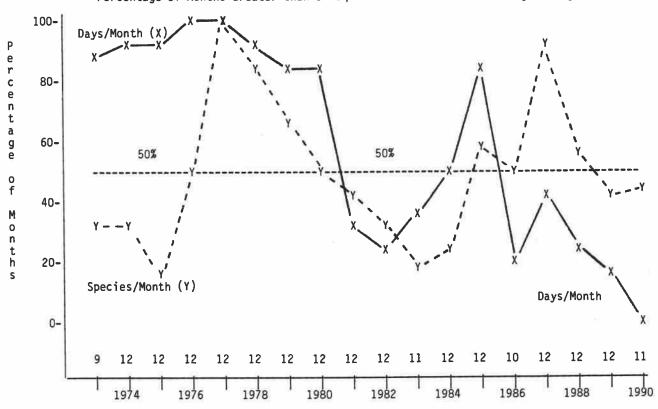
At Thornton Creek, all months with any observations at all qualified as TOE months by criteria #2, and there were 16-18 TOE months for each calendar month (Table 3.4). TOE months were used in calculating average relative monthly frequencies of occurrence during the 1973-19B1 or 1982-1990 periods (section 1-D). TOE months included all those in which daily frequencies were calculated as well as three additional months in which daily frequencies were not calculated because there were less than eight observation days (Tables 3.1 and 3.4).

TOE will be used extensively in Volume II and especially in Volume III, where TOE month records will be compared among sites.

3-D. FIGURE AND TABLES

Figure 3.1. Percentage of months each year whose observation days/month (X) or bird species/month (Y) was greater than or equal to the 1973-1990 monthly average at Thornton Creek. Only months with more than five days of observation are included, and the number of these months each year is given along the baseline.

These data were compiled from data in Tables 3.1 and 3.4. Months with greater than or equal to the average were determined from averages calculated to the nearest 0.1, not averages rounded off to the nearest whole number as given in Tables 3.1 and 3.4.



Percentage of Months Greater than or Equal to the 1973-1990 Monthly Average

Table 3.1.Number of observation days per monthat Thornton Creek in 1973-1990.Only days with six or more species/day are included; days with little or no observation effort (i.e., five or less species/day) are listed in Table 3.2. Months

boldfaced.

For years with at least one observation day: N=number of non-zero years, AV=monthly average, SD=Standard Deviation, MIN=monthly minimum, MAX=monthly maximum.

Months with less than 10 c	lays	ofo	bser	vati	ons	are												
	Yr					s/Mo My												
	73 74 75 76 77 80 81 82 83 84 85 86 87 88 89 90	0 26 21 28 21 28 22 21 23 20 26 24 18 10 18 13 19	0 26 27 25 19 23 24 22 18 21 24 19 14 16 21 15 17	0 28 31 27 23 22 24 21 18 24 27 29 5 18 22 14 21	30 29 26 29 30 26 27 24 22 26 17 27 23 23 18 16 10	28 31 29 25 29 26 27 24 21 26 23 20 27 26 23 19 15 13	30 27 27 23 24 20 21 21 20 24 21 13 21 13 13	30 26 29 26 28 28 26 23 24 17 0 17 28 21 14 15 16	31 24 28 26 29 26 23 16 19 22 21 27 26 21 27 26 21 28 24 22 16	26 25 24 26 26 24 23 24 19 9 16 16 25 20 22 17 21 5	19 25 29 25 25 21 19 20 13 27 22 17 29 17 14 12	26 19 25 25 22 22 22 13 24 16 20 15 25 8 20 *						
	N AV SD MIN	mary 17 22 5 10 (28	for 17 21 4 14 27	Mon 17 22 6 5 31	ths 18 24 5 10 30	18		Leas 16 23 6 14 30		18	oserv 18 21 5 12 29	16* 21 5 8	n Day 18 19 6 8 30					
*≖In November 1990, the n																han 1	0.	
Table 3.2. Days in which made or in which five or recorded at Thornton Cree	no d less							Firs	Thi t or	is Ta Las	ble st da	can ite f	be used	to d	eterm may	have	been	
<pre>1973: Jan. (1-31), Feb. (</pre>	, Dec , 27 31) 23-24 9, 22 9, 22 9, 22 9, 22 9, 22 30) . (1 31),	(2), Fe Aug (4), D (2-26) (1, 13) (1, 13) (1, 15) (1, 15) (1, 15) (1, 15)	2) eb. (4)ec.), Fe 3), A 2, (7), A 1, (1	(3, 1 4, 11 (8, 20, (Aug. 7, 14 pril [2, 1	0), 15, 15, (2, (-16) (18) (7, 1	Marc 5-18, 17, 16), 17,) , Ma 19, 2	ch (3 23) 21-2 Marc 30) (1 21),	3, 10), Se 22, 2 ch (1 , Sep 13-16 Oct.), 24 ept. 29) 1, 22 ot. (5, 25 . (9,	(), / (5-8 2-23) (8, 1 5, 30 , 17	April 3, 15), Ap 17-20)), 24	(9) 5), (0ril 0, 28 June , 27-), June Oct. (6, (12-13, 3), Oct. (8-9, 2 -28), No	(2, 1 13, 20, (12, 0), J	6, 23 18, 2 27), 19), uly (, 14,), O, 26 May (4, 18 21,	-27), 4, 25 , 23- 23, 2	5), •25)

1977

1977: Jan. (2, 16, 23), Feb. (13, 20, 27), March (1, 6, 12, 27), May (20, 22), June (12, 16-20, 25), July (5, 24, 30), Aug. (28-29), Sept. (4, 11, 19-20), Oct. (4, 16, 20, 24, 29-30), Nov. (3, 6, 13, 16, 28). Dec. (5, 10-11, 13, 15, 18, 20-21, 25)
1978: Jan. (2, 8, 10, 12, 15, 22, 25, 29-31), Feb. (5, 12, 14-17, 19, 26, 28), March (5, 7, 9-12, 19, 26), April (5, 9-10, 30), May (5, 7, 14, 21, 28), June (8-12, 24), July (4, 9, 16), Aug. (6, 11-12, 25, 30), Sept. (3, 10, 15-17, 24), Oct. (1, 4, 9, 15, 22, 31), Nov. (5, 12, 17, 19, 30), Dec. (3, 10, 12, 17, 24)
1979: Jan. (14, 21, 28), Feb. (4, 11, 18, 25-26), March (4, 6, 18, 20-21, 25, 28, 30-31), April (12, 22, 29), May (13, 20, 22, 27), June (3, 8-14, 17, 29), July (8, 15, 22, 27, 29), Aug. (5, 11-12, 17, 19, 23, 26, 31), Sept. (2, 7, 15-17, 23, 30), Oct. (7, 9-10, 13-14, 18, 21, 28), Nov. (4, 11, 14, 16, 18, 20, 25, 30), Dec. (2, 5, 9, 12, 14-16, 18, 26, 29-31)
1980: Jan. (4-6, 12-13, 19-20, 25, 27), Feb. (10, 13-16), March (9, 12, 16, 19, 26-27, 30), April (5, 13, 19-20, 23-24), May (4-6, 11, 18, 25-26), June (6-10, 13, 15, 22, 29), July (6, 10-13, 15, 20, 27), Aug. (2, 9-10, 16-18, 21-28, 31), Sept. (7, 14, 18-19, 21, 28), Oct. (5, 7, 12, 14-15, 19, 24-26, 30), Nov. (3, 6, 9, 16, 20, 23, 27, 29), Dec. (3-4, 7, 9, 14, 16-17, 19, 21-22, 24-25, 28, 31)

Table 3.2 continued on next page

Table 3.2 continued

Table 3.2 continued
1981: Jan. (4, 11-12, 17-18, 20, 25, 29-31), Feb. (1, 3-4, 8, 14-15), March (2-3, 7, 15-16, 22, 24-25, 29-30), April (4-5, 12, 19, 25-26), May (3, 10, 17, 20-25, 31), June (5-8, 14, 19, 21, 28, 30), July (4, 12, 19, 24-26, 31), Aug. (5-8, 11, 19, 20-27, 28-29, 31), Nov. (4-5, 8-11, 14-16, 19, 21-24, 28-30), Dec. (1-2, 4, 6, 8, 13-16, 20-27, 29)
1982: Jan. (2-3, 16-18, 21, 24, 31), Feb. (2, 6-7, 13-14, 18, 21, 26-28), March (4, 7, 9-10, 14, 17, 19-23, 27-28), April (4, 7, 11, 14, 17-18, 23, 22, 27, 29, 31), Aug. (6-8, 10, 21-22, 24, 28, 20), Gept (5-9, 11-12, 18, 19, 20-26), July (3-4, 80, 11, 11, 16, 16-6, 17, 19, 21, 24, 29-31), Aug. (6-8, 10, 21-22, 24, 28, 20), Febr (5-9, 11-12, 18, 19, 23, 26-30), July (1-4, 4, 90), I, 11, 16, 16-6, 17, 19, 21, 24, 29-31), Aug. (6-8, 10, 21-22, 24, 28, 20), Febr (3-9, 11, 12, 18-19, 23, 26-30), July (1-31, 18, 24, 26-7, 19, 21, 24, 29-31), Aug. (1, 4, 7, 14, 17-18, 21-22, 24, 28), Sept (3-5, 9, 11-18, 21, 25), Oct. (2, 9, 16-31), Mov. (7, 46, 90-51, 22, 21), June (10, 12, 18-19, 23, 26-30), July (1-31, 15, 22, 29), Aug. (1, 4, 7, 14, 17-18, 21-22, 24, 28), Sept (3-5, 9, 11-18, 21, 25), Oct. (2, 9, 16-31), Mov. (7, 18, 16, 22, 27, 27), June (10, 12, 18, 19, 23, 26, 26), March (13, 19-20, 25, 27, 29-30), Aug. (1, 4, 7, 14, 17, 19-22, 29), Aug. (5, 12, 14, 26), Sept. (2, 8-9, 13, 16-23, 26, 30), Oct. (7, 18-19, 21), Hov. (4, 10-11, 13, 18, 23, 25, 7, 29-30), Dec. (6, 9, 12, 14-18, 22-27, 29-31)
1985: Jan. (2, 4-5, 7-8, 13, 27), Feb. (13-15, 19, 24-28), March (12, 11, 17, 13, 16, 22, 24), 24, 28-29)
1986: Jan. (2, 4-5, 7-8, 13, 27), Feb. (13-16, 19, 22, 27, 29, 30), Dec. (1, 77, 12, 14, 18, 22, 27, 29, 30), Feb. (45-15, 15-16, 21, 24, 19, 24-26), March (15, 21-22, 24, 24, 28-29)
1986: Jan. (2, 4-5, 7-8, 13, 27), Feb. (13-15, 19, 24-28), March (12, 11, 17, 12, 24-28), May (1, 13, 16, 16, 27, 27), Sopt. (6-6, 12, 14, 18, 21, 26-30), May (1, 14, 15, 16, 16, 27, 27), Sopt. (11, 11, 12, 12, 16, 17, 19, 22, 27)

Table 3.3. Species recorded per day of observation at Thornton Creek in 1973-1990. Days with five or less species/day are excluded; see Table 3.1 for number of observation days/month and Table 3.2 for dates with five or less species/day. N=number of years, SD=Standard Deviation, #=No observation days and no bird records, *=in November 1990 only, some species were observed but the number of observation days was not recorded; AV=average of monthly means, SD=Standard	Deviation, Range=minimum-maximum of species/day. Months with daily averages of 30 or more species are boldfaced . Species includes some taxa not identified to species (goose spp., stint spp., and jaeger spp.) but not others (Common/Red-breasted Merganser, Sharp-shinned/Cooper's Hawk, gull spp., Caprimulgidae spp., Empidonax spp., Audubon's [Yellow-rumped] Warbler, Myrtle [Yellow-rumped] Warbler, and Slate-colored [Dark-eyed] Junco).
Species/Day of Observation. JanuaryFebruaryMarchYr MeanSD RangeMeanSD RangeMeanSD Range73######7412.22.79-2012.13.47-1916.34.19-257510.42.76-1612.83.16-2113.13.86-227611.53.46-1713.93.57-2117.14.69-287714.93.68-2216.64.89-2419.04.59-287816.64.611-2316.53.711-2420.35.114-327916.02.710-2112.83.09-1916.03.410-228013.93.09-1914.13.99-2517.44.69-258111.63.78-1813.22.38-1714.23.99-228215.22.712-2013.62.211-2014.54.18-228311.22.08-1411.42.88-1913.22.88-218413.03.37-1913.83.78-2314.93.910-248618.34.811-3016.52.713-2222.65.315-308715.84.814-2520.64.815-26<	Species/Day of ObservationJuneAprilMayJuneYr Mean SD RangeMean SD RangeMean SD Range73 16.8 5.6 8-2923.5 5.2 13-3025.9 5.7 13-3874 21.3 5.9 11-3229.3 5.7 15-3928.2 5.4 13-3775 20.1 4.7 14-3328.1 5.9 19-4027.3 3.8 17-3576 22.6 4.8 14-3128.0 5.0 20-4032.1 5.0 22-4577 27.8 5.6 14-4035.3 4.3 27-4233.9 4.3 28-4378 26.0 5.6 17-3736.6 4.9 20-4532.1 4.1 25-3879 24.6 6.1 15-3934.9 3.7 29-4131.2 3.3 24-3880 25.8 6.3 15-4031.8 3.9 24-3831.2 2.7 27-3881 24.1 8.3 13-3534.5 4.6 26-4332.2 2.8 28-3782 23.7 7.1 14-3837.1 5.1 26-4733.6 2.8 29-3883 25.1 6.3 14-3635.0 5.2 21-4335.7 3.8 30-4484 26.9 3.6 19-3331.2 5.6 17-3930.0 5.3 22-4085 23.6 5.6 14-3538.4 3.8 29-4535.1 3.8 29-4586 26.6 7.1 14-3639.8 6.5 25-5038.4 2.5 34-4287 29.2 7.0 17-4240.4 4.7 33-5036.2 3.6 27-4188 29.7 7.2 14-4434.9 4.8 24-4230.0 6.0 10-3889 26.6 6.1 18-3632.2 3.8 23-3730.5 4.1 25-3690 26.8 3.2 23-3232.6 5.0 19-4032.3 4.2 25-41
Summary for Months with at Least One Observat. Day N 17 17 AV 14.5 14.9 17.7 SD 2.6 2.5 3.1 Range 6-30 6-26 6-32	Summary for Months with at Least One Observat. Day N 18 18 AV 24.9 33.5 32.0 SD 3.2 4.4 3.2 Range 8-44 13-50 10-45
Species/Day of Observation	Species/Day of ObservationOctoberNovemberDecemberYr Mean SD RangeMean SD RangeMean SD Range73 15.3 4.4 10-249.2 2.8 6-149.4 1.8 6-1574 17.0 4.3 9-259.5 2.8 6-159.4 2.6 6-1575 16.2 3.8 11-2611.9 4.1 6-1812.0 3.4 6-1976 16.4 4.1 9-2312.6 3.9 6-2212.6 3.7 6-2077 21.8 5.2 14-3117.2 3.9 10-2517.5 3.3 14-2578 16.2 3.8 11-2614.1 3.8 10-2314.4 3.0 10-2080 15.5 5.2 7-2711.4 3.0 6-1711.1 3.6 8-1881 17.0 3.8 9-2315.3 3.5 10-2213.7 3.9 6-2182 15.9 4.8 7-259.1 2.6 6-168.3 2.1 6-1383 17.9 4.2 13-2610.6 2.4 6-1514.1 3.0 9-1884 14.0 5.0 9-2910.8 2.5 7-1511.5 3.8 7-2085 17.2 4.4 11-2814.8 3.6 9-2118.6 4.0 12-2686 21.9 4.3 12-30###16.6 4.5 9-2487 25.9 5.4 13-3417.0 4.1 7-2688 26.1 4.6 15-3415.8 4.3 10-2389 22.5 4.3 14-2814.9 3.9 10-2480 25.4 3.4 19-31***90 25.4 3.4 19-31
Summary for Months with at Least One Observat. Day N 16 18 18 AV 29.5 25.2 19.6 SD 2.9 4.0 4.5 Range 16-43 8-46 6-45	Summary for Months with at Least One Observat. DayN18AV18.9SD4.0Aunge7-346-266-26

Table 3.4. Number of species recorded each month and year at Thornton Creek in 1973-1990. Months with 60 or more species are boldfaced. N=number of years, AV=1973-1990 monthly average, SD=Standard Deviation, MIN=monthly minimum, MAX=monthly maximum, *=number of observation days was not recorded, @=month with

Tolerable Observation Effort (TOE)(i.e., month with at least 60% MAX)(section 3-C), Total Species=total species each month during all years or total seen each year during 1973-1990. Taxa included or not included as species are the same as in Table 3.3.

Yr	Spec Ja	cies Fe	/Mon Mr	th Ap	My						N۷	De	Total Species
1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1983 1984 1985	0 37 31 35 37 36 40 37 34 34 27 33 39	0 36 31 37 38 37 34 36 45 28 29 34 27	0 44 35 38 43 47 43 43 35 31 48 44	48 58 47 61 65 62 63 56 62 58 56 58 56 56	48 63 69 65 66 78 71 62 75 64 64 74	54 54 50 58 59 47 53 61 55 58 52	49 51 53 62 62 60 53 62 52 0 51 60	55 52 53 55 68 59 62 51 56 51 56 53 57	53 48 51 52 53 49 45 53 49 45 52 52 53	43 45 44 45 50 43 45 50 46 47 41 43 40	28 31 33 47 34 38 37 36 31 29 29 33	30 26 34 35 41 34 41 32 29 28 31 29 36	93 95 95 97 107 104 109 97 104 107 97 100 107
1986 1987 1988 1989 1990 1973-1990 Summary	37 36	36 34 Mon		66 61 63 50 with	63 55 58 h at			50 ne Ot	49 47 57 serv	55 52 44 51	33 39 36* n Da	y *	99 113 99 100 101
N AV SD MIN MAX 60% of MAX	36 4 27 44	35 4 27 45		59 6 47 66	66 8 48 79	54 4 47 61	55	55 6		46 4 40 55	35 5	34 5 26 44 26	101 6 93 113 68
yrs of TOE Total Species	67				112								18

days. Since months varied markedly in the number of recorded species or the average number recorded per day, it was necessary to divide the year into

P=two-tailed probability, NS=not significant (two-tailed P>0.10). Statistical significance was tested with the student's "t" test given in Goldstein (1964:146) and Pollard (1977:261).

		Obs. D v Specie	vs	ies/Month vs Species/Day			
Interval	N	r	Р	r	Р	r	Р
November-February	68	0.15	NS	-0.32	<0.01	0.60	<0.002
March	17	0.20	NS	-0.43	<0.10	0.56	<0.02
April	18	0.07	NS	-0.54	<0.05	0.62	<0.01
May	18	0.34	NS	-0.10	NS	0.71	<0.002
June-August	52	0.34	<0.02	-0.30	<0.05	0.39	<0.01
September-October	36	0.02	NS	-0.38	<0.05	0.67	<0.002

Chap. 4. DISCUSSION: GENERAL ******************* 4-A. Introduction------26 Introduction-----26 Total Species-----26 Species/Day-----26 Species/Month------26 Within-year and Among Year Variation------26 Species Interrelationships-----26 Rarities-----27 Table------28 4-8. 4-C. 4-D. 4-E. 4-F. 4-G. 4-H. (Table 3.4).

4-A. INTRODUCTION

In spite of the shortcomings just discussed in section 3-B, the value of these observations cannot be ignored. These records are the most extensive that have been published for the Oregon Coast Range. For example, based on monthly averages in Tables 3.1 and 3.3, Faxon has about 99,80D records, where each record is one

species noted during one day. In this Chapter, some of the general results are examined in more detail. Results pertinent to migration are discussed in Chap. 5, and results for individual species are given in Chap. 6. **4–B.** TOTAL SPECIES

Faxon recorded a total of 191 species at Thornton Creek, 144 of which were classed as terrestrial (Table 4.1). The majority of waterbirds (54.6%) were found in only 1-3 years, but the majority (5D.4%) of terrestrial birds were recorded in each of 16-18 years (Table 4.1). If there had been more suitable habitat for waterbirds, Faxon may have recorded more species, and each species might have been

recorded more regularly. The large number of species at Thornton Creek is more a result of Faxon's diligence than of an abundance of species. If Faxon had not spent an average of 19-24 observation days per month during 209 months (=17.4 years)(Table 3.1), while he worked out of doors most of the day, he would have recorded fewer species (also see section 4-G). 4-C. SPECIES/DAY

The average number of species seen per day during 1973-1990 ranged from 13.1 to 33.5 with the greatest daily average recorded in May when a peak of 5D species/day was noted twice (Table 3.3). However, daily means greater than 3D were also often found in June and sometimes in July-September, so these months had averages of over 25 birds/day (Table 3.3).

November-January daily averages were less than half those in May-July (Table 3.3).

4-D. SPECIES/MONTH

For the 1973-1990 period, the average number of species per month ranged from 34 to 66 with a maximum of 79 species (Table 3.4). Generally the greatest number of species was found in May, although in many years there was a secondary, smaller peak in July, August, or September (Table 3.4). Generally, the number of species was less in June than in April (Table 3.4).

The least number of species per month was observed from November through February, when the average was about 52-55% that of May (Table 3.4).

Combining all years, the total number of species/month ranged from 66 to 112 with April-May and August-September having over 100 species/month

4-E. WITHIN-YEAR AND AMONG YEAR VARIATION

In general, Faxon's observation effort varied (section 3-B-3), and this could account for some of the variation in the number of species/day (section 4-C) and species/month (section 4-D). But the variation in his observation effort may also account for some of the variation in the frequency of presence of individual species during a year and among years that is given in the individual species' accounts in Chap. 6. In particular, the absence or low frequencies of some species in some months may be because they were

overlooked, not because they were absent. It would, however, be a mistake to assume that species are constantly present; some are just passing through and others may have large home ranges that may make them difficult to be seen daily. Further, the variation in many summer or winter resident species' presence after they arrive (section 5-D) could very well be because they are not present then every day; unfortunately, no one besides Faxon has data to test this. This variation among years in arrivals or departures is examined in sections 5-C and 5-D.

In conclusion, some of the variation in the frequency of a species' presence may be a result of observation effort variation, but some may also be because a species may vary in its presence.

4-F. SPECIES INTERRELATIONSHIPS by Darrel Faxon

4-F-1. INTRODUCTION

The interrelationship between species is a very complex issue, and one with which I have made no real attempt to spend a great deal of time studying. Nevertheless, I have made a number of observations over the years about changes in populations that seem on the surface to be more related to pressures from the birds themselves than from anything else. These are admittedly subjective opinions of what I have observed, and there are no hard figures to back them up, but my years of observations should give them some credibility.

First of all, the coming of two alien species to the Valley has contributed more than anything else to the reorganization of bird populations. In 1957, Brown-headed Cowbirds first arrived here, and European Starlings followed in 1969. Each has brought changes to the Valley's bird life, but in different ways.

4-F-2. BROWN-HEADED COWBIRD

The most notable change brought about by the cowbirds (section 6-B-184) was probably in breaking up a colony of about 20 pairs of Brewer's Blackbirds (section 6-B-183) that had been permanent residents in the Thornton Creek Valley.

Brewer's generally built their nests in somewhat conspicuous places, such as an exposed fork of a tree, and certainly would have been a vulnerable species for cowbird parasitism. Whether this, in fact, happened is open to question, but within just a couple of years after 1957 the colony of blackbirds broke up completely, and none have bred here since. Now, the species is only an occasional straggler here. If, in fact, cowbirds were responsible for this, why Brewer's remain such a common species in so many other places but were unable to adapt in this location remains a mystery.

Blackbirds, of course, are not the only species which are parasitized by cowbirds. I have observed Wilson's and Black-throated Gray warblers, Song and White-crowned sparrows, and Hammond's Flycatchers feeding young cowbirds, but the cowbird's effect on these species is unknown. It probably has not caused any major disruption to them, as the number of cowbirds in the Valley has never numbered more than about 15 adults.

4-F-3. EUROPEAN STARLING

The problem caused by starlings (section 6-B-142) appears to be much worse. They have been hard on cavity-nesting species, swallows and some woodpeckers in particular. Tree and Violet-green swallows formerly nested in old woodpecker holes and natural cavities, but the starlings have taken over all such nesting sites, at least in the general vicinity of the house and barns, and even further back up the canyon. I have sometimes destroyed starling nests and shot adult starlings, but it seems to have had little effect on their population. They remain as aggressive as ever, and quickly become wary.

There is little doubt that the influx of starlings reduced the populations of some woodpeckers, particularly Downies (section 6-B-91). Before the coming of starlings, Hairy and Downy woodpeckers were equally common birds. Now the Hairy is an uncommon species (section 6-B-92), and the Downy is quite rare. Perhaps the Hairy has not suffered as badly because its larger size allows it to sometimes compete for nesting space with starlings. Northern Flickers are frequently seen fighting starlings over nesting space, and flickers remain quite common (section 6-B-93).

4-F-4. TREE & VIOLET-GREEN SWALLOWS

An interesting thing took place in respect to the population ratio of Tree and Violet-green swallows (sections 6-B-107 and 6-B-108, respectively). Prior to the arrival of starlings, Tree Swallows were more abundant than Violet-greens. This became even more pronounced with the coming of the starlings. The

Violet-greens dwindled down to one nesting pair. About that time I put up about a dozen nest boxes suitable for swallows. The result was that the population of Violet-greens exploded, and at the same time the population of Tree Swallows diminished. Now there are around eight nesting pairs of Violet-greens, and only about two or maybe three pairs of Tree Swallows. There seems to be no reasonable explanation for this reversal of swallow populations.

4-F-5. SOLITARY & WARBLING VIREOS

There is one other case of competition between species that has no relationship to invading or non-native species, and it is perhaps the most interesting one of all. It is between two vireos, the Solitary and the Warbling (sections 6-B-143 and 6-B-145, respectively). The Warbling is much more common, nesting throughout the Thornton Creek Valley in suitable habitat, while Solitary Vireos have never numbered more than three pairs. However, the competition for space between the two species is apparently very keen, as both prefer similar habitats. The Solitary Vireo annually arrives ahead of

The Solitary Vireo annually arrives ahead of the Warbling by an average of eight days. Immediately upon arrival, a Solitary Vireo stakes out a territory. Since vireos, and Solitary Vireos in particular, are persistent singers, their territorial boundaries are often easy to define. I have been fortunate enough to be able to work in a couple of different areas where this territorial behavior was taking place. I observed several Solitary Vireos each stake out a territory that was a nearly square area. Each vireo made a complete round of the outer boundaries of its square several times a day. This continued steadily right up to the time when the Warbling Vireos arrived.

The Warbling Vireos have apparently adapted to being able to survive within a smaller territory than Solitary Vireos, so when Warbling Vireos arrive, several different Warbling Vireos quite often begin to put pressure on the edge of the territory that a Solitary has already staked out. This no doubt creates a certain amount of stress on a Solitary that was the first inhabitant of the area.

Although I have not observed any specific confrontations between the two species, the pressure Warbling Vireos exert on the edge of a Solitary's territory invariably seemed to cause the territory to decrease in size, even though the territorial Solitary still continued to sing and move around. In some cases, when the boundaries became too small, a territorial Solitary simply gave up and left.

4-F-6. COYOTES

Prior to 1966, coyotes were unknown here. Now they are common, and some years have been abundant. I have no doubt that they have contributed to lower populations of ground-nesting and ground-dwelling birds.

4-G. RARITIES by Darrel Faxon

I should add a few paragraphs about what have come to be called vagrants. Seeing the rare bird remains an exciting part of birding, so some treatment_of that should be done here.

The Thornton Creek Valley has had its share of rarities over the years, but that must be put in perspective. First of all, in 37 years almost anyplace would have its share of rarities. Secondly, one must remember that my work enables me to be outside most of the time during each day. Thus, I have spent thousands of hours in the field and have had ample opportunity to spot any rare individual that might have come by.

Actually, Thornton Creek is not to be considered a hot spot for rare birds, although it can be on occasion if conditions happen to be just right. Since the Valley basically lies north and south, it serves as a natural route for birds during migration. Most of the upper portion of the watershed is a solid forest, with little to force the migrants into a small area. However, once the Creek enters the area nearest the House (see Fig. 2.1) that changes. Then there are several pastures adjoining the Creek, and the trees that are present are right on the Creek for a distance of nearly half a mile. Birds using the Valley as a route for migrating are thus forced into a narrow strip of trees there, and this makes for good birding during migration, particularly in fall.

Other vagrants have shown up at various times of the year, most notably in late spring, but there is not really enough of a pattern to most of these sightings to make any concise statement concerning them.

4-H. TABLE

Table 4.1. Number and regularity of water and terrestrial birds at Thornton Creek.

Waterbirds=grebes, cormorants, herons, egrets, waterfowl, Osprey, rail, shorebirds, jaegers, gulls, and Belted Kingfisher (including goose spp., stint spp., and jaeger spp.); but not Common/Red-breasted Merganser or gull spp.

Terrestrial birds=all taxa not previously mentioned except Sharp-shinned/Cooper's Hawk, Caprimulgidae spp., Empidonax spp., Audubon's and Myrtle (Yellow-rumped) warblers, and Slate-colored (Dark-eyed) Junco.

No. Years Found=number of calendar years in which a species was recorded at least once out of a total of 18 years (1973-1990).

No. of	Species
Marka	Tauran Audal Takal

	Water	Terrestrial	Total	
pre-1973 only	3	9	12	
1973-1990	44	135	179	
Total	47	144	191	

1973-1990. No. Years % of Species..... Found Water Terrestrial ------------29.6 20.0 1 23 15.9 4.4 9.1 5.2 4 4.5 2.2 5 4.5 3.0 6 0 1.5 7 6.8 1.5 8 0 0 ĝ 0 0.7 0.7 10 0 11 4.5 1.5 1.5 6.8 12 13 0 14 0 3.7 2.3 2.2 15 2.3 16 2.2 5.2 17 2.3 18 11.4 43.0 TOTAL 100.0 100.0

5-A. DETERMINING MIGRANT SPECIES

Although it may seem that determining which species are migratory would be a simple task, it is not so in all cases. Species that are only regularly present during a particular portion of the year are probably migrants. But species in which some birds are present throughout the year may also have subpopulations that are migratory. For example, Reed Ferris' banding data for the Tillamook County Coast Range indicate that some Song Sparrows appeared to be nonmigratory, but that others seemed to be only winter residents (Bayer and Ferris 1987:29, 37-38). Unfortunately, Faxon's data indicate only

Unfortunately, Faxon's data indicate only when a species is present or absent, not when particular individuals are present or absent. Thus, species that appear to be nonmigratory at Thornton Creek may still have migratory subpopulations.

5-B. ACCURACY OF ARRIVAL/DEPARTURE DATES

5-B-1. INTRODUCTION

Unfortunately, migration is not as easy to measure as one would suppose because not all birds arrive or leave together.

When considering a species' arrival and departure dates, the first problem is to determine what to measure: the date when a species is first or last detected or the date when the species is first or last COMMONLY present?

Customarily, birders and researchers (e.g., Saunders 1959) often think of First (arrival) or Last (departure) dates as when a species is first or last detected, and that is the way these dates have been calculated in this Volume. Since it is clear that some species may not be present every day after they first arrive or before they last depart (sections 5-C and 5-D), accurate determination of yearly First and Last dates is highly dependent on observation effort as well as sporadic presence of a species at the onset of immigration or the outset of emigration. Since the adequacy of observation effort in determining First or Last dates is unknown, it is not reasonable to assume that First and Last dates (and subsequent averages) are extremely accurate.

If dates when species are first or last COMMONLY present are desired, then dates have to be calculated differently. For example, Temple and Cary (1987a) determined first dates by using the date when a species was first recorded at 50% of its average frequency. This was considered infeasible for Faxon's observations.

5-B-2. ACCURACY OF YEARLY FIRST OR LAST DATES

There are several sources of error in determining arrival or departure dates each year.

First, and most obvious, is that few or no observations were made some days (Table 3.2), and species may have been overlooked on observation days when the number of species recorded were less than the average recorded that month (Table 3.3). Thus, a species may actually have been present earlier than the observed First date and later than the observed Last date but may have been missed or overlooked.

The second source of error is one of interpreting unusually early or late birds. The early arrival or late lingering of one, perhaps immature, abnormal, or sick bird could affect the observed arrival or departure date for the whole species in that year. Exclusion of atypical dates has been done to a certain extent with Faxon's data, but such decisions are highly subjective and generally were not done. Thus, it would be ideal if arrival/departure dates are only determined for a significant number of birds, not one or a few abnormal birds. Unfortunately, this is difficult to determine in the field.

A third problem is of mistaken human judgment in oversimplifying the categorization of bird species as just residents or migrants. For example, Varied Thrushes (section 6-B-136) can be classed as winter residents, but they are more frequent in October than in the rest of winter, so some may only be fall migrants while others are winter residents. Another example is the Golden-crowned Sparrow (section 6-B-176), which can also be classed as a winter resident; however, they have much higher frequencies in April than throughout the rest of the winter, probably as a result of an influx of spring migrants. Similarly, Reed Ferris' banding results in the Tillamook County Coast Range indicate that some Golden-crowned Sparrows were winter residents, but that most were spring migrants (Bayer and Ferris 1987:29). A third example is of some summer resident species, in which part of the population is just spring migrants, while others are summer residents. Examples of two summer resident species at Thornton Creek that appear to be just spring migrants at some other Coast Range sites in Lincoln County are White-crowned Sparrows and Black-throated Gray Warblers (which will be discussed in Volume III). In all these examples, there should be an arrival and departure date for each portion of the population; having a single arrival and departure date is an oversimplification and is in error. Nevertheless, determining multiple arrival and departure dates for these species is difficult to do in the field.

5-B-3. AVERAGE FIRST OR LAST DATES

If there were three or more years with First or Last dates, an Average First or Average Last date is calculated. Although such averages are commonplace (e.g., Saunders 1959), Bayer has misgivings about them because if yearly dates are inaccurate, then the average will be in error. If the error in yearly dates is random, then the error could be expected to cancel out by using an average, but the error is not random. The error for First dates will be consistently in using dates later than a species' actual arrival date, and the error for Last dates will be consistently in using dates before a species' actual departure date.

To more accurately determine an average, it would be helpful to determine which First or Last dates may be so inaccurate that they could be discarded; perhaps, use of statistical methods to eliminate outlier data would be useful. Although some apparent abnormal First or Last dates have been excluded, the problem is determining if outlier data represent inadequate observation effort or a species' abnormal migration, perhaps because of abnormal weather (e.g., Welty 1962:462-466, Pettingill 1967:179) or of abnormally behaving birds. Further, it is apparent that the wide range in First or Last dates at Thornton Creek is not unique, since Saunders (1959) also often found large variability in First and Last dates in Connecticut.

Bayer has puzzled over alternatives to Average First or Last dates but has not found anything demonstrably better. For example, an average could be made of the two, three, or five earliest or latest First or Last dates. Such an average would be more useful than the average of all First and Last dates in preparing observers for the arrival or departure of a species, but such an average may not be typical for most years and would not be as useful in predicting a species' presence in a particular year as an overall average. Accordingly, overall averages are still used, but the reader is cautioned that they may not be accurate. Further, the reader is cautioned that First or Last dates may be site- and observer-specific, so that extrapolating the First or Last dates from one site or one observer to another may not be accurate. While Average First and Last dates are biased

While Average First and Last dates are biased estimators of when a species First or Last appears, these Averages may be better estimators of when the species is first or last regularly present. This could result because Faxon may have detected birds when they were common, not when only a few individuals were sporadically present.

5-C. INFREQUENCY AFTER ARRIVAL OR BEFORE DEPARTURE

5-C-1. ARRIVAL

Do birds arrive and then remain every day? Most of them apparently do not do so at Thornton Creek. A perusal of many of the species accounts indicates that many species were not found every day in the month after they first arrived; for example, they had monthly frequencies of less than 9-10 tenths. Further, only three (Willow Flycatcher,

Further, only three (Willow Flycatcher, Swainson's Thrush, and Black-headed Grosbeak) of 23 common summer residents and none of the four common winter residents were present in 90% or more of the observation days in the 10 day period after they were first recorded (Table 5.1).

5-C-2. DEPARTURE

Based on monthly frequencies of most birds prior to their last recorded date, most birds did not appear to depart abruptly from Thornton Creek. Further, none of the 23 common summer residents or four common winter residents were present in 90% of the days in the 10 day period prior to their departure (Table 5.1). Most (17) of the 23 summer residents were

Most (17) of the 23 summer residents were more frequent after their arrival than before their departure (Table 5.1). But the Band-tailed Pigeon and Western Wood-Pewee were much more frequent before their departure (Table 5.1).

Of the four common winter residents, only the Varied Thrush was more frequent after its arrival than prior to its departure (Table 5.1). In contrast, the Golden-crowned Sparrow was much more frequent before its departure than after its arrival (Table 5.1).

Even though Faxon's data seem to indicate that a species does not depart abruptly, this may be misleading because the vast majority of a species may leave en masse (e.g., section 5-G-3), although stragglers may remain and prolong the observed departure date for the species as a whole.

5-C-3. REASONS FOR INFREQUENCY AFTER ARRIVAL OR BEFORE DEPARTURE

One probable reason for the infrequency is because birds can be highly mobile and asynchronous in their arrival and departure. Thus, there are days when they are present and other days when they are not. For example, some birds may be just passing through during migration and do not remain at one site, even for species in which some birds remain as winter or summer residents. Other birds may remain in the general area but may be searching for favorable habitat to remain to nest (i.e., the summer residents) or to overwinter (i.e., the winter residents) and thus may not remain in an area where they would be observed by Faxon.

A second reason is that some species may be more frequent than Faxon's data suggest. Faxon may have missed birds because they were inconspicuous or less numerous when they first arrived or when they departed. Faxon may also have missed birds because they were present when be wasn't looking during a day.

he wasn't looking during a day. To conclude, it is not possible to determine if a species' infrequency at the time of its arrival or departure is characteristic of a particular species or is because a species was overlooked. Unfortunately, no one else has made daily observations in Lincoln County to compare with Faxon's results. In any case, this infrequency is characteristic of Faxon's observations.

5-C-4. SIGNIFICANCE OF ARRIVAL/DEPARTURE INFREQUENCY

The observed infrequency is significant for two reasons. First, it indicates that summer and winter residents may often be absent after their "arrival" or before their "departure."

Second, it suggests that arrival or departure dates can be very dependent on daily observation effort, at least for Faxon's observations. For instance, if there are inadequate daily observations, then the actual date when a species may arrive or depart may be missed, and it may be several days or a week (e.g., for species present 30% or less of the days after the arrival date in Table 5.1) before the species may appear again. Thus, apparent differences in arrival or departure among years may be partially a result of uneven observation effort among years.

5-D. PREDICTABILITY OF SPECIES' PRESENCE BASED ON AVERAGE ARRIVAL DATE

Given the infrequency of presence of many species within 10 days of their arrival (Table 5.1), it is not surprising that most common summer and all common winter residents were infrequently seen on the date of their average arrival (Table 5.2). In fact, only five of 23 common summer residents were seen on 50-75% of the dates of their average arrival, and none were seen on more than 75% of the dates of their average arrival (Table 5.2). Further, not one of the four winter residents was found on an average of greater than 25% of their average arrival dates (Table 5.2). Finally, the average frequency of presence for the average arrival day plus or minus five days was above 50% for only one species, the Barn Swallow (Table 5.2).

These low frequencies indicate that the presence of these common summer and winter residents on the date of their average arrival is unpredictable. Even 3-5 days after the average arrival date, the average frequency of presence for the 23 common summer resident species was only 50-61% and for the four common winter residents was only 24-34% (Table 5.2), which indicates that their presence then is still unpredictable.

For a common summer resident, the frequency of occurrence on the average arrival date (Y)(% on day=0 in Table 5.2) is somewhat correlated with the frequency with which a species is noted 10 days after it first arrives (X; "First + 10 Days Mean Presence Frequency" in Table 5.2) and inversely correlated with the extent of the range between the minimum and maximum yearly arrival dates (R; "First Date Range" in Table 5.2). For example, for the 23 summer residents, the correlation between Y and X was r=0.44 (student's t=2.23, two-tailed P<0.05) and between Y and R was r=-0.41 (student's t=2.04, two-tailed P<0.10).

For the 23 common summer residents, the multiple linear regression of the relationship between Y on both X and R can be expressed as Y=25.44 + 0.29X - 0.57R. This regression was statistically significant (F=3.72, one-tailed P<0.05). However, the coefficient of determination (Zar 1974:260) for this regression was only 0.272, so only 27.2% of the variation in Y was accounted for by X and R. Thus, usage of only X and R to predict Y can be inaccurate.

One source of error in these calculations is that Faxon did not make observations every day (see Table 3.2), so birds may have arrived earlier than indicated. Hence, their average arrival date would be prior to the one calculated. Given that summer and winter residents were usually more infrequent before the calculated arrival date, this source of error would result in birds being even more infrequent on the date of their average arrival than indicated in Table 5.2.

A second source of error is that birds may have been missed on some observation days. Thus, some of the variation in the regression and correlation analyses may be due to observation omission error rather than error related to the presence of summer residents when they arrive.

Because there were only four common winter residents, multiple linear regressions and correlations were not calculated for their arrivals.

These calculations were also not done for departures because Bayer expected these birds to

be infrequent on the date of their average departure, similarly to their infrequency on the date of their average arrival. The major difference would be that they would be expected to be more frequent in the days prior to the date of their average departure.

5-E. CORRELATING ARRIVALS AND DEPARTURES WITH WEATHER

Saunders (1959) compared arrival dates of spring migrants in Connecticut with average arrival dates and sometimes with weather conditions. Such analyses could also be done with Faxon's arrival/departure data and his monthly rainfalls (Table 2.1) or daily rainfall and temperature records kept at Toledo or Newport. Bayer has not done this because in scanning some of the records for swallow arrivals, he did not see an obvious correlation with rainfall at Thornton Creek. A more careful analysis may reveal such correlations and may be done in Volume III.

5-F-1. RAPTORS

There is no indication of raptor migration during the spring at Thornton Creek. However, if Faxon had spent more time watching ridge tops during spring he may have noted flights of raptors because several species have been observed migrating along ridge tops near the coast in California (Fish 1989). However, the average migration rate in California of 9.3 raptors/hr (which is about one raptor every 6.5 min)(Fish 1989) is so low that a spring raptor migration could have been easily missed at Thornton Creek.

5-F-2. PASSERINES

Faxon did not note any waves of migrants in spring.

5-G-1. RAPTORS

Because of their increased frequencies in fall at Thornton Creek, Turkey Vultures (section 6-B-27), Northern Harriers (section 6-B-30), and Sharp-shinned Hawks (section 6-B-31) appear to migrate through Thornton Creek. These raptors as well as Cooper's and Red-tailed hawks (sections 6-B-33 and 6-B-36, respectively) are also migrants along ridge tops near the coast in California (Fish 1988), where the average migration rate was 17.4 raptors/hr (which is about one raptor each 3.5 min).

Fall migration of raptors might have been more detectable at Thornton Creek if Faxon had spent more time watching ridge tops. But with an average rate of only one raptor every 3.5 min as in California, Faxon would have had to been very patient to detect a migration.

5-G-2. PASSERINES

Sometime from early August until early September there is commonly a major movement of migrants at Thornton Creek. This movement is most observable around 9 AM. On days when it is raining or overcast, actual waves of migrants sometimes occur. Faxon has then noted up to six species of migrants in a single tree at the same time. Most often these waves of migrants include Black-throated Gray and Wilson's warblers, Warbling Vireos, Black-headed and Evening grosbeaks, Western Tanagers, and Empidonax flycatchers with a sprinkling of other species including occasional Townsend's Warblers and vagrant warblers.

The Empidonax flycatchers remain the most puzzling part of the fall movement. Each fall there are several of them which pass through the Valley that certainly do not appear to be any of the native species. A good mist-netting program here in the fall might turn up some real surprises.

5-G-3. PASSERINE MIGRATION WAVES

The following incidental notes for fall migration in 1985-1988 are incomplete and subjective, but do indicate that waves of migrants can sometimes occur. Waves of migration could have also occurred on days other than those indicated.

In 1985, fall migration was slow until August 13, then a whole flood of migrants moved through. August dates of major movements were August 13th (grosbeaks, Western Tanagers, Warbling Vireos, and Empidonax flycatchers), August 15th (mainly grosbeaks with a sprinkling of Black-throated Gray Warblers), August 19th (a very heavy movement of Warbling Vireos, dozens of Black-throated Gray and Wilson's warblers, and a few Orange-crowned and Hermit warblers), and August 21st (another movement of primarily Black-throated Gray Warblers). The movement between these dates was more subdued, with fewer birds.

more subdued, with fewer birds. In 1986, by early August, a heavy migration of Black-throated Gray and Wilson's warblers, Warbling Vireos, Black-headed Grosbeaks, Western Tanagers, and Pacific-slope and Hammond's flycatchers was taking place. Later in August and in early September, large flocks of Evening Grosbeaks and Cedar Waxwings showed up.

In 1987, there was a heavy movement of passerines between August 26 and September 10. This movement was noteworthy for heavy concentrations of Red-breasted Nuthatches, Evening Grosbeaks (hundreds), Cedar Waxwings (thousands-single flocks of 300 birds were common), and Warbling Vireos. There were lesser numbers of Hammond's and Pacific-slope flycatchers, Black-throated Gray and Wilson's warblers, Western Tanagers, and a few Solitary Vireos. Townsend's Warblers moved through on September 7-8, but good numbers of them were still migrating through on October 15.

In 1988, a series of waves of migrants occurred during or shortly after periods of stormy wet weather. A small movement of Red-breasted Nuthatches began on September 15. On September 19, the day following a heavy rainstorm, there was a day-long movement of Black-throated Gray and Townsend's warblers and large numbers of Hammond's Flycatchers. During the first two weeks of October, there was an impressive movement of Ruby-crowned Kinglets. Another wave of Black-throated and Townsend's warblers occurred on October 3-10; a Yellow Warbler joined the group on October 5. Straggling Black-throated Gray Warblers were noted until October 13. On October 13, hundreds of Cedar Waxwings and American Robins moved through.

5-H. TABLES

Table 5.1. Mean and range in yearly frequency of occurrence of 23 common summer residents and four common winter residents at Thornton Creek within 10 days of arrival or before departure. Summer residents arrive in spring and depart in late summer/fall; winter residents arrive in late summer/fall and depart in spring.

These data are based on a sample of five years (usually 1976-1980), when the number of observation days each month and the number of species seen daily were usually higher than average (Fig. 3.1). If there were less than five days of observations in the 10 day period, a different year was usually used. These data are derived from summary data given for each species in Chap. 6.

£	First 10 Da	r Frequer Date + ys Range	Last I 10 Dag	y (%) Last Date - 10 Days Mean Range				
SUMMER RESIDENT: Turkey Vulture Band-tailed Pigeon Rufous Hummingbird Olive-sided Flycatcher Western Wood-Pewee Willow Flycatcher Hammond's Flycatcher Pacific-slope Flycatcher Tree Swallow Violet-green Swallow No. Rough-winged Swallo Barn Swallow Swainson's Thrush Cedar Waxwing Warbling Vireo Orange-crowned Warbler Black-thr. Gray Warbler Wilson's Warbler Western Tanager Black-headed Grosbeak White-crowned Sparrow Brown-headed Cowbird American Goldfinch	58 57 74 93 59 65 77	$\begin{array}{c} 20-50\\ 0-33\\ 0-88\\ 44-100\\ 0-89\\ 88-100\\ 43-70\\ 40-89\\ 0-100\\ 22-100\\ 0-100\\ 22-100\\ 0-100\\ 30-100\\ 30-89\\ 29-100\\ 56-89\\ 56-100\\ 0-67\\ 90-100\\ 30-100\\ 50-100\\ 50-100\\ 60-100\\ \end{array}$	42 68 34 64 70 81 12* 34 58 34 23 73 44 14 41* 17 24 25 32 67 58 47 26	0-100 29-100 25-44 0-60 17-100 11-57 0-38 0-78* 0-50 0-75 0-63 0-63 0-63 0-100 33-75				
Mean * Mean and range for ou	64 nly fo	ur years	43					
WINTER RESIDENT: Ruby-crowned Kinglet Varied Thrush Fox Sparrow Golden-crowned Sparrow	27 55 40 18	0-67 38-78 13-88 0-44	37 25 40 69	10-100 10-43 14-78 30-100				

Varied Thrush Fox Sparrow Golden-crowned	•	40	38-78 13-88 0-44	40	10-43 14-78 30-100
	Mean	35		43	

Table 5.2. Frequency of prese or after the average arrival d summer residents and four comm at Thornton Creek. Summer res spring and depart in late summ residents arrive in late summe spring. "First + 10 Day Mean" fre Table 5.1 and is the frequency the first 10 days after a spec First Date" is the average Fir part of the 1973-1989 period, Range" is the difference betwe smallest First Date during the data are derived from yearly d in Chap. 6. "Frequency of Presence Be Average First Date" is calcula if a species was present/absen calendar date relative to the for Faxon's 1973-1989 observat	observations were made on a day, then that day (and year) is excluded. For example, there were 17 years of April observations in which the presence of Band-tailed Pigeons in the five days before and after the average arrival date were determined; however, there were no observations on April 18 (-2 days [before the average]) in 1976 and 1982, so the frequency of presence is calculated from the presence/absence in the remaining 15 years for -2 days. Since the number of years with observations for each date vary, the range in the number of years with observations is given as the "Years/Day Range." Only years in which a First Date were given for each respective species are included; see footnotes to see which years were included in these calculations. Day O=Average First Date. Days with Frequencies of 50% or more are boldfaced.									ve e of the the iven					
First + 10 Day Mean Presence	1973-19	Date	rvati Days	ons. Befo	ore o	or A	fter	Ave	rage	Fir	st D	ate.			Years/
(%)	Date ((Days)	-5	=4	-3	-2	=1	0	+1	+2	+3	+4	+5	Mean	Range
SUMMER RESIDENT:Turkey Vulture35Band-tailed Pigeon22Rufous Hummingbird32Olive-sided Flycatcher76Western Wood-Pewee42Willow Flycatcher95Hammond's Flycatcher54Pacific-slope Flycatcher54Pacific-slope Flycatcher58Violet-green Swallow57No. Rough-winged Swallow43Barn Swallow74Swainson's Thrush93Cedar Waxwing59Warbling Vireo65Orange-crowned Warbler77Black-thr. Gray Warbler72Wilson's Warbler81Western Tanager26Black-headed Grosbeak98White-crowned Sparrow79American Goldfinch88	3/18 4/21 3/6 5/10 5/7 5/24 5/1 4/25 3/2 3/13 4/11 4/11 5/10 5/23 4/28 4/1 5/23 4/28 4/7 4/18 4/17 5/9 5/7 3/28 4/15 4/23	18 21 14 28 23 57 32 37 13 12 21	17 15 12 25 29 13 19 7 8 7 7 0 8 12 18	23 20 30 10 7 27 21 22 0 15 21 20 17	20 25 23 21 18 13 17 10 27 27 40 0	20 21 25 22 38 33 20 18 33 27 33 8 33 27 6	30	17 29 23 54 38 9 8 15 15 54 20 46 31 57 57 57	50 38 31 55 50 64 39 47 56 60 237 30 21 29	21 36 25 85 36 67 10 46 29 79 47 63 54 38 58 54	20 45 47 73 20 64 15 62 38 75 50 47 42 58 80	31 36 69 36 75 36 82 25 64 31 81 85	19	20 28 36 32 32 35 26 39 40 40 46 25 35 35 35 35 35 35	10-14A 13-16I 10-14A 11-14B 13-17I 8-13C 8-13D 11-15E 9-13A 11-14A 12-16I 12-16I 12-16I 12-16I 12-16I 12-16I 13-16I 13-16I 13-17I 9-12H 12-16I 13-16I
Mean 64 Minimum 22 Maximum 98	-	23 12 57	12 0 29	15 0 30	19 0 40	22 6 38	28 0 50	31 8 75	38 14 64	45 10 85	50 15 80	56 25 93	61 9 93	34 13 52	
WINTER RESIDENT: Ruby-crowned Kinglet 27 Varied Thrush 55 Fox Sparrow 40 Golden-crowned Sparrow 18	10/1 9/23 9/20 10/17	54 26 38 97	0	10 14 8 33	0 0 25	0 11 0 21	18 23 23 14	15 15 25 23	23 38 13 30	27 33 31 22	30 36 15 13	30 33 46 25	29 36 17 25	18 22 19 24	9-15E 9-14J 8-13J 8-16I
Mean 35 Minimum 18 Maximum 55	-	54 26 97	17 0 29	16 8 33	6 0 25	8 0 21	20 14 23	20 15 25	26 13 38	28 22 33	24 13 36	34 25 46	27 17 36	21 18 24	
A 1974-1985 and 1987-1989. B 1973-1987. C 1973, 1975-1983, and 1985-1 D 1977-1989.	F 197 989. G 197	4-1979,	1981.	-198	5, a	nd 1	987-	1989	j.		3-19	981 a		983-19	989.

Chap. 6. Species Accounts Chap. 6. SPECIES ACCOUNTS ******* DAILY FREQUENCY (FREQ): 6-A. LEGEND 1-10=relative Daily Frequency (in number of tenths)(section 1-C) within a month that Years without records are given for a species if it was present most years and if inclusion of the year without records would had at least eight observation days (Table 3.1). The relative Daily Frequency was make it clearer that a species was not found calculated by dividing the number of some years. observation days that a species was recorded by the total number of observation days (see -----FIRST AND LAST DATES: Table 3.1), and then multiplying by 10. The result was then rounded-off to the nearest These are the first and last dates, respectively, that a species was recorded. Note that a species may have been present whole number (section 1-E-1). before a First or after a Last date (section 5-B). A First or Last date is only listed if +=Daily Frequency of 0.1-0.4 tenths in a month that had at least eight observation days (Table 3.1). If this relative Daily there appears to be enough observations to somewhat accurately determine the date. Frequency was rounded-off to the nearest whole number, the result would be 0, so a "+" was used to indicate that the species was See Table 3.2 for dates when there few or no observations, which may accordingly have affected observed First and Last dates. present, albeit rarely. -=not possible to assign a First or Last date .=species was not recorded in a month because the bird species was present that had at least eight observation days (Table 3.1). Thus, the species was either absent or overlooked. A "." was u instead of a "0" (zero) to enhance continually or erratically throughout the year, because observation effort may have been inadequate to determine the First or was used Last date reasonably accurately, or because readability of when a species was absent (section 1-E-2). the date was not recorded. AVERAGE FIRST AND LAST DATES: P=species was present at least one day in a These were calculated for the entire 1973-1990 period. month with less than eight observation days. ?=species was not recorded in a month with less than eight observation days. Because of the low observation effort, it is not clear if the constitute of if it was a second and a second a AV First=average (earliest date-latest date) AV Last=average (earliest date-latest date) AV First, AV Last=Averages (AV) are only the species was absent or if it was present, calculated for species with at least three but missed. years of First or Last dates and in which an ------average (AV) appears appropriate. For some species, the range in First or Last dates is so great that an average doesn't appear AV DAILY FREQUENCY (FREQ): These were calculated for the entire 1973-1990 period (section 1-C-4). meaningful and is not calculated. The pitfalls of AV First and AV Last 1-10=relative Average Daily Frequency (in number of tenths) for months with at dates are examined in section 5-B-3. least eight observation days. The average was calculated by dividing the sum of Daily Frequencies by the total number of months with at least eight observation days (see Table 3.1), and then multiplying by 10. The result was then rounded-off to the FREQUENCIES AFTER FIRST OR BEFORE LAST DATES: First + 10 Days Last - 10 Days Obs. Present Obs. Present YR Days (%) Days (%) nearest whole number. If a Daily Frequency was "+," the sum of Daily Frequencies was For common summer and winter residents (see Table 5.1 for list), the relative calculated as if +=0.4. frequency with which a species was recorded 10 days or less after its First Date or 10 days or less before its Last Date is +=Average Daily Frequency of 0.1-0.4 tenths for months with at least eight calculated for a sample of five years (e.g., usually 1976-1980). If there were less than observation days. If this frequency was rounded-off to the nearest whole number, the result would be 0, so a "+" was used to five days of observations in the 10 day period, a different year was usually used. indicate that the species was present, albeit If a species was Present (P) during **Obs. Days**=total number of observation days 10 days or less after the yearly First Date 1973-1990 only in a month with less than eight observation days, a "+" was used to indicate its Average Daily Frequency. or 10 days or less before the yearly Last Date. This includes observation days in which a species may have been absent.

.=average of 0.0 tenths. Thus, the species was either absent or overlooked in all months with at least eight observation days. A "." was used instead of a "0" (zero) to enhance readability of when a species was absent (section 1-E-2).

Present=number of days that a species was

recorded divided by the total Obs. Days.

AVERAGE MONTHLY FREQUENCY:

Average Monthly Frequencies are also explained in section 1-D. Because of the many years of observations, Average Monthly Frequencies are calculated separately for three periods: <1973 MONTHLY 73-81 MONTHLY 82-90 MONTHLY.

These divisions allow the reader to ascertain if relative Monthly Frequencies may have changed during the course of Faxon's observations.

1-10=Average Monthly Frequency (in number of tenths) among Tolerable Observation Effort (TOE) months (section 3-C). The Frequency was calculated by dividing the number of TOE months in which a species was recorded by the total number of TOE months (see Table 3.4), and then multiplying by 10. The result was then rounded-off to the nearest whole number.

Note that the Frequency in tenths (a number or ".", see below)(section 1-E-1) is calculated only for months with TOE and is thus unaffected by a species' presence or absence in non-TOE months.

- .=O tenths, and the species was also not recorded in any non-TOE month. A "." is used instead of a "O" to enhance readability of when a species appears to have been absent (section 1-E-2).
- x=species present during a month in one year
 prior to 1973.
- X=species present during a month in two or more years prior to 1973.
- ?=species not recorded in a month prior to
 1973 but there were few or no observations,
 so it may have been overlooked.

SPECIES STATUS:

Yr	First	Last	Ja	Fe	Mr	Ар	Мy	Jn	J1	Ag	Sp	0c	Νv	De	
73	11/27	11/28	?	?	?	•	•	•	•	•	•	•	1		
A 1/	DATEN	5050													
AV	DAILY	FREQ	•	•	•		•	٠	•	•	•	•	+	•	
	-81 MOI		•	•	•	•	•	•	•	•	•	•	- 1	•	
82.	-90 MOI	NTHLY													

In 1973, a single bird was caught by hand on land and released into Pond B.

6-B-2. EARED GREBE												
Yr First Last	Ja	Fe	Mr	Ар	Мy	Jn	J1	Ag	Sp	0c	Ň٧	De
79 11/21 11/21	•	•	•	•	•	•	٠	•	•	•	+	•
AV DAILY FREQ											+	
73-81 MONTHLY	•	•	•	•	•	•	•	•	•	•	1	
	•	•	•	•	•	•	•	•	•	•	+	•
82-90 MONTHLY	•	•		•	•	•	•	•	•	•	•	•
One was at a pond. 6-B-3. DOUBLE-CRESTED CORMORANT												
6-B-3. UL	JURL	E-C	RE:	SIEL	ູບເ	JKM	JKAI		C	0-		D
Yr First Last					МУ	JN	JI	Ag	Sp	UC	NV	
79 12/6 12/6					•	٠	•	•			•	+
81 12/18 12/19					•	•					•	2
84 11/22 11/24			•	•							1	
85 1/16 1/16											•	
89 12/28 12/28								•				i
AV DAILY FREQ	+										+	+
73-81 MONTHLY	-											2
82-90 MONTHLY	- ĩ										1	1
AV First=12/18												

AV Last=12/19 (11/24-1/16)

A single bird was noted each time.

A strigter											
6-B-4. Gi Yr First Last 73 74 75 76 77 78 77 78 79 80 80 81 82 83 85 87 88 89 90	REAT B F 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	? 2 • 4 • 1 • + 2 1 • 1 2 P 3 1 • 5	·1+2 ·+213 ·1 · · ·76 ·4	My • •1++ •+++ •283 •6833	Jn + 1 2 1 + 1 	J1 4 2 ·2 1 4 2 6 4 5 ?? 1 3 ?? 6 6 2 ·	322162342414 •48811	Sp21+122245153234 • • P	0c+12112 ·2 ·243 ·63413	Nv 11121+133 .642?461P	De 5 .221+264281353214
AV DAILY FREQ 73-81 MONTHLY 82-90 MONTHLY	2 2 10 9 9 8) 6	2 8 4	2 7 8	1 7 7	3 9 9	3 10 9	2 10 8	2 8 9	2 10 9	3 9 10

They were seen along Thornton Creek and were not seen "mousing" in the fields.

		-5. G												
Yr	First	Last	Ja	Fe	Mr	Ар	Мy	Jn	J1	Ag	Sp	0c	Νv	De
	8/6		•	•	•		•	•	•	3	•	•	•	
78	11/8	11/8								•				
AV	DAILY	FREQ				•	•			+	•	•	+	•
73-	-81 MOI	THLY				•	•		•	1	•	•	1	•
82-	-90 MOI	VTHL Y	•	•	•	•	•	•	•	•	•		•	

Usually a single bird was seen, but two were sometimes seen in August 1977.

	6-B-6. GREEN-BACKED HERON (r First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De													
Yr	First	Last	Ja	Fe	Mr	Ар	My	Jn	JI	Ag	Sp	0c	Νv	De
73	8/4	8/4	?	?	?	•		•	•	+	•	•	•	•
74	-	-	•		•	•	•			•	•	•	•	•
75	-	-			•	•	•			•	•	•	٠	•
76	12/10	12/10			•	•				•		•	•	+
77	-	-		•	•	•	•	•	•	•	•	•	•	•
78	3/29	3/29	•	•	+	•	•	•	•	•	•	•	•	•
79	5/3	5/3												
79	9/3	9/3	•	•		•	+	•	•		+	•	•	
80		7/31	•	•	•	•	•	•	+	•	•	•	•	
81	7/28	7/28		•	- 2	•	•	•	+	:	:	•	•	
82	7/2	9/13	•	•	•	٠		•	1	1	1	•	•	•
83		5/31								-				
	8/3	8/8	•	•		•	+	•	?	2	•	•	•	•
84	-	-		٠	٠					•				
85	3/31	3/31			+				?	•		٠		•
86		-	٠					٠	?	•			?	
87	5/17	5/17												
87	8/3	8/30					+			1				•
88		-			•		•	i	•	÷		- 00		
	4/25	8/23	•	•	•	1	•	1	•	+	•		•	•
90	-	-		•	•					•		•	•	•
		EDEO				+	+	+	+	+	+			
H¥ 72	DAILY -81 MO		•	•	+		1		2				•	i
	-81 MO		•	•	1		2	i	1				•	-
0C	First		121	~ ^•									-57	213
AV AV	First	-4/2/ -0/2 /	13/	_0/	2/3	τ)	ΔV	Lac	+=0	/18		120		12
AV	First First	-8/2 (=12/10	112	ーン/ ク/1	3		AV	Lac	+=1	2/1	λ'	12/	101	13)
٨V	rirst	-12/10	(1	2/1	0)		A V	Las	υ-1	2/1	0 (101	10)	
		inglo	L							-	-	how		

A single bird was seen each time. They appeared to be an occasional spring and an uncommon late summer migrant. They were found along Thornton Creek.

						_	_						
6-B-7. TUNDRA SWAN Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De													
Yr First Last	Ja	Fe	Mr	Ар	Мy	Jn	JI	Ag	Sp	0c	Nv	De	
85 11/19 11/1	9.	•	•	•	•	•	•	٠	•	•	1	•	
AV DAILY FREQ													
73-81 MONTHLY			٠	٠	٠	•	•	٠	٠	٠	:	•	
82-90 MONTHLY							•		٠		1	•	

Five flew over towards the northwest on 19 November 1985.

6-B-		DÖZI	E_SI	РР.						c -	<u> </u>		
Yr First		Ja	Fe	Mr	Ар	My	Jn	JI	Ag	Sp	UC	NV	ve
73 4/24	5/1				-						~		1.1
73 8/30	12/28	?	?	?	1	+	•	•	+	1	2	•	Ŧ
74 4/26	5/20				-	-					+	1	
74 8/26	11/12	•	•	•	1	1	•	•	+	•		1	•
75 4/29	5/3										1		
75 9/30	10/31	•	•	•	+	1	•	•	•			•	1
76 9/30	12/19	•	•	•	•	•	•	•	•	т	т	•	т
77 4/22	4/30										_		
77 10/19	10/19	•	•	•	1	•	•	•	•	•		•	•
78 4/29	5/2				-	-				1	1		
78 9/23	10/28	•	•	•	т	т	•	•	•	1	1	•	•
79 4/25	4/25										+		
79 10/20	10/20		•	•	т	•	•	•	•	•	i	i	•
80 10/1	11/28	•	•	•	•	•	•	•	•	•	-	-	
81 2/2	2/2												
81 4/22	4/28		-		1						+		
81 10/19 82 10/4	10/19 11/9	•	т	•	T	•	•	•	•	•	2	÷	. <u>.</u>
	5/3	•	•	•	•	÷	•	?	•	•	-		
83 5/3 84 4/21	4/21	•	•	•	i		•	•		- 2	- 00	- 2	÷ 2
85 4/26	4/26	•	•	•	-	•	•	•	(.				15
85 9/2	10/21				+	12	1.2		2 -	+	+		
86 4/19	5/6	•	•	•				ं	0 T			-	•
86 10/24		_	_		+	+	0.5	?			1	?	1
87 4/24	4/24	•	•	•						•	-		
87 11/7	11/26				+							1	
88 4/16	4/26	•		-		-				-7-			
88 10/1	11/28				2						2	3	
89 4/24	4/24	•		-									
89 9/30	9/30				1					+	•		: - : • •
90 2/22	2/22			-									
90 9/24	10/25		1							P	2		
AV DAILY	FREQ		+		1				+	+	1		+
73-81 MO	NTHLY		1		7		-		2				1000
82-90 MO			1		7					_ 3			1
AV First		(2/	2-2	/22)	AV	La	st=	2/1	2 (2/2	-2/	22)
AV First	=4/24	(4/	16-	5/3	2.	AV	Las	t=4	/30	(4	/21	-5/	20)
AV First	=10/1(8/2	6-1	1/7) A	VL	ast	=11	/11	(9/	30-	12/	28)

This includes all records of unidentified geese as well as those identified as Canada or Gr. White-fronted Geese.

There were only three sightings (on unrecorded dates) of single birds landing; all the rest of the sightings were of birds flying overhead in flocks.

Most spring flocks were flying N/NW towards the general direction of the Siletz River Valley, and most fall flocks were flying towards the SE from the general direction of the Siletz River Valley. However, November-December flocks were usually small and often were flying east or south; for example, on 7-8 Nov. in 1987 and 1989, several flocks flew east, seemingly up the Yaquina River Valley towards the Willamette Valley. But on 13 Nov. 1989, one flock flew towards the south, and on 25 Oct. 1990 a flock of 30 Canada Geese also flew south. On 22 Feb. 1990, three flocks totalling about 600 Canada Geese flew to the east. Thus, the flight direction was not constant. The number of geese flying by during spring

and fall migration seemed to be highly variable. For example, on 1 Oct. 1990, Faxon noted thousands of Gr. White-fronted Geese, but there were also years when none were noted.

These geese were probably all Gr. Whitefronteds or Canadas, but some may have been Snows. They were usually not visually identified because of high altitude, poor visibility, or a lack of time. Further, because they were so uncommon, Faxon could not become familiar enough with their calls to confidently distinguish among them.

	6-B-11. MALLARD
6-B-9. WOOD DUCK Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De	6-B-11. MALLARD Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De
73 ? ?	73 - 4/12
74	73 7/16 7/16 73 9/4 9/22 ? ? ? + + . 2
76 4/11 6/11 1 1 1	74 2/22 3/28
77 2/17 6/5 . + 1 2 9 1	74 9/13 10/7 . + 1 + 1 75 3/15 5/26 1 7 3
78 4/23 4/23 78 8/13 9/14 + + +	76 3/6 5/19 4 8 2
79 1/7 1/20	77 1/22 - + 2 8 4 5 4 2 3 1 2 + +
79 4/15 5/18 1 1 1	78 - 6/20 78 8/26 8/26 1 2 1 3 5 1 . +
81 3/31 4/23	79 3/2 5/15 . 2 + 2
81 9/26 9/26 + + +	80 2/21 5/14 80 10/2 10/6 . + + + + 1
82 4/8 6/2 3 1 1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
84 2/12 5/21 . 2 1 1 2	82 6/7 6/7
85 3/26 5/5 + + 2	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
86 4/29 5/2 + + . ? ? . 87 5/11 5/11	84 2/27 5/7 . + 1 . 1
87 9/7 9/19	85 1/6 3/21
87 12/16 12/18 + 1 2 88 5/23 5/23	85 7/1 7/1 + 1 +
88 9/16 9/16 1 1	87 2/10 7/27 . 1 2 . + . 1
89 4/4 5/25	88 2/2 5/3 88 9/13 9/13 • + • 1 1 • • • 1 • • •
89 9/24 10/5 5 3 1 2 90 3/24 5/10 1 7 1	89 3/18 4/18
	89 11/24 12/4 1 1 1 1 90 3/1 5/16 9 9 6 P 4
AV DAILY FREQ + + + 1 1 + . + + + . + 73-81 MONTHLY 1 1 4 7 4 2 . 1 2	90 3/1 5/16 9 9 6 P 4
82-90 MONTHLY . 1 3 8 9 1 3 1 . 1	AV DAILY FREQ + + 2 2 2 + + + + + + +
AV First= $4/4$ (2/12-5/23) AV Last= $5/9$ (3/3-6/11)	73-81 MONTHLY 3 5 10 9 8 2 2 2 4 3 1 2 82-90 MONTHLY 2 4 8 4 7 1 3 . 1 . 4 2
AV First=9/11 (8/13-9/26) AV Last=9/22 (9/14-10/5) AV First=12/27(12/16-1/7) AV Last=1/4 (12/18-1/20)	
	Broods of young were occasionally seen at
Many of these records were for pairs, although the only nesting record was for a brood	Pond C; all were in a pond. Observation effort was similar among years,
of eight at Pond C in 1991. They appear to be	so their decline until 1990 appears to have been
mainly a spring migrant in April and May.	real.
They have only been common since Pond C was dug in 1976 or 1977; all were in a pond.	6-B-12. NORTHERN PINTAIL
	Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De
6-B-10. GREEN-WINGED TEAL Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De	89 2/14 2/14 . 1
	AV DAILY FREQ . +
80 1/22 1/22	73-81 MONTHLY
80 12/8 12/23 + 2 81 8/17 8/17	
82 11/23 11/24 1 .	The single record was of 5-6 swimming
84 4/28 4/28 1	together in a pond.
86 4/20 4/20	6-B-13. BLUE-WINGED TEAL
	Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De
AV DAILY FREQ +	77 5/28 6/1 + +
73-81 MONTHLY 1 1 1 1 1	
	AV DAILY FREQ + +
Usually single birds were noted, although sometimes flocks of about five were seen.	<1973 MONTHLY ? ? ? ? X ? ? ? ? ? ? ? ? ? 73-81 MONTHLY 2 1
They have only been recorded since Pond C was	82-90 MONTHLY
dug in 1976 or 1977; all were in a pond.	AV First=5/28 (5/24-5/31) AV Last=5/29 (5/24-6/1)
	This species was ples even on 24 May 1071

This species was also seen on 24 May 1971. 1-2 birds were noted at a time in a pond.

6-B-14. CINNAMON TEAL Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De ? ? ? + 73 4/23 4/23 ? f : . 85 4/14 4/23 . . . 87 5/5 5/5 . AV DAILY FREO . . + + 73-81 MONTHLY 82-90 MONTHLY AV First=4/24 (4/14-5/5) AV Last=4/27 (4/23-5/5) A pair was noted at least once; otherwise, only singletons were seen in a pond. ----------6-B-15. GADWALL Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De AV DAILY FREQ ? ? ? ? ? x x ? ? ? ? <1973 MONTHLY This species was seen only in August 1969 and on 31 July 1970. ------6-B-16. AMERICAN WIGEON Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 75 10/9 11/19 + - + . 78 11/26 11/26 +. . . . • • . . 79 12/25 12/25 ÷ . • • • 82 12/16 12/16 1 • . . . • . • . . . 83 12/30 12/30 ? + 86 1/3 1/3 88 10/4 10/4 1 ? ? . . • • ÷ . • ٠ . ٠ . • . 89 12/28 12/28 . 1 i 90 2/1 2/1 . AV DAILY FREQ + +÷. + + . • • . . 73-81 MONTHLY 1 2 1 Small flocks of less than 10 birds were found in a pond, not in the fields. They have been seen more regularly since Pond C was dug in 1976 or 1977. 79 2/8 2/10 1 + AV DAILY FREQ + + . . ٠ 73-81 MONTHLY 1 2 82-90 MONTHLY . . About 4-5 birds were present in a pond each time. 6-B-18. RING-NECKED DUCK Yr First Last Ja Fe Mr Ap My Jn J1 Ag Sp Oc Nv De 79 1/11 1/11 79 12/17 12/17 + 90 12/7 12/19 5 . . . AV DAILY FREQ + . . . 73-81 MONTHLY 1 1 1 • • • • • • • 82-90 MONTHLY 1 AV First=? (11/20-1/11) AV Last=? (11/26-12/19)

Only a single female was seen at a time in a pond.

	CONTRACT CONTRACTOR	0054											
6-B-	-19.	GREA	TEI	K SC	AU	, 				C	o .	NI	D -
Yr First	Last	Ja	ŀе	Mr	Ар	Mу	Jn	JI	Aġ	Sb	UC	NV	ve
84 8/17	8/1/	•	•	•	•	•	•	•	+	•	•	•	•
	5050												
AV DAILY				•		•	•	•	+	•	•	•	•
73-81 MOI		٠	٠	•	٠	•	•	•	i	•	•	•	•
82-90 MOI	NIHLY	•	•	•	•	•	•	•	T	•	•	•	•
One	adult	ma	le v	vas	no	ted	in	ap	ono	d.			
C D	-20.	1 2 2 2	ED	50	ALID	-							
Yr First	-20.	LES		30/ Mm	AUP An	м.,	1n	11	٨a	Sn	00	Nv	Do
1r F1rSt		Jd	ге			riy	Un	01	Ay	эh	00	IN V	1
88 12/3	12/3	•	•	•	•	•	•	•	•	•	•	•	-
AV DAILY	EDEO												+
73-81 MOI		•	•	•	•	•	•	•	•	•	•	•	•
82-90 MOI		•	•	•	•	•	•	•	•	•	•	•	i
82-90 MUI					•	•	٠	•	•	•	٠		-
0ne	adult	ma	leı	Nas	fo	und	in	a	pone	d.	1000		
6 D	-21.	COM	MON	CO	DE		5		0.000				
Yr First	-21.	COM	nOn	GOI	LDEI		<u> </u>			~	~		
			- L O	Min	۸n	Mv	10		DΩ	\n	110	NV	110
90 12/12													De 1
90 12/12	12/12	•	•	•	•	•	•	•	ł	•	•	•	1
90 12/12 AV DAILY	12/12 FREQ	•	•	•	•	•	•	•	ł	•	•	•	1
90 12/12 AV DAILY 73-81 M0	12/12 FREQ NTHLY	•	•	•	•	•	•	•	ł	•	•	•	1
90 12/12 AV DAILY	12/12 FREQ NTHLY	•	•	•	•	•	•	•	ł	•	•	•	1
90 12/12 AV DAILY 73-81 MO 82-90 MO	12/12 FREQ NTHLY	•	• • •	• • •	•	•	• • •	•	ł	•	•	•	1
90 12/12 AV DAILY 73-81 MO 82-90 MO One	12/12 FREQ NTHLY NTHLY was f	oun	d i	n a	po	nd.	•	•	ł	•	•	•	1
90 12/12 AV DAILY 73-81 MO 82-90 MO One 6-B	12/12 FREQ NTHLY NTHLY was f 	oun	d i	n a 'S 1	po	nd. DEN	• • • •	•		•	•	•	1 + i
90 12/12 AV DAILY 73-81 MO 82-90 MO One 6-B Yr First	12/12 FREQ NTHLY NTHLY was f -22. Last	oun	d i ROW Fe	n a 'S 1	po	nd. DEN	• • • •	•		•	•	•	1 + i
90 12/12 AV DAILY 73-81 MO 82-90 MO One 6-B Yr First	12/12 FREQ NTHLY NTHLY was f -22. Last	oun	d i ROW Fe	n a 'S 1	po	nd. DEN	• • • •	•		•	•	•	1 + i
90 12/12 AV DAILY 73-81 MO 82-90 MO One 6-B	12/12 FREQ NTHLY NTHLY was f -22. Last	oun BARI Ja	d i ROW Fe	n a 'S 1	po	nd. DEN	• • • •	•		•	•	•	1 + i
90 12/12 AV DAILY 73-81 MO 82-90 MO 0ne 0ne First 80 1/10 82 1/29	12/12 FREQ NTHLY Was f -22. Last 1/10 1/29	oun BARI Ja +	d i ROW Fe	n a 'S (Mr	po GOLI Ap	nd. DEN My	EYE Jn		Ag		0c		1 + 1 De
90 12/12 AV DAILY 73-81 MO 82-90 MO 0ne 0ne First 80 1/10 82 1/29 AV DAILY	12/12 FREQ NTHLY NTHLY was f -22. Last 1/10 1/29 FREQ	oun BARI Ja + +	d i ROW Fe	n a 'S 1	po GOL Ap	nd. DEN My	EYE Jn		Ag		0c		1 + 1 De
90 12/12 AV DAILY 73-81 MO 82-90 MO 0ne 0ne First 80 1/10 82 1/29	12/12 FREQ NTHLY NTHLY was f -22. Last 1/10 1/29 FREQ NTHLY	oun BARI Ja + +	d i ROW Fe	n a 'S (Mr	po GOL Ap	nd. DEN My	EYE Jn		Ag		0c		1 + 1 De
90 12/12 AV DAILY 73-81 MO 82-90 MO One 0r First 80 1/10 82 1/29 AV DAILY 73-81 MO	12/12 FREQ NTHLY NTHLY was f -22. Last 1/10 1/29 FREQ NTHLY	oun BARI Ja + + 1	d i ROW Fe	n a 'S (Mr	po GOL Ap	nd. DEN My	EYE Jn		Ag		0c		1 + 1 De

female that was gray with a brown head and yellow eye. To distinguish each as a Barrow's, the bird was flushed. Each had the amount of white and pattern of white in the wing that was characteristic of the Barrow's (see Robbins et al. 1983). The shape of the head or the color of the bill was not recorded. Each was in a pond. Eltzroth (1987:7) lists them as rare along the Oregon Coast.

			-											
	6-B-	-23.	BUFI											
Yr	First	Last	Ja	Fe	Mr	Ap	Мy	Jn	Jl	Ag	Sp	0c	Νv	De
78	11/29	-	•	•						•			+	7
79	11/17													
79	5/7	5/12	4	3	4		2				•	•	5	10
80	12/2		6									•	•	+
81	12/5	12/5												
81	-	3/10	+	+	+	•			•	•	•	•	•	2
82	4/2	4/3												
82	12/16		3 .	•	•	1	•	•	•	•	•			1
83	2/15	2/16												
83	4/9	4/9												
83	12/22	-		1		+	•	•	?			•		+
84	11/2	11/2												
84	-	2/23	1	+									1	
85	3/15	3/15												
85	11/23	11/30).		+						1.		1 ?	
86	~	-	•						?				?	
87	10/23		3.									+		
88				•	•	2		٠						۲
89		3/23	1	1	8			•			•		•	•
90	12/3	4/7	1	7	•	1				•	•	•	•	5
Δ.		EDEO	1	1	1	+	+					+		1
	DAILY -81 MO		1 4	1 3	1 3		1	•	•	•	•	т	2	4
	-90 MO		3		2	4		•	•	•	•		3	
						4		νĹ		_? [*]	(10	122	-5/	
AV	FIFSL	=? (10	5723	-57	"		A	¥ L	αsι	-:	(10	123	-57	17)

On 5-9 February 1979, 5-7 Buffleheads were counted; generally, only 1-2 were found. They were sometimes present most of a winter; other times, they were only a spring or fall migrant. They have only been seen since Pond C was dug in 1976 or 1977; all were in a pond.

			-			-							
6-B-						NSEF				C	0.		
	Last 5/26	Ja	ŀе	Mr	Ар	Мy	Jn	JI	Ag	Sp	UC	NV	νe
	11/30	?	?	?		1						1	
	5/29	:	:	÷	•	÷		:		:	:	-	•
	2/10	•	•		•		•	•	•	•	-	•	•
	12/6		+			•					1	2	+
	6/3	•	•		•	•	+	•	•		•	•	
	7/29												
	12/4	٠	•	+	1	1	+	13	4	:	•	1	1
	9/14 12/19	٠	i	+++	•	1+	•	1	2	1	i	•	÷
	12/30	•	1		•	÷	•	2	1	•	÷	•	4
	4/3	•	•	•	•		•	-	-	•	•	•	-
	7/23		+		+	٠		+				•	•
	5/9												
	7/13	٠	•	•	+	+	•	1	•		•	•	
	5/24												
	8/28 11/24				<u>т</u>	<u>т</u>		?	-			2	
	2/29	•	•	•	т	т	•	1	т	•	•	2	•
	7/30												
	11/28		1			1		1				1	
85 3/22	5/14												-
	11/30	•	•	1	1	2	•		•		•	1	•
	1/2					~		•				•	
	8/1 3/23	1	•	•	•	2	1	?	+	•	•	?	10
87 11/2	5/25			1								÷	+
88 12/28	1/9	i				•		•	•		•		i
	3/21	î	i	i									÷
90 -	2/13		ī	-			•		•			P	2
AV DAILY		+	+	+			+		+	+			+
73-81 MON 82-90 MON		3	4		2	7	2	6 3	3	1	3	3	
02-90 1101	11061	- 3	- 3	- 3	- 3	0	1	3	۷ ک			0	- 4

Six were noted on 29 July 1977, but usually only 1-2 were found at a time in a pond. No broods of young were ever seen.

Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De Ť 76 8/18 8/18 . . 79 9/6 9/6 AV DAILY FREQ 73-81 MONTHLY 1 1 . 82-90 MONTHLY These records were for females or immatures that might have been Red-breasted Mergansers but were much more likely to have been Common Mergansers. All were in a pond. ----6-B-26. COMMON MERGANSER Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De ? ? + ? 73 12/23 -. . . . 1/23 74 = -÷ . ŧ 75 12/28 -. ÷ 1/6 + 76 -٠ 18 77 12/14 12/14 + . . . 78 -79 2/15 4/10 79 11/27 + 1 -+ 2/29 80 12/2 1 1 2/20 ÷ 81 2/20 . . 82 83 11/25 11/26 ? 1 . 3 ÷ 84 2/14 3/1 . 85 --. ? ? 86 --87 -_ . ٠ . . 88 3/19 1 89 1/14 1 90 1/13 2/2 1 1 . + + ++ AV DAILY FREQ. + + 73-81 MONTHLY 4 4 1 1 4 2 . . 2 2 1 82-90 MONTHLY . AV Last=? (11/26-4/10) AV First=? (11/25-1/14)

6-B-25. COMMON/RED-BREASTED MERGANSER

They were sometimes present in a pond during high waters and subsequent salmon runs. They may be occasionally present in summer, but they were not conclusively identified (see

section 6-B-25).

73 - 9/ 74 3/20 9/ 75 3/25 9/ 76 3/11 9/ 77 3/15 9/ 78 3/18 9/ 79 3/15 9/ 80 3/15 9/ 81 3/8 9/ 82 3/25 9/ 83 3/26 10 84 3/21 10 86 - 9/ 87 3/19 9 88 3/10 9 89 3/19 1	ast Ja Fe /26 ? /24 . /21 . /25 . /30 . /30 . /28 . /22 . /17 . 0/5 . /28 . /30 . /30 . /28 . /30 . /30 . /30 . /28 . /30 . /28 . /28 . /30 . /30 . /28 . /30 . /28 . /30 . /21 . 0/2 . 0/2 . 0/5 .	VULTURE Mr Ap My Jn ? 5 6 9 4 5 9 9 1 7 8 9 2 6 8 9 3 10 9 10 3 9 10 8 3 7 6 3 + 6 10 10 + 5 9 10 + 6 10 10 + 6 10 10 + 6 10 10 5 9 10 8 3 10 10 9 5 9 10 8 2 9 9 8 2 7 9 9	7 8 6 7 5 3 10 7 4 9 5 4 8 5 7 9 8 6 8 10 7 6 8 5 10 6 6 8 10 7 6 8 5 10 10 3 ? 4 3 6 4 . 9 10 8 9 10 8 9 10 7 9 10 7 9 10 7 9 10 7 9 10 7 9 10 9 9 . 7 5 8 9 9 8 5 7 9 10 9 9 8 8 5 9 10 9 9	· · · · · · · · · · · · · · · · · · ·
73-81 MONT 82-90 MONT AV First=3	HLY	10 10 10 10 10 10 10 10	10 10 10 9 10 9	
Y 197 197 197 197 198	7 10 78 8 79 6	10 Days Present (%) 20 30 25 50 50		Days resent (%) 63 44 44 44 14

35.0 41.8 On the days following their arrival each year, they were often absent. For example, the previous tabulation indicates that TV's were present an average of only 35% of the days in the

Mean

10 day period after their arrival. The probability that they would be present near their average arrival date each year was also

low because their average daily presence was only 21% during the five day period before and after their average arrival date (Table 5.2). Prior to their departure, they were also

often absent. For instance, they were present an average of only 42% of the days in the 10 days preceding their departure.

Although only about 10% of Faxon's observations were along ridge tops, he noted a fall ridge top migration of TV's. This is consistent with observations of fall hawk migration near the Golden Gate in California, where many passed in September and October (Fish 1988). In California, they were also found during spring migration (Fish 1989). See also sections 5-F and 5-G.

On 28 April 1987 and 31 March 1990, 10-11 TV's were counted; this was a typical number in feeding flocks, which were sometimes seen. Their apparent absence in July 1989 was

probably a result of an oversight.

6-B-	-28.	OSPI	REY										
Yr First	Last												
78 5/3													
82 6/6	6/6	•	•	•	•	•	1	٠	•	٠		•	•
AV DAILY									((
73-81 MONTHLY		•	•	۲	•	1		•	٠		٠	•	٠
82-90 MON		•		•	•	1					•	•	

A single bird was seen flying over each time.

6-B-29. BALD EAGLE Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 79 3/8 3/8 82 12/3 12/4 +. . . ٠ . . 1 85 1/15 1/15 + + AV DAILY FREQ + . 73-81 MONTHLY 1 i ٠ . . . 1 82-90 MONTHLY

In 1979 and 1985, single adults were found. In 1982, the eagle seen on Dec. 3 was an adult; the one see on Dec. 4 was an immature. All were flyovers, although sometime prior to 1973 Faxon noted a perched pair.

6-B-	6-B-30. NORTHERN HARRIER Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De												
Yr First	Last	Ja	Fe	Mr	Ap	Мy	Jn	Jl	Ag	Sp	0c	Νv	De
74 10/17	10/17	- 201								•	+		
75 9/27	9/27									+		•	
85 9/9	9/9									+			•
88 10/1	10/1									•	1	•	•
89 3/13	3/13	•		1	٠	٠	٠		٠	٠	٠	٠	٠
AV DAILY 73-81 MO		•	•	+	•	•	•	•	•	+	+ 1	•	•
82-90 MO	NTHLY			1						1	1		
AV First	=9/29	(9/9	9-1	0/1:	7) /	4V I	as	t=9,	/29	(9,	/9-:	10/3	17)
AV First	=3/13	(3/:	13)				Α'	V La	ast	=3/	13 ((3/:	13)

It appears that there may sometimes be a Sep.-Oct. migration here that may be detectable by watching ridge tops. This is consistent with observations of the fall hawk migration near the Golden Gate in California, where many passed in September and October (Fish 1988). In California, they also found a spring migration of this species (Fish 1989). See also sections 5-F and 5-G.

A single bird was seen each time.

	6-B	8-31.	SHAI											
Yr	First	: Last	Ja	Fe	Mr	Ap	My	Jn	J1	Ag	Sp	0c	Νv	De
73	-	-	?	?	?	+					- +			
74	-	-	+	1.	1						2	4	1	10
75	-	-		÷			12	÷		i	ī	1	- ÷	÷.
76	_	_		+		÷		1	•	-		2	·	1.0
77	-	-	•		:			1	•	i	+	3 2	+	:
	-	-	٠	•	- T		т. Т			1	- 4			1
78	-	-	٠	+		٠	٠	+	+	•	•	+	1	2
79	-	-	2			1	1	+	+	- 1				
80	-	-	1		+						- +	2	- +	
81	-	-								+		2	1	
82	-	-	ż	- 2	- 2	÷	- ē	1	2?	+	2	_	÷	- 12 - I
83	_	_		•	•			÷	2		-	•	•	•
84	-	-	٠	•			.						•	
	-	-			1		•	+			1	1	٠	
85	-	-	+			+					2	5		
86	-	-							?	1	1	- 4	?	
87	-	-			1	14	+	1.72		1	4	2 4		
88	-	-				1				+	1	4	-	
89	-	-			100	ī		110	i	+	÷	i		•
90	_	_	•	•				•	-	i	•	i	, P	i
90	-	-	•	•	٠	1	•	٠	٠	1	•	T	۲	1
۸v	DATES	r FREO	+	+	+	-	+	+	+	+	1	2		1
				-	-		-	-	-	-	_	2		.
		ONTHL Y	4	4			2	4	2 3	4	7			3
82	82-90 MONTHLY				2	6	1	3	3	7	8	8	3	1

Since it was mostly noted in Sep.-Oct. (which is also when it had its greatest average daily frequency), migration may occur then and may be much more detectable by watching ridge tops. A fall migration is consistent with observations of the fall hawk migration near the Golden Gate in California, where many passed in September and October (Fish 1988) and also with September-October observations in British Columbia where an average of 11 hawks/hr (mostly Sharp-shinneds) flew by, especially during high pressure systems with north winds and clearing skies (1980 Am. Birds 34:192). In California, they have also found a spring migration of this species (Fish 1989). See also sections 5-F and 5-G.

Also see following Sharp-shinned/Cooper's Hawk records.

Usually only one was noted at a time, but on 17 Oct. 1990, two were counted.

													-	-	
		-32.													
Yr	First	Last	Ja	Fe	Mr	Ар	Мy	Jn	JI	Ag	Sp	0c	N٧	De	
78		-								٠					
79	-	-	٠	•	•	•	•	•	•	•	+	•	•	•	
	DAILY									•	+	+	•	•	
	81 MOI				٠					•	1	1		•	
82-	90 MOI	VIHLY	•	٠	•	•	•		·•)	٠	٠	•	•	•	

Sightings were of either Sharp-shinned or Cooper's hawks.

				_	_									
	6-B	-33.	C001	PER	'S	HAW	K		enan:					
Yr	First	Last	Ja	Fe	Mr	Ap	My	Jn	J1	Ag	Sp	0c	Νv	De
73	-	-	?	?	?	1				2	+	+		
74	-	-		1			+	+					•	
75	-	-			+		+	+		1	ż			
76	-	-		+		1		1		3				
77	-	-				1	1	+	1		1 3 4		1	
78	-	-					+	1	+	i	3	23		+
79	-	-						٠	+	1		3		1
80	-	-		+				+	1		+	+		
81	-	-								1	2			
82	-	-					+	i	1	+				
83	•	-							?					
84	-	•										1		
85	-	-				+	+			2	1			
86	-	-	2		P	+	۰.	1	? 24		1 4 5	1	?	i
87	-	-					+	+	2	4	5	2		+
88	-	-		+			1	+ 4	4	421				
89	-	-						1		1		;	i P	
90	-	-							ż		P	1	P	
	DAILY		+	+	+	+	+	1	1	17	1	1	+	+
	-81 MO		•	4		2	4	7			8		1	2
82	-90 MO	NTHLY	1	1	1	2	4	6	6	6	4	6	3	2

These observations don't appear to indicate that a fall migration occurs here. However, a Sep.-Oct. migration may be much more detectable by watching ridge tops. Near the Golden Gate in California, many pass in September and October (Fish 1988) and also in spring (Fish 1989). See also sections 5-F and 5-G.

On 18 July 1979, a nest contained two fledglings that could also fly. On 18 Sep. 1986, a family group of three was seen away from their nest.

Also see preceding Sharp-shinned/Cooper's Hawk records.

	6-B-	-34.	NORT	THE	RN G	GOSI	HAW	<						
	First	Last	Ja	Fe	Mr	Ар	Мy	Jn	J1	Ag	Sp	0c	N٧	De
73	-	-	•				•		•	•	•		•	•
74	4/4	4/4	•	•	•	+						•		
75	7/15	7/15	•						- +	•				
76	-	-		•			•		•	•		•		
77	-	-		•	•					•			•	
78	-	-						•						
79	8/1	8/1	•	•	•	•	•	•	•	+	•	•	•	•
80 80	3/26 11/13	3/26 11/13	3.	•	+		•	•	•	•	•		+	
81	10/13		· .									1		1.
82	5/26	5/26					+							
83	9/22	9/22		•	•				?		1			
84	3/27	3/27			+					- <u></u>				٠
85	9/19	9/19		•					•	•	+	•		
86	-	-												0.00
87	2/11	2/11		1										
88	-	-		•										
89	-	-			٠			٠		٠				
90	3/27	3/27	•	•	+	٠			•		٠			٠
AV	DAILY	FREO		+	+	+	+		+	+	+	+	+	
	973 MOI		×	?	?	?	?	?	?	?	?	?	?	?
		NTHLY			i	i		-	i	i		i	i	•
	-90 MOI		•	i	2	1	i	•	-	1	2	-	1	•
021	- 50 1101		<u>.</u>	-	2	•	*	•	•	•	2	•	•	•

One was also seen on 20 Jan. 1970 and 30 March 1991.

Only one bird was found at a time.

263

	First	Last	RED- Ja									0c	Nv	De
	8/27 DAILY		•	•	•	•	•	•	•	1+	1+	•	•	•
73.	-81 MO -90 MO	NTHLY	•	•	•	•	•	•	÷	i	i	•	•	•
and	As d2an	inglet d 4 Se	on w	as ber	see 19	n o 87.	n 2	7 a	nd	30	Aug	gus	t ar	nd
Yr	6-B First	-36. Last	RED- Ja	Fe	LED Mr			Jn	JI	Ag	Sp	0c	Nv	De
73 74	-	-	? 2	? 2 2	? 5	6 5	4 6	5 7	8 8	6 6	23	3	1 1	1 1
75 76		-	2	2	1 3	1 2 3	5 2	1 6	3	3	3	3	1	2 1
77 78		-	1 2 4	2 2 4	4	4	4 7	1	557	2 2 5 9	4	4	2 2 2	1 2 3 5
79 80	-	-	4	2 3 4	4 6 4	3 6 3	8 8 7	8 2 6	76		223	1 2	2 + 4	3 5 1
81 82 83		-	2 2 3 6	3	4 2	3 6 7	/ 5 8	10 5	10 8 ?		4	2 4 3	2	6 3
84 85	-	-	3 1	2 4 4	4 2	5 5	5	5 5 3	9 1		2	1	2	3 4
86 87	-	-	5 7	1 6	P 2	34	6 3	4		6	8	- 7	?	8
88 89	-	-	3 4	3 6	P 2 5 5	3	8	85	4	3	4	5	4 3	2 2 3 5
90	-	-	4	4	•	•	6	5	8	9	Ρ	5	Ρ	
73	DAILY -81 MC -90 MC	NTHL Y		3 10 10	3 10 8	4 10 9		5 10 10		10	10	9	10	10
th	The ley wer	eir Av												hat
		ere is	no i	indi	icat	tior	n fi	rom	Fa	xōn	's			
ີ່ຫາ	gratic curs i	on occ	urred	d he	re	, ā	lth	oug	h a	mi	gra	tio	n	in
Ca ma	lifor y be d	nia (F detect	isĥ∶ ible	1988 if	3, : the	1989 e r	9). idg	S e t	uch ops	a ne	mig ar	irat Tho	ion	
	reekwe Iso seo	ctions	5-F	and	1 5	-G.							Se	е
Re	ed-tai'	15 Oc led Ha	wk wa	as s	seer	n.	Si	ngl	еH	lar]	an'	SW	lere	
al	lso see In	en on early	two (Mar	ch :	er. 198	un: 9,	rec two	ord	ed re	dat fou	es. Ind	dea	d	
ap	long a pparen	mile tly vi	ctim	CCN S OT	от f t	he l	orn Feb	rua	ry	теек 198	99 c	:01c	ey w I	ere
	nap. Fa: ating :	xon al	so si	ome	tim	es (obs	erv	ed	Red	l-ta	ile	eds	
	nornto						-	-						
Yı	r Firs	B-37. t Last	Ja	Fe	Mr	An	Μv	Jn	JI	A	I Sc	0 00	: Nv	De
83	3 12/2 9 4/1	2 12/2 4/1	2.	•	•	i		•		?.	•			+
٨		Y FRFO				+	•							+
7: 8:	3-81 M 2-90 M	ONTHL Y ONTHL Y	•	•	•	i	•	•		•		•	• •	i
-	UN nd, in													
t	he aro	und be tzroth	fore	-f1	vin	g a	way							511
r	are al	ong th	ne Or	ego	n C	oas	t.	UIC	(~ • •	- ~ 61		- 1 9	

		e
6-B-38. AMERICAN KESTREL Yr First Last Ja Fe Mr Ap My Jn Jl Ag S	Sn Oc Ny De	
7/ 11/20 11/20		
	. i i .	
77 10/14 11/11 .	1.?	,
		,
AV DAILY FREQ +	+ + + .	,
73-81 MONTHLY	. 1 2 .	,
AV DAILY FREQ + 73-81 MONTHLY	8/17-11/30)	j
A single bird was found each time.		
O-B-39. MERLIN Yr First Last Ja Fe Mr Ap My Jn Jl Ag 73 9/26 9/26 ? 79 11/24 11/24 . 81 4/18 4/21 .	Sp Oc Nv De	e
73 9/26 9/26 ? ? ?	+ • • •	
81 4/18 4/21 +		•
		_
AV DAILY FREQ +	1.1	•
82-90 MONTHLY	• • •	•
A single bird was seen each time.		
6-B-40. PEREGRINE FALCON		•
Yr First Last Ja Fe Mr Ap My Jn Jl Ag	Sp Oc Ny De	е
81 11/13 11/13	1	•
AV DAILY FREQ	???	•
AV DAILY FREQ	? ? ?	2
C19/3 MONTHLY f <th< td=""><td>• • •</td><td>•</td></th<>	• • •	•
One was also seen in June 1969. T	[he 1981	
sighting was of a singleton.		
6-R-41. BLUF GROUSE		
6-B-41. BLUE GROUSE Yr First Last Ja Fe Mr Ap My Jn Jl Ag 73 9/25 9/25 ? ? 74 8/19 8/19 . . 76 4/12 4/22 . 1 81 11/2 11/2 . .	Sp Oc Nv D	е
73 9/25 9/25 ? ? ?	+	•
76 4/12 4/22 1	• • •	•
AV DAILY FREQ + + <1973 MONTHLY ? ? ? X ? ? X ? 73-81 MONTHLY 1 1 82-80 MONTHLY	+ . +	•
<1973 MONTHLY ? ? ? X ? ? X ? 73-81 MONTHLY 1	$\begin{array}{c} 7 \\ 7 \\ 1 \\ 1 \end{array}$	1
82-90 MONTHLY	• • •	•
They were also seen in April 1961,	on 5 July	,

They were also seen in April 1961, on 5 July 1970, and 1-11 April 1972. At least one bird nested on a ridge in the late 1960's and early 1970's.

1970's. This species was not seen here more often because of a lack of proper habitat.

6-B-42. RUFFED GROUSE															
Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De															
	First	Last			Mr	Ap	Mу			Ag	Sp		Νv		
73	-	-	?	?	?	3	2 7	2	1	2	3	8		4	
74	-	-	3	4	4	7	7	2	2 2	2 1	2 2 4	8 5 7	3	3	
75	-	-	4	4	2	2	2	2	2	1	2	7	3	2	
76	-	-	3	5	2	5	2	3	+	2	4	5	3	3	
77	-	-	6	4 5 4	2 2 4	2 5 5	2 2 6	2 2 2 3 4	+	1		5 7	3	5	
78	-	-	5	3	4	5	1	2	1	2	2 4	7	33334	3235 4	
79	-	-	2	4	5	5		- -	4	ī	5	6	7		
80	-	-	4 3 5 2 4	6	3	5 6	3	7	2	3	5 5	6	1	3	
81	-	-	6	6	5 3 3	5	2 3 3 4	÷	4	1 3 3	ī	4	-4		
82	-	-	- +	1	2	2	Ă	1		1	ī	3	2		
83	-	-		ī	-	4	i	2	?	÷	°ī	3 3 2	1	1	
84	-	-	i	ī	3	1	2	- -	2	2	- 4	2	ī	ī	
85	-	-	- ÷	ī	ī	- 5	7		ī	-	1	÷	- 3	ī	
86	-	_			P	5 5 2	7		?	1	2	4	3 ?		
87	_	_	2 3 3 1 4	÷.	4	2	6	· 2	÷	4	2	3	6	3 4	
88	_	_	2	5 2	3	8	5	3 2 2 2	i	1	-	2	ĭ	3	
89	-	-	1	4	5	6	5	2	-		i	6	4	4	
	-	-	1	2	- 3	3	5 5	2	•	i	P	8	P	2	
90	-	-	4	2	4	3	Э	2	•	1	٣	0	٢	2	
A.V	DAILY	EDEO	= 3	3	3	4	4	2	1	2	2	5	3	2	
AV				-				. —	•	10	10	10	9	8	
		NTHLY	10	10	10	10	10	10	10						
82	-90 MC	NTHL Y	9	9	9	10	10	8	6	9	9	10	10	9	

In 1974, booming/drumming started on March 25 and ended by June 2; in 1984, booming commenced on March 29; in 1985, booming started on March 15; and in 1987, booming was first heard on Feb. 9.

On 2 May 1974, a nest contained eggs; on 23 May 1974, newly hatched young were observed; on 14 May 1985 a female with young were noted; and on 26 July 1985, young just able to fly were found.

	6-B-	-43.	CAL	FOF	RNI	A QI	JAII							
Yr	First	Last	Ja	Fe	Mr	Ap	Мy	Jn	JI	Ag	Sp	0c	Νv	De
73	8/3	8/13	?	?	?	•				1	•	•	•	•
	1/2	1/2	+	•	•	•	•		•	•	•	•	•	
	2/9			+	•		•	•	•	•	•	•	•	•
	10/2	10/31	•	•	•	•	•		•	•	•	1	•	•
	6/12	6/16	•	•	•	•	•	2	•	•	•	•	•	•
	5/8	5/8												
	10/22	10/22	•				1	•	•	•	•	- 1	•	•
	9/28	10/4	•	•	•	•	•	٠	?	•	1	2	•	•
	5/24		•	•		•	- 1	•		•	•	•	•	•
86	4/19	5/21	•	•	•	+	+	•	?	•	•	•	?	•
AV	DAILY	FREQ	+	+		+	+	+		+	+	+		•
73	-81 MOI	VTHL Ý	1	1				1		1		1		
82	-90 MOI	NTHLY				1	3				1	2		

They were more abundant here about 30 years ago when the land was cutovers and small clearings. Coveys were often then noted in summer.

On 19 April 1986, two were seen, but most recent records have been of single birds.

	6-B-	-44.	MOUN	TA		UAI	[L							
Yr	First	Last	Ja	Fe	Mr	`Ap	My	Jn	J1	Ag	Sp	0c	Nv	De
73	-	_	?	?	?							+		
74	-	-	-	-					+					
75	_	_												
76	_	_							12	- 2	- 2			
77	_	_	•	÷	•					- 5	- 2	+	+	
78	_	_	•	•	•	÷	•	•			5			
	-	-	•	•	•	•	•	•				•	1. ()	
79	-	-	•	•	•	•	•	•	•	•	•	•	•	
80	-	-	•	•	;	•	•	٠	٠		•	3 .		
81	-	-	•	•	1		•	•			•		•	
82	-	-	•	٠	1	•	•	•	:	•	•	•	•	•
83	-	-	•		•	•	+	٠	?	•	•	٠	•	•
84	-	-		•		•	٠	•	•	•	•			•
85	-	-	•		- +	- 1	1		÷	2	3	1	1	2
86	-	-	2			1	2	6	?	2	- 1	3	1 ? 1	•
87	-	-		1	1	1	1 2 3 1	6 1 2	?	23	+	3 3	1	
88	-	-	i	1	1	1	1	2	1	+		1		
89	-	-	-										+	
90	-	-			- ÷									
20				•		•	•	•	•	•				
Δv	DAILY	FRFO	- H	+	+	+	+	1	+	+	+	+	+	+
	973 MO		x	?	?	?	?	?	?	?	?	?	?	?
		NTHLY		i	i					•		2	? 1 4	-
			ż	2	1 6	1	6	3	1	4	3	24	Ā	i
82.	-90 MO	NTHLY	2	2	0		0	3			5			-

They were also seen in January 1971. Some were calling on 23 and 29 April 1985. An adult with young able to fly was noted on 14 May 1985. In 1985, a female with a brood was also noted on July 26 and August 5 and 21. In 1986, up to 30 were seen repeatedly in August and early September. On 15 January 1988, a covey of 25 was flushed. In 1985-1988, the increase in the number

In 1985-1988, the increase in the number of records of this species was because they had become more abundant, not because of an increased observation effort to find them.

They were most frequent when trailing blackberries were abundant in a 3-4 year old clearcut.

6-B-45.	VIR	GIN	[A F	RAII	-										
Yr First Last		Fe	Mr	Ар	Му	Jn	J1	Ag	Sp	0c	Nv	De			
AV DAILY FREQ <1973 MONTHLY		?	?	?	?	?	?	* X	?	?	?	?			

This species was only seen alive in August 1961; a dead one was found near a fence in 1983. This species was uncommon because of a lack of proper habitat.

	-46.												
	Last	KILL		.ĸ Mr	Δn	Mv	.ln	.11	Αa	Sn	00	Νv	De
73 -	-	?	?	?									
74 -	-	1	1	+	•	•	•		•	•	+	•	•
75 -	-		•		•	•	•	•	•	•	•	•	•
76 -	-	•	•	•	•	•	٠	•	:	•	•	:	•
77 -	-	•	+	•	+	•	3	٠	1	÷	•	15	3
78 - 79 -	-	i	•	•	÷	÷	3	•	i	т	•	-	3
80 -	-		i	i			:	:		:	÷	•	:
81 -	-		-	•	•	+	÷	•	÷	•	1	•	•
82 -	-	•	•	•	+	2	•	•	•	•	•	•	•
83 -	-	:	•	+	٠	•	•	?	•	•	•	٠	5
84 - 85 -	-	3	•	•	i	+	:	•	•	•	•	•	1
86 -	-	•	•	•	7		$\frac{1}{1}$?	•	•	•	2	10
87 -	-	•	•	•	í	ż			+	•	:	÷	:
88 -	-	ī		÷	-	ī							•
89 -	-	•	1	•	1	1	•		•		•		1
90 -	100	•	•	•	1	•	•	٠	٠	•	٠	•	•
AV DAIL		+	+	+	1	+	+		+	+	+	1	1
73-81 M			4		2	2			3		3		1
82-90 M		ž	1	2	7	6		:	ĭ			3	4
frequent hung ard one of t spell.	ound a	sma'	11 :	stre	eam	in	a	mea	dow	th	at	was	
hung are one of t spell.	bund a the fea recen	sma' wuni tyea	11 : fro: ars	stre zen , tl	eam gr hey	in ass ha	an ya ve	mea rea bee	dow sd ns	th uri een	at ng mo	was a C	old
hung ard one of f spell. In April a	bund a the fea recen	sma w uni t yea pei GRE	fro ars rha ATE	stro zen , tl ps R Y	eam gr hey the ELL	in ass ha se OWL	a i y a ve wer EGS	mea rea bee e m	dow s d n s igr	th uri een ant	at ng mo s.	was a c re 	old in
hung ard one of s spell. In April an 6- I Yr Firs	the fea recent d May 3-47. t Last	sma w uni t yea pei GRE	fro ars rha ATE	stro zen , ti ps	eam gr hey the ELL	in ass ha se OWL	a i y a ve wer EGS	mea rea bee e m	dow s d n s igr	th uri een ant	at ng mo s.	was a c re 	old in
hung ard one of s spell. April an 6- Yr Firs 75 8/13	recent recent d May B-47. t Last 8/13	sma w uni t yea pei GRE	fro ars rha ATE	stro zen , tl ps R Y	eam gr hey the ELL	in ass ha se OWL	a i y a ve wer EGS	mea rea bee e m	dow s d n s igr Ag +	th uri een ant Sp	at ng mo s.	was a c re 	old in
hung ard one of spell. In April au Yr Firs: 75 8/13 78 8/17	recen recen d May 3-47. t Last 8/13 8/17	sma w uni t yea pei GRE	fro ars rha ATE	stro zen , tl ps R Y	eam gr hey the ELL	in ass ha se OWL	a i y a ve wer EGS	mea rea bee e m	dow s d n s igr 	th uri een ant Sp	at ng mo s. Oc	was a c re 	old in
hung ard one of s spell. April an 	ound a recent nd May B-47. t Last 8/13 8/17 9/16	sma w uni t yea pei GRE	Ars rha ATE Fe	stro zen , tl ps R Y	eam gr hey the ELL	in ass ha se OWL	a i y a ve wer EGS	mea rea bee e m	dow s d n s igr Ag +	th uri een ant Sp	at ng mo s. Oc	was a c re 	old in
hung ard one of s spell. April an 	bund a recen nd May 3-47. t Last 8/13 8/17 9/16 4/15	sma w uni t yea pei GRE	Ars rha ATE Fe	stro zen , tl ps R Y	eam gr hey the ELL Ap	in ass ha se OWL My	a i y a wer EGS Jn	mea rea bee e m	dow s d n s igr Ag +	th uri een ant Sp	at ng mo s. Oc	was a c re 	old in
hung ard one of s spell. April an 	ound a recent nd May B-47. t Last 8/13 8/17 9/16	sma w uni t yea pei GRE	Ars rha ATE Fe	stro zen , tl ps R Y	eam gr hey the ELL	in ass ha se OWL	a i y a ve wer EGS	mea rea bee e m	dow s d n s igr Ag +	th uri een ant Sp	at ng mo s. Oc	was a c re 	old in
hung ard one of spell. April a 6- Yr Firs: 75 8/13 78 8/17 81 9/16 87 4/15 87 9/1 90 4/12	bund a recenned May- 8-47. t Last 8/17 9/16 4/15 9/1 4/12	sma w un t yea pei GRE Ja	Ars rha ATE Fe	stro zen , tl ps R Y	eam gr hey the ELL Ap 1	in ass ha se OWL My	a i y a wer EGS Jn	mea rea bee e m	dow s d n s igr Ag +	th uri een ant Sp	at ng mo s. Oc	was a c re 	old in
hung ard one of spell. In April an Yr Firs: 75 8/13 78 8/17 81 9/16 87 4/15 87 9/1 90 4/12 AV DAIL	bund a the fer recenned May 3-47. t Last 8/13 8/17 9/16 4/15 9/1 4/12 Y FREQ	sma w un t yea pei GRE/ Ja	Ars rha ATE Fe	stro zen , tl ps R Y	eam gr hey the ELL Ap	in ass ha se OWL My	a i y a wer EGS Jn	mea rea bee e m	dow s d n s igr Ag + + +	th uri eent ant Sp + + +	at ng mo s. Oc	was a c re 	old in
hung ard one of spell. In April an Yr Firs: 75 8/13 78 8/17 81 9/16 87 4/15 87 9/1 90 4/12 AV DAIL 73-81 M	bund a the fer recenned May 3-47. t Last 8/13 8/17 9/16 4/15 9/1 4/12 Y FREQ DNTHLY	sma w un t yea pei GRE/ Ja	Ars rha ATE Fe	stro zen , tl ps R Y	eam gr hey the ELLL Ap 1 1 1	in ass ha se OWL My	a i y a wer EGS Jn	mea rea bee e m	dow s d n s igr Ag +	th uri een ant Sp + + + 1	at ng mo s. Oc	was a c re 	old in
hung ard one of spell. In April an Yr Firs: 75 8/13 78 8/17 81 9/16 87 4/15 87 9/1 90 4/12 AV DAIL 73-81 M 82-90 M	bund a recen- nd May- 3-47. t Last 8/13 8/17 9/16 4/15 9/1 4/12 Y FREQ DNTHLY ONTHLY	sma w un t yea per GRE/ Ja	II : fro rha ATE Fe	stre zen , tl ps R YI Mr	eam gr hey the ELL Ap	in ass ha se OWL My	a n y a wer EGS Jn	mea rea bee e m J]	dow s d igr Ag + + 2	th uri een ant Sp + + + 1	at ng mo s. Oc	was a c re Nv	old in De
hung ard one of i spell. In April an 	bund a recenn recenn d May- 3-47. 8-47. 8/13 8/17 9/16 4/15 9/1 4/12 Y FREQ DNTHLY NTHLY t=4/14	sma w un t yea pei GRE Ja	II : fro ars rha Fe Fe	striczen , tl ps : Mr	eam gr hey the ELL Ap	in ass ha se OWL My	a n y a wer EGS Jn	mea rea bee e m Jl	dow s d igr Ag + + 2 /14	th uri een ant Sp + + 1 1 (4	at ng mo s. Oc /12	wassa c re Nv	old in De
hung ard one of spell. In April an 	bund a recenned May- 8-47. t Last 8/13 8/17 9/16 4/15 9/1 4/12 Y FREQ DNTHLY NTHLY t=8/27	sma sma w unt t yee pe GRE/ Ja	II fro fro ars rha ATE Fe	str zen , tl ps R Y Mr	eam gr hey the ELL Ap 1 1 + 2 5) 6	in ass ha se OWL My AV AV	a n y a wer EGS Jn	mea rea bee m J]	dow s d igr Ag + + 2 /14	th uri eennt Sp + + 1 1 (4 (8	at ng mo s. Oc /12	wassa c re Nv	old in De
hung ard one of spell. In April an 6- Yr Firs 75 8/13 78 8/17 81 9/16 87 4/15 87 9/1 90 4/12 AV DAIL 73-81 M 82-90 M AV Firs AV Firs	bund a the fer recenned May 3-47. t Last 8/13 8/17 9/16 4/15 9/1 4/12 Y FREQ DNTHLY ONTHLY t=4/14 t=8/27 2 bird	sma sma w unt t yee pe GRE/ Ja	II fro fro ars rha ATE Fe	str zen , tl ps R Y Mr	eam gr hey the ELL Ap 1 1 + 2 5) 6	in ass ha se OWL My AV AV	a n y a wer EGS Jn	mea rea bee m J]	dow s d igr Ag + + 2 /14	th uri eennt Sp + + 1 1 (4 (8	at ng mo s. Oc /12	wassa c re Nv	old in De
hung ard one of spell. In April an 6- Yr Firs 75 8/13 78 8/17 81 9/16 87 9/1 90 4/12 AV DAIL 73-81 M 82-90 M AV Firs AV Firs 1-	bund a the fer recenned May 3-47. t Last 8/13 8/17 9/16 4/15 9/1 4/12 Y FREQ DNTHLY t=4/14 t=8/27 2 bird B-48.	sma' wun tyee GREJ Ja (4/ (8/ swe LES	II fro ars rha Fe	stro zen , ti ps R Y Mr	eam gr hey the ELL Ap 1 1 + 2 5 6 erv LLO	in ass ha se OWL My	a n y a wer EGS Jn Las Las at	mea rea beee m Jl t=4 t=8 a p	dow s d n s igr Ag + + + 2 /14 2/27 bond	th uri eent ant Sp + + + 1 (4 (8	at ng mo s. 0c	wassa c re Nv 	old in De
hung arc one of spell. In April an Yr Firs: 75 8/13 78 8/17 81 9/16 87 4/15 87 9/1 90 4/12 AV DAIL 73-81 M 82-90 M AV Firs AV Firs 1- Yr Firs:	bund a the fer recenn d May 3-47. t Last 8/13 8/17 9/16 4/15 9/1 4/12 Y FREQ DNTHLY t=4/14 t=8/27 2 bird B-48. t Last	sma' wun tyeepe GRE/ Ja (4/ (8/ swe LES Ja	II fro ars rha Fe	stro zen , ti ps R Y Mr	eam gr hey the ELL Ap 1 1 + 2 5 6 erv LLO	in ass ha se OWL My	a n y a wer EGS Jn Las Las at	mea rea beee m Jl t=4 t=8 a p	dow s d n s igr Ag ++ - - - - - - - - - - - - - - - - - -	th uri sp sp + + 1 (4 (8 	at ng mo s. 0c	wassa c re Nv 	old in De
hung ard one of spell. In April an 6- Yr Firs 75 8/13 78 8/17 81 9/16 87 9/1 90 4/12 AV DAIL 73-81 M 82-90 M AV Firs AV Firs 1-	bund a the fer recenn d May 3-47. t Last 8/13 8/17 9/16 4/15 9/1 4/12 Y FREQ DNTHLY t=4/14 t=8/27 2 bird B-48. t Last	sma' wun tyeepe GRE/ Ja (4/ (8/ swe LES Ja	II fro ars rha Fe	stro zen , ti ps R Y Mr	eam gr hey the ELL Ap 1 1 + 2 5 6 erv LLO	in ass ha se OWL My	a n y a wer EGS Jn Las Las at	mea rea beee m Jl t=4 t=8 a p	dow s d n s igr Ag + + + 2 /14 2/27 bond	th uri sp sp + + 1 (4 (8 	at ng mo s. 0c	wassa c re Nv 	old in De
hung arc one of s spell. In April an 	bund a recenned recenned 8-47. t Last 8/13 8/17 9/16 4/15 9/1 4/12 Y FREQ DNTHLY V FREQ DNTHLY t=4/14 t=8/27 B-48. t Last 8/27	sma w un t yee pe GRE/ Ja (4/ (8/ s we LES Ja	II fro ars rha Fe	stro zen , ti ps R Y Mr	eam gr hey the ELL Ap 1 1 + 2 5 6 erv LLO	in ass ha se OWL My	a i y a wer EGS Jn Las Las at	mea rea beee m Jl t=4 t=8 a p	dow s d n s igr Ag ++ - - - - - - - - - - - - - - - - - -	th uri sp sp + + 1 (4 (8 	at ng mo s. 0c	wassa c re Nv 	old in De
hung arc one of s spell. In April an 	bund a the fer recenned May. 8-47. t Last 8/13 8/17 9/16 4/15 9/1 4/12 Y FREQ ONTHLY ONTHLY t=4/14 t=8/27 2 bird B-48. t Last 8/27 Y FREQ	sma w un t yee per GRE/ Ja (4/ (8/ s we LES Ja	II fro ars rha Fe	stro zen , ti ps R Y Mr	eam gr hey the ELL Ap 1 1 + 2 5 6 erv LLO	in ass ha se OWL My	a i y a wer EGS Jn Las Las at	mea rea beee m Jl t=4 t=8 a p	dow s d igr Ag + + 2 /14 /27 oond Ag 1 +	th uri eent Sp + + 1 (4 (8 	at ng mo s. 0c	wassa c re Nv 	old in De
hung arc one of s spell. In April an 	bund a recenn recenn d May 3-47. t Last 8/13 8/17 9/16 4/15 9/1 4/12 Y FREQ DNTHLY Y FREQ DNTHLY t=4/14 t=8/27 2 bird B-48. t Last 8/27 Y FREQ ONTHLY	sma w un t yee per GRE/ Ja (4/ (8/ (8/ s we LES Ja	II fro ars rha Fe	stro zen , ti ps R Y Mr	eam gr hey the ELL Ap 1 1 + 2 5 6 erv LLO	in ass ha se OWL My	a i y a wer EGS Jn Las Las at	mea rea beee m Jl t=4 t=8 a p	dow s d n s igr Ag ++ - - - - - - - - - - - - - - - - - -	th uri eent Sp + + 1 (4 (8 	at ng mo s. 0c	wassa c re Nv 	old in De

A single bird was observed at a pond.

6-B-49. SOLITARY SANDPIPER													
6-B-	-49.	SOLI	TAF	RY S	SANE	PI	PER						
First	Last	Ja	Fe	Mr	Ap	Мy	Jn	JI	Ag	Sp	0c	Nv	De
-	+	?	?	?	•	•	•	•	•	•	•	•	•
		•	•	•	•	1	•	•	•	•	•	•	•
		•		•	+	•	٠	•	•	•	•	•	•
		•	•	•	+	•	•	•	•	•	•	•	•
		•	•	•		:	•	•	•	٠	•	•	•
		•	•	•	1	_	•	•	•	•	•	•	•
		•	•	•	•		•	•	•	•	•	•	•
5/3		•	•	•	:	Ŧ	•	•	•	•	•	•	•
4/22	4/29	•	•	•	1	•	•	•	•	•	•	•	•
10/2	10/2	•	•	•	•	•	•	2	•	•	i	•	•
10/3	10/3	•	•	•	•	•	•	•	•	•	1	•	•
-		•	•	•	•	•	•	•	•	•	•	•	•
5/11	5/13	•	•	•	•	i	•	?	•	•	•	?	•
		•	•		÷	1	•			•		:	
7/61	-	•	•			•	:						
4/16	4/29				2								
-	-				-								•
		•	•										
DAILY	FREQ				+	+					+		•
-81 MO	NTHLY				6	- 4		•			•	•	•
-90 MO	NTHLY				2	1					1	•	:
		(4/1	16-	5/1	1)	AV	La	st=	5/2	(4	/21	-5/	13)
First	=10/3	(10,	/3)			A	V L	ast	=10	/3	(10	/3)	
	First 5/10 4/30 4/28 4/21 5/5 5/3 4/22 10/3 - 5/11 4/21 - 4/16 - DAILY -81 MO -90 MO First	First Last 5/10 5/11 4/30 4/30 4/28 4/28 4/21 4/21 4/24 5/8 5/5 5/7 5/3 5/3 4/22 4/29 10/3 10/3 	First Last Ja ? 5/10 5/11 4/30 4/30 4/28 4/28 4/21 4/21 4/24 5/8 5/5 5/7 5/3 5/3 4/22 4/29 10/3 10/3 5/11 5/13 4/21 4/21 4/16 4/29 DAILY FREQ -81 MONTHLY First=4/28 (4/2)	First Last Ja Fe ? ? 5/10 5/11 . 4/30 4/30 . 4/28 4/28 . 4/21 4/21 . 4/24 5/8 . 5/5 5/7 . 5/3 5/3 . 4/22 4/29 . 10/3 10/3 . 5/11 5/13 . 4/21 4/21 . 4/16 4/29 . DAILY FREQ . -81 MONTHLY . First=4/28 (4/16-	First Last Ja Fe Mr ? ? ? 5/10 5/11 4/30 4/30 4/28 4/28 4/21 4/21 4/24 5/8 5/5 5/7 5/3 5/3 4/22 4/29 10/3 10/3 5/11 5/13 5/11 5/13 4/21 4/21 4/16 4/29 DAILY FREQ B1 MONTHLY 90 MONTHLY First=4/28 (4/16-5/1	First Last Ja Fe Mr Ap ? ? ? 5/10 5/11 4/30 4/30 + 4/28 4/28 + 4/21 4/21 + 4/24 5/8 1 5/5 5/7 5/3 5/3 4/22 4/29 1 10/3 10/3 5/11 5/13 5/11 5/13 4/21 4/21 + 4/16 4/29 2 DAILY FREQ + -81 MONTHLY First=4/28 (4/16-5/11)	First Last Ja Fe Mr Ap My ? ? 5/10 5/11 . 4/30 4/30 . 4/28 4/28 . 4/28 4/21 . 4/21 4/21 . 4/24 5/8 . 1 5/5 5/7 . 1 5/5 5/7 . 1 5/3 5/3 . + 4/22 4/29 . 1 5/3 5/3 . + 10/3 10/3 . . 5/11 5/13 . 1 5/11 5/13 . 1 4/21 4/21 . + 4/16 4/29 . 2 DAILY FREQ . + + -90 MONTHLY . 2 1 First=4/28 (4/16-5/11) AV	First Last Ja Fe Mr Ap My Jn ? ? 5/10 5/11 . 4/30 4/30 . 4/28 . 1 4/28 . + 4/21 . + 4/21 . + 4/21 . + 4/21 . + 4/24 5/8 . 1 5/5 5/7 . 1 5/3 5/3 . + 4/22 4/29 . 1 10/3 10/3 . . 5/11 5/13 . 1 5/11 5/13 . 1 6 4 . . 7 . . . 10/3 10/3 . . 1 . . . 4/16 4/29 . 2 90 MONTHLY . 2 . . </td <td>First Last Ja Fe Mr Ap My Jn J1 ? ? 5/10 5/11 . 4/30 4/30 . 4/28 . 1 4/28 4/21 . 4/21 . + 4/21 . + 4/24 5/8 . 1 5/5 5/7 . 1 5/3 5/3 . + 4/22 4/29 . 1 5/3 5/3 . + 4/22 4/29 . 1 5/11 5/13 . 1 6/11 5/13 . 1 7 . 1 . 10/3 10/3 . . 10/3 10/3 . 1 7 . . 1 7 . . 1 7 . . . 10/3 10/3 . . 4/16 4/29 . 2 <!--</td--><td>First Last Ja Fe Mr Ap My Jn Jl Ag ?? ? 4/30 4/30 4/28 4/28 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/24 5/8 5/5 5/7 5/3 5/3 4/22 4/29 10/3 10/3 10/3 10/3 10/3 10/3 10/3 7 4/21 4/21 10/3 10/3 7 4/16 4/29 2 A 4/16 4/29 2 90 MONTHLY 91 2 4/16 4/28</td><td>First Last Ja Fe Mr Ap My Jn Jl Ag Sp ? ? 5/10 5/11 4/30 4/30 4/28 + 4/28 + 4/21 + 4/21 + 4/21 + 4/24 5/8 5/5 5/7 5/3 5/3 4/22 4/29 1 . 5/3 5/3 4/22 4/29 10/3 10/3 - . 10/3 10/3 - . 4/21 4/21 - . - . 10/3 10/3 - . - . 4/21 . 4/21 . 4/21 . 4/16 4/29 2 <td>First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc ? ? 4/30 4/30 4/28 + 4/28 + 4/21 + 4/21 + 4/21 + 4/24 5/8 5/5 5/7 1 . 4/22 4/29 1 . 5/3 5/3 4/22 4/29 1 . 10/3 10/3 . . 10/3 10/3 </td><td>First Last Ja Fe Mr Ap My Jn Jl Ag Sp OC Nv ? ? 5/10 5/10 4/30 4/30 4/28 4/28 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/24 5/5 5/7 1 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 6 6 6 6 6 7 1 7 1 7 1 7 1 7 1 7 1</td></td></td>	First Last Ja Fe Mr Ap My Jn J1 ? ? 5/10 5/11 . 4/30 4/30 . 4/28 . 1 4/28 4/21 . 4/21 . + 4/21 . + 4/24 5/8 . 1 5/5 5/7 . 1 5/3 5/3 . + 4/22 4/29 . 1 5/3 5/3 . + 4/22 4/29 . 1 5/11 5/13 . 1 6/11 5/13 . 1 7 . 1 . 10/3 10/3 . . 10/3 10/3 . 1 7 . . 1 7 . . 1 7 . . . 10/3 10/3 . . 4/16 4/29 . 2 </td <td>First Last Ja Fe Mr Ap My Jn Jl Ag ?? ? 4/30 4/30 4/28 4/28 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/24 5/8 5/5 5/7 5/3 5/3 4/22 4/29 10/3 10/3 10/3 10/3 10/3 10/3 10/3 7 4/21 4/21 10/3 10/3 7 4/16 4/29 2 A 4/16 4/29 2 90 MONTHLY 91 2 4/16 4/28</td> <td>First Last Ja Fe Mr Ap My Jn Jl Ag Sp ? ? 5/10 5/11 4/30 4/30 4/28 + 4/28 + 4/21 + 4/21 + 4/21 + 4/24 5/8 5/5 5/7 5/3 5/3 4/22 4/29 1 . 5/3 5/3 4/22 4/29 10/3 10/3 - . 10/3 10/3 - . 4/21 4/21 - . - . 10/3 10/3 - . - . 4/21 . 4/21 . 4/21 . 4/16 4/29 2 <td>First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc ? ? 4/30 4/30 4/28 + 4/28 + 4/21 + 4/21 + 4/21 + 4/24 5/8 5/5 5/7 1 . 4/22 4/29 1 . 5/3 5/3 4/22 4/29 1 . 10/3 10/3 . . 10/3 10/3 </td><td>First Last Ja Fe Mr Ap My Jn Jl Ag Sp OC Nv ? ? 5/10 5/10 4/30 4/30 4/28 4/28 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/24 5/5 5/7 1 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 6 6 6 6 6 7 1 7 1 7 1 7 1 7 1 7 1</td></td>	First Last Ja Fe Mr Ap My Jn Jl Ag ?? ? 4/30 4/30 4/28 4/28 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/24 5/8 5/5 5/7 5/3 5/3 4/22 4/29 10/3 10/3 10/3 10/3 10/3 10/3 10/3 7 4/21 4/21 10/3 10/3 7 4/16 4/29 2 A 4/16 4/29 2 90 MONTHLY 91 2 4/16 4/28	First Last Ja Fe Mr Ap My Jn Jl Ag Sp ? ? 5/10 5/11 4/30 4/30 4/28 + 4/28 + 4/21 + 4/21 + 4/21 + 4/24 5/8 5/5 5/7 5/3 5/3 4/22 4/29 1 . 5/3 5/3 4/22 4/29 10/3 10/3 - . 10/3 10/3 - . 4/21 4/21 - . - . 10/3 10/3 - . - . 4/21 . 4/21 . 4/21 . 4/16 4/29 2 <td>First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc ? ? 4/30 4/30 4/28 + 4/28 + 4/21 + 4/21 + 4/21 + 4/24 5/8 5/5 5/7 1 . 4/22 4/29 1 . 5/3 5/3 4/22 4/29 1 . 10/3 10/3 . . 10/3 10/3 </td> <td>First Last Ja Fe Mr Ap My Jn Jl Ag Sp OC Nv ? ? 5/10 5/10 4/30 4/30 4/28 4/28 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/24 5/5 5/7 1 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 6 6 6 6 6 7 1 7 1 7 1 7 1 7 1 7 1</td>	First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc ? ? 4/30 4/30 4/28 + 4/28 + 4/21 + 4/21 + 4/21 + 4/24 5/8 5/5 5/7 1 . 4/22 4/29 1 . 5/3 5/3 4/22 4/29 1 . 10/3 10/3 . . 10/3 10/3 	First Last Ja Fe Mr Ap My Jn Jl Ag Sp OC Nv ? ? 5/10 5/10 4/30 4/30 4/28 4/28 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/21 4/24 5/5 5/7 1 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 5/3 6 6 6 6 6 7 1 7 1 7 1 7 1 7 1 7 1

All these birds were larger than a Spotted All these birds were larger than a Spotted Sandpiper but smaller than dowitchers or yellowlegs. They had the eye-ring; white, barred tail with dark central stripe; and dark legs characteristic of Solitary Sandpipers. Only a single bird was seen at a time at a pond. They have become less common in recent years, although one was also found on 30 April 1991.

	6-B-	-50.	SP01	TEC) S/	AND	PIPE	ER						
Yr	First	Last	Ja	Fe	Mr	Ap	My	Jn	JI	Ag	Sp	0c	Νv	De
73	-	-	?	?	?		•			•				
74	-	-				•							•	
75	-	-												
76	5/8	5/8					+							
77	4/23	5/29				+	1							
78	5/9	6/17												
78	8/21	9/9					3	1		+	+			
79	5/8	5/21												
79	7/26	8/29					4		+	+				
80	4/30	6/1				+	2	+						
81	5/7	5/12					1							
82	5/1	5/26												
82	8/15	8/15					2			- +				
83									?					
84	-	-												
85	5/13	5/13					÷							
86	5/15	5/19	•	•	•			•	•	•	•	-	-	070
86	8/8	8/16		_			1		?	1			?	
87	5/13	5/13		•			÷			-				
88		5/11	•				+							
89	4/29	4/29				i								
90	4/25	7/25	•	•	•	-	•	•						
90	-	_	•	•	•	•	•	•	•	•	•	•	•	•
Δν	DAILY	EREO				+	1	+	+	+	+			
	-81 MO		•	•	•	2	- 7	2		2	1			
	-90 MO		•	•	•	1	6	-	-	2	-	•	•	
021	First	=5/6	(11)	3_5	/1=			• ac'	+=F		(1	/29	-61	175
AV	First	=0/12	177	26.	0/2	í\ '	Π.Υ. Ι Α.V	יבו	c±=	8/2	5`7	Ω/1	5_0	745
ΜV	rirst	-0/12	(77)	20-0	0/2	- /	M¥.	La	36-	072		0/1	5-5	, , ,

Most sightings have been at Pond C, which was constructed in 1976 or 1977; so the lack of records prior to 1976 is probably because of a lack of proper habitat.

They appear to be most commonly a May migrant.

6-B-51. WESTERN SANDPIPER Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 75 5/1 5/1 + AV DAILY FREQ + 73-81 MONTHLY . 1 82-90 MONTHLY Single bird at a pond. **6-B-52.** STINT SPP. Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 77 8/6 8/6 + AV DAILY FREQ . . • . . . 73-81 MONTHLY 1 . . • • 82-90 MONTHLY UNCONFIRMED.--One was seen on 6 August 1977. It was seen only in flight when it was twice

It was seen only in flight when it was twice flushed from a pond's edge when the bird was about 10 feet (3 m) away. It had a twisting, towering flight. It was peep-sized, brownish, with a narrow white wing stripe, a tail that was brownish down the center, and pure white outer tail feathers. Twice, when it took off, it immediately flew off at a sharp angle (about 60 degrees above the horizontal). It had a raspy call very unlike that of Western or Least sandpipers. It sounded more like the rattling flight call of a longspur or the call of a Temminck's Stint on bird call tapes.

Stints are vagrants to the Oregon Coast (Eltzroth 1987:9).

	6-B-	-53.	LEAS	ST S	SAND	PIR	PER							
Yr	First	Last	Ja	Fe	Mr	Ар	My	Jn	J1	Ag	Sp	0c	Νv	De
73	8/9	8/9	?	?		•	-			÷	•			
77	7/20	8/27												
77	11/22	11/24	•						+	1			1	
78	5/4	5/9												
	7/13	7/15	•	•	•		1		1			•	•	
79	5/21	5/21					+			•			•	
	4/30	4/30	•		•	+		•			•	•		
-	-	8/13	•	•	•	4		•	?	1	•	•	?	•
88	7/10	7/10		•	•	•			1	•	•	•		· • '
	DAILY		•	•	•	+	+	•	+	+	•	•	+	•
	-81 MO		•	•	•	•	2	•	2		•	•	1	•
	-90 MOI			•		1	•	•	1	-	. •	. •	•	•
	First									/10				
	First									/2				7)
A۷	First	=11/22	11	1/2:	2)	- 1	AV L	ast	t=1)	1/24	ŧ (:	11/2	24)	

Sometimes several birds were present; for example, 12 were counted on 8 May 1978. They were mainly an uncommon spring or fall migrant and were seen only at a pond.

	6-B-	-54.	DUN	IN										
	First		Ja	Fe	Mr	Ар	Mу	Jn	Jl	Ag	Sp	0c	Νv	De
	4/25			•		+	•			•	•	•	•	•
81	4/28	4/28	•	•	•	+	•	•	•	•	•	•	•	•
AV	DAILY	FREQ	•			+						•	•	•
	-81 MOI		•	•		2	•	•			•		•	
82.	-90 MOI	VTHL Y	•	•	•	•	•	•	•	•	•	•	•	•

Small flocks of 4-6 Dunlin were noted; they were found only at a pond.

6-B-55. LONG-BILLED DOWITCHER Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 77 7/19 7/27 80 9/25 9/25 . 1 • • • • . . AV DAILY FREQ 1 1 73-81 MONTHLY 1 . ٠ 82-90 MONTHLY AV First=? (7/19-10/15) AV Last=? (7/27-10/16) Usually only one bird was found, but sometimes 2-3 were observed. All were at a pond. 6-B-56. COMMON SNIPE Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 73 -1. -1 . + . 1 + 74 10/27 4/14 75 10/12 5/7 3 . + 1 + 76 10/14 5/4 + 3 3 5 • + . 9 7 . • • 3 5 + 77 10/17 5/3 1 3 1 • . . 4 78 9/7 5/3 · + 3 1 ++ 1 + + 8 5 . . . 79 10/20 4/19 + 1 1 + 1 + . • • . 80 10/19 5/3 + + . + 1 1 5 . . 1 81 10/2 4/23 2 3 5 5 $i \frac{2}{1}$. . . • • 2 82 10/14 4/27 3 3 3 . . . ٠ ? 1 83 9/6 1 + -. 84 i . . . 85 10/3 4/24 8 3 . 201 . ٠ ? 1 86 9/4 4/21 + ? + i • . . . 87 10/8 4/18 2 1 1 1 1 + 88 -. i 2 89 -4/8 1 i 5 . . $\frac{1}{2}$ i Å. 90 10/2 4/14 2 1 2 AV DAILY FREQ 1 1 2 2 1 + + + . ٠ . 8 8 6 7 6 3 3 7 73-81 MONTHLY 6 1 9 8 8 • • • 82-90 MONTHLY 2 4 5 AV First=10/5 (9/4-10/26) AV Last=4/24 (4/8-5/7)

The decrease in their Average Daily Frequency suggests that they left or at least became less conspicuous after December.

Since snipe were often absent in February or March of 1982-1990, some snipe might be winter residents, and a few might be spring migrants, arriving in April or May.

In recent years, they were much less frequent in some months than previously. It is not clear if this decline is widespread or if it is limited to Thornton Creek.

They were often seen in fields.

6-B-57.	WILS	SON	'S I	PHAI	ARC	DPE						
Yr First Last	Ja	Fe	Mr	Ap	Мy	Jn	Jl	Ag	Sp	0c	Νv	De
79 5/25 5/25	•	•	•	•	÷	•	•	•	•	•	•	٠
AV DAILY FREQ			•	•	+	•	•		•			•
73-81 MONTHLY	•	•	•	•	1	•	•	•	•	•	•	•
82-90 MONTHLY					٠	•	٠		•	٠		

One bird was seen at a pond.

6-B-58. RED-NECKED PHALAROPE Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 74 5/6 5/12 1 . 76 5/8 5/11 . 2 . 76 5/8 5/11 . 2 . . 78 5/8 5/11 . 2 . . . 78 5/8 5/11 . 2 78 5/8 5/11 . . 2 79 5/14 5/17 . . 1 79 5/14 5/17 . . 1 79 9/2 9/4 . . 1 83 5/22 5/22 . . + . <th>6-B-62. GULL SPP. Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 77 4/7 4/7 +</th>	6-B-62. GULL SPP. Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 77 4/7 4/7 +
AV First=8/24 (8/15-9/2) AV Last=8/25 (8/15-9/4) They were also seen in January 1961 (when they could be caught by hand) following a severe storm. Many were then weak and emaciated. They were also found on 20 August 1970 and 5-6 May 1972. On 8 and 9 May 1978, 75 and 40 were present, respectively, so they could be abundant at times.	<pre>6-B-63. MEW GULL Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De AV DAILY FREQ <1973 MONTHLY ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ?</pre>
In 1990, six were noted on May 10. All were at a pond. 6-B-59. RED PHALAROPE Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 76 11/17 11/17	6-B-64. RING-BILLED GULL Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 78 8/1 8/1 + + 81 8/6 8/6 + + + 82 7/30 7/30 + + + 86 8/6 8/6 + + + + 87 DAILY FREQ + + + + + 73-81 MONTHLY 2 1 1 + 73-81 MONTHLY 1 1 + + 73-81 MONTHLY 1 1 + + AV First=8/3 (7/30-8/6) AV Last=8/3 (7/30-8/6) W Last=8/3 (7/30-8/6) Lually only a single bird was observed, but two were once seen. Most were juveniles that 1 1 + Janded near a pond. Most were juveniles that 1 1 +
AV Last=11/22 (10/28-12/24) They were also seen in January 1961, when they could be caught by hand following a severe storm. Many were then weak and emaciated. If present during October-December, it was only after a strong storm. All were at a pond. 6-B-60. JAEGER SPP. Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 79 7/2 7/2	See gull spp. for other possible records.6-B-65. CALIFORNIA GULLYr First LastJa Fe Mr Ap My Jn Jl Ag Sp Oc Nv De78 7/27/2.90 8/248/24.AV DAILY FREQ.73-81 MONTHLY.82-90 MONTHLY.Single bird in 1978 and a flock of 20 flyingwest in a "V" formation in 1990.
AV DAILY FREQ 73-81 MONTHLY 82-90 MONTHLY One bird was seen soaring fairly high above a meadow. The white wing-patches were exceptionally large and showy. This does not include the following record of a Parasitic Jaeger. 6-B-61. PARASITIC JAEGER Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 82 6/18 6/18	See gull spp. for other possible records.
73-81 MONTHLY 82-90 MONTHLY Single bird flying over (also see jaeger spp.).	

6-B Yr First 73 4/26 74 4/25 75 5/6 76 4/10 77 4/16 78 4/20 79 4/24 80 4/18 81 4/20				Ap + 1 + 1 1			J1 5 9 6 7 10 10 10 10	Ag 4 9 9 10 7 10 10	Sp 7 8 7 7 8 10 8 10	0c + 6 2 4 + 1 3 +	Nv	De
82 4/26 83 4/10 84 4/21 85 4/22 86 4/7 87 4/26 88 4/28 89 4/15 90 5/5	10/22 10/6 9/25 10/7 10/3 10/21 10/19 9/28 10/11			1 2 2 2 3 2 1 4 1 1 3	, 9 6 5 10 9 4 1 2	10 10 10 10 10 10 10 7 7 7	10 ? 10 9 ? 9 4 4	10 9 10 10 9 10 2 4 2	99856932P	4 3 + 1 2 3 3	• • • • • • •	• • • • • • • • • • • • • • • • • • • •
AV DAILY 73-81 MC 82-90 MC AV First	NTHLY	: (4/7-	5/6)	1 9 9 AV		8 10 10 st=		8 10 10 10		2 9 8 22-3	10/	: 22)
1 1 1	C	irst bs. ays 9 10 9 9 6		Day eser (%) 20 22 33 33	/S ht	(Las Obs Day 9 8 8 5 6	•	10 P	Da resi (% 10 8 4 3	ent) B 0 B 0 0	

Mean

On the days following their arrival each year, they were often absent. For example, the previous tabulation indicates that Band-tails were present an average of only 22% of the days in the 10 day period after their arrival.

21.6

67.8

The probability that they would be present near their average arrival date each year was also low because their average daily presence was only 20% during the five day period before and after their average arrival date (Table 5.2).

Prior to their departure, they were not always present. For instance, they were found an average of 68% of the days in the 10 days preceding their departure.

Formerly, 6-10 birds could normally be seen daily during the summer, and during fall migration they sometimes moved through in large numbers feeding on cascara berries. For example, once (on an unrecorded date) a flock of about 500 or so were noted that were either so involved in eating or so unafraid that Faxon was able to walk amongst them. In recent years they have been much less numerous, but 100 were noted on 14 October 1988; this was the largest flock seen in quite a few years. In 1989, a flock of 13 was noted on June 24, and a flock of 15 was seen on August 21.

A nest with eggs was observed on 1 June 1974. A nearly fledged pigeon was seen at the nest on 24 August 1989.

	6-B-	-67.	MOUR											
Yr	First	Last	Ja	Fe	Mr	Ap	Mу	Jn	JI	Ag	Sp	0c	Νv	De
73	9/14	10/16	?	?	?	•	•		•	•	1	+	•	•
74	5/27	6/5		•	•	•	+	+	•	•	•	•	•	•
75		5/14	•	•	•	•	+	•	•	•	•	•	•	•
76	9/22	9/22	•	٠	•	•	•	•	•	٠	+	٠	•	•
77	-	-	•	•	•	•	•	•	•	•	•		•	•
78		4,000	•	•	•		•	•	•	٠	٠	•	•	٠
79	4/28	4/28	•	•	•	T	•	•	٠		•	•	•	
80	5/31	5/31					–					4		
80 81	10/3 1/1	10/3 1/1	•	•	•	•	т	•		•	•		•	•
81	5/9	5/28	+				1				721			-21
82	5/21	5/21	•	•	•	•	÷	•				- 1	- 8	
83	4/18	5/13	•	•	•	÷	1		?					
84	5/22	5/22		-			ī							
85	5/21	5/21					+							•
86	5/23	5/23					+		?				?	
87	5/24	5/24												
87	7/21	7/21				•	+		+	•				
88	6/3	6/3						1				٠		
89	4/20	4/20		•	•	1	•	•	•				•	•
90	5/5	5/5	•	•	•	•	1	•	•					
		5550										+		
	DAILY		+	•	•	+	+	+	+	•	+ 2			•
	-81 MO		1	•	•	1	4	1	i		2	2	•	•
82	-90 MO	NIHLY -1/1/	1.1	· •	•	2	8	1			·+	1/i	(i	/1)
AV	First	=1/1 (~E/1E		10	c / 2	١	AV	1.5	A¥ c+=	են 5/1	ο (1/1 //2	0-6	/5)
	First					/	- 4 V	עו	36+	=? =?	77)	7/ C 21 -	10/	16)
AV	First	-: (//	21-	10/	c)		A	¥ L.	ασι		(1)		10/	101

May was when they were most likely to be found.

1-2 birds were seen at a time.

		-										
6-B-68.	YELL	.0W-	-BIL	LEI) CI	JCKC)0					
Yr First Last	Ja	Fe	Mr	Ap	Мy	Jn	Jl	Ag	Sp	0c	Νv	De
AV DAILY FREQ	:	•	?	•	:	•	:	:	:	:	•	•
<1973 MONTHLY	- 7	?	1	1	- 7	X	£	f	ſ	1	:	ſ
The only	sigh	iti	ng v	vas	of	a p	aiı	i i	ı Jı	ine	196	51.
6-B-69.	BARN	0	AL.									
Yr First Last	Ja	Fe	Mr	Ap	Мy	Jn	JÌ	Ag	Sp	0c	Nv	De
	Ja	Fe	Mr	Ap •	My •	Jn •	J] 1	Ag •	Sp •	0c •	Nv •	De •
Yr First Last 89 7/4 7/4 AV DAILY FREQ	Ja •	Fe	Mr.	•	•	•	1+	•		•	•	•
Yr First Last 89 7/4 7/4	Ja •	Fe	Mr •	•	•	•	1+	•		•	•	•

Single bird.

-														
	6-B	-70.	WEST	ERI	V SC	CREI	ECH	-OWL						
Yr	First	: Last		Fe	Mr	Ар	Мy	Jn	Jl	Ag	Sp	0c	Νv	De
73	-	-	?	?	?			+			- +	- 4		
74	-	-	1	2								+		
75	-	-									1	+	+	
76	-	-	1		-	-		-	-		ī	6	5	
77	-	-	÷	ī	•		•	-	-	÷		3	Ŭ	•
78	_	_	-	-	•	•	•	•	•	+	3		•	•
79	_	_	i	•	1	•	•	•	•	+	1	6 3 3 2	•	•
80	-	-	1	•	1	•	:	•	•	т		3	1	•
	-	-	•	•	т	•	т	•	:	•	2	3	1	•
81	-	-	•	•	٠	•	٠	•	+	•	•		2	•
82	-	-		•	٠	+	٠	•		•		1	•	•
83	-	-	1		•	•			?		1			•
84	-	-	•	•		•						1		
85	-	-	•	4	1				- +		+			
86	-	-	1	2					?			4	?	
87	-	-		2	1		1	2	-		+	3	+	-
88	-	-	ī	-	-		-		i	÷		ĭ	•	•
89	-	-	3	•	•	•	•	•	-	•	i	2	•	•
90	_	_	5	•	•	•	•	•	•	i	P	3	P	1
90	-	-	•	•	•	•	T	•	•	1	٢	0	٢	1
A۷	DAILY		1	1							1	2		
			1	1	+	т			+	+	1	3	1	+
		NTHLY	5	3 3	3 2		1	1	1	3	7	10	6	:
82.	-90 MC	NTHL Y	4	3	2	1	2	1	3	2	6	8	3	2

These records are probably incomplete (see section 3-B-4). These owls were most often noted in September-October. ------

	6-B	-71.	GREA	Τŀ	IOR	VED	OWL							
Yr	First	Last		Fe	Mr	Ap	My	Jn	Jl	Ag	Sp	0c	Nv	De
73	-	-	?	?	?		+				+	+	+	+
74	-	-	1											
75	-	-					+						- 2	
76	-	-	+	1	3	1	+		-		÷	2	10	2
77	-	-	1	2		-	+	•	•	÷		ī	÷	-
78	-	_	÷	3 2	÷	2	1	i	•	3	6	-	•	2
79	_	_	3	ĩ	i	4	÷	-	•	5	0	i	1	4
80	_	_	3	+	+	•	т	•	•	•	:	Ŧ	т	•
81	-	-	ż	•		i	•	:	:	•	1	•	:	:
		-	/		+	1		+	- +	:	٠	•	1	2
82	-	-	•	4	•	•	+	1	•	1	•	+	+	•
83	-	-	•	•	•	•	•	•	?	•				
84	-	-	+	•	1	•	1			+		1	1	
85	-	-			+	•								1
86	-	-	1	1		2			?		1		?	
87	-	-	1	1			+	+		+	1	1	+	
88	-	-				1					ī	-	1	i
89	-	-	2.411	÷.					•		÷	•	-	î
90	-	-	ĩ	2	i	-i	•	•	•	•	P	4	P	2
20			-	•		-	•	•	•	•	F	4	F	4
AV	DAILY	EDEO	1	1	1	+	+	+	Т	+	1	1		1
73.		NTHLY	8					-	1				+	1
				5 3	6 3	3 3	7 3	2	T	2	4	4	4	4
٥٢.	-90 MO	NTHL Y	4	3	3	- 3	- 3	- 2	•	3	6	4	6	4

These records are probably incomplete (see section 3-B-4).

This species' Monthly Frequencies have declined in recent years in January, March, and May; but differences in other months did not appear significant.

		8-72.							_					
Yr	First	t Last	Ja	Fe	Mr	Ар	Мy	Jn	Jl	Ag	Sp	0c	N٧	De
73	-	-	?	?	?									
74	-	-												
75	-	-												
76	-	-										+	1	
77	-	-												
78	-	-	÷.							•				
79	-	-										•		+
80	-	-												
81	-	-			•				•		•		1	•
82	-	-			•									
83	-	-	•		•	•	•		?	•	•	2	•	•
84	-	-	+	•	1	•				+	1	2 2 +		2
85	-	-			•	•	•		•	1	3		•	1
86	-	-				3			?	1	3	4	?	
87	-	-	1	1	1	6	6	+	2	- 5	6	7	1	•
88	-	-	2		+						3	5	3	
89	-	-	2	1		1				+	1	4	1	
90	-	-	•	•	2	9	1	•	•	1	Ρ	6	P	٠
۸v	DATES	FREO	-	-	-	1	-	-	-	1	1	2	+	_
			т	т	т	1	т	т	т	т	1			1
		ONTHLY	4	2	4	4	2	i	i	;	8	1	2 5	1
02.	-90 M(ONTHL Y	4	2	4	4	2	T	T	/	0	9	Э	2

These records are probably incomplete (see section 3-B-4).

Recently, they were most often found in August-October.

The increased number of records since about 1983 is probably because Faxon started imitating their call to attract other birds, which caused any Pygmy's present to also call.

												-
6-B-73.	SPOT	TE	0 0	٨L								
Yr First Last	Ja	Fe	Mr	Ap	My	Jn	Jl	ρA	Sp	0c	Nv	De
AV DAILY FREO					-			-	•			
<1973 MONTHLY	?	?	?	?	?	?	x	X	?	?	?	?
One bird	was	see	en f	in .	July	/ ai	nd /	Augi	lst	196	54.	
There is no su	uitab	le	hat	oita	at i	for	th	emľl	her	э.		
6-B-74.	BARR	RD	OWL	-								

Yr First Last 90 10/5 10/5	Ja •	Fe •	Mr •	Ар •	My •	Jn •	J] •	Ag •	Sp •	0c 1	Nv •	De •
AV DAILY FREQ 73-81 MONTHLY												•
82-90 MONTHLY					•							
62-90 MONTHEI	•	•	•	•	•	•	•	٠	•	T		•

UNCONFIRMED.--One was calling at about 2030 PST along with other owls; the Barred Owl gave eight hoots that were noticeably different from the other owls. Faxon listened to audiotapes of bird calls to identify it as a Barred. Eltzroth (1987:11) does not list this species

as occurring along the Oregon Coast.

6-B-75.	GRE	AT (GRA'	Y 01	٨L							
Yr First Last	Ja	Fe	Mr	Ap	My	Jn	Jl	Ag	Sp	0c	Nv	De
AV DAILY FREQ				•	•			•	•			
<1973 MONTHLY	?	?	?	?	?	?	?	?	?	?	X	?

UNCONFIRMED.--One was observed in November 1965. It was very large, quite gray, and had concentric circles around its eyes. The bird was very curious and followed Faxon. It was sometimes within 15 ft (4.6 m) of him. This species is not listed for the Oregon Coast by Eltzroth (1987:11).

6-B-76. LONG-EARED OWL 6-B-80. BLACK SWIFT Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv Oe Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv Oe 73 10/31 10/31 ? ? ? . . 85 9/13 9/13 + 90 10/11 10/11 87 9/19 9/19 1 . AV OAILY FREQ AV OAILY FREQ + ? ? 2 2 2 ? <1973 MONTHLY ? 73-81 MONTHLY х х 73-81 MONTHLY 82-90 MONTHLY 1 . . . 82-90 MONTHLY UNCONFIRMED .-- The 1985 bird was alone, but the 1987 sighting was of a flock of about 30-35 birds (about half of which were Black Swifts) that UNCONFIRMED.--A single bird was also recorded on 11 August 1970 and in November 1970. The 1973 and 1990 owls were each identified were identified by their size and manner of on the basis of their calls. Eltzroth (1987:11) lists them as vagrants flight. Eltzroth (1987:11) lists them as rare along along the Oregon Coast. the Oregon Coast. -----6-8-77. NORTHERN SAW-WHET OWL 6-B-81. VAUX'S SWIFT Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv Oe Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv Oe 80 + . . 82 8/28 8/28 -. 1 85 -87 9/3 9/3 . _ i . . . ? ? ì 86 ٠ • • . • i i 87 --1 AV OAILY FREQ 88 -+ 73-81 MONTHLY . . . ٠ . . . ÷ i . i 89 -82-90 MONTHLY • . ٠ Ρ 90 _ 1 In 1982, two birds were seen. Faxon is familiar with this bird from the east slope of the AV OAILY FREQ ++ + + + + + 73-81 MONTHLY Coast Range, so the absence of records here is 1 i 3 1 3 82-90 MONTHLY 1 1 3 real. These records are probably incomplete (see 6-B-82. ANNA'S HUMMINGBIRO Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv Oe section 3-B-4). + They appear to be more common in recent 74 10/5 10/5 • • . years. 79 10/31 10/31 + • P . ? ? 86 -. 6-B-78. CAPRIMULGIOAE SPP. Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv Oe AV OAILY FREQ 90 6/23 6/23 73-81 MONTHLY 2 . . i 82-90 MONTHLY AV OAILY FREQ 73-81 MONTHLY The 1986 spring bird was a single adult male 82-90 MONTHLY that competed with arriving Rufous Hummingbirds for about three days. The other sightings were of singleton females or immatures. UNCONFIRMED. -- This nighthawk-like bird was flushed from the roadside. It was, however, larger than a nighthawk, had rounded wings, had a 6-B-83. CALLIOPE HUMMINGBIRO long rounded tail, was brownish, had a moth-like flight, and had a slight amount of white markings Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv Oe 77 4/26 4/26 ÷ . . . • • . . in the primaries. AV OAILY FREQ 6-B-79. COMMON NIGHTHAWK 73-81 MONTHLY 1 Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv Oe 82-90 MONTHLY 76 6/29 + 78 6/25 8/2 ++ + UNCONFIRMED.--One adult male was observed on ٠ 26 April 1977. It was very small with a purple 83 6/24 + ? -. 87 7/27 streaked gorget on a white background; it also -+ . . . 90 6/15 + displayed the courtship flight characteristic of a Calliope Hummingbird (see Robbins et al. 1983). AV OAILY FREQ + + This species is a vagrant along the Oregon + . 73-81 MONTHLY 2 1 1 82-90 MONTHLY 2 1 AV First=6/23 (6/15-6/29) AV Last=7/30 (7/27-8/2) Coast (Eltzroth 1987:11). Faxon was commonly out at twilight and is familiar with this species from elsewhere, so his few nighthawk records at Thornton Creek indicates

that they were really uncommon here. See also Caprimulgidae spp. (section 6-B-78).

6 Yr Fir	 st	84. Las	BRC t Ja	AD-							Sp	0c	Nv	De	
85 7/9		7/9	•	•	•	•	•	•	+	•	•	•	•		
AV DAI 73-81	MÓN	THL	ì.	•	•	•	•	•	+	•	i.	•	•	•	
82-90				•	•	•	•	•	1	•	•	•	•	•	
feeder dull g The cr green. Hummin who ha sides.	ray own I gbi d a	lts , an , na t wa rd. goo	ape, as a It od lo	at and lit fle	was rea en tle w w at l	ro: st i lan ith bot	se- and e u rge in h i	red be pper r tl 10 ts	, i ily r pa han ft dor:	ts f wer arts a f (3 m sal	flan re w S we Rufo n) o and	nks white ous of F d ve	wer te. du axc entr	11 0n.	
0regon	ney Co	are ast	e not (Elt	: 11 zro	ste th	d as 1983	s og 7:12	ccui 2, S	rri: Schi	ng a nidi	10r 19	ng 1 989:	the 78).	
6	-B-	85.	RUF	OUS	HU	MMII	NGB	IRD							
Yr Fir 73 -		8/22	2 ?	Fe ?	?	5	3	4	7	1		0c	Nv	De	
74 3/1 75 3/5		9/4 9/9		•	1	9	10 10	10 10	9 10	8 5	1 +	:	:	:	
76 3/9 77 2/2	1	8/18 8/9	•	8 - S	4	9	10 10		9 9	525237	:	:	:	•	
78 3/1 79 3/1		9/5 8/27	, :			10 9		10 10	10 10	52	+	÷	:	÷	
80 3/7 81 3/4		8/8 9/10		•	4	8 10	10 10		10 10	37	2	÷	:	•	
82 3/7 83 3/1		9/3 9/3	•		5		10	10	10	7 9	1	•	•	:	
84 3/3 85 3/9		9/3 B/27		•	777	9		10 10	10	777	2	:	:	:	
86 - 87 2/2		9/5 9/9			Ρ	10 10 10	10	10	?	10	3 2	•	?	*	
88 2/2 89 3/7	9	9/3	•	+	10	10	10		10 10	9 10	2	•	•	•	
90 -		8/31 8/25		•	9	4	10 10	10 10	10 10	7 9	•	:	•	•	
AV DAII 73-81 4	LY I		; .	-	5	.9	10	10		6	1	•	•	•	
82-90 I AV Fir	MON	THLY		1 2 1-3,	10 9 /16)	10	10		10		4 7) (8	8/8-	9/1	.0)	
			Firs	t +	10	Day	/S	L	.ast	- :	-				
Mean	197 197 197 197 197	77 78 79	0bs. Days 10 8 8 8 7			ser %) 30 88 13 29		0)bs)ays 10 9 7 6 9	,		ese (%) 50 44 0 78	nt.		
Mean						22	0					2.4			

On the days following their arrival each year, they were often absent. For example, the previous tabulation indicates that they were present an average of only 32% of the days in the 10 day period after their arrival.

32.0

Mean

The probability that they would be present near their average arrival date each year was also low because their average daily presence was only 28% during the five day period before and after their average arrival date (Table 5.2).

Prior to their departure, they were also often absent. For instance, they were present an average of only 34% of the days in the 10 days preceding their departure.

The low frequency of records in 1973 was probably because Faxon was just learning to keep records.

On 11 April 1974, a nest had two eggs, and on 28 June 1974 a different nest had one egg and one

In 1987, June 25, and, males were all	the 1 in ge	ast nera	1, I	Faxo	on r	note	ed i	seei tha	n oi t ai	n dul'	t
6-B-86. Yr First Last 73 - 74 - 75 - 76 - 77 - 78 - 79 - 80 - 81 - 81 - 82 - 83 - 84 - 85 - 86 - 87 - 88 - 89 - 90 - 90 -	Ja F ? 2 1 + 5 4 1 3 1 4 2 2 1 1	e Mr? 13673443593000000000000000000000000000000000	Ap + + 7 6 1 9 5 1 1 1 	My 14 66 13 19 51 1 1 1	Jn 2 • 2664 • + 7 • 88 + 2 + • • 4	J1 3695095000000000000000000000000000000000	Ag 9 8 4 9 9 10 8 9 7 4 7 7 8 4 5 7 2	Sp79585880 10895677841 P	0c58685868581033893398341	Nv2357468454663?551P	De + .2 3 2 2 3 4 3 2 4 3 3 .1 4 1 5
AV DAILY FREQ 73-81 MONTHLY 82-90 MONTHLY	2 9 7	23 89 78	2 7 7	2 7 7	3 8 7	6 10 10	7 10 10	7 10 10	6 10 9	5 10 10	2 9 9
Its Avera greatest from population may They were 6-B-87.	July have most	throu incu ly se ' WO(igh reas en)DPE	Nov ed alo	wit wit	h 1 Tho	Tec Prn1	nen Igli ton	the ings Cre	e ek	•••
Yr First Last AV DAILY FREQ <1973 MONTHLY	Ja Fo	e mr ? ?	Ар ?	My ?	Jn ?	J I ?	Ag ?	Sp x	UC ?	Nv ?	De ?

newly hatched young.

Faxon's only record here since the early 1950's was one sighted on 25 September 1972.

						- ·	_					
6-B-88. Yr First Last 87 4/20 4/20	Ja	Fe	Mr	Ap	My	Jn	JI	Ag	Sp	0c	Nv	De
AV DAILY FREQ 73-81 MONTHLY 82-90 MONTHLY	:	•		+ i			•	•	•	•	•	•

UNCONFIRMED.--It flew towards Faxon for about 50 yards (46 m) and also flew over his head at a height of about 50 yards (46 m). It had a brilliant red head that seemed a bright scarlet. The red on the head cut off sharply right at the breast line, and the rest of its underparts were pure white. As the bird passed overhead, the wings were clearly seen to be blackish, with the ventral side of each wing having a white patch that nearly covered the entire region of the secondary feathers. Faxon did not have a dorsal view of the bird, but he was using 7 x 35 binoculars, and is familar with this species from two years of observations in Michigan.

There are no Oregon Coast records and only one Oregon record for this species (Schmidt 1989:78).

34.4

6-B-89. YELLOW-BELLIED SAPSUCKER Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 77 7/17 7/17
AV DAILY FREQ
UNCONFIRMEDThe one sighting was not of a Red-naped Sapsucker. The bird sighted, a male, had extensive white on the back, black and white facial marks, and a red throat and crown; but it had no red on the nape. Eltzroth (1987:12) doesn't list them as occurring along the Oregon Coast.
6-B-90. RED-BREASTED SAPSUCKER Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 73 - - ? ? 1 4 3 + + + 74 - - . + + 3 1 . + 75 - - . + 1 + . . . + 76 - - + . . 2 1 . . . 76 - - + . . 2 1 . . . 76 - - 1 . 2 2 3 5 + 2 1 76 - - 1 . 2 2 3 5 + 2 1 77 - - 1 . 2 2 3 5 +
AV DAILY FREQ + + + 1 + <

Although usually infrequent anytime, they were most likely to be recorded during the 1973-1981 period in June and December; more recently, their Monthly Frequencies are more equable among months.

This species may be becoming extirpated by humans because it girdles and kills trees. Accordingly they are shot, but not at the Faxon Farm. Nevertheless, their Monthly Frequencies were much less here in Feb.-March, May-Aug., and Dec. in recent years, so they appear to be declining.

	6-B	-91.	DOW	YY V	100	PE	CKER	2						
Yr	First		Ja	Fe	Mr	Ap	My	Jn	Jl	Ag	Sp	0c	Νv	De
73	-		?	?	?	i	1	1	1	÷	1	•	+	
74	-	-	1	+	3	1	1	1	- 1	+		2		2
75	-	-	+	2	1	2	1	1	3	1	+			•
76	-		2 1		1				4	1	1	+	+	+
77	-	-	1	÷	1	1		•	1 3 2	1	•	1	+	+
78	-	-	1	•	+	+	2	2	3	2	1	•		1 2
79	-	-		+	+	•	•	•	2	•	+	•	+	2
80	-	-	2	1	1	1	+	+	•	•	•	•	•	•
81	-	-	•	٠	1	+	i	:	+		•	:	•	•
82	-	-	•	1	•	+	1	2	1 ?	2	:	1	•	•
83	-		•	•	+	•	:	+		+	1	1	•	:
84	-	-	÷	•	1	:	1	1	33?	1	٠	•	•	T
85	-	-	1	•	:	1		1	3	1	:	•	?	
86	-	-	1	:	P	1	2	:		3	3	•	1	1
87		-	5	3	1	1	2	2 1	2 1 5 4	4	3	•	:	Ţ
88	-	-	1	+	2	1	1	T	는	1	1	:	1	•
89	-	+	1	1	1	ż	•	2	C	27	1 P	1 3	P	3 2
90	-	•	3	•	2	/	•	2	4	/	٢	3	٣	2
A.V.		FREO	1	1	1	1	1	1	2	2	1	"÷	+	1
AV	DAILY -81 MO	NTHLY	8	6	10	8	6	6	9	2	6	3	4	6
		NTHLY	8	4	8	7	7	8	10	10	7	4	3	6
02	-30 110	NINET	0	- +	0			0	10	10		-	5	~

It has been much scarcer since about 1970, probably as a result of competition for nesting cavities with European Starlings (see section 4-F-3). But its Monthly Frequencies are similar in recent years to those of 1973-1981. On 29 January 1987, three Hairy and five

Downy woodpeckers were seen together, but usually only single Downies were noted.

	6-1	8-92.	HAI	RY 1	100		CKEF							
Yr	First	t Last	Ja	Fe	Mr	Ap	My	Jn	J]	Ag	Sp	0c	Νv	De
73	-	-	?	?	?	1	3	8	3	4	2	2	1	2
74	-	-	3	3	4	2	3	5	5	+	1	+	1	
75	-	-	? 3 2	+	1	1	3	2	2	1	2	1	+	+
76	_	-	1	3	2	4	3 3 3	6	2	5	2	1	3	1
77	_	-	4	2	6	4	8	5	- -	2	2	2	3 4	5
78	-	_	4	5	5	6	9	2	4	2	4	4	5	2
79	_	_	4		3	ž	4	4	ż	7	2		2	2
80	_	_	2	3	4	6	8	8	2	8	2	2 3 3	2 1	4
81	_	_	2	ĩ	3	5	3	4	4	2	2	ັ້ຈ	4	i
82	-	-	3 4	6	4	2	6	8	2	2	2	2		ī
	-	-			4	5		3	?	4	1	2	2	5
83	-	-	2 5	3	-		4	3	:			2	2	
84	-	-		2	6	5 5	1	1	:	2	1	1		4
85	-	-	3 7	3	2	5	4	2 5	3	4	3	+	1	4
86	-	-		3	P	4	7	5	?	2	1	5	?	3
87	-	-	2	8	2	4	7	3	3	3	6	3 2	1	1
88	-	-	2	3	4	8	6	- 4	1		2	2	5	3
89	-	-	2	6	4	3	1	2	2	4	23	2	2	2
90	-	-	2	4	4	1	3	2 2		3	P	8	Р	6
AV	DAIL	Y FREO	3	3	4	4	5	4	3	3	2	2	2	3
		ONTHLY	10	9	10	10	10	10	10	10	10	10	10	9
		ONTHLY	10	10	10	10	iň	ĩŏ	7	Ĩğ	10	10	- 8	10
02	-30 11		10	10	10	10	10	10			- 0	- 0	0	-0

On 21 May 1974, a nest with young was found. On 15 May 1986, an adult was at a nest. On 29 January 1987, three Hairy and five

Downy woodpeckers were seen together, but usually only single Hairy's were noted. Hairy Woodpeckers competed with European

Starlings for nesting space (section 4-F-3), but the Monthly Frequencies of Hairy's do not appear to have changed markedly in recent years.

	6-B-93. NORTHERN FLICKER													
	6-B	3-93.	NOR	ГНЕ	RN F		CKE	2						
Yr	First	: Last	Ja	Fe	Mr	Ар	My	Jn	JI	Ag	Sp	0c	Νv	De
73	-	-	?	?	?	- 5	6	6	3	- 5	7	10	10	10
74	-	-	9	- 5	6	- 7	- 5	4	3 5	5 7	9	10	10	10
75	-	+	10	- 7	8	8	6	3		7	- 7	10	10	10
76	-	-	10	10	10	9	4	5	7	8	10	10	10	10
77	-	-	10	10	9	10	9	9	6	10	10	10	10	10
78	-	-	10	10	10	8	10	- 5	9	9	10	10	10	10
79	-	-	10	10	10	9	10	10	10	7	- 7	8	10	9
80	-	-	10	10	9	10	4	3	9	10	•	- 7	10	10
81	-	-	8	10	10	9	6	5	7	- 5	10	10	10	8
82	-	-	10	8	8	7	9	7	1	9	10	10	10	10
83	-	-	10	10	10	10	10	10	?	5	10	10	10	10
84	-	-	•	•	10	10	•	•	10	•	9	10	10	9
85	-	-	10	10	10	10	10	9	6	8	9	10	9	9
86	-		10	10	Ρ	•	2		?	9	9	10	?	6
87	-	-	10	10	10	10	3	•	1	3	8	10	10	9
88	-	-	10	10	10	10	2	2	1	4	6	10	10	9
89	-	-	6	9	9	- 4	5	•	1	+	1	9	6	3
90	-	-	5	•	4	7	2	6	6	5	Ρ	10	Ρ	10
A۷	DAILY	FREQ	9	8	9	8	6	5	5	6	8	10	10	9
73-	-81 MC	NTHLY	10	10	10	10	10	10	10	10	ğ	ĩŏ	ĩŏ	10
82-	-90 MC	NTHLY	- <u>9</u>	8	10	-ĝ	- <u>9</u>	- Õ	īŏ	- ĝ	10	īŏ	īŏ	īŏ

Their Average Daily Frequencies were greatest from September through April.

On 26 November 1988, a flock of 13 was noted. The absence of flickers in some months may be a result of oversight, but Faxon noted that flickers also seemed to be less common in recent summers.

Flickers fought with starlings for nesting sites (section 4-F-3).

6-B-94.	PILE	ATE	ED N	100)PE(2					
Yr First Last		Fe	Mr	Ар	Му	Jn	Jl	Ag	Sp	0c	Νv	De
73	?	?	?	- 1		3	1	1	3	2		
74		2	2	2	4	2	1	1		4	2	1
75		2	1	1	1	+	2		2	5	2	
76	+	2	1	+	3	4	1	3 2	3	4	2 2	3
77	3	2	ī	3	3	1	ī	3	4	7	ī	ĩ
78		1	4	Ĩ	3	3	ī	4	3	3	ī	÷
79	1 3 2	2	4	3	3333	Ĩ	2	3	4	3	÷	3
80	2	2	1	3 3	3		1	1	3	2	1	
81	1		1	•	1	1	2	3	5	10	7	
82	1		1	- +	6	1	4	3	1	3	2	
83	1	1	+	3	1	3 2	?	1	6	4	1	
84	2	2	3	1	6	2	? 3	3	5	4	1	1
85	•		+	1	6 3 5			9	9	10	4	
86	3 1	1	Ρ	3	5	23	4 ? 3	4	4			
87	1	1	1	1	4	3	3	7	8	4	?	÷
88		3	3	4	7		4	3	4	10	4	1
89	1	3 2	Ĩ	4		1	4	3 5	2	6	1	2
90	-	ī	- -	7	5 3	2	4	3	P	3	P	2 3
	-	-			•	-			•	Ť	•	Ŭ
AV DAILY FREQ	1	1	1	2	3	2	2	3	4	5	2	1
73-81 MONTHLY	8	9	10	<u>9</u>	ĝ.	<u>9</u>	10	10	9	10	9	6
82-90 MONTHLY	7	8	10	10	10	9	10	10	10	- 9	10	6
	•	· ·	- •				- 4	20	~ 0	_	- 0	<u> </u>

Their Average Daily Frequency was slightly greater in September and October. They were least common in December. Their Monthly Frequencies have not changed markedly in recent years.

	6-B	-95.	OLIV	/E-S	SIDE	D	FLY	CAT	CHE	2				
Yr	First				Mr						Sp	0c	Νv	De
73		8/25	?	?			4	7	2	4				
74	5/7	8/30	•	•	· ·	•	3	4	4	i	•	•	•	•
75	5/6	8/26	•	•	•	•	4	- 7	5	÷	•	•	•	•
			•	•	•	•		3 5			•	•	•	•
	5/18	8/19	•	•	•	٠	1	2	4	1	•	٠	٠	•
77	5/20	8/18	•	•	•	٠	3	9	10	6	•	٠	٠	•
	5/9	8/3	•	•	•	•	6	8	10	1	•	•	•	•
79	5/11	8/21	•				6	9	10	5	•	•		
	5/15	8/20	•				6	10	- 7	8		•	•	
81	5/2	8/17					10	8	10	1				
82	5/6	7/30					6	4	7					
83	5/10	8/2					7	8	?	- +				
84	5/19	8/8				_	2	1		1				
85	5/3	8/4					8	5	5	2	-		•	
86	5/14	8/8	•	•		•	5	10	?	ī	•	•	?	
87	5/8	7/21	•	•	•	•	7	4	3	-	•	•	•	•
88	5/0	7/21		•	•	•		-	4	•	•	•	•	•
	-	//21	•	٠	•	•	•	•	- 4	•	•	•	•	•
89	-	-	•	•	•	•	•	3	•	•	•	•	•	•
90	-	-	•	٠	٠	٠	٠	٠	•	٠	•	٠	•	•
• • •								_	_	-				
	DAILY		•	•		٠	4	5	5	2	٠	•	•	•
	-81 MO						10			10		•	•	
82.	-90 MO	NTHLY	. •		•.		- 7	8	6	- 4	. •	•	•	
A٧	First	=5/10	(5/2	?-5/	/20)	1	AV L	.ast	t=8,	/11	(7,	/21.	-8/3	30)
		E	First	; +	10	Day	vs	<u>ا</u>	.as	t -	10	Dag	ys	
		()bs.		Pre			()bs.			resi		

		Obs.	Present	Obs.	Present
	YR	Days	(%)	Days	(%)
	1976	ğ	56	10	10
	1977	9	78	10	100
	1978	9	44	10	100
	1979	8	100	7	29
	1980	8	100	6	83
ean			75.6		64.4

On the days following their arrival each year, they were usually present. For example, the previous tabulation indicates that they were found an average of 76% of the days in the 10 day period after their arrival.

The probability that they would be present near their average arrival date each year was low because their average daily presence was only 36% during the five day period before and after their average arrival date (Table 5.2). However, they were usually found each year 4-5 days after their average arrival date (Table 5.2).

Prior to their departure, they were often present. For instance, they were found an average of 64% of the days in the 10 days preceding their departure.

The lack of records in recent years appears to be because they are becoming rarer, not because of reduced observation effort.

M

	RN WOOD-PEWEE		
	e Mr Ap My Jn		Oc Nv De
73 4/30 9/25 ? 3			
74 4/26 9/4	1 7 10		• • •
75 5/6 9/15 .	7 8		• • •
76 5/17 9/18	4 9		• • •
77 5/10 9/8 78 5/10 8/29	3 10 6 10		• • •
79 4/27 8/24	+ + 710	98.	• • •
8D 5/9 8/6	5 9		• • •
81 5/6 8/15	7 6		• • •
82 5/1 9/10	2 7	9 10 3	
83 5/6 8/25 .	4 10		
84 5/12 9/14	5 10		
85 5/5 9/12	710		
86 5/17 9/4	4 7	?.1	. ? .
87 5/11 8/29	2 1 5 4 1 7	. 1 .	• • •
88 5/12 9/1	5 4	2.1	• • •
89 5/12 8/30 90 5/12 9/1			• • •
90 5/12 9/1	•••56	. 3 P	• • •
AV DAILY FREQ	+ 5 8	7 5 1	
73-81 MONTHLY	. 3 10 1D		
82-90 MONTHLY	10 10		
AV First=5/8 (4/26-5	5/17) AV La	st=9/3 (8	/6-9/25)
- 1			
First H		Last - 10	Days
Obs.	1		resent
YR Days 1976 9	(%)	Days	(%)
1976 9 1977 9	89 0	8	0
1977 9	78	8 8	100 100
1970 9	20	2	100

year, they were usually absent. For example, the previous tabulation indicates that they were found an average of 42% of the days in the 10 day period after their arrival.

The probability that they would be present near their average arrival date each year was low because their average daily presence was only 28% during the five day period before and after their average arrival date (Table 5.2).

Prior to their departure, they were often present. For instance, they were found an average of 70% of the days in the 10 days preceding their departure.

They seem to be having trouble maintaining a large enough population to continue to breed here. They were regular breeders right up through 1980, but their population, never high, seemed to dip in 1981. In 1982, for the first time in at least 10 years, they failed to breed. In 1987 and 1988, their Daily Frequencies were markedly lower than in other years, but in 1989 they seemed to rebound.

Cowbird parasitization (section 6-B-184) may be a factor in the pewee's decline, as pewees seem to build their nests on exposed limbs and are thus vulnerable to cowbirds.

6-B-97. EM											
Yr First Last J	la Fe	Mr	Ар	Мy	Jn	J1	Ag	Sp	0c	Νv	De
75 9/14 10/10											
75 12/5 12/5						-	•	+	+	•	+
76 12/30 12/30	• •	•	•			•		•		•	1
77 - 10/14	• •	•	•			•	1	•	+		•
78	• •	•	•			+	+	•	•	•	•
82		•	•		•		+	2	•	l.	•
85 3/28 3/28	• •	+	•	•	•	•	•	•	•	*	•
							_	-	-		
AV DAILY FREQ	• •	+	•	•	•		+		- <u>+</u>	•	+
73-81 MONTHLY	• •	•	•	•	•	- 1	2	1	2	•	2
82-90 MONTHLY	• •	1	•	•		•	1	1	•	•	

These records were for Empidonax (i.e., the following Willow, Least, Hammond's, Dusky, and Pacific-slope flycatchers) that were not identified to species.

The unidentified Empidonax seen on 30 December 1976 had a back that was greenish-gray, with a crown darker than its back. But the back coloration lightened up toward the level of the eye, and the rest of its head was plain-colored. Its wings were dark with two conspicuous broad, dingy-white to yellowish wingbars. Its tail was dark, its throat was whitish, its breast was light brownish gray with a lighter streak up the center of the breast that was whitish. The belly was yellow, and its bill was either all black or at least quite dark. Its voice was high-pitched with rather loud "cheeps" or "cheeks," which were repeated about once a second for 10-15 seconds. It preferred medium to high perches (20-35 feet tall [6-11 m]) in willows and alders, although it was lower on occasion. At times it sat motionless, and at other times it flicked its tail and also its wings. The wings were flicked similarly to a Ruby-crowned Kinglet.

82 83 84 85 86 87 88	First 5/30 5/18 5/18 5/19 5/18 5/20 5/26 5/26 5/26 5/26 5/26 5/26 5/26	-98. Last 8/30 8/19 8/29 8/14 9/5 8/18 8/18 8/18 8/28 8/13 8/11 8/24 9/2 8/13 8/24	WILL Ja ?	FLY Mr · ·				J1 1 6 9 10 10 10 10 10 10 10 2 ? 6 4 10	Ag 1+549579104121111 12212	Sp 2 1 1 1 1	0c	Nv 	De
73- 82-		NTHLÝ NTHLY =5/24 YR 976	First Obs. Days 9	10 Pre (Daj sei %) 89	ys	1	7	•	10	Dag resi (% 7	ys ent) B	, /5)
	1	977 978 978	10 8		00			10			10	0	

	1976	9	89	9	/8
	1977	10	100	7	100
	1978	8	88	10	60
	1979	7	100	7	100
	1980	8	100	6	67
Mean			95.4		81.0

On the days following the Willow's arrival each year, they were almost always present. For example, the previous tabulation indicates that they were found an average of 95% of the days in the 10 day period after their arrival.

The probability that they would be present near their average arrival date each year was low because their average daily presence was only 49% during the five day period before and after their average arrival date (Table 5.2). However, they were usually found each year 2-5 days after their average arrival date (Table 5.2).

Prior to their departure, they were often present. For instance, they were found an average of 81% of the days in the 10 days preceding their departure.

There have been 2-3 pairs here.

The relative absence of their records in 1973 and 1974 is probably because Faxon was just learning to keep records. In 1984-1988, their Daily Frequencies were lower than in the past, but they apparently rebounded in 1989.

Also see Empidonax spp. (section 6-B-97) for other possible records.

6-B	-99.													
Yr First	Last	Ja	Fe	Mr	Ар	Мy	Jn	J1	Ag	Sp	0c	Νv	De	
	8/13				•	•		•	÷	•				
87 9/1				•		•		•	•	+				
90 8/24	8/24	•	•		•	•		•	1		•		•	
AV DAILY			•	•	•	•			+				•	
73-81 MOI		•	•	•	•	•			•			•	•	
82-90 MOI	NIHLY	•	•	•	•	•	٠	٠	2	1	•	•	•	

UNCONFIRMED.--The 1985 bird had upperparts that were brownish gray, underparts that were whitish, and a head that was proportionately large for the body and slightly crested. The crown,

nape, back, and rump were light brownish gray; it was slightly browner on the crown, and the rump had a slight olive tinge. The tail was short, rather deeply forked for an Empidonax, but the bird was in molt and a central tail feather was loose so the deep fork may have been an illusion; the tail was grayish brown, having a slight to moderate contrast with the brownish gray of the upper parts. The wings were medium brown, darker brown on the primaries, and had two broad white wing bars. The precise color of each set of wing coverts was undetermined due to molting wing feathers. The throat was whitish. The breast was dull grayish on the sides and whitish gray in the center. The belly was white, and slightly yellow on the lowest portion. The undertail coverts were light yellow. The eye-ring was white and round. The bill was short and thin from a side view; the upper mandible was black, and the lower mandible was mostly orange-pink. The points that separated this bird from a Hammond's Flycatcher include a whitish (not gray) throat, the whitish-gray central breast (rather than a gray breast band), the grayer (less olive) upper parts, and, perhaps most importantly, the orangish-pink (not black) lower mandible. Also the bird once uttered a "che-wick" (as it sounded to Faxon) call, like Least Flycatchers do.

The September 1987 bird was smaller than a Pacific-slope Flycatcher, based on a direct comparison; it was also proportionately big-headed and moderately short-tailed. The upper parts were brownish-olive, and the wings were somewhat darker with two whitish wing bars. The tail was only slightly darker than the back. The crown was brownish-olive, fading very minimally to light grayish in a very small area behind the eye. The grayish area appeared ragged, as the head feathers were apparently just beginning to molt. The eye-ring was white, very bold, and was slightly wider behind the eye. The throat was white, and the breast was dull grayish, forming a dull breast band. The belly and undertail coverts were whitish, with only a slight trace of yellowish discernible under certain light conditions. The bill was short, the upper mandible was dark, and the lower mandible was orangish.

In 1990, one was vigorously calling on August 24; its voice was a "che-bek," the "k" very emphatic. It called about 30 times in five minutes. It was a small Empidonax. Its upperparts were brownish, and its underparts were largely whitish. Its head was proportionately large with a prominent white eye-ring; its crown and nape were brown and very nearly the same color as its back. Its back was brown, with a little olive tinge. Its tail was darker brown and short. Its breast was whitish with a light suffusion of gray. Its belly was whitish, with almost no yellowish wash. Its throat was pure white. Its bill was short and thin, when viewed from the side; when viewed from the front and looking up at the bird, the bill was quite wide-based, making it look almost triangular. Its upper mandible was dark, but the lower mandible was entirely orange. Its wings were darker brown than the back with two white wingbars.

The single Oregon Coast record for this species is of an immature seen on 1 Sept. 1985 (Schmidt 1989:80).

Also see Empidonax spp. (section 6-B-97) for other possible records.

6-B-100. HAMMOND'S FLYCATCHER	
Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv	De
73 ? ? ? ? ? ? ? ?	
74 ? ? ? ? ?	
73 - ?	-
76 ? ? ? ? ?	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1
78 5/9 9/21 4 4 1 . 1 79 5/1 9/6 7 6 5 1 +	
80 4/29 9/21 + 7 5 4 1 1	•
	•
81 4/30 9/7 . + 8 9 5 + 2 . 82 4/26 9/16 . . 1 10 8 2 . 1 . 83 5/5 9/8 . . 8 8 ? 1 1 . 84 5/9 8/19 . . 7 5 4 + .	•
83 5/5 9/8 8 8 ? 1 1 .	1
83 5/5 9/8 8 8 ? 1 1 84 5/9 8/19 7 5 4 +	- *
	•
85 5/1 8/28 . . 8 9 8 3 . . 86 4/17 9/19 . . 1 9 10 ? 2 1 . 87 4/29 9/10 . . + 10 8 8 1 3 .	•
87 4/29 9/10 + 10 8 8 1 3 .	•
85 5/1 8/28 . . 8 9 8 3 . . 86 4/17 9/19 . . 1 9 10 ? 2 1 .? 87 4/29 9/10 . . + 10 8 8 1 3 . 88 4/26 9/19 . . 1 7 6 4 5 1 .	٠
89 4/20 8/31 1 7 7 1 2	•
	•
90 5/11 9/5 6 5 3 . P	•
AV DAILY FREQ * + 7 7 4 1 1 73-81 MONTHLY * 4 10 10 10 6 8	٠
	•
82-90 MONTHLY 6 10 10 10 8 7	
AV First=5/1 (4/17-5/15) AV Last=9/9 (8/19-9/	21)
* Calculated from 1977-1990 data only.	
First + 10 Days Last - 10 Days	

		11130 .	IC Days	Eust -	IO Duya
		Obs.	Present	Obs.	Present
	YR	Days	(%)	Days	(%)
	1978	9	44	7	Ó
	1979	10	50	8	0
	1980) 7	43	7	14
	1981	8	63	6	33
	1982	10	70	3	-
Mean			54.0		11.8*
* Mean	is f	or 4 years	because	few 1982	Obs. Days.

On the days following their arrival each year, they were usually present. For example, the previous tabulation indicates that they were found an average of 54% of the days in the 10 day period after their arrival.

The probability that they would be present near their average arrival date each year was low because their average daily presence was only 32% during the five day period before and after their average arrival date (Table 5.2).

Prior to their departure, they were usually absent. For instance, they were found an average of only 12% of the days in the 10 days preceding their departure.

It was first recognized in 1977 when its call was first learned, and it was probably present before 1977. Thus, the summary averages are only for 1977-1990.

This species is probably the most common flycatcher in 30 yr or older coniferous timber.

On 16 August 1980, one was feeding a fledged cowbird (also see section 6-B-184). Also see Empidonax spp. (section 6-B-97) for

other possible records.

6-B-101.												
Yr First Last	Ja	Fe	Mr	Ар	Мy	Jn	Jl	Ag	Sp	0c	N٧	De
85 5/2 5/3	•	•	•	•	1	•	•	•	•	•	•	٠
AV DAILY FREQ	•				+		•				•	
73-81 MONTHLY					:							
82-90 MONTHLY	•	•	•	•	1	•	•	•	•	•	•	٠

UNCONFIRMED.--The 2 and 3 May 1985 sightings seemed to be of the same bird. It was the size of a Pacific-slope Flycatcher. Its upper parts were olive-gray; the underparts were light yellowish. The crown, nape, back, and rump were uniform grayish-olive; the olive tinge being slightly stronger on the upper back, and least strong on the rump, which looked plain gray in flight. T The white eye-ring was conspicuous, but not bold. The area behind the ear was dull grayish-white, similar to the color of the throat, and somewhat blending with the coloration of the throat. The wings were dark grayish-olive, not strongly contrasting with the the rest of the upper body plumage. There were two white wing-bars. The tail was long, slightly forked, warm brown, and contrasting sharply with a grayish rump. The inner margins of the secondaries were tinged with whitish, and the inner margin of the outermost primaries were tinged with the same warm brown color as the tail. The throat was grayish-white. The breast, belly, and undertail coverts were light yellowish, were suffused with gray; the gray suffusion being strongest on the breast and weakest on the lower belly. The bill was mostly dark, with a pale orange base to the lower mandible. The voice was an occasional low "wit," softer than the "whit" of the Willow Flycatcher. It preferred a low perch less than 5 ft (1.5 m) from the ground in a strip of riparian willow.

This flycatcher is considered extremely rare along the Oregon Coast (Eltzroth 1987:12). Also see Empidonax spp. (section 6-B-97) for

other possible records.

		-102		PAC	IFI	IC-9	SLOP	PE I	FLY(CAT	CHER	2			
Yr Fir	st			Ja	Fe	Mr	Ар			JI	Ag		0c	Νv	De
73 -		9/2		?	?	?	•	+	+	•	1	+	•	•	
74 -	~	9/1		•	•	•		:	+	:	1	+	•	•	•
75 5/1		9/1		•	•	•	٠	3	4	8	6	1	•	•	•
76 5/1		9/5		•	•	•	:	6	7	16	6	+	•	•	•
78 4/2		9/3 9/6		•	•	•	1+	9 8	10 10	10	2 2	1+	•	•	٠
79 4/2		8/1		•	•	•	2	10	10	9	2		•	•	•
80 4/2		8/2		•	•	•	2	10	10	10	9	•	•	•	•
81 4/2		8/2		•	•	•	3	10	10	10	6	•	•	•	•
82 4/2		8/2	8	:	•	•	2	- 9	10	10	5	•	•	•	•
83 4/1		8/2	25	:	:	:	2 3	ģ	10	?	5 7	•		:	•
84 4/1		8/3	31				4	10	- ğ	10	4		:	:	
85 4/1	9	9/1	.5	•			2	10	10	10	6	1			
86 4/2		8/2	2				2	10	10	?	7			?	
87 4/2	4	9/4	Ļ	•			3	10	10	10	6	1			
88 5/2		8/1		•		•		8	9	10	5				
89 4/2		9/6		•	•		1	9	10	6	4	+	•	•	
90 5/5)	8/2	25	•	•	•	•	10	10	9	4		٠		•
AV DAI				•			1	8	8	8	4	+			
73-81						•	6	9	10	8	10	- 7			
82-90					•	•	्8	10	10	10	10	_3	•	•	
AV Fir	st	=4/2	26	(4/1	7+	5/10) /	AV I	as	t=8,	/31	(8,	/14	-9/:	28)
			F	irst	+	10	Day	ys	1	Las	t -	10	Da	ys	
)bs.			esei	nt		Obs	-	P	resi	ent	
		YR	C)ays			(%)			Day	S		(%		
		976		10			40			7			2		
		977		10			70			8 7			1		
		978 979		7			57			4				0	
		979		9 7			89 86			7			2		
Mean	Τ;	200		/			80 68	٨		Ø			10		
nean							00	• **					3	4.2	

On the days following their arrival each year, they were usually present. For example, the previous tabulation indicates that they were found an average of 68% of the days in the 10 day period after their arrival.

The probability that they would be present near their average arrival date each year was low because their average daily presence was only 42% during the five day period before and after their average arrival date (Table 5.2). However, they were usually found each year 1-5 days after their average arrival date (Table 5.2).

Prior to their departure, they were usually absent. For instance, they were found an average of only 34% of the days in the 10 days preceding their departure.

This flycatcher seems to be the most common one at Thornton Creek. It seems to prefer deciduous trees, and there are more deciduous than coniferous trees here; if the reverse was true, the Hammond's Flycatcher would probably be the most common flycatcher at Thornton Creek.

On 10 August 1976, a nest contained three fledglings (i.e., young still at the nest that could or nearly could fly).

The lack of records in 1973-1974 is probably because Faxon was then learning to identify them. Also see Empidonax spp. (section 6-B-97) for other possible records.

6-B-103. Yr First Last 84 5/15 5/15	Ja	Fe	Mr	Ap	My	Jn	J1 •	Ag •	Sp •	0c	Nv •	De	
AV DAILY FREQ 73-81 MONTHLY 82-90 MONTHLY												:	

A single bird.

6-B-104. EASTERN PHOE	BE
Yr First Last Ja Fe Mr Ap M 83 8/11 8/11	4y Jn Jl Ag-Sp Oc Nv De ? +
AV DAILY FREQ	· · · + · · · · · · · · · · · · · · · ·
82-90 MONTHLY	1
UNCONFIRMEDThis bird	
Western Wood-Pewee. Its upp brown, and it was darkest of	per parts were medium
It had no wing bars and no e	eye ring. The
underparts were dull whitis entirely black. It continue	h. The bill was
both up and down and sideway The Oregon Bird Records	ys.
The Oregon Bird Records accepted any records for th	s Committee has not is species in Oregon
(Schmidt 1989), and it is no	ot listed in Eltzroth
(1987).	
6-B-105. WESTERN KING	
Yr First Last Ja Fe Mr Ap I 73 6/2 6/2 ? ? ?	
86 4/22 4/22 +	? ? .
73 6/2 6/2 ? ? ? 86 4/22 4/22 . + 87 5/23 5/23 . . 88 4/27 4/27 . 1	* • • • • • • •
AV DAILY FREQ + <1973 MONTHLY ? ? ? ? 73-81 MONTHLY 82-90 MONTHLY	+ +
73-81 MONTHLY	1
82-90 MONTHLY 2 AV First=5/16 (4/22-6/2)	1
It was also seen in Aug 26 May 1972.	gust 1961 and On
The June 1973 record wa	
other sightings were of sing	gletons.

6-B-106.	PUI	RPL	EM	ART	IN							
Yr First Last												
88 8/16 8/16	٠	•	•	•	•	•	٠	+	•	•	•	•
AV DAILY FREQ			•					+	•			•
73-81 MONTHLY					•							
82-90 MONTHLY	•	•	•	•	•	٠	•	+	•	•	•	•

Two were seen on 16 August 1988.

C D 107	TOFE	CLIP									
6-B-107.	TREE	SWAL	LUV.	1				~	•		_
Yr First Last	Ja Fe	Mr		My	Jn				0c	Nν	De
73 - 9/15	? 1		10	10	10	10	8	1		•	•
74 3/11 9/12	• •	. 6	10	10	10	9	+	1			•
75 3/3 8/5	• •		9	10	10	8	1	•			•
76 2/2 9/9		⊦ 5	10	10	10	9	1	1			•
77 2/19 7/28		⊦ 8	10	10	10	8	•				•
78 3/6 7/15	•	. 8	10	10	10	5 5					
79 2/28 8/18	- i -		10	10	10	5	2				
80 3/8 7/24		, 7	10	10	9	6	•				
81 2/25 7/11		8	10	10	10	2					
82 3/1 7/20	• •	3	7	10	10	ī					
83 3/11 8/29		. ĭ	10	10	10	1 ?	3		•	•	•
84 3/1 7/13	-	3		10	10	3	•	•	•	•	•
85 3/9 8/15		. ĭ	5	- 9	- 9	1	i	•	•	•	•
86	•	. P	5	10	10	2	-	•	•	?	•
87 3/31 7/11	•		10			? 2	•	•	•		•
	•	-		10	9		•	•	•	•	•
88 3/12 7/29	•	. 1	8	.9	9	9	•		•	•	•
89 3/7 7/12	•	. 10	10	10	7	1	٠	•		•	•
90 3/19 7/11	•	. 3	10	10	10	4	•	•	•	•	•
		_	-			_	-				
AV DAILY FREQ	•	F 5	9	10	10	5	1	+	•	•	•
73-81 MONTHLY		5 10		10	10	10	6	3	•	•	•
82-90 MONTHLY		. 10				10	_ 2	•.	•	•	.•
AV First=3/3 (2/2-3	/31)	1	AV I	as	t=8,	/4	(7/)	11-9	9/1	5)
	irst -	F 10	Day	ys		Las		10	Daj	ys	
)bs.		esei	nt	(Obs	•	P	resi		
YR D	lays		(%)			Day	s		(%)	
1977	7		0			9			5	6	
1978	5		80			9			10	0	

	YR	Days	(%)	Days	(%)
	1977	7	Ó	9	56
	1978	5	80	9	100
	1979	8	38	7	29
	1980	7	100	8	63
	1981	7	71	9	44
Mean			57.8		58.4

On the days following their arrival each year, they were usually present. For example, the previous tabulation indicates that they were found an average of 58% of the days in the 10 day period after their arrival.

The probability that they would be present near their average arrival date each year was very low because their average daily presence was only 13% during the five day period before and after their average arrival date (Table 5.2).

Prior to their departure, they were often present. For instance, they were found an average of 58% of the days in the 10 days preceding their departure.

The absence of records in April 1986 is probably because of an oversight, not because they were absent.

Before the coming of the European Starling, Tree Swallows were more abundant than Violet-greens; now the reverse is true (see section 4-F-4). Here they arrive, nest once, and then depart.

Faxon was very familiar with and careful in distinguishing between Tree and Violet-green swallows, so the late Tree Swallow records in 1973-1976 are not a result of misidentification.

In recent years, this species' Monthly Frequencies were reduced in February and August-September.

	6-B-	-108.	VIC	DL E'	T-GF	REEN	I SI	ALL	.0W					
Yr	First	Last		Fe	Mr	Ар					Sp	0c	N٧	De
73	-	-	?	?	?	10		8	10	3		•		
74	3/16	10/7			3	4	- 8	7	9	5	+	1		
75	4/1	9/5				9	10	10	10	2	- +			
76	3/8	9/9			3		10	10	10	4	1			
77	3/16	9/3	•		2	10	10	10	10	3	1			
78	3/18	9/13			- 5		10	10	10	2	3			
79	3/6	9/11			9	10	10	10	10	4	1	•		
80	2/29	9/16		+	7	10	10	10	10	6	3			
81	3/5	10/8			5	10	10	10	10	4	•	1		
82	3/15	9/16			4	10	10	10	10	5	7	•		
83	3/16	9/1			4	10	10	10	?	2	1	•	•	
84	3/8	9/25			4	9	10	10	10	7	4			
85	3/18	9/18			1	10	10	10	10	8	4			
86	-	10/1			P	10	10	10	?	9	5	+	?	
87	3/15	9/18			5	10	10	10	10	9	6			
88		9/19			4	10	10	- 9	10	5	2			
89	3/15	_			5	10	10	10	10	5				
90		-			6	10	10	īŏ	10	8				
20	0, 1		•	•	•					-	•	•	•	•
AV	DAILY	FREO		+	4	10	10	10	10	5	2	+		
	-81 MO			1	ġ		10	10	10	10	8	2		
	-90 MO				10		īŏ	īŏ	īŏ	10	8	ī		
	First		(2/)				ÂŇ			9717		9/ī·	- 10	/8)
		-, -0	/ .		., .	•				-, -,				/
												-		

		First +	10 Days	Last -	10 Days
		Obs.	Present	Obs.	Present
	YR	Days	(%)	Days	(%)
	1977	10	50	7	29
	1978	8	88	9	44
	1979	10	100	9	33
	1980	9	22	8	38
	1981	8	25	8	25
Mean			57.0		33.8

On the days following their arrival each year, they were usually present. For example, the previous tabulation indicates that they were found an average of 57% of the days in the 10 day period after their arrival.

The probability that they would be present near their average arrival date each year was low because their average daily presence was only 35% during the five day period before and after their average arrival date (Table 5.2).

Prior to their departure, they were usually absent. For instance, they were found an average of 34% of the days in the 10 days preceding their departure.

In 1974, none were seen between September 12 and October 4, and, in 1986, none were seen between September 18 and October 1. This absence in late September was also noted in 1981. Thus, there seems to be a pattern of their absence between mid-September and early October, when some nonlocal birds appear to migrate through.

They competed with starlings for nest sites here (section 4-F-4).

Also see above comments for the Tree Swallow.

	6-R.	-109.	NDRTHERN F			ROUGH-WINGED SW						ALLOW				
Yr	First	Last	Ja	Fe	Mr	Ap	My	Jn	JĪ	Ag	Sp	0c	Νv	De		
73	4/27			_		'				•	•					
73	8/5	8/14	?	?	?	1	8	1		3						
74	4/24	7/27				1 2 3 6	9658	10	.52733			٠				
75	4/10	7/10				2	6	4 5 6 1	2							
76	4/6	8/13			÷	3	5	5	7	3 +		1.00				
77	3/21	8/17		:	+		8	6	3					٠		
78	4/16	8/24				2	7	1	3	+						
79	4/9	6/1					_			_						
79	8/7	8/10		•		4	7	+	•	1	•		•	•		
80	4/1	5/3				4 2 6 3	17		۲			•				
81	4/13	8/6		•		6	7	·2843451	•54?54?+	1 1 3						
82	4/22	8/19				3		8	4	1						
83	4/8	8/25	٠		14	6	10	4	?							
84		7/31				92544	9	3	5	i 2 1	•		٠	٠		
85		8/29	۰			2	6 8	4	4	1		•	?	٠		
86		8/20				5	8	5	- 7	2		•	1	٠		
	4/8					4	+		+	1		•	•	٠		
	4/12	5/19	•	•	•		2	•	•	•	•	•	•	•		
89		4/18	•	•	•	1		•	•	•	•	•	•	•		
90	5/5	5/24	•	•	•	•	3	•	•	•	•	•	•	•		
A۷		FREQ	•		+				2 7	1	•			•		
	-81 MO			•	1			9	7	7		•	•	•		
A٧	-90 MC First First	=4/12	(3/3	21- -8/	5/5 7)	9			6 Las		(4	/18	8-8/	29)		

		First	+ 10 Days	Last -	10 Days
		Obs.	Present	Obs.	Present
	YR	Days	(%)	Days	(%)
	1976	1Ŏ	40	9	44
	1977	9	0	10	0
	1978	10	30	10	10
	1981	9	44	10	60
	1982	8	100	9	0
Mean		-	42.8		22.8

(First is for March-April dates; Last is for August dates.)

On the days following their arrival each year, they were usually absent. For example, the previous tabulation indicates that they were found an average of only 43% of the days in the 10 day period after their arrival.

The probability that they would be present near their average arrival date each year was low because their average daily presence was only 26% during the five day period before and after their average arrival date (Table 5.2).

Prior to their departure, they were often absent. For instance, they were found an average of 23% of the days in the 10 days preceding their departure.

There were never more than 1-2 pairs here. Some years it was a summer resident; other

years, it appeared to be a spring or fall migrant. In 1980 and 1988-1990, its Daily Frequencies were much less than in other years. Thus, this suggests that its population may be cyclic here,

were much less than in other years. Thus, this suggests that its population may be cyclic here, not that the population is undergoing a recent decline.

6-B-110. BANK SWALLOW

Dne was seen on an unknown date prior to 1973.

	6-B-	-111.	CL 1	IFF	SWA				_		_			_
Yr	First	Last	Ja	Fe	Mr	Ар	My	Jn		Ag	Sp	0c	Νv	De
73	4/15	8/21	?	?	?	3	6	9	10	7	•	•	•	•
74	4/12	7/26	•	•	•	5	7	10	8 3 7	:	•	•	•	•
75	4/28	8/13	•	•	•	+	1	9	3	2	•	•	•	•
76	4/27	8/20	•	•	•	1	2	7		4	•	•	•	•
77	4/19	8/23		•	•	+	3	3	4	1	•	•	•	•
78	4/22	8/8	•	•	•	1	3	10	10	3	٠	•	•	•
79	4/13	8/24	•	•	•	+	7	10	10	7	•	•	•	•
8D	4/6	8/8	•	•	•	5	3	5	2	1	•	•	•	•
81	5/11	7/21	•	•	•	:	4	3	4		•	•	•	•
82	4/26	8/31	•	•	•	1	4	8	9	4	•	•	•	•
83	4/20	8/13	•	•	•	2	8	6	?	4	•	•	•	•
84	4/22	8/8	•		•	2	÷	10	8	2	•	•	•	•
85	5/1	8/21	•	•	•	:	5	8	10 ?	7	•	•	?	•
86	4/15	8/22	•	•	•	2	10	10		8	i	•	:	•
87	4/13	9/8	•	•	•	7	10	10	10	-	T	•	•	•
88	4/12	8/25	•	•	•	2	9	9 10	10	8	•	•	•	•
89	4/7	8/22	•	10 -	•	6	10	10	10 10	8	•	•	•	•
90	4/15	8/21	•	•	•	1	10	10	10	0	•	•	•	•
	DATLY	5550				2	5	8	8	4	+			
AV	DAILY	FREQ	•	•	•	2	10	10	-			•	•	•
/3	-81 MO	NIHLY	•	•	•	9	9					•	•	•
82	-90 MO		11	-						8/1		7/2	1_0	/8)
A٧	First	=4/19	(4/	0-5	/11	1	A۷	Ld	51-	0/1	/ (114	1-3	707

On average, about four pairs nested here with a range of about 2-8 pairs.

The lack of records in May 1984 may be because they were overlooked, not because they were absent.

6-B-112. Yr First Last 73 4/10 9/11 74 4/15 9/12 75 4/17 9/14 76 4/14 9/14 77 4/8 9/13 78 4/11 9/20 79 4/6 9/24 80 4/8 9/16 81 4/13 9/7 82 4/16 9/16 83 4/13 9/10 84 4/13 9/16 85 4/6 9/13 86 4/7 9/16 87 4/4 9/16 88 4/10 9/13	BARN SWALLOW Ja Fe Mr Ap ? ? ? 7 6 5 4 8 6 4 7 8 6 4 5 6 4 5 6 7 7 7 7	My Jn J1 Ag 10 10 10 9 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 9 10 10	Sp Oc Nv De 1
89 4/8 9/6 90 4/6 9/19 AV DAILY FREQ 73-81 MONTHLY 82-90 MONTHLY AV First=4/10	· · · · 5 · · · 7 · · · 10 · · · 10	10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10	P . 5 . 10 . 10 . 4 (9/6-9/24)
C	First + 10 Day Obs. Preser Days (%) 9 44 10 80 10 80		10 Days Present (%) 100 75 71

	TR.	Days	(%)	Days	(%)
	1976	9	44	9	100
	1977	10	80	8	75
	1978	10	80	7	71
	1979	9	89	6	17
	1980	9	78	8	100
Mean			74.2		72.6

On the days following their arrival each year, they were usually present. For example, the previous tabulation indicates that they were found an average of 74% of the days in the 10 day period after their arrival.

The probability that they would be present near their average arrival date each year was moderate because their average daily presence was 52% during the five day period before and after their average arrival date (Table 5.2). But they were usually found each year on their arrival date and 1-5 days thereafter (Table 5.2).

Prior to their departure, they were often present. For instance, they were found an average of 73% of the days in the 10 days preceding their departure.

Prior to 1988, there were 7-8 breeding pairs, but, in 1988, there was a sudden decline to three pairs. In 1989, there were also not as many nesting pairs as prior to 1988.

	6-	-B-113.	GR/	AY J	AY									
Yr		st Last	Ja	Fe	Mr	Ap	Мy	Jn	J1	Ag	Sp	0c	Νv	De
73	-	-	?	?	?	•	•	•	•	•	- `+	+		
74	-	-		•		+				•	•	+	•	•
75	-					•	•	•			٠	•	•	•
76	-	-	•	•	- 1 1	•	+	+	•	•	:	•		۲
77	-	-	+		•	•	+	•	+	2	1			•
78	-	-	1	+	+	•	•	•	•	•		+		
79	-	-	•	•	•	•	•	•	٠	•	٠	٠	٠	٠
80	-	-	•	•	٠	•	•	•			•	•		
81	-	-	•	•	٠	•	•	+	- 1	•	:	•	•	i
82	-	-	•	•		•	•	1	1 ? 2	÷	1	•	•	1
83	-	-	•	+	4	•	•	:	?	+	2	•	•	•
84	-	-		•	1	•	•	+	2	٠	•	•	•	•
85	-	-	+	٠		•	•	•	:	•	:	•	;	•
86	-	-	•	•	۲	•	•	•	?	i	1	+	?	•
87	-	-	1	•	٠	•	•	•	T	T	1	Ŧ	•	i
88	-	-	•	•		•	•	•	•	•	1	•	•	T
89	-	-	•	•	•	•	•	•	•	•	•	2	•	•
90	-	-	•	•	•	٠	•	٠	•	•	•	2	•	•
۵v		Y FREQ	+	+	+	i+	+	+	+	+	+	+		+
		MONTHLY	3	i	3					i	2	3		
		MONTHLY	1	1	1	1	2	2 2	2 4	1 2	2 6	3 2	•	ż
02	- 50 1		1	1	-	•	•	2	-	2	0	-	•	-

They may be uncommon here because of a lack of appropriate habitat.

On 16 June 1982, three young of the year were flying around.

On 15 August 1987, three were seen eating

cascara berrie		
6-B-114. Yr First Last 73 74 75 76 77 78 79 80 80 81 82 83 83 84 85 86 87 88 89 90	Ja Fe Mr Ap My Jn Jl Ag Sp 0c Nv Do ? ? 7 4 7 3 7 6 10 8 10 10 10 10 8 7 6 8 8 10 9 9 10 8 9 8 10 6 6 4 7 9 9 10 9 10 10 7 8 7 6 5 10 10 6 9 9 10 7 8 7 6 5 10 10 6 4 9 10<	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	10 10 10 10 10 10 10 10 10 10 10 10 1	0 10 10 10 10 10
Faxon ind	icates that they were always	e always

present, eating about 90% of the feed at his feeder, so months without records probably reflect an oversight.

Once, in late fall or early winter in the 1950's, a flock of about 500 was seen in the orchard; such large numbers have not been seen since.

On 15 August 1987, 23 were seen eating cascara berries.

6-B-115. SCRUB JAY Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 99 10/12 10/12
9 10/12 10/12 10/2 1 1 11 10/2 10/2 1 1 1 13 9/10 1 1 1 1 14 6/1 1 1 1 1 14 10/9 10/9 1 1 1 14 10/9 10/9 1 1 1 17 9/19 9/19 1 1 1 10/25 10/25 1 1 1 1 10/25 10/25 1 2 1 2 1 10/25 10/25 1 2 1 2 1 2 1 10/25 10/25 1 2 1 2 1 2 1 1 1 2 1 1 1 2 1
34 6/1 6/1 34 10/9 10/9 + + 37 9/19 9/19 + + + 37 9/19 9/19 + + + + 38 10/25 1 + + + + 38 10/25 1 - 1 - 2 38 10/25 1 - 2 - 2 38 10/25 1 - 2 - 2 32-90 MONTHLY - 1 - 2 - W First=10/3(9/10-10/25) AV Last=10/3(9/10-10/25) AV Last=10/3(9/10-10/25) They seem to be more common in recent years. Only one bird has been seen at a time. -
34 6/1 6/1 34 10/9 10/9 + + 37 9/19 9/19 + + + 37 9/19 9/19 + + + + 38 10/25 1 + + + + 38 10/25 1 - 1 - 2 38 10/25 1 - 2 - 2 38 10/25 1 - 2 - 2 32-90 MONTHLY - 1 - 2 - W First=10/3(9/10-10/25) AV Last=10/3(9/10-10/25) AV Last=10/3(9/10-10/25) They seem to be more common in recent years. Only one bird has been seen at a time. -
87 9/19 9/19 88 10/25 10/25 88 10/25 1 98 10/25 1 98 10/25 1 98 10/25 1 98 10/25 1 98 1 2 97 1 2 98 10/25 1 99 10 2 90 MONTHLY 1 92 2 94 First=10/3(9/10-10/25) AV First=10/3(9/10-10/25) AV Last=10/3(9/10-10/25) They seem to be more common in recent years. 01y one bird has been seen at a time. 6-8-116 BLACK-BILLED MAGPIE Yr First Last Ja Fe Mr Ap My Jn J1 Ag Sp OC Nv De 32 7/12 8/15 1 AV DAILY FREQ + + . 43-90 MONTHLY 1 1 52-90 MONTHLY 1 1 52-90 MONTHLY 1 1 61sappeared until August 14. On August 14 and 15,
38 10/25 10/25 1 1 1 AV DAILY FREQ 1 2 1 2 32-90 MONTHLY 1 2 2 32-90 MONTHLY 1 2 2 AV First=10/3(9/10-10/25) AV Last=10/3(9/10-10/25) AV Last=10/3(9/10-10/25) They seem to be more common in recent Years. Only one bird has been seen at a time. 6-B-116. BLACK-BILLED MAGPIE Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 32 7/12 8/15 2 1 AV DAILY FREQ + + . AV DAILY FREQ + + . AV DAILY FREQ - + + AV DAILY FREQ - + + AV DAILY FREQ - + + AV DAILY FREQ - 1 1 S2-90 MONTHLY - 1 1 . S2-90 MONTHLY - 1 1 . Four birds stayed July 12-14; they then . . . disappeared until August 14. . . .
3-81 MONTHLY 1 2 32-90 MONTHLY 1 2 AV First=10/3(9/10-10/25) AV Last=10/3(9/10-10/25) They seem to be more common in recent rears. Only one bird has been seen at a time. 6-B-116. BLACK-BILLED MAGPIE Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 32-90 MONTHLY 2 AV DAILY FREQ + + 73-81 MONTHLY 1 AV DAILY FREQ + + 73-81 MONTHLY 1 AV DAILY FREQ + + 73-81 MONTHLY 1 B2-90 MONTHLY 1 S2-90 MONTHLY 1 <t< td=""></t<>
73-81 MONTHLY 2 32-90 MONTHLY 1 2 AV First=10/3(9/10-10/25) AV Last=10/3(9/10-10/25) They seem to be more common in recent years. Only one bird has been seen at a time. 6-B-116. BLACK-BILLED MAGPIE Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 32-90 MONTHLY 2 AV DAILY FREQ + + Y3-81 MONTHLY 1 Y3-90 MONTHLY 1 Y4
AV First=10/3(9/10-10/25) AV Last=10/3(9/10-10/25) They seem to be more common in recent years. Only one bird has been seen at a time. 6-B-116. BLACK-BILLED MAGPIE Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 32 7/12 8/15 AV DAILY FREQ . Y DAILY FREQ . <t< td=""></t<>
They seem to be more common in recent years. Only one bird has been seen at a time. 6-B-116. BLACK-BILLED MAGPIE Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 32 7/12 8/15 2 1 AV DAILY FREQ + + 73-81 MONTHLY 1 1 Four birds stayed July 12-14; they then disappeared until August 14. On August 14 and 15, three were seen. Floyd Schrock also photographed them. Eltzroth (1987:13) doesn't list them as occurring along the Oregon Coast. 6-B-117. AMERICAN CROW Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 73 ? ? 8 910 5 4 5 7 1 5 74 - 2 3 8 910 10 9 7 9 8 4 + 75 + 5 910 10 10 9 8 7 6 4 2 76 - 3 6 10 10 9 10 10 3 7 5 9 4 77 - 1 7 910 9 6 4 810 10 910 78 - 4 7 810 9 . 7 9 910 10 9 79 - 810 10 10 10 7 2 10 10 10 8 5 80 - 5 9 7 10 9 1 410 7 6 5 1 81 1 3 8 9 5 6 5 8 8
years. Only one bird has been seen at a time. 6-B-116. BLACK-BILLED MAGPIE (r First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 32 7/12 8/15 AV DAILY FREQ 4 +
Only one bird has been seen at a time. 6-B-116. BLACK-BILLED MAGPIE Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 32 7/12 8/15
Ar First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 32 7/12 8/15 . . 2 1 . . AV DAILY FREQ AV DAILY FREQ AV DAILY FREQ .
32 7/12 8/15 . <t< td=""></t<>
AV DAILY FREQ + +
73-81 MONTHLY
B2-90 MONTHLY 1 1 1 1 1 Four birds stayed July 12-14; they then disappeared until August 14. On August 14 and 15, three were seen. Floyd Schrock also photographed them. Eltzroth (1987:13) doesn't list them as occurring along the Oregon Coast. 6-B-117. AMERICAN CROW Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 73 ?? ? 8 9 10 5 4 5 7 1 5 74 2 3 8 9 10 10 9 7 9 8 4 + 75 + 5 9 10 10 10 9 8 7 6 4 2 ? ? 9 4 7 7 9 10 9 6 4 8 10 10 9 10 76 3 6 10 10 9 10 10 3 7 5 9 4 9 10 10 10 3 7 5 9 4 76 3 6 10 10 9 10 10 3 7 5 9 4 77 1 7 9 10 9 6 4 8 10 10 9 10 78 5 9 7 10 9 1 4 10 7 6 5 1 80 5 9 7 10 9 1 4 10 7 6 5 1 81 1 3 8 9 5 6 5 8 8 81 1 3 8 9 5 6 6 5 8 8
disappeared until August 14. On August 14 and 15, three were seen. Floyd Schrock also photographed them. Eltzroth (1987:13) doesn't list them as occurring along the Oregon Coast. 6-B-117. AMERICAN CROW Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 73??? 8 910 5 4 5 7 1 5 742 3 8 910 10 9 7 9 8 4 + 75 + 5 910 10 10 9 7 9 8 4 + 75 1 7 910 9 6 4 810 10 910 78 4 7 810 9 . 7 9 910 10 9 79 - 810 10 10 10 7 2 10 10 10 8 5 80 - 5 9 7 10 9 1 4 10 7 6 5 1 81 1 3 8 9 5 6 5 8 8
6-B-117. AMERICAN CROW Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 73 - - ? ? 8 9 10 5 4 5 7 1 5 74 - - 2 3 8 9 10 10 9 7 9 8 4 + 75 - - + 5 9 10 10 10 9 7 9 8 4 + 76 - - 3 6 10 10 9 10 10 3 7 5 9 4 77 - - 1 7 9 10 9 6 4 8 10 10 9 10 78 - - 4 7 8 10 9 . 7 9 9 10 10 9 79 - - 8 10 10 10 10 7 2 10 10 10 8 5 80 - 80 - - 5 9 7 10 9 1 4 10 7 6 5 1 81 -
Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 73 ? ? 8 9 10 5 4 5 7 1 5 74 2 3 8 9 10 10 9 7 9 8 4 + 75 - 2 3 8 9 10 10 9 7 9 8 4 + 75 - + 5 9 10 10 9 8 7 6 4 2 76 3 6 10 9 10 10 3 7 5 9 4 77 - 1 7 9 10 10 9 10 10 9 10 10 9 10 10 9 10 10 9 10 10 9 10 10 9 10 10 10 10 10 10 10 10 10 10 10 10 10
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$
78 - 4 7 8 10 9 . 7 9 9 10 10 9 79 - - 8 10 10 10 7 2 10 10 10 8 5 80 - - 5 9 7 10 9 1 4 10 7 6 5 1 81 - - 1 3 8 9 5 6 5 8 8 . .
79 8 10 10 10 10 7 2 10 10 10 8 5 80 5 9 7 10 9 1 4 10 7 6 5 1 81 1 3 8 9 5 6 5 8 8
80 = - 59710914107651 81 = - 138956588
82 + 2 2 6 10 7 6 8 2 8 . 1
83 2 . 5 9 6 9 ? 2 . 5 2 . 84 2 2 4 9 9 10 10 4 4 7 10 6
85 5 7 8 10 10 9 10 9 10 10 5 10
86 9 10 P 10 10 10 ? 10 10 10 ? 10 87 9 9 9 10 10 10 10 10 10 0 9 9
88 10 10 10 10 10 9 10 10 9 10 10 6
89 10 10 8 10 10 10 10 10 10 9 8 10 90 10 10 10 10 10 9 9 4 P 10 . 10
AV DAILY FREQ 5 6 8 9 9 8 7 8 8 8 6 5 73-81 MONTHLY 10 10 10 10 10 9 10 10 10 9 9 9

Although usually still present, their Average Daily Frequencies were least from November through

February. On 18 March 1974, a crow was carrying sticks, presumably for a nest.

Yr 73 74 75 76 77 78 80 81 82 83 84 85 86 87 88 89 90 AV	Firs 		COM Ja 1 1 2 2 1 + + 3 3 1 1 3 3 2 2 6 2 2 10		Mr ? 1+1+1 331. 31. 2+31 1	VAp 121227 212 + 3134 28	My ·1+3333222214333 ·2 29	J23641 • •22131+211 •3 20	J1242411+21 ·?112+ ·12	Ag24222 .112211333+63 29	Sp123144322 •4234363P 30	0c1324422353411.290330	Nv+314 •33183114?368 • 39	De 222142221142 2343 29
82.	-9́0 М А1	ONTHLÝ ONTHLY though	10 ther	8 ew	10 7	8 e u s	9 sual	8 9 1y	10 7 1-3	10 2 ra	10 9 ave	10 9 ns,	9 up	9 to
si: 198	x wer 39, a	e quite flock	oft of 1	en 1 w	not Ias	red red	ar	nd, led.	on	ce,	on	1 I 	10V	•
Yr 73 75 76 77 78 79 80 81 82 83 84 85	6- Firs - - - - - - - - -	B-119. t Last - - - - - - - - - - - - - - - - - - -	BLA Ja 2+ ·3 34 35 6 14 6	CF?2346523774356	CAF Mr?3176636578999	PEC Ap 1 1 6 8 9 5 8 8 9 7 7 8) CF My 1 5 6 9 6 7 10 10 10 9 10	HICI Jn 1 2 6 9 5 4 6 7 8 6 0 10	(AD1 4137754957?58?	EE Agg 2 1 6 8 6 4 8 8 8 8 8 8 8 10	Sp216456910697578	0c1 .625557582385	Nv 1 1 5 4 5 1 3 5 2 4 4 6 5 ?	De+1245231532457

86	-	-	6	6	Ρ	10	10	10	?	10	8	5	?	7	
87	-	-	8	8	8	10	9	10	9	8				4	
88	-	-	3	4	-5	7	10	5	- 5	1		8		2	
89	-	-	9	9	4	7	9	-5	10	10	8	10	4	6	
90	-	-	5		10	6	10	8	9	6	Ρ	- 7	Ρ	•	
AV	DAI	LY FREQ											3		
73-	·81	MONTHLY	9	10	10	10	10	10	10	10	10	9	10	10	
82-	90	MONTHLY	10	9	10	10	10	9	10	10	9	10	9	9	

It was generally more frequent than the Chestnut-backed Chickadee. The low Daily Frequencies of records in 1973 and 1974 could be because Faxon was just starting to keep records.

											-			
	6-B	-120.	CHE	STN	UT-	BAC	CKED) Cł	ICI	ADE	E			
Yr	First	Last	Ja	Fe	Mr	Ap	My	Jn	JI	Ag	Sp	0c	Νv	De
73	-	-	?	?	?	1	+	1	- +	1	1	1	•	2 2
74	-	-	1	2	1	1	2	1	1	+	- +	1	2	2
75	-	-	1		1	1		+	•		- +			10
76	-	-		1	1	+	2		1			+	- 1+	+
77	-	-	1		1	1	- +	1			1	1	- 4	2
78	-	-	1	+		1	1	1	1	1		+	1	1
79	-	-	1	1 2	+	2	2	2	2	1	3 2	3	1	3
80	-	-	1 3	2	+	2	1	1			2	3 2 2	2	
81	-	-	2 +		+	1	1	+	1	+	3		1	
82	-	-		3		1		•	•	•	- 1	1	1	
83	-	-	2 3	3 1 2		- +	2		?	+	1	2	•	2
84	-	-	3	2	4	2		2	1	2	3	2	1	6 7
85	-	-		1	2		2		3 ?	3 2	6	4	5 ? 5	
86	-	••	8 9		Ρ	-5		3	?	2	3	2	?	3 5
87	-	-	9	9	7	9		6	4	4	6	4	- 5	
88	-	-	3	1	3	6	9	3	7	1	6	10	3	4
89	-	-		5		3 3	3	2	1	3	3		4	7
90	-	-	4		5	3	8	5	3	2	P	8	P	8
AV	DAILY	FREQ	2	2	2	2		2	2		2	3	2	
73)NTHL Ý	9	6	9	10		9		6	8		8	
82	-90 MC	ONTHLY	8	8	7	9	9	- 7	9	9	10	10	9	9

Almost all of these were sight records. Since they were sometimes heard and not seen, they might be more frequent that these records indicate, especially in summer.

	-121.		SHT							~	•		
Yr First	Last	Ja	Fe	Mr	Ар	Mу	Jn	JI	Ag	Sp	UC	Νv	ve
73 7/4	9/29												
73 12/18	12/18	?	?	?				2		1			+
74 3/26	4/5												
74 8/14	11/21			+	+				+	1	+	1	
75 -													
76 2/23	2/23	•	•	•	•		-	-	-	-	-	-	-
76 5/11	5/22												
76 12/24	-		+			1							+
77 -	-	i	2	i	- É	1	4	Å	i	i	÷	3	+
78 -	10/20	-		2	5	4	- -	4	1	i	1	5	-
70 -	1/3	•	т	2	2	- 4	•	5	2	- +	-	•	•
79 1/3								2					
79 7/14	7/31	+	•	•		4	i	3 1	3	÷	•	•	•
80 4/2	9/11	•	•	•	4	4	1	1	3	+	•	•	•
81 3/1	5/8			-		-						1 20	
81 10/8	11/25	•	•	1	•	1	•	•	•	•	2	1	
82 -	-		•	•	•				•	•			•
83 2/24	4/18		+	+	+	•		?					
84 7/26	10/2							2	3	3	+	÷ .	
85 3/15	5/20												
85 7/24	7/31			+	3	1		1					-
86 1/4	1/4												
86 4/15	4/15	1			+	0.0		?				?	
87 2/4	5/21	-	•							2			
87 7/4	7/23	-	1	1		+		1					
88 -	-		-			1				1.4			
89 7/17	9/6	•	•					i		÷			10
90 -	970	•	•	1.5	•	•	•) -			•	•	
90 -	-	•	•					× •	•	•		•	
AV DAILY	FRFO	+	. +	. +	1	1	+	1	1	+	+	+	+
	NTHLY	3											
82-90 MO		1	2	5	3	2	3	6					5
02-90 MU	IN L D L T		. 4	. ວ	່ 3	2		0	- T		. T	•	•

They were erratically present. Their Monthly Frequencies were often lower in recent years, especially since 1987.

	6B-	-122.	REC)-BI	REAS	STEE) NI	JTH/	ATCH	1				
Yr	First	Last				Ap	Мy	Jn	J1	Ag	Sp	0c	Νv	De
73	-	-	?	?	?	•	•	•	•	•	•	•	•	•
74	-	-	•	٠	•	•	•	•	•	:	•	•	•	•
75	8/25	10/30	•	•	٠	•	•	•	•	+	•	Ŧ	•	•
76	1/11	1/11												
76	5/11	5/11	+	54			-		+					
76 77	7/2	7/2	т	•	•	•	т	•	4	ġ	8	10	7	4
78	7/8	- 5/9	6	3	3	2	2	•				10		
79	7/20	10/1				•			÷	+	3	÷		
80	4/18	7/8	:	:		÷	:	÷	2		-			
81	7/22	10/15							2 1		2	i		
82	5/23	5/23												
82	8/26	10/20				•	+	•	?	+	1	1	•	•
83	-	-	•		•	•	•	•	?	•	•	•	•	•
84	5/16	5/16					-							
84	9/6	9/29	•	•	:	:	1	•	:	:	4+	•	•	•
85	3/2	9/28	٠	:	1	1	+	2	1 ?	1	т	i	?	
86	2/7	E /00	•	1	•	1	•	2	:	•	•	1	:	
87 87	5/20 7/14	5/20					+		2	2	10	10	5	4
88	//14	5/23	•	•	•	•	•	•	-	-	10	10	Ŭ	æ
88		10/1	3	1	3	6	4					+		
89	8/31		-	-	-					÷			5	7
90	-	-	3	2	3	6	•	1	1		P	•	•	•
									_	_	_	-	-	-
	DAILY		1	+		1	' +	+		1	23	2	1	1
		NTHLY	3	1	1	2	2	1	6	3	3	4 6		1
82	-90 MO	NIHLY	2	3	3	4	6	2	4	4	. /	D	3	2

This species was irregularly present. They were sometimes very abundant during fall migration "waves" (section 5-G-3). The birds present in summer may sometimes only be post-breeders.

														-
	6.	-B-123.	BR	DWN		EEPI								
Yr	Firs	st Last	Ja	Fe	Mr	Ар	Мy	Jn	Jl	Ag	Sp	0c	Νv	De
73	-	-	?	?	?							+		•
74	-	-			+						•			+
75	-	-		1									- +	•
76	-	-		+	1									•
77	-	-				•							- +	1
78	-	-							•				1	
79	-	-			+	+	•				•	•	•	
80	-	-	+	- +						•		•	•	
81	-	-	1											
82	-	-	+	1		+	•		- 20					•
83	-	-					•	•	?	۲	•		•	•
84	-	-	1	+	+	1	•	•		+	3			•
85	-	-	+		36		•			•	•	•	•	2 1
86	-	-		1			+ 2		? 1		1	1	?	1
87	-	-	1		i	:	2		1	+	1	3	1	•
88	-	-	1	1				1	•		1	1	1	4
89	-	-	1	1	ż							•		1
90	-	-	•							1	P	2	P	•
AV	DAI	LY FREQ	+	+	+	+	+	+	+	+	+	+	+	1
		MONTHLY	3 7	4	4	1						1	3	
		MONTHLY	7	7	4 3	1 2	2	i	ĺ	3	6	1 4	3 4	4

They were usually detected only in Douglas-firs 1.5 ft (0.5 m) or greater in thickness and were found generally while Faxon was fern-picking. They were usually first detected by their calls.

They appear to be uncommon in summer, but this may be an incorrect conclusion for several reasons. First, Faxon often was using a chain saw in summer and consequently may not have heard their high-pitched calls. Second, in summer, they may have been more inconspicuous because they were higher up in trees or less in view than they were during fall-spring. Finally, Faxon may have not recorded them in summer because he usually found them while fern-picking, which he did not do in summer until about Sept. 15.

The increased number of records in recent years may have resulted from the aging of the trees, which made them more suitable habitat for Brown Creepers, and/or Faxon's growing familiarity with them.

6-B-124.	BEWICK'S WREN	
Yr First Last	Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv	De
73	???+113156.	1
74	1 3 4 7 9 7 8 9 3 5 1 1 5 + + 1 . 1 5 8 9 4	4
75	1 3 4 7 9 7 8 9 3 5 1 1 5 + + 1 . 1 5 8 9 4	4
76	22.1.117656	4 5 2
77	89914794	2
78	8 9 9 1 4 7 9 4 + 2 3 2 . + 1 5 4 7 4	
79	1	1
80		2
81	+ + + 3 2 + 3 1 2 5 7	1 2 2
82		
83	2 3 5 8 10 4 7 1 6 7 4 3 5 + 3 3 6 ? . 4 5 2 + 1 3 2 . 1 2 + 1 1 1	
84	3 5 + 3 3 6 ? . 4 5 2 + 1 3 2 . 1 2 + 1 1 1	
85		i
86		ī
87	1 1 P 3 8 8 ? 4 5 5 ? 3 7 3 + 3 . 2 3 10 5 1	ī
88		ī
89	4 2 1 1 5 . 3 3	2
90	1 2 1 3 . 1 6 1 4 2 1 1 5 . 3 3 1 2 3 6 4 . 2 9 P 10 P	
		-
AV DAILY FREQ	2 3 2 2 2 2 2 3 4 5 2	2
73-81 MONTHLY	2 3 2 2 2 2 2 3 4 5 2 9 8 6 7 4 6 8 10 9 10 8	2 9 9
82-90 MONTHLY	10 10 9 8 7 7 9 8 8 10 9	8

They may be cyclic rather than showing a population decline in 1979 and 1980.

	6-B-	-125.	HOU	SE	WR	EN								
Yr	First	Last	Ja	Fe	Mr	Ар	Мy	Jn	Jl	Ag	Sp	0c	Νv	De
73	5/31	6/28	?	?	?	•	+	3		•	•	•	•	•
74	5/10	5/31					_							
74	8/30	9/3	•	•	•	•	-5	•		+	+		•	•
75	7/29	8/22	•				•	•	+	1	٠	٠	•	•
76	5/5	8/20		٠		•	8	6	1	+	٠		•	•
77	7/31	8/27	•	•			•	•	+	5	٠	•	٠	•
78		-	•	•			•	•	•			٠	•	•
79	-	-	•	•	- 34	•	•	٠		•	•		•	•
80	-	-	•	•		•	•	•	•	•	•	•	•	•
81	- /10		•	•			:	•	•		•	•	•	•
82	5/10	5/10	•		•	•	+	•	?	٠	•	٠	•	•
83	- /10		•	•		•	3	i	£	•	•	•	•	•
84	5/18	6/9	•	•		٠	3	T	•		٠	٠	•	•
85	5/2	5/5					1			1				
85	8/13	8/19	•	•	•	•	1	•	?	- 1	i	•	?	•
86	- 	9/13		•	٠	i	i		:	т	1	•	•	•
87	4/24	5/20 5/19	•	٠	•	1	- 1	•	•	•	•	•	•	•
88	5/18						1			3				
88 89	8/16 5/8	8/29 6/11	•	•	•	•	1	2		5	•			
90	5/22	5/28	•	٠	•	•	2	2				•		
90	5722	5/20		•	•	•	2	٠	•			•	•	
AV	DAILY	FREO				+	1	1 2	+		+			
	-81 MO						1 3	2	3					•
82	-90 MO	NTHLY				1				3			•	
	First			24-	5/3	1)								28)
	First			29-	8/3	0) ,	A۷	Las	t=8	/28	(8	/19	-9/	13)

They nested here in old Barn Swallow's nests several years prior to 1973, and they nested in 1973 but not since then.

In 1974, they appeared only during spring migration but did not remain to nest.

In 1975, they failed to show up in spring, but a bird or birds appeared in late July and August.

In 1976, a territorial bird, presumably a male, showed up on May 6 and sang vigorously until the 17th, without attracting a mate. One reappeared on June 19 and again on July 15-16, each time singing and showing territorial behavior, but never succeeding in finding a mate. In 1977, one bird showed up in late summer,

and another was not seen until 10 May 1982.

In 1984, a pair took up housekeeping in a bird house, filling it with sticks, but they didn't remain to nest.

Yr First Last 73 74 75 76 77 78 79 80 81 82 83 83 84 85 85 86 87 88		6-B-129. GOLDEN-CROWNED KINGLET Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 73 10/7 - ? ? ? . . . 2 1 2 74 10/5 4/11 2 2 1 + . . . 2 5 7 75 8/26 5/26 4 4 1 + 1 . 1 + 3 2 2 7 . . . 2 5 7 76 8/22 4/25 5 4 2 1 . + 2 5 7 76 8/22 4/25 5 4 2 1 . + .
90 AV DAILY FREQ 73-81 MONTHLY 82-90 MONTHLY	10 10 10 10 5 1 1 P 10 10 9 9 7 5 3 3 6 10 9 9 10	90 9/28 4/14 7 3 5 1 . . P 10 P 8 AV DAILY FREQ 7 5 3 1 1 1 + + 2 5 6 73-81 MONTHLY 10 10 9 4 3 2 3 8 10 10 82-90 MONTHLY 10 10 8 7 7 3 6 6 10 10
Their Aven from September 6-B-127. Yr First Last	rage Daily Frequencies were greatest through May.	The lack of records in 1973-1974 is probably because Faxon was then becoming familiar with their call. Thus, differences in Monthly Frequencies between the 1973-81 and 1982-90 intervals may be from differing observation skills, especially in summer. Their Average Daily Frequencies were greatest from October through February or March, but they

73-81 MONTHLY 82-90 MONTHLY

about 1970.

One bird was seen once in 1987 in a little marshy area with a few cattails that wasn't larger than 50 ft (15 m) long and 15 ft (4.6 m) wide.

They were probably not recorded more often

Faxon only noted one along Haxel Creek in

Perhaps, there isn't enough streamflow along Thornton Creek in Faxon's Study Area to attract dippers (e.g., see Fig. 2.3).

because of a lack of appropriate habitat.

6-B-128. AMERICAN DIPPER

from October through February or March, but they might be more common in summer than these records indicate for several reasons. First, Faxon often was using a chain saw in summer and consequently may not have heard their high-pitched calls. Second, in summer, they were more inconspicuous and could be missed because they were higher up in conifers or less in view than they were during fall-spring when they appeared to wander around more and use lower branches of conifers or even bare branches of deciduous trees. Third, Faxon often found them while fern-picking, which he did not do in summer until about Sept. 15.

6-B-130. Yr First Last 73 74 10/9 4/23 75 10/5 4/29 76 10/10 5/1 77 9/30 4/28 78 9/21 4/26 79 8/22 4/28 80 9/21 4/26 81 10/9 4/24 82 10/15 4/27 83 9/26 4/22 84 10/2 4/13 85 10/10 4/13 86 9/27 5/1 87 10/8 4/15 88 10/1 4/18 89 10/6 4/7 90 9/29 3/24	RUBY-CROWNED KINGLET Ja Fe Mr Ap My Jn Jl Ag Sp (? ? 1 1 3 . 1 2 1 5 . 4 2 4 4 . 6 4 4 . . 9 7 4 . . 9 7 4 . . 9 7 4 . . 9 7 4 . . 9 7 4 . . 1 1 4 . . 9 7 7 . . 1 1 4 . . 1 1 4 . . 1 1 8 . . 2 10 1 . . 2 10 1 . . 2 10 1 . . 2 8 5 . . <	Dc Nv De 2 + 2 3 5 5 4 5 5 4 8 5 4 3 2 1 2 1 3 2 1 5 1 2 1 9 1 2 7 ? 6 8 9 9 10 10 10 10 8 8 10 10 10
AV DAILY FREQ 73-81 MONTHLY 82-90 MONTHLY AV First=10/1	4 5 5 4 + + + 10 10 10 9 1 1 4 9 10 9 9 1 3 1 (8/22-10/15) AV Last=4/21(3)	3 5 6 9 9 10 10 10 10 /24-5/1)
C	bs. Present Obs. Pre ays (%) Days (9 44 10 9 67 10 9 22 10 7 0 9	Days esent (%) 10 10 30 33 100

The lack of records in 1973-1974 is probably because Faxon was then becoming familiar with their call.

26.6

36.6

Mean

On the days following their arrival each year, they were usually absent. For example, the previous tabulation indicates that they were found an average of 27% of the days in the 10 day period after their arrival.

The probability that they would be present near their average arrival date each year was low because their average daily presence was only 18% during the five day period before and after their average arrival date (Table 5.2).

Prior to their departure, they were often not present. For instance, they were found an average of only 37% of the days in the 10 days preceding their departure.

They were sometimes common during fall migration "waves" (see section 5-G-3).

-														
	6-B-	-131.	WE:	STE	RN I	BLUI	EBI	RD						
Yr	First	Last	Ja	Fe	Mr	Ap	My	Jn	JI	Ag	Sp	0c	Νv	De
73	-	-	?	?	?	•					•			
74	4/27	4/27				- +								
75	-	-												•
76	-	-	•			•		•						•
77	11/22	11/22	•	•		•				•	•	•	+	
78	-	-									•			
79	-	-	•		•	•			•	•	•	•	•	•
80	-	-								•			•	
81	-	-	•		•	•	•	•		•		•	•	•
82	-	-	•		•	•	•	•	•		•			
83	-	-	•		•			•	?		•		•	
84	-		•		•	•		•	•	•		•	•	•
85	9/25	10/19	•	•		•	•		•	•	+	+	•	•
86	4/29	6/13	•	•	•	+	3	7	?	•	•	•	?	
87	10/8	11/27	•		•	•	•		•	•	•	1	2	
88	3/25	5/28			_		_							
			•	•	1	•	1	•	•	•	•	2	3	
89	1/4	3/7	-	-	-									
89	8/27	8/27	1	1	1			•	•	+	•		•	
90	-	-	•	•	•	•	•	٠	•	•	•	•	•	•
۸v	DAILY	EDEO	+	-	-	-	-	-		1	1	-	-	
	973 MOI		?	?	?	?	X	?	?	?	?	?	?	;
	-81 MOI		*	÷	•	i	^	•	*	•	:	:	1	-
	-90 MOI	• • • • • •	i	<u></u>	2	i	2	i	•	i	i	3	3	•
	First	=? (1//				-	2		1.2	st=i	-			เว่
	First		7_1	1/2	21					t=?		/7-		
л∎	11/36	-: (0//	-1.	., .				1 .	_us	- -:	10	,,		_, ,

They appear to be a spring or fall migrant. Since the 1960's, they have only been regularly seen after 1984.

One day in May 1957, a migrant flock of 200 or more was seen, but this was the last time they were numerous. On 22 November 1977, five were counted.

In May and June 1986, a pair was present, but Faxon doesn't think they nested successfully because no fledged young were seen, and the adults left abruptly on June 13. In 1987, 3-5 were repeatedly observed during

In 1987, 3-5 were repeatedly observed during October 8-November 7. In 1988, a pair was seen on May 28, and 12 were counted on November 11. In 1989, seven were noted on January 4, and two small flocks passed through in late August.

6-B-132.	TO	NS	END	'S :	SOL	ITA:	IRE					
	Ja	Fe	Mr	Ар	Мy	Jn	JI	Ag	Sp	0c	Νv	De
AV DAILY FREQ	•			•	•		•	•	•		•	
<1973 MONTHLY	×	?	?	?	?	X	?	?	?	?	?	?

One was seen in June 1962 and January 1969. The June 1962 bird was a territorial bird that was singing along a ridge top on several different days.

	6-B-	-133.	SWA	INS	SON '	S 1	HRU	JSH						
Yr	First	Last			Mr	Ар	Mу	Jn	JJ	Ag	Sp	0c	Νv	De
73		10/2	?	?	?			10	10		4	+	•	•
	5/9	10/5	٠				6	10	10	3	4	+	•	•
	5/13	10/11				•	6		10	6	7	3 2	•	
	5/11	10/11	•	•	•	•	6		10	7	8	2	•	•
77	5/16		•		•	•	5	10	10	8 6	7 6	4 +	•	•
	5/9	10/3	٠		•	٠		10	10 10	8	9	3	•	•
	5/14					*	8		10	8	8		3	
81	5/8 5/9	10/4 9/29	٠	•				10		6	10			
	5/4		•			•		10	10	3	7	2	:	
	5/11	10/3						10	- ?	5	9	2		
84	5/12	10/5	1.			<u></u>	5	10	10	10	10	2	- 1	÷.
85	4/9	4/9		•			-					_	1.77	
	5/9	10/8				1	8	10	10	10	8	2		
86	5/11		•				6	10		4	8	•	?	•
87	5/8	10/13	•		•		- 7		10	10	10		•	•
88	5/12	10/13			•	•			10	9	10	5	•	•
	5/5				•	•	7		10			6	•	•
90	5/11	10/2	•	٠	•	٠	8	10	10	9	Ρ	1	•	•
817	DAILY	EDEO				+	6	10	10	7	8	2		
	-81 MO		•	•	•		10							•
	-90 MO		•	•	•	i	10	10	10			9	•	•
	First	=4/9 (4/9	٠.	•	-	10					4/9	(4	/9)
AV	First	=5/11	(5/	, 4-5	/16) A	V L	ast	=10	/7	(9/	25-	ıòż	23)
		-,					. –							
			irs	t +		Da			Las			Da		
			bs.			ese	nt		Ops	-	Ρ	res	ent	
	_	YR D	lays			(%)			Day			(%)	
		976	6			100			9			5		

	115	Days	(~)	Duys	(~)	
	1976	6	100	9	56	
	1977	8	100	9	11	
	1978	9	67	8	50	
	1979	8	100	7	57	
	1980	8	100	9	44	
Mean			93.4		43.6	
	(First	is for May	dates;	Last is for		
		dates.)				

N

On the days following their arrival each year, they were usually present. For example, the previous tabulation indicates that they were found an average of 93% of the days in the 10 day period after their arrival in May.

The probability that they would be present near their average arrival date each year was low because their average daily presence was only 39% during the five day period before and after their average arrival date (Table 5.2). However, they were usually found each year 1-5 days after their average arrival date (Table 5.2).

Prior to their departure, they were often not present. For instance, they were found an average of 44% of the days in the 10 days preceding their departure.

The 9 April 1985 arrival was anomalous, since their earliest arrival date in other years was May 4. Accordingly, it was not included in the calculations of an average first recorded date.

Although some of Faxon's comments about this species in Nehls (1978) are not corroborated by observations since then, nocturnal migration still occurs here. Faxon's comments that are currently correct include: "On clear nights [towards the end of September or in early October], or especially in the mornings just before dawn, what must be vast numbers of these birds pass overhead in the darkness. Their calls fill the sky from one side to the other . . I have noted it most often just before dawn while deer hunting in early October. I am usually out an hour or so before daylight, and this phenomenon can be heard at this time, right up until the time when the sky begins to lighten up, then it stops abruptly. . . . What becomes of these birds at daylight is somewhat of a mystery. The calls stop, and in the daylight the birds are not visible in the sky, yet only very, and I mean very, rarely do I see the birds on the ground. . . There is no question that there is a very heavy migratory flight of apparently non-local Swainson's Thrushes which passes over the Coast Range every year."

	6-B-	134.	HER											_
Yr		Last			Mr	Ар	Мy	Jn	JJ	Ag	Sp	0c		De
73	11/5	-	?	?	?		•		•	٠	•		+	+
74	12/31	2/23	3 1	1	•		•			•	•	•	•	+
75	10/28	1/9	1		•		•		۰	•	•	+	•	3
76	12/13	4/25	1	1	1	+			- 2	•	•	•	•	1 2
77	11/19	3/19	2	1	1		•			•	•	•	+	2
78	10/10	1/27												_
78	3/4	3/4	+		\mathbf{H}					•		1	8	10
79	12/10	2/3	7	1						۲		٠		2
80	10/31	1/19												
80	3/11	4/22	1		1	1	٠		•	•	•	+		
81	10/19	1/16	+						•	•	•	+	_	6
82	10/14	2/10	6	1				•		•		1		•
83		1/1	1						?			3	2	10
84	12/11	1/23												
84	4/26	4/26	1			1				•	•	•		2
85	11/21	1/24												
	4/24	4/29	1			1						•	3	5
		2/7												
			1	1			+		?			1	?	
		2/16		1								- 4	+	8
88	10/1	3/21	8	+	+							2		1
			2	1	1									
		2/18	1	2							P		P	5
	161-1													
AV	DAILY	FREQ	2	1	+	+	- 2+				+	1		
			10	5	- 5	2								
			10	7	2	2	1					6	9	
ĀV	First	=? (9/	29-1	2/	31)			A	ΥL	ast	=?	(1/	1-5	/5)
	First	=? (3/	4-5/	' 5)	,									
80 81 82 83 84 85 86 85 86 87 88 90 AV 73 82	3/11 10/19 10/14 10/10 12/11 4/26 11/21 4/24 10/4 5/5 10/8 10/1 11/13 9/29 DAILY -81 MOI -90 MOI First	4/22 1/16 2/10 1/1 1/23 4/26 1/24 4/29 2/7 5/5 2/16 3/21 3/2 2/18 FREQ NTHLY =? (9/	+ 6 1 1 1 1 1 8 2 1 10 10 29-1	1 + 1 2 1 5 7 2/	· · · · · · · · · · · · · · · · · · ·	1			•	ast	P + i	+133 142 146	1 1 P 1 6 9	4 10

Their Average Daily Frequency was greatest in December, and this species was found almost every December and January.

Its arrival and especially its departure dates were fairly irregular. Note that in 1980, 1984, and 1985; they were absent for 1-2 months in early spring before reappearing in April.

	6-E	8-135.	AME	RIC	CAN	ROE	BIN							
Yr	First	Last	Ja	Fe	Mr	Ap	Мy	Jn	Jl	Ag	Sp	0c	Νv	De
73	-	-	?	?	?	10	10	10	10	10	7	9	5	6
74	-	-	8	10	10	10	10	10	10	8	7	10	2 5	+
75	-	-	2	9	10	10	10	10	10	8	8	7	- 5	5
76	-	-	9	10	10	10	10	10	10	9	7	6	2	3
77	-	-	4	8	10	10	10	10	10	10	5	8	8	3 4 2 2
78		-	9	10	10	10	10	10	10	6	5	6 5	•	2
79	-	-	3	8	10	10	10	10	10	10	6	5	. 5	2
80		-	3	10	10	10	10	10	10	10	8	5	4	•
81	-	-	2	10	10	10	10	10	10	10	7	8	23	3 1
82	-	-	8	10	10	10	10	10	10	8	6	6	3	1
83	-	-	•	9	10	10	10	10	?	9	6	9	•	2
84	-	-	7	10	10	10	10	10	10	10	8	4	6	4
85	-	-	9	8	10	10	10	10	10	10	10	6	3	5
86	-	-	8	10	Р	10	10	10	?	10	10	9 7	6 3 ? 1 1	8
87	-	-	9	10	10	10	10	10	10	6	8		1	2
88	-	-	8	10	10	10	10	10	10	10	8	9	1	:
89	-	-	° 1	6	10	10	10	10	10	8	3	8	1	2
90	-	-	8	10	10	10	10	10	10	4	Ρ	10	Р	2
Δv	וזאח	Y FREQ	6	9	10	10	10	10	10	9	7	7	3	3
		DNTHLY	10	10	10	10	10	10	10	10	10	10		
		ONTHLY	-9	10	10	10	10	10	10	10	10	10	9	
								_						. .

Faxon notes that extremely hot summer or cold

winter weather tended to drive robins from here. There sometimes seemed to be some immigration

occurring in January and/or February and an emigration in September through November. Note that this migration was a partial migration because some birds were noted almost every month.

They were sometimes abundant during fall migration "waves" (section 5-G-3); for example, on 13 October 1988, hundreds were seen that emigrated or dispersed elsewhere.

The first heavy northward movement in 1986 occurred on January 24.

6-B-136. VARIED THRUSH

Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De Yr First Last 73 9/25 4/12 ? ? ? + 7 - 5 3 1 74 9/23 4/18 7 10 10 1 10 3 . -1 • 3 2 75 9/26 5/6 3 3 - 5 7 1 4 4 . . . 76 10/2 77 9/28 4/24 3 2 4 3 1 1 6 ÷ 2 9 4 6 4/29 5 1 3 78 9/30 4/26 78 6/26 6/27 8 10 7 3 1 +3 1 . . 2 2 79 9/27 5/4 4 5 ÷ + 3 3 2 . . . 80 9/22 5/8 2 5 4 2 5 1 4 ÷ 5 . . • 5 6 4 4 3 5 81 10/2 4/16 + 82 10/10 12/7 82 9 10 6/16 10 8 2 2 1 . 1 ? ; 83 9/6 10 2 8 i 1 ٠ ٠ ż 5/3 5/24 84 9/24 8 8 1 4 3 3 . . 10 10 2 85 9/16 8 3 +1 2 1 . . ? 86 9/12 4/4 2 4 1 1 6 ? 5 . 87 9/8 5/11 87 7/8 7/8 3 10 9 2 1 + 2 9 2 6 . 88 9/30 3/31 88 7/24 7/24 8 1 6 1 1 7 1 . 89 9/19 4/24 1 8 4 1 2 1 . . 90 9/19 4 P P 7 4/14 3 10 6 6 5 5 6 + AV DAILY FREQ 3 ++ 1 6 2 -3 . 73-81 MONTHLY 10 10 10 10 3 1 8 10 10 9 . 82-90 MONTHLY 9 9 8 8 4 9 10 8 10 AV Last=? (3/31-6/16) AV Last=? (6/27-7/24) AV First=9/23 (9/6-10/10) AV First=? (6/26-7/24) AV Last=12/7 (12/7)

		First Obs.	+ 10 Days Present	Last Obs.	- 10 Days Present
		Days	(%)	Davs	(%)
	1976	9	56	9	22
	1977	9	78	10	10
	1978	7	57	10	30
	1979	8	38	9	22
	1980	9	44	7	43
Mean			54.6		25.4
	(First i	s for	SeptOct.	dates;	Last is for
	A		``		

April-May dates.)

On the days following their arrival each year, they were usually present. For example, the previous tabulation indicates that they were found an average of 55% of the days in the 10 day period after their arrival.

The probability that they would be present near their average arrival date each year was low because their average daily presence was only 22% during the five day period before and after their average arrival date (Table 5.2).

Prior to their departure, they were often not present. For instance, they were found an average of only 25% of the days in the 10 days preceding their departure.

Because their Average Daily Frequency was greater in October than in the rest of the fall, part of them may be fall migrants and others may be winter residents.

														-
	6-B-	-137.	WRE	NT	IT									
Yr	First	Last		Fe	Mr	Ap	Mу	Jn	J1	Ag	Sp	0c	Nv	De
73	-	-	?	?	?	1	1	2	1		3	3	2	1
74	-	-	2	1		1	3	1	1 4	+	1	6	1	+
75	-	-	÷				2	+	2	1	2	4		2
76	-	-	1 2	1		+	1	1	1	1	2	3	+	+
77	-	-	2	2	1	2	2	+	2	3	1	5	1	+
78	-	-	1	•	2 2	1	1 4	1 3	1	1	3	3 4	2	1 2
79	-	-	+	+	2	4	- 4		1 2 1 2 3	1 9 5	7		٠	2
80	-	-	33221232351	1	2	3	2	+	3	5	2	1	+	1
81	-	-	3	•	+	3	1	•	1	2 4	1	+	4	3
82	-	-	2	3	1	1	1		:	4	4	2	1	
83	-	-	2	•	•	2 2 5 3	1	1 1	?	3	6	4		+
84	-	-	1	1	3	2	1			7	6	2	1	1 3 1 5 2 5
85	-	-	2	3	1	- 5	9	6	9	10	7	7	9 ?	3
86	-	-	3	1	P	3	6	4	?	10	8	9		3
87	-	-	2	8	6	6	8 5 9		6	10	10	10	8	1
88	-	-	3	2	4	5	- 5	2	4	4	8	9	4	5
89	-	-	- 5	1	3	7	9		7	8	4	3	2 P	2
90	-	-	1	3	3	4	6	4	7	10	Ρ	7	P	5
AV	DAILY	FREQ	2	2	2	3	4	2	3	5	4	5	2	2
	-81 MO		10	6	2 6	9	10	9	10	ğ	10	10	8	2 9
		NTHLY	10	ğ	ğ	10	10	8	10	10	10	10	ğ	10
02	-90 110	11 I I I I I	10	9	9	10	10	0		10	10	10		10
	Adu	lts we	re s	som	eti	nes	ob	ser	ved	fe	edi	ng		
	Auu	ILS WC	16.3	5011	CUI	1103		301	,eu		curi			• 1

fledgling Brown-headed Cowbirds (section 6-B-184).

6-B-138.	NOF	RTH	ERN	MO	CKII	NGB]	IRD					
Yr First Last	Ja	Fe	Mr	Ap	Мy	Jn	J1	Ag	Sp	0c	Νv	De
AV DATLY CDEO												?

One was seen on 9 June 1970.

		-139.				PIF		_				~		
Yr	First	Last	Ja	Fe	Mr	Ap	My	Jn	JI	Ag	Sp	UC	NV	De
73	9/29	9/29	?	?	?	•	•	•	•	•	+	٠	•	•
74	4/25	4/26												
74	10/5	10/24	•	•	•	1	•	٠	•	٠	٠	1	•	•
75	4/30	5/2												
75	10/7	10/7			•	+	+	•	•	•	•	+	•	•
76	4/9	4/12												
76	9/30	10/20		(.))	•	1	•	•	•	•		Ŧ	•	•
77	4/12	4/21				1						1		
77 78	10/10	10/14 5/8	•	•	•	$\frac{1}{1}$	2	•	•	•	•	T	•	•
70 79	4/13 1/11	1/11	•	•	•	1	2	•	•	•	•	•	•	•
79	4/17	5/6												
79	9/11	11/1	-			1	2				2	2	+	
80	5/19	5/31	т	•	•	- +	2	•	•	•	2	2	•	•
80	11/17	11/17					1						+	
81	4/14	4/23	•	•	•	•	-	•	•	•	•	•	•	•
81	10/10	11/7				1						+	1	
82	4/8	5/9	•	•	•	+		•	•	्	•		-	•
82		10/25				2	+	_		_		1	_	
83		4/20	•	•	•	ī	÷		?			-		
84		4/28	•	•	•	•	•	•	•	•	•	•	•	•
84		10/25				1						1		
85		4/27	•	•	•	-	•		•		•	-	•	
85		10/7				1						1		
86		5/15	•	•	-		-							
86		10/10			P	1	1		?		1	1	?	
87	4/21	4/21												
87	10/9	10/29				+						2		•
88	4/16	4/16												
88	9/16	10/30				1					1	1		
89	4/13	4/24												
89	9/19	9/19				2					- +			
90	-	-												•
	DAILY		- +		+	-	+			•	+			
	-81 MO		1	•		8			•		3			•
	-90 MO			•	1						,3		-	
AV		=4/19	(4/	8-5	/19	2	AV	Las	t=4	/29			-5/	
AV	First	=10/3(9/1	1-1	1/1	()	AV	Las	t=1	0/2	1(9	/19	-11	/1/)

They seemed to be mostly found in newly plowed fields.

6-R	-140.	CEDAR	WAXWIN			
Yr First 73 - 74 5/23 75 5/24 76 5/24 77 6/4 78 5/25 79 6/2 80 5/21 81 5/26 82 5/22 83 5/21 84 5/19 85 5/21 86 5/13 87 5/18 88 5/23 89 5/25 90 5/25		Ja Fe ? ?		My Jn 1 6 1 5 1 9 1 0 1 5 9 1 0 1 5 9 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0	6 5 10 10 9 10 1	Sp OC NV De + 1 6 4 1 6 4 1 6 4 2 7 5 1 1 5 1 1 8 7 2 10 5 9 2 9 1 ? 9 6 7 4 P 2
AV DAILY 73-81 MO 82-90 MO AV First		: : 5/13-6	 /4) AV	2 8 7 10 10 10 Last=) 10 10) 10 10	7 3 + . 10 9 6 . 10 8 . (9/15-11/29)
1 1 1	0	irst + bs. ays 8 9 9 8 8 8	10 Day Presei (%) 13 100 44 38 100 59	nt	Last - Obs. Days 7 8 7 8 9	10 Days Present (%) 0 38 0 0 33 14.2

On the days following their arrival each year, they were usually present. For example, the previous tabulation indicates that they were found an average of 59% of the days in the 10 day period after their arrival.

The probability that they would be present near their average arrival date each year was low because their average arrival date each year was low because their average daily presence was only 40% during the five day period before and after their average arrival date (Table 5.2). However, they were usually found each year 1-5 days after their average arrival date (Table 5.2).

Prior to their departure, they were often absent. For instance, they were found an average of only 14% of the days in the 10 days preceding their departure.

Sometimes they were very abundant during fall migration "waves" (see section 5-G-3). On 24 October 1987, 250 were observed, and on 13 October 1988, hundreds were seen. In 1987, a nest with four eggs was found on July 10; on July 20, two of these eggs had

hatched.

	NONTH												
6-B-141. NORTHERN SHRIKE Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De													
Yr First Last		Mr Ap	Му	Jn J	I Ag	Sb	UC	NV	ve				
77 10/10 10/10	• •	• •	•	•	• •	•	+	•	•				
AV DAILY FREQ	??	??	?	?	??		+	•	:				
<1973 MONTHLY	??	??	- 2	?	??	?	X	X	?				
73-81 MONTHLY			•	•	• •		1	•	•				
82-90 MONTHLY	• •	• •	•	•	• •	•	•	•	•				
This spec			see	n in	Nove	embe	ir 1	1965	4				
and on 20 Octo				1									
Each record was of a single bird.													
6 D 140	FUDOD	TAN CT	ADLT	NC									
6-B-142. EUROPEAN STARLING Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De													
73		· mr Αμ ? 10	9 my 1 9 9	7				N V	+				
74			10		4 1 1 +	2	5 4	2	4				
74	2 5		10		-		+	5	3				
76	5. 25 35			9		+	1	- 5 - 4	6				
77	89		-		$, 1 \\ 7 6$	2	8	9	6				
78	9 10	10 10			5 1	8	10	10	10				
79	10 10	10 10		10	5 3	•	7	10	10				
80	9 10	10 10		10	53 54		-	+	+				
81	3 10	10 10		10		•	•		2				
82	6.	9 10		9	i Å	6	2	8	ĩ				
83	10 10	10 10		10	2 2	ă	•	•	4				
84	8 1	10 10		7	5 1 1 6 ? 2 7 5	•	5		-				
85	[°] 9 10	10 10	-	ź	7 2	•	4	9	10				
86	8 10	P 10		10	? 10	8	7	?	10				
87	9 10	10 10		10	9 +	8	7	6	-8				
88	10 8	10 10		9	5	•	2	ğ	•				
89	c	9 8		5	5. 82	:		2	i				
90	15	8 10		8	6 1	P	•	· P	5				
<i></i>	1 3	0 10	, ,	0	· ·		•						
AV DAILY FREQ	67	10 10) 9	9	53	2	3	5	4				
73-81 MONTHLY	10 9			10	9 9	6	8	9					
82-90 MONTHLY	10 9				09	6	7	6	8				
OL DO HONTHLI	10 0	10 10	0	10 1		Ŭ		Ŭ					
ît may di	coonco	~ ~ ~		+0 1		mmo		1+					

It may disperse or emigrate in summer. It arrived at Thornton Creek in 1969 and has had a deleterious effect on several cavity-nesting birds (see section 4-F-3).

There used to be 10-50 nesting pairs here, but they have decreased by 1988 to only 1-2 pairs; in 1989, no nesting pairs were noted. This decrease may have resulted because Faxon has sometimes destroyed starling nests and shot adult starlings. Nevertheless, their Daily Frequencies in summer remain high.

6-B-143.	SOLITARY	VIREO			
Yr First Last		Ар Му	Jn Jl	Ag Sp	Oc Nv De
73	???	• •		• •	
74		. +	. +	• •	
75 - 9/22		. 1		. +	
76		• •			
77 4/17 9/16		3 10	75	42	• • •
78 4/22 7/31		21	1 +	• •	• • •
79 4/24 7/14		1 1	• +	• •	• • •
80 5/10 9/9		. 1	64	1 2	
81 4/17 9/7	• • •	1 10	10 2	· + 3 7	• • •
82 4/3 9/16		1 6	55		• • •
83 4/23 8/27	• • •	2 10	8 ?	8.	• • •
84 4/17 9/15	• • •	44	34	94	• • •
85 4/18 9/6	• • •	22	. 1	1 +	• • •
86 5/3 8/8		. 3 + 1	. ?	+ .	. ? .
87 4/23 9/3		+ 1	+ 2	1 1	
88 4/15 8/12		26	. 1	+ .	
89 4/18 8/7		34	. 5	1.	
90 4/15 9/1		1.	1 1	• P	
		_			
AV DAILY FREQ		1 3	2 2	2 1	• • •
73-81 MONTHLY		48	4 7	2 4	• • •
82-90 MONTHLY		99	6 10	9,6	
AV First=4/20	(4/3-5/10) P	AV Last	t=? (/	/14-9/22)

In some years, they were present through the summer. In other years, however, they appeared to be only spring or fall migrants, perhaps because they were more inconspicuous while they nested in June.

It seemed subordinate to the Warbling Vireo (see sections 4-F-5 and 6-8-145).

On 9 July 1974, a nest with three eggs and one newly hatched young was found.

They were sometimes present during fall migration "waves" (see section 5-G-3).

They were recorded more often after 1976. They may have been uncommon earlier because Faxon was still becoming familiar with them, not because they may have been rare. They also may be cyclic because they were not as frequent in 1979 or 1990 as in other years.

	6	-B-144.	HUT	TON	1'5	VIF	REO							
Yr	Fir	st Last	Ja	Fe	Mr	Ар	Мy	Jn	Jl	Ag	Sp	0c	N٧	De
73	-	-	?	?	?		1	3 3		1	2	2	•	
74	-	-		4	4	5		3	3	2	1	1	•	
75	-	-	+	2	2	1	1					1	1	
76	-	-	1	1 4		+	1	•	2 1	2	+	2		
77	-	-	1		3	3 2	1 5 4	2 3	1	1	+	2	+	
78	-	-	1	1	6	2	4	3	6	1		1	2	
79	-	-		2	5 5	3	6	2	2	2	1	1 2		
80	-	-	1	4	5	7	1	6		•	2	2	1	
81	-	-	+	6	2	4	6		1		3	•	•	
82	-	-			1	1	4	2		1	•	1	- +	
83	-	-	1	1	1	2	3 3	1	?	1		2		+
84	-	-		2	10	2	3	2	2	1	4		1	1
85	-	-	+	2	3	1	8	4	6	2	- 4	2 4	2	3
86	-	-	1	1	Ρ	6	6	5	? 4	3	2	4	?	1 3 1
87	-	-	4	8	8	7	6	7		4	6	4	2	3
88	-	-	2	+	8	9	4	3 3 3	2 2	2 3	6	- 7	1 2 ? 2 5 2 P	
89	-	-	1 3		9	8	6	3	2	3	2	3 8	2	1
90	-	-	3		8	6	4	3	1	2	Ρ	8	P	
A۷	DAI	LY FREQ	1	2	5	4	4	3	2	2	2	2	1	1
	-81	MONTHLY	8	10	9	9	9	7	- 7	7	8	9	4	
82	-90	MONTHLY	8	7	10	10	10	10	9	10	8	10	9	8

Hutton's Vireos were noted mainly on the basis of their call. Since they don't call much in winter, they may have been more common in winter than the 1973-1983 records indicate. In particular, the lack of December records in 1973-81 may be because they were overlooked.

	-145. Last 8/25 8/7 9/13 9/14 9/3 8/22 9/3 9/1 8/17 9/17 9/15 8/26 9/11 9/1 8/21 9/1		L ING e Mr ? ?	VIF Ap 2 1 1 3 2 1 1 3 1 1		Jn 8 9 7 8 10 10 10 10 10 10 10 10 10 10 10 10 10	J1 3 10 7 10 8 10 10 10 10 10 10 2 10 10 10 2 0 10 10 2 0 2	Ag212245665033869558	Sp · · · 1 + 1 · + + · · 3 1 1 2 · 4 1 · •	0c	Nv	De
82-90 MO	NTHLY	: (4/13	3-5/7	1 6 6	8 10 9 AV	10 10 10 La	9 10 10 st≖	5 10 10 9/2	1 6 8 (8		9/1	7)
1 1 1 Mean * Mean i	C	irst bs. ays 10 8 10 9 10 4 ye: 1982.	Pr	Da ese (%) 70 75 60 89 30 64 eca	.8		Las Obs Day 9 7 5 4 ere	s	Ρ	(% 2 7 6	ent) 5 8 0 0 -	*

On the days following their arrival each year, they were usually present. For example, the previous tabulation indicates that they were found an average of 65% of the days in the 10 day period after their arrival.

The probability that they would be present near their average arrival date each year was low because their average daily presence was only 31% during the five day period before and after their average arrival date (Table 5.2).

Prior to their departure, they were often not present. For instance, they were found an average of 41% of the days in the 10 days preceding their departure.

It seemed to dominate Solitary Vireos when establishing territories (see sections 4-F-5 and 6-8-143).

They could be common during fall migration "waves" (section 5-G-3).

6-B-14		NGE-CF			WAR	8LEI	R	-			
Yr First La		Fe Mr ? ?		My 7	Jn	J] /				Νv	De
73 4/4 8/ 74 4/16 9/		•••	23	7	8 4	3 3	3 2 1	÷	•	•	•
	/11		3 2	7	4	1	ī	1			•
76 4/17 8/	/24 .		4	6	9	1	5 5	:	•	•	•
77 4/11 9/		: i	7 9	9	6 10	6 5	5 1	1	•	•	•
	/24 • /18	• 1	9	1D	10	Э	T	•	•	•	•
	0/20		8	10	6	2 2		+	+		
80 4/11 8/	/8 .	36) •		10	9	2	1 2	•	٠	•	
	/18	• •	6	10	6	5	2	•	•		•
	/24 /17 .		5	8	7	•		1			
83 4/7 -			7	10	7	?	•	•			•
	/27 .	. 1		10	5	3	ż	•	•	٠	•
	/31 . /13 .	· P		9 10	9 10	? 3 3 ?	2+	i		?	•
	/13 . /30	• r	9	10	10	:	т	1	•		•
87 9/8 9/	/8 .	. 1		10	10	+		+		•	
88 4/5 7/	/13 .	• •		8	5	1	•	•	•	•	
	/12 .	• •		10 10	7 2	•	i	p	•	•	•
90 4/4 9/	/1 •	• •	0	10	2	•	-		•	•	
AV DAILY FF		. +	6	9	7	2	1	+	- #	•	•
73-81 MONTH		. 1		10 10	10 10	10 6	9 3	4		•	•
82-90 MONTH AV First=4	HLT . /6 (3/2)	. 3 7-4/18) A	10	Last					-9/	13)
AV First=9	/11 (9/8	3-9/17) A	i V	ast	;=9/	25			10/	
								10	0.		
	First Obs.		Day esen			.ast)bs.			Da	ys ent	
YI		Pr	(%)	I L)ays		r	(%		
1970			78			10			5	0	
1977			100			8			2		
1978	8 9		78			10			- 1	0	

Mean 77.0 17.0 (First is for March-April dates; Last is for August-October dates.)

100

29

9

7

1979

1980

6

9

Õ

0

On the days following their arrival each year, they were usually present. For example, the previous tabulation indicates that they were found on an average of 77% of the days in the 10 day period after their arrival.

The probability that they would be present near their average arrival date each year is low because their average daily presence was only 40% during the five day period before and after their average arrival date (Table 5.2). However, they were usually found each year on their average arrival date and 4-5 days thereafter (Table 5.2).

Prior to their departure, they were often not present. For instance, they were found on an average of 17% of the days in the 10 days preceding their departure.

In 1979, 1982, and 1987, they were absent for 1-2 months in July or August before reappearing. This suggests that, at least sometimes, there may be a fall migration after the local birds leave. They could sometimes be present during fall migration "waves" (section 5-G-3).

				***	-	-								
	6-B-	-147.	YEL	LOW	WA I	RBL	.ER							
Yr	First	Last			Mr	Ар	My	Jn	J1	Ag	Sp	0c	Νv	De
73	-	-	?	?	?	•	•	•	•		•	•		
74	5/26	6/1	•	•	•	•	+	+	•		•	•	•	
75	5/16	8/25	•	•	•		5	6	3	+	•	•	•	•
76	4/28	7/7	•	٠	•	1	5	5	1	٠	•	•		
77		-	•	•	•	•	:	•						
78	5/11	5/28	•	•	٠	•	32	•			•			
79	5/16	5/26	•	٠	•	•	2	•	•	•	•	٠	٠	•
80 80	5/8	6/23 9/21					4	3						
81	9/21 5/11	6/9	•	· * ·	•	•	- 4	3	•	•	т	•	•	•
81	9/10	9/10					3	1			+			
82	5/6	6/25	(). • ()	S		•	- -	2	•		01	() • .)	(. .)	
83	5/14	6/1	•	•	•	•	•	2	•	•	•	•	•	•
83	8/15	8/15					5	+	?	+				
84	5/10	5/14	1.20	247			5 3			- 10				÷.
85	5/30	5/30			27	-	Ŭ	-	•	8				2
85	9/5	9/5					+				+	÷		
86	5/7	5/31					3 1		?				?	
87	5/12	6/2					1	i						
88	5/23	6/4												
88	10/5	10/5				•	2	1				+	-	
89	5/3	6/26		•		•	4	4	•			•	•	•
90	5/11	6/2				•	5	1	•	- 10			•	•
A.V		EDEO					2	,	+		+			
	DAILY 81 MO		•	•	•	1	3 8	1 6		1	2		•	•
	-90 MO		•	•	•	1	10	7	2	1	1	i	•	•
AV	First		(4/2		5 /20	۱ °	AV		st=			/14	_7;	7)°
ÂV		=9/11							st=					//5)
- 11	11136	2/11	(0)1		10/3		A #	La	J (-	-10	10	110	-10	, , ,

They have generally only been migrants here, although there was one record of a nest with 10 eggs (which may have included some cowbird eggs) in willows in about 1970.

The reason why they don't remain around Thornton Creek may be because there is a lack of suitable riparian habitat. There is some willow and assorted brush along Thornton Creek which runs through an open meadow, but apparently these warblers do not find this sufficient.

Occasionally, birds will stay for several weeks along the creek, singing and showing territorial behavior, but they almost always disappear before enough time has elapsed for breeding to have taken place.

6-B-148	, CH	CHESTNUT-SIDED WARBLER										
Yr First Last												
78 10/16 10/1	.6.	•	•	•	•	•		•	•	+	•	•
90 7/10 7/10).	•	•	•	•	•	1	•	٠	•	•	•
AV DAILY FRE	2			¥			+	•		+	•	•
73-81 MONTHLY						•				1		
82-90 MONTHL						•	1	•	•	•	•	•

UNCONFIRMED.--In 1978, an immature was sighted that had greenish upperparts, white underparts, and a white eye-ring.

underparts, and a white eye-ring. On 10 July 1990, a singing bird in breeding plumage was discovered. Its crown was bright lemon-yellow. Its lores were black, with the black extending from the lores back over the eye to the nape; this black streak also joined another black streak that extended downward from the lores along a white cheek patch. A ragged dark chestnut stripe extended from the upper breast all the way along the side to the flank. The rest of the underparts were pure white. The back was grayish olive and was prominently marked with black streaks. The wings were dark gray with two broad yellowish wingbars. Its voice was a rapid (for a warbler) "we-cheepa, cheepa-cheepa-cheepa," the last note dropping.

There are four records for the Oregon Coast: one record in late May, one in early June, one in mid-June, and one in mid-September (Schmidt 1989:93-94). Eltzroth (1987:15) lists them as vagrants along the Oregon Coast.

	6-B-	-149.			-RL									
Yr	First	Last	Ja	Fe	Mr	Ар	My	Jn	J1	Ag	Sp	0c	N۷	De
73	-	5/7										-		
73	10/15	10/16	?	?	?	4	2 1	•	•	•	•	1	•	•
74	1/28	5/13	+	1	3	4	1	•	•	•	•	•	•	•
75	4/2	5/17	•	•	•	3	2	•	•	•	•	•	•	•
76	2/25	5/2		-	~	-7							1	
76	11/12	11/13	•	1	6	7	1	•	•	•	•	•	1	•
77	3/22	5/12			1	5	3						1	1
77	11/2	4/28	•	•	1	5	3	•	•	•	•	•	1	1
78 78	- 10/28		5	6	2	4						+		
	3/22	5/3	5	0	2	-4	•	•	•	•	•		•	•
79	10/20			_	1	7	1					+		
80	3/25	5/2	•	•	•		-	•	•	•			•	•
80	10/11				1	8	+					1		
81	2/21	4/29	•	•	-	_		_	-	-				
81	9/21	10/15	12	+		6					- +	3		
82	1/1	5/17												
82	10/2	10/22	4	1	1	3	+	•	•	•		6	•	•
83	3/18	5/8				-							-	
83	10/4	11/10	•	•	+	4	+	•	?	•	•	2	1	•
84		3/30		~								-		
84		10/16	4	8	4	•	•	•	•	•	1	1	•	•
85		1/17												
85 85		5/1 10/3	-		1	8						1		
86		4/30	т	•	- 1	0	•	•	•	•	•	-	•	•
86					Р	5			?		_	1	?	
87		5/7	•	•				•	•		•	-		•
87		10/22				3	2				+	- +		
	4/15	5/2		-	•	-	_		-	-			-	-
88						4						4		
89		5/5					1 3	3.						
90	2/24	3/14		1		- 6								
			-	_	_									
	DAILY		1	1	2				•	•	. 1			
	-81 MC		3					\$. ,	•	•	1	6		2 1
82	-90 MC		3		3,7	΄ ξ								
AV	First First	=: (1/	1-4	H/1/ /10	11	110		AV		st=?	22	0/14	1-7/	1/12
- A V	r i r st	-10/11	1(3)	10-	/	17,	iun i	Las) L-1	.072	211	10/3	1-11	1121

The records above include records of the Audubon's and Myrtle forms of Yellow-rumped Warblers below. The only record of this species nesting here was for a nest of Audubon's in about 1971.

It was erratically present in winter; more often, it was just a spring and fall migrant.

		Audut	on	's ((Yel	1101	ง-ทเ	impe	ed)	War	·b1e	er		
Yr	First	Last	Ja	Fe	Mr	Ap	My	J'n	JI	Ag	Sp	0c	Νv	De
73	-	5/7	?	?	?	1	2				•		•	
74	1/28	5/13	+	1	2	1	1							
75	4/2	5/17				1	1							
	-						AV	Las	st=	5/12	2 (!	5/5.	-5/3	17)

Sightings of Audubon's were not separated from Myrtle's after 1975. There was one Audubon's nest with eggs found on a low bough of a Douglas-fir in about 1971.

Myrtle (Yellow-rumped) Warbler Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 73 - 4/30 73 10/15 10/16 ? ? ? 3 1 . .

	,		-	-	-	-	-	-	-	-	-	_	-			
74	3/29	5/1	-	-	1	3	- +									
75	A/1A	5/1/				2	1									
15	7/17	3/14		•	•	~	-	•	•		· • • ·	. •		. t.		
ΔV	Einct	=4/6 (3	120	_ / /	11)		ΔV	1 2 6	+=5	/5	(1 /	30-	5/1	Δ)		
~v~	「「」うし	-4/0 (J	1 62	-4/	141		2 1 AV Last=5/5 (4/30-5/14 AV Last=10/16 (10/16									
Δ.V	Einct	=10/15	(10	/1 6	.)		- Λ	V I	a e +	=10	116	(1	n/1	6)		
- MV	LILE	-10/10	(10	110					ası	-10	110	_ \ ±	0/1	07		

Sightings of Myrtle's were not kept separate from Audubon's after 1975.

_								-					
	6-B	-150.						GRAY WARBLER Jn Jl Ag Sp Oc Nv De					
Yr	First	Last	Ja F	e Mr	Ap	Mу		Jl	Ag		0c	Νv	De
73	-	9/28	?	??		4	- +	1	•	1	•	٠	•
74	-	9/4			•	1 2	1		٠	+	•	•	٠
75	-	9/22				2		+	+	1 1		•	•
76	-	9/18				+	+	:	+ 2 3 2 1	1		•	
77	4/23	10/8			2	9	6	1	2	1	+	•	٠
78	4/22	9/2		• •	3	9 9	1	+	3	1		•	•
79	4/16	9/11			3	9	3	1	2	3	•	٠	•
80	4/18	9/20			3	9	8	1		2	•	•	•
81	4/17	9/19			•233362	8	+ 61382628896256	1 + 1 1 5?	•262562	113217325264	•	•	•
82	4/26	9/17	•		2	10	6	5	2	/	:		٠
83	4/17	10/4			4	9	2		6	3	2	•	•
84	4/14	9/15				10	8	2?2111	2	2	•		•
85	4/18	9/20	•		4	10	8	2	5	5	٠	:	
86	4/17	9/13		• •	4	10	9	?	6	2		?	•
87	4/18	9/26			4	10	6	2	2	6	į		•
88	4/15	10/14	•		4	9	2	1	+	4	4	٠	•
89	4/7	10/13			5	10	5	1	3	1 P	3	٠	
90	4/14	10/2	•	• •	1	10	6	1	3	Ρ	1	•	
A۷	DAILY	FREQ			3	8	4	1	2	2	+	•	•
73		NTHLY			6	10	9	8	7	10			•
82	-90 MO	NTHL Y			10	10	10	9		10			
A۷	First	=4/17	(4/7-	4/26	5)	AV	Las	t=9	/23	(9	/2-	10/	14)
		F	irst	+ 10) Da	vs		Las	t -	10	Da	ys	
)bs.	Pr	ese	nt		0bs			res	ent	
			Days		(%)			Day	s		(%)	
	1	977	10		60							Ó	
		978	<u> </u>		89			9 7			2	9	
	- s - i	979	9		56			8			7	5	
		980	9 6		67			8				0	
			-								1	-	

Mean

1981

7

On the days following their arrival each year, they were usually present. For example, the previous tabulation indicates that they were found an average of 72% of the days in the 10 day period after their arrival.

86

71.6

6

17

24.2

The probability that they would be present near their average arrival date each year was moderate because their average daily presence was 46% during the five day period before and after their average arrival date (Table 5.2). However, they were usually found each year on their average arrival date and 1-5 days thereafter (Table 5.2).

Prior to their departure, they were often absent. For instance, they were found on an average of only 24% of the days in the 10 days preceding their departure.

In 1973-1976, Faxon was just learning their calls, so that is the reason for the few records then. Accordingly, the May "arrivals" then have been excluded because these warblers probably arrived in April like they did in 1977-1988.

Their Average Daily Frequency was greatest in May, and this may be a result of many migrants passing through or because they were singing more then. Most of the records were based on song rather than on sightings.

They could be common during fall migration "waves" (section 5-G-3).

Adults were sometimes observed feeding fledgling Brown-headed Cowbirds (section 6-B-184).

	6-B-	-151.	TO	INS	END	'S I	NAR	BLEF	۲.					
Yr	First	Last	Ja	Fe	Mr	Ар	My	Jn	JI	Ag	Sp	0c	N٧	De
73	-	-	?	?	?				•	•	•	•	•	•
74	5/10	5/27	•				2	•	•	•	•	•	•	•
75	8/25	8/25					•	•	•	+	•	•	•	•
76	10/2	10/2			•		•	•	•	•	•	+	•	
77	8/24	8/24	•			•	•	•	•	+	•	•	•	•
78	5/9	5/9				•	+	•	•	•	•	•	•	•
79	5/4	5/4	•		•	•	+	•	•		•		•	•
80	9/21	10/11	•	•	•	•	•	•	•	•	+	1	•	•
81	-	-	•	•	•	•	•	•	•	•	. :	i	•	•
	9/17	10/23	•	•	•	•	•	•	:	•	1		•	•
83	10/4	10/4	•	•	•	•	•	•	?	•	•	1	•	•
84	5/11	5/14												
84	8/30	8/30	•	•	•	•	1	•	•	+	•	•	:	•
85	11/1	11/1	•	•	•	•	•	•	:	•	•	•	1	•
86	-	-	•	•	•	•	•	•	?	•	:		?	•
87	9/7	10/19		•	•	•	٠	•	•	•	1	1	•	•
88		10/13	•	•	•	•	•	•	•	•	1	1	•	•
89		1/17										~		-
89		12/14	1	•	•	а н	•	•	•	•	•	3	1	1
90		5/24					-					1		
90	9/29	-	1	•	•	•	1	•	•	•	Р	1	Р	•
٨٧	DAILY	EDEO	+				+			+	+	1	+	+
		NTHLY	•	•	•	•	२	•	•	2				
	-90 MO		i	•	•	•	3	•	•	1	4			2
AV	First	=5/9 (5/4	-5/	נ רוי	•	Ā	1.a	st=	5/1				27)
ÂV	First	=9/19	(8)	24-	.ii/	1)		Las	t=9	130	í (à	124	-11	715
AV	First	=1/17	(1)	17)	/	- /		A	V I	ast	=17	17	(17	17)
		-, -,	(-/	- ' '				•			-,	- /	/	/

Townsend's appeared to be mainly fall migrants, but they were also noted in May of five different years, so they were also spring migrants sometimes.

They were sometimes present during fall migration "waves" (section 5-G-3).

In 1989, two were noted on January 17, and a flock of eight were recorded on October 24. Faxon believes that the increased number of

Faxon believes that the increased number of records in recent years is because he started imitating No. Pygmy-Owl calls to attract birds, and one of the species attracted was the Townsend's Warbler.

	6-B-	-152.	HEF	RMI	r W/	ARBL	ER							
Yr	First	-	Ja	Fe	Mr	Ap	Mу	Jn	JI	Ag	Sp	0c	Νv	De
73	-	8/19	?	?	?			+		+	•			•
74	5/3	8/3					4	7	4	+	•		•	•
75		7/17					3	6	7	•			•	
76	5/11	7/14					3	5	2	•	•	•	•	•
77		7/7					+		+					
78		7/13					2	8	1		•			
79	4/28	6/30				1	261 7353	7+9446	i 3	i	٠			
80	4/29	8/5				+	1	+	1	1				
81	4/24	7/23				+	7	9						
82	5/12	6/24					3	4	?				٠	
83	4/26					÷	5	4	?		1			
84	5/3	6/28			٠		3		٠					
85	5/4	8/31					7	10	·5?3	21			?	٠
86	4/29	8/21				1	9	10	?	1			?	•
87	4/25	7/29				2	10	777	3					
88	5/3	7/21					7	7	6					
89	2/22	2/22						_						
89	4/24	8/2		1	•	1	9	7	2	+	•	•	•	•
90	5/10	7/13					_	_						
90	10/12	10/12	•	•	•	•	8	8	2	•	•	1	•	•
AV	DAILY	FREO		+		+	5	6	2	+	+	+	•	•
	-81 MO				•	3	9	9	2 8	3				•
82	-90 MO	NTHLY		1		4	10	10	- 7					•
AV	First	=2/22	(2)	22)				A	V L	ast	=2/	22	(2/	22)
AV	First	=5/3 (4/2	4-5	/25)	A۷	La	st≖	7/2	7 (6/2	4-9	(8)

In 1973, Faxon was just learning their calls, so that may be the reason for the few records then.

They often differed between summers in their Daily Frequencies and how long they remained.

migration "wave	sometimes prese es" (section 5-0		
	BLACK-THROATED		

Yr First Last 77 8/19 8/19	Ja •	Fe •	Mr	Ap •	My •	Jn •	J]	Ag +	Sp •	0c	Nv •	De •
AV DAILY FREQ	•	•	•		•	•	•	+	•			•
73-81 MONTHLY		•	•	•	•	•	•	1	٠	٠	٠	٠
82-90 MONTHLY	•						•					۰

UNCONFIRMED.--One bird was seen on 19 August 1977 that was an immature with an exceptionally greenish back unlike that of Townsend's or Hermit warblers. The crown was olive-green, and on the side of the bird's head was a conspicuous triangle surrounded by yellow; this triangle was shaped differently from that of a Townsend's Warbler. The throat and breast were whitish, and its belly was tinged with yellow. The wings were grayish with two broad white wingbars. The tail was grayish-olive with the outer feathers appearing white.

There is one record accepted by the Oregon Bird Records Committee for the Oregon Coast in October (Schmidt 1989:98), and it is listed as a vagrant along the Oregon Coast by Eltzroth (1987:15).

PALM WARBLER 6-B-154. Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De Yr First Last 75 9/22 9/22 ÷ AV DAILY FREQ 1 73-81 MONTHLY 82-90 MONTHLY

The record was of a single bird.

6-B-155.	BL	ACK	-AN	D-WI	HITH	E W/	ARBI	-ER				
Yr First Last		Fe	Mr	Ар	Мy	Jn	J1	Ag	Sp	0c	Νv	De
89 5/24 5/24	•	•	•	•	1	•	•	•	•	•	•	•
AV DAILY FREQ					+							
73-81 MONTHLY	-		:									
82-90 MONTHLY	-	•	•	•	i	•	•	•	•	•	•	•

UNCONFIRMED.--A male sang from 9 AM to noon on 24 May 1989. It had a black throat and breast, black streaking on its sides, and a white face broken by a black eye and ear patch. The black crown was broken by a white central stripe. Its upperparts were black and profusely striped with white. It had black wings with two broad white wing bars. Its belly was white. It was closely observed for about 10 minutes and was present for about three hours.

Eltzroth (1987:15) lists it as extremely rare along the Oregon Coast; most records of this species in Oregon are in May (Schmidt 1989:105).

6-B-156.	COI	NNE	CTI	сит	WAI	RBLI	ER					
Yr First Last	Ja	Fe	Mr	Ар	Мy	Jn	J1	Ag	Sp	0c	Nν	De
76 10/14 10/14	•	•	•	•	•	•	•	•	•	+	•	•
AV DAILY FREQ	•	•				٠				+	٠	
73-81 MONTHLY												
82-90 MONTHLY	٠	•	٠		•	٠	٠	٠	٠	٠	•	•

UNCONFIRMED.--Two were seen on 14 October 1976. They were large for a warbler with the upper parts grayish olive throughout, no wing bars, and the head only slightly darker than the upper parts. They had a conspicuous complete white eye-ring. Their throats showed the cutoff line on the breast suggestive of a hood, but the color was pretty washed out and appeared dull whitish. The rest of the underparts were entirely yellow. They gave a call note several times, which was a distinctive "chip," similar to that of the Yellow-rumped Warbler, but also louder and different from the call note of the MacGillivray's.

There are no Oregon Coast records that have been documented by the Oregon Bird Records Committee (Schmidt 1989:109), but they are rare visitants to the Farallon Islands in California in May-June and September-October (DeSante and Ainley 1980).

6-B-	-157.	MAC											
Yr First	Last	Ja			Ар	Мy	Jn	J1	Ag	Sp	0c	Νv	De
73 -	-	?	?	?	•	•	•	•	•	•	•	•	•
74 -	-	•	•	•	•	•	•	•	•	•	•	•	•
75 5/12	6/29					-							
75 8/4	9/3	•	۲	•	•	5	2	•	2	- +	٠		•
76 5/10	9/8	•	٠		•	1	+	+	1	+	٠	٠	•
77 5/16	6/1					~			2				
77 8/8	9/2	٠		٠	•	2	+	٠	3	1	•	•	•
78 5/1	5/9					,							
78 7/30	8/21		•	•	•	1	i	ī	+ 2	- 2	•	•	•
79 6/8	9/9	•	•	•	•	•	T	T	2	т	•	•	•
80 -	6/5	٠	•	•	•	•	•	•	•	•	•	•	•
81 5/15 81 8/1	8/1					1	+		+				
82 5/13	6/4	•	•	•	•	2		•	•	•	•	•	•
83 4/27	9/2	•	•	•	1	+	1 2 5	?	i	i	•	•	•
84 4/30	7/27	•	•	•	i	i	Ē		-	-	•	•	•
85 4/13	7/24	•	•	•	÷	6	3	1 2	•	•	•	•	•
86 3/28	5/31	•	•	•	•	0	J	2	•	•	•	•	•
86 ~	8/24			Р		6		?	+			?	
87 4/23		•	•	•	÷	7	÷	÷	•	•	۰	•	•
88 5/9	5/19	•	•	•		֓.	•		•				
89 -	-			•				- 22		- 2			
90 5/16	6/1					2	i	100	1				
00 0,10	•, -		•	•		_	-				0.22		Ĩ.
AV DAILY	FREO			+	+	2	1	+	1	+			
73-81 MO		•				6	6	3	- 7	4			•
82-90 MO	NTHLY			1	4	9		4	2	1			
AV First	=5/1 (3/28	-5,	/16))	A	V La	ast	=7/	4 (5/9	-9/	9)
AV First	=8/3(7/30	-8,	/8)		A	V La	ast	=8/3	22	(8/	1-9	/3)

They were most often seen in clearcuts less than about two years old or in brush with less than complete ground cover.

There were never more than about three pairs. Between 1980 and 1983, they were not noted as breeding birds; their breeding status from 1983 onward is not clear.

In some years, they appeared to be only spring and fall migrants.

Since they were not always present every year prior to 1988, their low presence in 1988 and their absence in 1989 may be part of a down cycle rather than representing a continuing decline.

6-B-158. COMMON YELLOWTHROAT Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 73 - ? ? 74 4/17 4/17 + . . 75 - 76 4/29 5/8 76 4/29 5/8 76 4/29 5/8 76 4/29 5/8 .														
73 ? ? ? </td <td></td> <td></td> <td>CO</td> <td>MMO</td> <td>N YE</td> <td>ELL(</td> <td>DWTI</td> <td>IRO/</td> <td>AT -</td> <td></td> <td></td> <td></td> <td></td> <td></td>			CO	MMO	N YE	ELL(DWTI	IRO/	AT -					
74 $4/17$ $4/17$ $+$		Last			Mr	Ар	My	Jn	JI	Ag	Sp	0c	Νv	De
75 - - 1 1 + + - - 76 $8/17$ $8/17$. 1 1 . + + . . 77 $8/19$ $9/2$. 1 . . + + . . 77 $8/19$ $9/2$. 1 . . + + .		-	?	?	?		•			•	•	•	•	•
76 $4/29$ $5/8$ 76 $8/17$ $8/17$ 1 1 $+$ 77 $4/16$ $4/23$ 1 $ +$ $+$ 77 $8/19$ $9/2$ $ 1$ $ +$ $+$ 78 $7/31$ $7/31$ $ +$ $+$ $-$ 79 $4/26$ $4/26$ $ +$ $+$ $-$ 79 $7/16$ $7/17$ $ +$ $ -$ 80 $ +$ $ -$ 80 $ -$ 80 $ -$ 80 $ -$		4/17	•	•	•	+	•	•						
76 $8/17$ $8/17$ 1 1 $+$ $+$ $-$ 77 $8/19$ $9/2$ 1 $ +$ $+$ $-$ 78 $7/31$ $7/31$ $ +$ $+$ $-$ 79 $7/16$ $7/17$ $ +$ $ -$ 80 $ +$ $ -$ 80 $ -$ 80 $ 80$ $ -$		-	•	•	•	•	•	•						
77 $4/16$ $4/23$ 77 $8/19$ $9/2$ 1 $+$ $+$ 78 $7/31$ $7/31$ $ +$ $+$ $+$ 79 $4/26$ $4/26$ $ +$ $+$						_	-							
77 $8/19$ $9/2$. . 1 . . + + + + . <t< td=""><td></td><td></td><td>•</td><td>•</td><td>•</td><td>1</td><td>1</td><td>•</td><td></td><td>+</td><td>٠</td><td>٠</td><td></td><td>٠</td></t<>			•	•	•	1	1	•		+	٠	٠		٠
78 $7/31$ $7/31$ $7/31$ $1 + 1 + 1$ $1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 +$														
79 $4/26$ $4/26$ 79 $7/16$ $7/17$ + 80 - - + 81 $5/6$ $6/9$ + + 81 $5/6$ $6/9$ + + 82 $9/16$ $9/16$ + + + 83 $4/14$ $4/14$ + 1 1 84 $6/15$ +			•	•	•	1	•	٠		+	+			
79 $7/16$ $7/17$. + . 1 . <			•	•	•	٠	•	٠	+	٠	٠	٠	•	
80 - - + <td></td>														
81 5/6 6/9 81 10/2 10/2 82 9/16 9/16 83 4/14 4/14 84 6/15 85 4/4 4/14 + 85 6/15 85 4/4 86 5/10 86 9/12 86 9/12 87 4/15 84 6/14 88 4/23 87 7/31 9/12 2 84 1 87 4/15 4/15 4/24 87 7/31 9/12 2 2 84 4/16 90 8/23 9/15 9/16 1 1 1 2 1 1 2 90 8/1 - 90 8/1 - 90 8/1 - 90 8/1 - 90 8/1 - </td <td></td> <td></td> <td>•</td> <td>•</td> <td>•</td> <td></td> <td>•</td> <td>•</td> <td>1</td> <td>•</td> <td>•</td> <td></td> <td></td> <td></td>			•	•	•		•	•	1	•	•			
81 $10/2$ $10/2$ $+ + + + + + + + + + + + + + + + + + + $			•	•	•	•	•	•	•	•	•	٠	•	•
$\begin{array}{cccccccccccccccccccccccccccccccccccc$							-	-						
83 4/14 4/14 + ? .<			•	•	•	•	т	т	•	•	• •	т	•	•
84 6/15 6/15	83 4/14		•	•	•	1	•	•	;	•	1	•	•	•
85 4/4 4/21 85 6/22 8/21 . 1 2 + 2 . . 86 5/10 5/10 . . 1 . 2 . . . 86 5/10 5/10 .	84 6/15		•	•	•		•	- 1	:	•	•	•	•	•
85 6/22 8/21 . . 1 . 2 + 2 . . . 86 5/10 5/10 . . . 1 . 2 + .			•	•	•	•	•	•	•	•	•	•	•	•
86 5/10 5/10 86 - 9/12 87 4/15 4/24 87 7/31 9/12 88 4/11 6/14 88 8/23 9/30 89 4/15 9/16 90 4/2 4/6 90 8/1 - 90 8/1 - 87 - 1 1 1 2 90 8/1 - 90 8/1 - 87 - 1 90 8/1 - 8/1 - 1 9/12 - 1 9/15 9/16 - 9/10 - 2 - 9/11 - - 8/1 - - 9/10 - 1 9/10 - 1 9/11 - - 9/11 - - 9/11 - - 9/11 </td <td></td> <td></td> <td>_</td> <td></td> <td></td> <td>1</td> <td></td> <td>2</td> <td>+</td> <td>2</td> <td></td> <td></td> <td></td> <td></td>			_			1		2	+	2				
86 - 9/12 . . + ? 1 + ? . 87 4/15 4/24 . . . + 1 + ? . 87 4/15 4/24 . . . 1 . 1 . . 88 4/11 6/14 . . 1 .			•	•	•	-	•	2	•	2	•	•	•	•
87 4/15 4/24 87 7/31 9/12							+		?	1	+		?	
88 4/11 6/14 88 8/23 9/30 . . 1 . + 1 . 89 4/15 9/16 . . 1 1 2 1 2 . . 90 4/2 4/6 . . 1 1 2 1 . . 90 8/1 - . . 2 . . 6 P . AV DAILY FREQ . . 1 + + 1 + + .			•			•		•	•	•			•	•
88 8/23 9/30 . . 1 . + 1 . + 1 . . 89 4/15 9/16 . . 1 1 2 1 2 1 1 1 2 1 2 1 .	87 7/31	9/12				2			+	1	1			
89 4/15 9/16 . . 1 1 2 1 . . 90 4/2 4/6 . . . 1 1 2 1 . . 90 8/1 - 6 P . AV DAILY FREQ . . 1 + + 1 + +	88 4/11						-	-			_	-	•	•
89 4/15 9/16 . . 1 1 2 1 2 . <t< td=""><td>88 8/23</td><td>9/30</td><td></td><td></td><td></td><td>1</td><td></td><td>1</td><td></td><td>+</td><td>1</td><td></td><td></td><td></td></t<>	88 8/23	9/30				1		1		+	1			
90 8/1 2 6 P AV DAILY FREQ 1 + + + 1 + +						1	1	2	1	2	1			
AV DAILY FREQ 1 + + + 1 + +		4/6												
	90 8/1	-	•	•	•	2	•	•	•	6	Ρ	•	•	•
	AV DATLY	FREO				Т	+	+	+	1	+	+		
				•	•								•	•
						7	2	4	4	7	7	-	•	•
AV First=4/20 (4/4-5/6) AV Last=5/9 (4/14-6/15)			(4/	4-5	/6)	'						/14	-67	15)
AV First=8/6 (6/15-10/2) AV Last=9/2 (7/17-10/2))								

Faxon notes that this species has become more abundant in recent years; their increased Monthly Frequencies were not a result of changes in observation effort.

Faxon has not found any evidence of their breeding here. In some years they appeared to be only a spring and fall migrant.

 6-B	-159.	WILS	ON'S	WAF	R8LE	ER						
Yr First 73 4/20 74 4/17 75 4/25 76 4/24 77 4/20 78 4/18 79 4/20 80 4/17 81 4/16 82 4/22 83 4/17 85 4/11 86 4/7 87 4/18 88 4/13 89 4/11 90 4/14			e Mr???	Ap 32224434535		Jn 9 9 9 10 10 10 10 10 10 10 10 10 10 10	J1 10 8 10 7 9 10 10 10 10 9 ? 10 10 10 10 10 10	Ag 3 2 6 8 9 8 9 6 8 9 10 10 8 9 10 10 8 8 9	Sp12223233184442451P	0c	Nv	De
AV DAILY 73-81 MO 82-90 MO AV First	NTHL Ý NTHL Y	: (4/7-	4/25	4 10 10)	10 10 10 AV	10 10 10 Las	10 10 10 st=9	8 10 10 9/1	3 10 10 5 (9	9/2-	-9/3	27)
1 1 1	0	irst bs. 10 10 10 9 6	Pre	Day eser (%) 80 100 70 56 100 81	nt	(as bs ay 8 8 8 8 7	•			ent) 5 5 3	

On the days following their arrival each year, they were usually present. For example, the previous tabulation indicates that they were found an average of 81% of the days in the 10 day period after their arrival.

The probability that they would be present near their average arrival date each year was low because their average daily presence was only 42% during the five day period before and after their average arrival date (Table 5.2). However, they were usually found each year on their average arrival date and 1-5 days thereafter (Table 5.2).

Prior to their departure, they were often not present. For instance, they were found on an average of 25% of the days in the 10 days preceding their departure.

preceding their departure. They were probably the most common breeding warbler here. They could be common during fall migration "waves" (section 5-G-3).

Adults were sometimes observed feeding fledgling 8rown-headed Cowbirds (section 6-8-184).

6-B- 1 Yr First l 75 8/22 8								J1 •	Ag +	Sp	0c	Nv •	De •
AV DAILY 1 73-81 MON 82-90 MON	THL Ý	•	•	•	•	•	•	•	+ 1	•	•	•	•
plumage wa the vagra 6-B-153) p	nt Bla passed Oregon any re , but , but	en b ack- d th b Bi ecor one fhor	y G thr rou rd ds wa nto	iler oat gh. Rec for is c on (in F cord th cord th cord	axo Gre Is (Cure ek r	on t en Com Oreg ed reco	thre War niti Jon in tord	ee o rble cee Coa the in	lays er has st Se	s and (see (see (See (See nth ot.	ctio ot chm ⁺ 197	on idt 75
Yr First 73 - 74 5/3 75 5/15 76 5/11 77 5/10 78 5/8 79 5/5 80 5/7 81 5/4 82 5/10 83 5/13 84 5/7 85 5/11 86 5/10 87 5/6 88 - 89 5/15	9/26 9/4 9/14 9/23 9/9 9/11 9/20 9/10 8/18 9/10 8/18 9/12 9/7 9/11 9/13 9/19 9/13					My 532373466	Jn 24 •5552669105108	2415365477?46?1071	42256686373679625	2 1 2 3 1 1 1 3 • 4 2 3 + 2 4 1 2		Nv ••••••••••••••••••••••••••••••••••••	De
AV DAILY 73-81 MON 82-90 MON AV First=	THLÝ THLY	5/3-	5/1	.5)	•	4 9 9 4v 1	10	5 10 10 t=9	10 10	9 10	•	-9/	: 26)
19 19	0	irst bs. ays 6 9	+	Pr	Daj esei (%) 17 22		1	Las Obs Day 8 10	• S		(% 6	ent) 3 0	

	YR	Days	(%)	Days	(%)	
	1976	6	17	8	63	
	1977	9	22	10	20	
	1978	9	67	8	13	
	1979	9	0	7	0	
	1980	9	22	8	63	
Mean			25.6		31.8	

On the days following their arrival each year, they were usually absent. For example, the previous tabulation indicates that they were found an average of 26% of the days in the 10 day period after their arrival.

The probability that they would be present near their average arrival date each year was low because their average daily presence was only 27% during the five day period before and after their average arrival date (Table 5.2). However, they were usually found each year 4-5 days after their average arrival date (Table 5.2).

Prior to their departure, they were often absent. For instance, they were found an average of 32% of the days in the 10 days preceding their departure.

On 20 August 1983, 30-40 were seen; this number or more may not be unusual during fall migration, when they could be common during migration "waves" (section 5-G-3).

6-B-162.	BLACK-	-HEADED	GROS	BEAK			_
Yr First Last	Ja Fe	Mr Ap	My Jn	J] A	g Sp	Oc Nv	De
73 5/6 -	??	?.	7 9		• •	• •	•
74 5/7 8/3	• •	• •	79 79		+ .	• •	•
75 5/12 8/28	• •	• •	7 10		8 6 1	• •	•
76 5/9 9/8	• •	• •	7 10		7	• •	•
77 5/8 8/30 78 5/10 8/30	• •	• •	7 10		0	• •	•
79 5/11 8/21	• •	• •	6 10		7	• •	•
80 5/7 8/20	• •	• •	8 10		0	• •	•
81 5/1 8/21	• •	• •	10 10		8.	• •	•
82 5/7 9/2	• •		7 10		0 2	•••	
83 5/3 8/30	•••		8 10		4 .		
84 5/9 8/31	•••		7 10		6.		
85 5/9 8/29			8 10		9.		
86 5/10 8/24			7 10	?	8.	. ?	
87 4/29 8/30		. 1	10 10		7.		
88 5/9 8/22			8 9	10	2.		
89 5/5 8/28			8 10) 10	5.		•
90 5/10 9/1	• •	• •	8 10	9	2 P	• •	•
AV DAILY FREQ 73-81 MONTHLY	•••	. +	8 10 10 10		6 + 9 1	• •	•
82-90 MONTHLY		. 1	10 10) 10 1	0 2		
AV First=5/7 (4/29-5	/12)	AV L	ast=8.	/26	(8/3-9)/8)
	irst +	10 Dag		Last		Days	
	bs.	Prese		Obs.		resent	;
	ays	(%)	-	Days		(%)	
1977	10	90		8		50	
1978	9	100		9		0	
1979	8	100		6		100	
1980	9	100		6		83	

On the days following their arrival each year, they were usually present. For example, the previous tabulation indicates that they were found an average of 98% of the days in the 10 day period after their arrival.

100

98.0

1981

Mean

8

100

66.6

8

The probability that they would be present near their average arrival date each year was moderate because their average daily presence was 46% during the five day period before and after their average arrival date (Table 5.2). However, they were usually found each year 2-5 days after their average arrival date (Table 5.2).

Prior to their departure, they were often present. For instance, they were found an average of 67% of the days in the 10 days preceding their departure.

They could be common during fall migration "waves" (section 5-G-3).

													-	
	6-B-	-163.				UNT								
Yr	First	Last	Ja	Fe	Mr	Ap				Ag		0c	Νv	De
	8/24	8/24	•	•	•	•				+		•	•	
	5/11						-			•				
88	5/19	5/19	•	•	•	•	1	•	•	•	•	•	•	•
AV	DAILY	EDEO					+			+				
	-81 MOI									1				
82.	-90 MOI First	VTHL Y	. •	•		. •	2	•	•	. •		. •	•	:
A٧	First	=5/15	(5/)	11-:	5/1	9).	AV I	Las	t=5,	/15	(5,	/11	-5/	19)
A۷	First	=8/24	(8/	24)				٩	V La	ast	=8/3	24	(8/	24)

The sex of the 1976 bird is unknown, the 1985 bird was a male, and the 1988 record was for a pair.

6-B-164. RUFOUS-SIDED TOWHEE Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De	6-B-166. CLAY-COLORED SPARROW Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De
73 ? ? ? 6 5 4 3 2 1	75 5/16 5/16 +
/4 = = 3 4 5 / 6 5 3 3 4 6 / 5	AV DAILY FREQ +
76 910 8 7 8 4 5 2 2 9 6 5	73-81 MONTHLY 1
77 9 7 9 8 8 5 3 2 2 9 8 10 78 - 10 7 7 7 2 3 . 1 1 4 4 6	82-90 MONTHLY
79 933653121745	One was seen on 16 May 1975. The
80 - - 7 5 5 3 1 1 1 1 5 2 81 - - 1 1 4 + 3 5 3 + 1 1 7 4	distinguishing marks included small (i.e., Chipping Sparrow) size, plain gray underparts,
	small black whisker mark on or slightly below the
83 676544? + 4966	lower mandible, two white wing bars, and a white stripe down the center of the crown. It was with
85 71010 + 225 + 19510	two male American Goldfinches for a whole day, and
86 810 P 5 8 8 ? 4 5 9 ? 9 87 910 4 4 7 6 4 3 5 9 6 8	the total observation time of the bird was at least one hour.
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	This sighting was accepted by the Oregon
89 9 10 9 5 2 2 6 3 6 6 10 90 10 10 9 7 8 3 P 8 P 10	Bird Records Committee, and there are also eight other Oregon Coast records for this species
	(Schmidt 1989:116-117).
AV DAILY FREQ 8 7 7 6 5 4 3 1 2 6 5 6 73-81 MONTHLY 10 10 10 10 10 9 8 9 9 10 10	6-B-167. VESPER SPARROW
82-90 MONTHLY 10 10 10 10 10 10 9 9 9 8 10 10 10	Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De
Clearly, their Average Daily Frequencies were	73 4/12 4/13 73 9/2 9/27 ? ? ? 1 1
lowest during summer (June-September), even though	74 9/30 9/30
they were usually present in these months. Faxon thinks that they have an altitudinal	81 4/7 4/9 1
migration here in summer in which they forsake the	AV DAILY FREQ + +
valleys but are found on brushy ridges. Bayer wonders if this change may be unrelated to	<1973 MONTHLY ? ? ? X ? ? ? ? ? ? ? ? ? ? ? ? 73-81 MONTHLY 2 2
elevation but may be a change in preferred	82-90 MONTHLY AV First=4/10 (4/7-4/12) AV Last=4/11 (4/9-4/13)
habitat.	AV First= $4/10(4/-4/12)$ AV Last= $4/11(4/9-4/13)$ AV First= $9/16(9/2-9/30)$ AV Last= $9/29(9/27-9/30)$
6-B-165. CHIPPING SPARROW	
Yr First Last la Fe Mr An My In 11 An Sn Or Ny De	(1no was a)so seen on 12 April 1972.
Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 73 4/11 6/28	One was also seen on 12 April 1972.
73 4/11 6/28 73 8/9 9/18 ? ? ? 1 + 1 . + +	6-B-168. LARK SPARROW
73 4/11 6/28 73 8/9 9/18 ? ? ? 1 + 1 . + + 74 4/21 5/13 + 1	***************************************
73 4/11 6/28 73 8/9 9/18 ? ? 1 + 1 . . 74 4/21 5/13 . . + 1 . . . 75 5/15 7/25 . . 1 1 3 . . 76 4/28 6/29 . . 1 2 1 . .	6-B-168. LARK SPARROW Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 84 8/17 8/17
73 4/11 6/28 73 8/9 9/18 ? ? 1 + 1 . . 74 4/21 5/13 . . + 1 . . . 75 5/15 7/25 . . 1 1 3 . . 76 4/28 6/29 . . 1 2 1 . . 77 4/15 5/17 . . 1 2 1 . .	6-B-168. LARK SPARROW Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 84 8/17 8/17
73 4/11 6/28 73 8/9 9/18 ? ? 1 + 1 . + . . 74 4/21 5/13 . . + 1 . + . . 75 5/15 7/25 . . 1 1 3 . . . 76 4/28 6/29 . . 1 2 1 . . . 77 4/15 5/17 . . 1 1 . . . 78 4/3 8/15 . . 1 1 . . . 78 4/3 5/19 . . 2 3 	6-B-168. LARK SPARROW Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 84 8/17 8/17
73 4/11 6/28 73 8/9 9/18 ? ? 1 + 1 . + 1 74 4/21 5/13 . . + 1 . + . . 75 5/15 7/25 . . 1 1 3 . . . 76 4/28 6/29 . . 1 2 1 . . . 77 4/15 5/17 . . 1 1 . . . 77 8/13 8/15 . . 1 1 . . . 78 4/3 5/19 . . 2 3 .	6-B-168. LARK SPARROW Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 84 8/17 8/17
73 4/11 6/28 73 8/9 9/18 ? ? 1 + 1 . + 1 74 4/21 5/13 . . + 1 . + + . . 75 5/15 7/25 . . 1 1 3 . . . 76 4/28 6/29 . . 1 1 3 . . . 76 4/28 6/29 . . 1 2 1 . . . 77 4/15 5/17 . . 1 1 . . . 77 8/13 8/15 . . 1 1 . . . 78 4/3 5/19 . . 2 3 .	6-B-168. LARK SPARROW Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 84 8/17 8/17
73 $4/11$ $6/28$ 73 $8/9$ $9/18$? ? 1 $+$ 1 $+$ $+$ $.$ 74 $4/21$ $5/13$ $.$ $+$ 1 $.$ $+$ $.$ $.$ 75 $5/15$ $7/25$ $.$ $.$ 1 1 3 $.$ $.$ 75 $5/15$ $7/25$ $.$ $.$ 1 1 3 $.$ $.$ 76 $4/28$ $6/29$ $.$ 1 2 1 $.$ $.$ $.$ 77 $4/15$ $5/17$ $.$ 1 1 $.$	6-B-168. LARK SPARROW Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 84 8/17 8/17
73 $4/11$ $6/28$ 73 $8/9$ $9/18$? ? 1 $+$ 1 $+$ $+$ $ 74$ $4/21$ $5/13$ $ +$ 1 $ 75$ $5/15$ $7/25$ $ 1$ 1 3 $ 76$ $4/28$ $6/29$ $ 1$ 2 1 $ 77$ $4/15$ $5/17$ $ 1$ 1 $ 77$ $8/13$ $8/15$ $ 1$ 1 $ -$	6-B-168. LARK SPARROW Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 84 8/17 8/17
73 $4/11$ $6/28$ 73 $8/9$ $9/18$? ? 1 $+$ 1 $+$ $+$ $.$ 74 $4/21$ $5/13$ $.$ $+$ 1 $.$ $+$ 1 $.$ $.$ 75 $5/15$ $7/25$ $.$ $.$ 1 1 3 $.$ $.$ 76 $4/28$ $6/29$ $.$ 1 2 1 $.$ $.$ $.$ 77 $4/15$ $5/17$ $.$ 1 1 $.$	6-B-168. LARK SPARROW Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 84 8/17 8/17
73 $4/11$ $6/28$ 73 $8/9$ $9/18$? ? 1 $+$ 1 $+$ $+$ $ 74$ $4/21$ $5/13$ $.$ $+$ 1 $.$ $+$ 1 $.$ $+$ $.$ $.$ 75 $5/15$ $7/25$ $.$ $.$ 1 1 3 $.$ $.$ 76 $4/28$ $6/29$ $.$ 1 2 1 $.$ $.$ $.$ 77 $4/15$ $5/17$ $.$ 1 1 $.$	6-B-168. LARK SPARROW Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 84 8/17 8/17
73 $4/11$ $6/28$ 73 $8/9$ $9/18$? ? 1 $+$ 1 $+$ $+$ $ 74$ $4/21$ $5/13$ $.$ $+$ 1 $.$ $+$ 1 $.$ $ 75$ $5/15$ $7/25$ $.$ $.$ 1 1 3 $.$ $.$ 76 $4/28$ $6/29$ $.$ 1 2 1 $.$ $.$ $.$ 77 $4/15$ $5/17$ $.$ 1 1 $.$	6-B-168. LARK SPARROW Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 84 8/17 8/17 AV DAILY FREQ + 73-81 MONTHLY + 82-90 MONTHLY 1 One was seen. 1 It is listed as being extremely rare for the Oregon Coast (Eltzroth 1987:16). 6-B-169. SAGE SPARROW Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 77 4/12 + - AV DAILY FREQ + - 0 AV DAILY FREQ + - AV DAILY FREQ + - 73-81 MONTHLY 1 -
73 $4/11$ $6/28$ 73 $8/9$ $9/18$? ? 1 $+$ 1 $+$ $+$ $ 74$ $4/21$ $5/13$ $.$ $+$ 1 $.$ $+$ 1 $.$ $ 75$ $5/15$ $7/25$ $.$ $.$ 1 1 3 $.$ $.$ 76 $4/28$ $6/29$ $.$ 1 2 1 $.$ $.$ $.$ 77 $4/15$ $5/17$ $.$ 1 1 $.$ $.$ $.$ 77 $8/13$ $8/15$ $.$ 1 1 $.$ $.$ $.$ 79 $4/21$ $5/21$ $.$ <td>6-B-168. LARK SPARROW Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 84 8/17 8/17 AV DAILY FREQ + 73-81 MONTHLY + 82-90 MONTHLY 1 One was seen. 1 It is listed as being extremely rare for the Oregon Coast (Eltzroth 1987:16). 6-B-169. SAGE SPARROW Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 77 4/12 + + AV DAILY FREQ + AV DAILY FREQ +</td>	6-B-168. LARK SPARROW Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 84 8/17 8/17 AV DAILY FREQ + 73-81 MONTHLY + 82-90 MONTHLY 1 One was seen. 1 It is listed as being extremely rare for the Oregon Coast (Eltzroth 1987:16). 6-B-169. SAGE SPARROW Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 77 4/12 + + AV DAILY FREQ + AV DAILY FREQ +
73 $4/11$ $6/28$ 73 $8/9$ $9/18$? ? 1 $+$ 1 $+$ $+$ $ 74$ $4/21$ $5/13$ $ +$ 1 $ 75$ $5/15$ $7/25$ $ 1$ 1 $ 76$ $4/28$ $6/29$ $ 1$ 2 1 $ 77$ $4/15$ $5/17$ $ 1$ 1 $ 77$ $4/15$ $5/17$ $ 1$ 1 $ 78$ $4/3$ $5/19$ $ 2$ 3 $ 79$ $4/21$ $5/21$ $ 2$ 3 $ -$	6-B-168. LARK SPARROW Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 84 8/17 8/17
73 4/11 6/28 73 8/9 9/18 ? ? 1 + 1 . + + . . 74 4/21 5/13 . . + 1 .<	6-B-168. LARK SPARROW Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 84 8/17 8/17
73 4/11 6/28 73 8/9 9/18 ? ? 1 + 1 . + + . . 74 4/21 5/13 . . + 1 .<	<pre>6-B-168. LARK SPARROW Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 84 8/17 8/17</pre>
73 4/11 6/28 73 8/9 9/18 ? ? 1 + 1 . + + .	 6-B-168. LARK SPARROW Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 84 8/17 8/17
73 4/11 6/28 73 8/9 9/18 ? ? 1 + 1 . 74 4/21 5/13 . . + 1 . . . 75 5/15 7/25 . . 1 1 3 . . 76 4/28 6/29 . 1 2 1 . . . 77 4/15 5/17 . 1 1 77 4/15 5/17 . 1 1 .	 6-B-168. LARK SPARROW Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 84 8/17 8/17
73 4/11 6/28 73 8/9 9/18 ? ? 1 + 1 . + + .	 6-B-168. LARK SPARROW Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 84 8/17 8/17

Their Monthly Frequencies have declined in recent years. In 1975 and 1976, one pair apparently nested in a brushy pasture, as they were present well into mid-summer and exhibited territorial activity. In July 1987, only a juvenile was seen.

		_	_									
6-B-170.												
Yr First Last	Ja	Fe	Mr	Ap	Mу	Jn	JI	Ag	Sp	0c	N٧	De
74 5/13 5/13	•	•	•	•	+	•	•	•	•	•	•	•
AV DAILY FREQ								•				
73-81 MONTHLY	•		+		1	•	•	•	•	•		•
82-90 MONTHLY	•	•	•		•	•	•	•	•	•	•	•

UNCONFIRMED.--She resembled a female Purple Finch but was larger. She had a large amount of white on the wing that was very noticeable. She was present for a couple of hours and thus allowed good observations; she was also present at a neighbor's place for about a week.

There are three records for this species along the Oregon Coast that have been accepted by the Oregon Bird Records Committee; one record in late August and two records in mid-September (Schmidt 1989:119).

						0.01								
		-171.			HAV		ARRO				~	~		_
	First						My	Jn	JI	Ag	Sp	UC	NV	De
73	4/24	4/24	?	?	?	+0	٠							
	3/21	6/25												
	8/10	9/13	•		+	2	1	+	٠	+	+	•		
75	3/21	6/17			+	1	1	+				- 2		
	4/19	5/9												
	10/15	10/15				2	1	•	•			+		
	4/5	5/28												
	8/18	9/5				- 4	2	•	•	+	+			
78	3/16	5/15												
78	8/23	10/2			2	2	2			1	+	+	•	
79	3/24	5/14			+	6	3							
80	3/28	5/8												
	10/2	10/2			+	3	2					+	•	
81	4/14	4/29		-		2								
82	4/8	5/15		- 2	- 2	2 4	3							
	4/14	4/28				3			?					
	4/14	5/18		- 2		4	4							
85	4/24	5/8		- 8	- 9	- +	1		-					
	4/20	5/6	•	-			-	•	•	•	•	•	•	•
	9/20	9/20				1	1		?		1		?	
	3/30	5/7	- 2	- 3	- î	- ī	1				-			
88	4/19	5/5	- 3				ī							
89	3/30	4/22	- 3		i	2	- 5			100	- 12		10	0.24
90	4/14	4/14	ै		•	•		•	•	•			÷	1
90	9/29	9/29				1					Ρ			
50	5725	5725		•	•	1			•	•		•	•	
۸V	DAILY	FREO	_		+	2	1	+		+	+	+		
	-81 MOI			•	6	_	- 8			3	3	3	•	
	90 MOI		•	•	2			-	•	5	2	5	•	
		=4/7 (2/1	6-1		1	∆√ُ		+=£	/12		122	-61	251
	Finct	=9/9	9/1 9/1	0_1	0/1	έĽ		Las	τ-J +=0	/25	24	/5-	10/	15
~ *	11130	- 3/ 3 (0/1	0-1	0/1	57		Las	1-3	120	13	/ 0=	101	101

In recent years, this species was mainly a spring migrant, but previously it also often occurred in fall.

6-B-172. Yr First Last 73 10/7 4/15 74 8/30 4/8 75 10/6 4/25 76 9/15 4/21 77 10/1 4/17 78 9/25 3/21 79 9/21 4/17 80 9/19 4/17 81 9/15 4/15 82 - 4/28	??????????????????????????????????????	Ap My Jn J1 1 . . . + . . . 7 . . . 3 . . . 2 . . . 4 . . .	Ag Sp Oc Nv De + . 1 + + 2 2 2 . 3 3 2 . 1 7 5 6 . 7 5 8 . 1 4 4 5 . 1 9 8 3 . 1 4 6 5 . 1 8 8 5 . 6 3 2 . 2 1 8 . 2 8 5 3 . 2 4 7 9 . 4 10 ? 9
82 - 4/28 83 10/3 4/4 84 9/24 4/23 85 9/16 4/19 86 9/15 4/5 87 9/8 4/10 88 9/24 4/19 89 9/2 4/6 90 9/19 4/11	4 3 . 9 3 2 6 . 2 3 4 3 7 7 P 10 9 5 8 3 1 9 9 2 6 10 7	4 5 ? 5 ? 2 ? 1 1 5	1 9 8 3 1 4 6 5 1 8 8 5 . 6 3 2 . 2 1 8 . 2 8 5 3 . 2 4 7 9 . 4 10 ? 9 . 3 10 9 9 . 1 9 8 8 . 2 9 9 6 . P 10 P 10
AV DAILY FREQ 73-81 MONTHLY 82-90 MONTHLY AV First=9/20	5 4 3 9 10 8 10 8 10 3 (8/30-10/7	3 9 10) AV Last=4	+ 1 6 5 6 1 7 10 9 10 . 8 10 10 10 /14 (3/21-4/28)
C	Dbs. Pre Days (1 7 8 8 9 8	Days Las sent Obs %) Day 29 9 88 10 38 7 33 9 13 9 40.2	Present s (%) 44 20 14 44

On the days following their arrival each year, they were usually absent. For example, the previous tabulation indicates that they were found an average of 40% of the days in the 10 day period after their arrival.

The probability that they would be present near their average arrival date each year is low because their average daily presence was only 19% during the five day period before and after their average arrival date (Table 5.2).

Prior to their departure, they were not often present. For instance, they were found an average of 40% of the days in the 10 days preceding their departure.

Their Average Daily Frequencies were greatest from October through January, although they were present almost every year from September through April.

The lack of records in 1973-1974 is probably because Faxon was then becoming familiarized with them.

6-B-173.	SONG SPARROW	6-B-175. WHITE-THROATED SPARROW
r First Last	Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De ? ? ? 10 10 10 10 10 10 10 8 10	Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 74 1/4 2/7 1 2
3	10 9 10 10 10 10 10 10 8 10 7 10	81 12/28 2
	9 10 10 10 10 10 10 10 9 9 9 10 9 10 10 10 10 10 10 10 10 9 9 10	82 - 1/20 3 · · · · · · · · · · · · · · · · · ·
	10 10 10 10 10 10 10 10 10 10 10 10 10	83 12/17 - 3 1 1 5 ? 4
	10 10 10 10 10 10 10 10 9 10 10 10	84 - 4/27 2 3 9 9
	10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 9 10 10 10 10 0 9	AV DAILY FREQ 1 + 1 1 +
	10 10 10 10 10 10 10 10 10 10 10 10	73-81 MONTHLY 1 1
	10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 ? 10 10 10 10 10	82-90 MONTHLY 3 2 2 2 1 AV First=12/29 (12/17-1/4) AV Last=3/12(1/20-4/27)
	10 10 10 10 10 10 10 10 10 10 10 9	
	10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 P 10 10 10 ? 10 10 10 ? 10	In 1981-1984, this species was a regular winter visitor.
	10 10 10 10 10 10 10 10 10 10 10 10 10	Only singletons were seen; one on
	9 10 10 10 10 9 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10	19 April 1983 was singing.
	10 10 10 10 10 10 10 10 P 10 P 10	6-B-176. GOLDEN-CROWNED SPARROW
DAILY FREO	10 10 10 10 10 10 10 10 10 10 10 10 10	Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 73 9/28 5/8 ? ? ? 7 3 + 6 8 2
1 MONTHLY	10 10 10 10 10 10 10 10 10 10 10 10	74 10/5 5/13 6 7 10 7 2 5 3 5
O MONTHLY	10 10 10 10 10 10 10 10 10 10 10 10 10	75 10/6 5/8 9 8 9 10 2 2 6 10 76 9/26 5/7 10 10 9 10 3 + 1 4 10
This bir	i was recorded more often than any	77 10/9 5/16 10 10 10 7 2 3 8 9
her bird at	Thornton Creek. ere sometimes observed feeding	78 9/26 5/22 9 6 6 9 5 1 . 6 5 79 11/29 5/8 7 4 4 8 2 + 6
ledgling Brow	in-headed Cowbirds (section 6-8-184).	80 10/23 5/3 10 8 6 10 1 + . 1
6-B-174.	LINCOLN'S SPARROW	81 10/10 5/9 3 6 3 10 3 + 6 9 82 11/6 5/6 10 9 8 10 1 1 .
First Last	Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De	83 9/30 5/14 1 1 5 8 1 . ? . 1 10 1 7
/14 4/14 /27 9/27	? ? ? + +	84 - 5/14 8 10 . 10 6
14 5/1	+ +	85 10/10 - 1 1 2 3 2 3 9 10
/13 5/27 /21 4/26	. $.$ $.$ $.$ 1 $.$ $.$ $.$ $.$ $.$ $.$ $.$ $.$ $.$ $.$	86 10/15 5/24 4 10 P 10 9 . ? 1 ? 6 87 10/17 5/2 2 . 8 10 + 4 7 4
	• • • • • • • • • • • •	88 9/30 5/20 3 5 8 9 5 1 6 5 5
5/9 5/9 4/9 4/20	· · · · · + · · · · · · · ·	89 10/6 4/29 8 10 10 10 7 10 10 90 9/29 5/15 9 10 10 10 2 P 4 P 9
 4/5 5/12	•••• <u>•</u> ••••••••	AV DAILY FREQ 6 7 7 9 3 + 3 5 6 73-81 MONTHLY 10 10 10 10 10 3 8 9 10
4/5 5/13 4/26 4/26	: : : + : : : : : : : : : : : : : : : :	82-90 MONTHLY 10 9 9 10 9 3 8 9 8
5/7 5/7		AV First=? (9/26-1/1) AV Last=5/11 (4/29-5/24)
	•••••••••••••••••••••••••••••••••••••••	First + 10 Days Last - 10 Days
9/1 9/1		Obs. Present Obs. Present
4/18 4/18	••••••••••••••••••••••••••••••••••••••	YR Days (%) Days (%) 1976 10 0 10 100
2/20 12/2		1977 9 44 10 30
DAILY FREQ	* * * *	1978 8 13 8 50 1979 6 17 9 78
-81 MONTHLY		1980 6 17 8 88
90 MONTHLY	3 2 1 1	Mean 18.2 69.2
	(4/5-5/13) AV Last=5/1 (4/14-5/27) (9/1-9/27) AV Last=9/14 (9/1-9/27)	On the days following their arrival each
		year, they were usually absent. For example, the
There	e most often spring migrants; only	previous tabulation indicates that they were found

They were most often spring migrants; only singletons were seen.

departure.

78

an average of only 18% of the days in the 10 day period after their arrival.

The probability that they would be present near their average arrival date each year was low because their average daily presence was only 24%

during the five day period before and after their average arrival date (Table 5.2). Prior to their departure, they were often present. For instance, they were found an average of 69% of the days in the 10 days preceding their

Although present all winter, their Average Daily Frequency was greatest in April, when an

emigration probably occurs, as is also apparent from banding records in the Tillamook County Coast Range (Bayer and Ferris 1987:29).

6-B-177.	WHITE	-CR	WN F	n s	PAR	ROL	1	30001			
Yr First Last								Sd	0c	Νv	De
73 - 10/11			9								•
74 3/31 1D/16		+	8	10	10	10	9	10	4		•
75 4/1 10/25		•			10		1D	10	4		•
76 3/21 10/25	• •		10		10	10	10	10	6	•	•
77 3/30 10/12			10			10	10	10	4		•
78 3/20 11/13	• •		10			10	9	5	.	2	•
79 3/16 10/26			10			10	10	10	7	•	•
80 1/7 10/22			9			10	10	.9	1	•	•
81 4/2 10/27					10		10	10	+	•	•
82 3/21 10/23		. 4				10 ?	10 10	10 10	8 7	•	•
83 4/1 10/11 84 3/31 10/25			10	10	10	10	10	1D	6	•	•
85 4/1 -			10	10	10		10	7	1	2	ż
86	2	P	10	10	10	?	10		9	?	
87 3/31* 9/29		i							-		
88 4/3 10/10					<u>9</u>			<u> </u>	3		
89 4/1 11/29			10	10	10	10	10	10	8		
90 3/27 -			10						8		•
* First for a	dults,	Fir	st	for	an	ាំ ៣រ	mati	ire	on	3/	6.
								_			
AV DAILY FREQ	+ -	F 1						9	4	+	+
73-81 MONTHLY	1	L 6	10	10	10	10	10	10			
82-90 MONTHLY		L D	10	10	10	10	10	10	9	3	1
AV First=1/7	(1//)	1/2	<u>۱</u>	٨		+	- 2	(20	11/	201
AV First=3/28 @ Immature in							= <u>r</u>	(97	29-	117	29)
e immature in	130/ 0	71 I. I	veu	on	57	0.					
	First -	F 10	Da	vs		Las	t -	10	Da	vs	

		First	+ 10 Days	Last -	· 10 D	ays	
		Obs.	Present	Obs.	Pre	sent	
	YR	Days	(%)	Days	(%)	
	1975	9	89	ğ		33	
	1976	10	30	8		63	
	1977	10	90	9		67	
	1978	9	100	8		50	
	1979	8	88	8		75	
Mean			79.3			57.5	
	(First	is for	March-April	dates;	Last	is for	0
	October	-Novemb	er dates.)				

On the days following their arrival each year, they were usually present. For example, the previous tabulation indicates that they were found an average of 79% of the days in the 10 day period after their arrival.

The probability that they would be present near their average arrival date each year was low because their average daily presence was only 36% during the five day period before and after their average arrival date (Table 5.2). However, they were usually found each year 3-5 days after their average arrival date (Table 5.2).

Prior to their departure, they were often present. For instance, they were found an average of 58% of the days in the 10 days preceding their departure.

Wintering birds were mainly immatures. For example, in 1985, an immature was found on November 16, and, in 1987, an immature first appeared on March 6, but the first adult did not arrive until March 31.

Adults were sometimes observed feeding fledgling Brown-headed Cowbirds (section 6-B-184).

6-B-178.	DARK-FYED JUNCO
6-B-178. Yr First Last 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87	DARK-EYED JUNCO Ja Fe Mr Ap My Jn J1 Ag Sp OC Nv De ? ? ? 8 5 4 8 5 4 10 1D 10 10 9 10 9 8 8 10 2 4 9 10 10 10 8 8 1 6 7 8 4 2 7 10 10 10 10 10 10 10 10 8 8 10 2 4 9 10 10 10 10 10 10 10 10 8 8 10 10 10 10 10 10 10 10 10 10 8 8 10 10 10 10 10 10 10 10 10 9 8 8 9 9 10 10 10 10 10 10 10 10 9 5 4 1 9 10 10 10 10 10 10 10 10 9 5 4 1 9 10 10 10 10 10 10 10 10 9 9 10 10 9 10 10 10 10 10 10 10 9 9 10
88	10 10 10 10 10 9 10 8 10 10 10 10
89	10 10 10 10 10 . 10 . 10 10 10 10
90	10 10 10 . 10 8 . 6 P 10 P 9
AV DAILY FREQ	10 10 10 9 9 9 8 7 8 10 10 10
73-81 MONTHLY	10 10 10 10 10 10 10 10 10 10 10 10
82-90 MONTHLY	10 10 10 9 10 9

The records above include sightings of the

Slate-colored form (see below). On 16 May 1974, an "Oregon" Junco nest contained four eggs, and on May 26 there was at least one hatched young at the nest.

The absence of records in June and August 1989 could be because they were overlooked, not because they were absent.

	Slate	-co	lore	ed (Dai	rk-e	eye	d) ,	Juno	:0			
Yr First		Ja	Fe	Mr	Ар	Мy	Jn	JI	Ag	Sp	0c	Νv	De
74 3/30													12
74 12/27		٠		+	٠		•	•	:		٠	•	+
75 -		+	•		•	•	٠			•		•	
76 10/24	10/24	•	٠	•		•	٠	•	•	٠	+		
AV DAILY	FREQ	+		+		•	•	•			+		+
73-81 MON		1		1		•			:	•	1		1
82-90 MON	ITHL Y	•	•	•	•	•		•	•	•	٠	٠	
Only	/ sing	let	ons	we	re :	see	n.						
6-B-	179.	LA	PLA	ND I	ON	GSPI	UR						
Yr First								Jl	Ag	Sp	0c	Nv	De
Δν ΠΔΙΙν	FRFO												

AV DAILY FREQ x ? ? ? ? ? ? ? ? ? ? ? ? <1973 MONTHLY

One was seen in snow during January 1969.

									5			
			8REW	cnic	01 /	CVO						-
6-B-180. RED-WINGED 8LACK8IRD 'r First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De	o-o Yr First	B-183. t Last	Ja F					Aa	Sp	0c	Νv	
3 11/7 11/7 ? ? ?	73 6/26			??								
	74 3/9	5/10		12	-	51				12		
5/19 $5/19$	74 10/24		•	. 2	1	+		٠	٠	+	٠	
4/25 5/9 1 1	75 10/2 76 4/7	10/17 4/28	٠		٠		• •		٠	1	•	
5/13 $6/4$ + +	76 9/29				1				+			
4/10 5/1 1 +	77 4/1	4/1	•	1						-	-	
3/24 5/18 + + +	77 9/22		•	•	+	:	• •	•	+	1		
3/14 5/17 + . +	78 4/21	•.	(.)	• •	1	1	• •	•	•	•	•	
4/26 5/24 7/6 7/7	79 1/1 79 4/20	1/1 5/19										
10/11 10/11 + 1 . 1 +	79 7/19											
4/26 5/11 1 1 . ?	79 10/5	10/5	+		+	+	. 1	L.	•	+	•	
3/8 5/26 2 1 3	80 2/29											
5/22 $5/22$	80 4/12	5/8			14.					1		
4/28 5/16 1 2 . ? ? . 3/5 5/17 1 . +	80 10/28 81 2/22	8 10/28	•	T .	T	т	• •	•	•	т	•	
4/19 5/7	81 7/9	7/9										
5/5 5/5	81 10/9			+ 💡	•		(in) -	Ε.		3	•	,
5/22 5/22 1	82 3/30			25								
	82 10/4			. 1	-	+	300 - 3		•	3	•	
DAILY FREQ + + 1 + + + + . -81 MONTHLY 3 3 8 2 1 .	83 3/18 84 10/23		•	• +	•	٠	•	?	•	+	•	'
-90 MONTHLY 2 6 10 . 1 1	85 1/23		•	• •	•	3. . .:	39 5		•	•	•	
First=? (3/5-5/22) AV Last=5/18 (5/1-6/7)	85 3/14											
First=7/6 (7/6) AV Last=7/6 (7/6)	85 9/18		+	. +	+	•	•	• •	+	•	•	,
First=10/24(10/11-11/7)AV Last=10/24(10/11-11/7)							1	?.		1	2	,
Red-wings were mainly a spring migrant.	86 10/22 87 3/30		•	• •	т	•	1	•	•	1	:	
Red-wings were mainly a spiring ingrant.	87 6/24											
6-B-181. WESTERN MEADOWLARK	87 10/10		•	. 1	1		+ (1.	•	+	•	,
First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De	88 3/14											
8 8/13 8/13 ? ? ? +	88 6/28 88 9/19			+			1		1	1	_	
	89 4/15		8.	•	•	•	•	•••	-	-	•	'
10/17 10/19	89 7/26				1	•		1 🤘	•	•	•	,
4/10 4/10 + ? ? .	90 4/7	7/6		• •	2	1	•	1.	•	•	•	
10/26 12/1	AV DATES	V EDEO	+ ::	+ +	+	-	ш.	L	+	1		
/ DAILY FREQ + + . + . +	AV DAILY 73-81 MC		1	3 1		4	1 3	2.	2			
973 MONTHLY ? ? ? ? x ? ? ? ? ? ? ?	82-90 MC		ī	. 6				4 .	2	6		
-81 MONTHLY 1 . 3												
P-90 MONTHLY 1	The	eir Dai	ly Fr	eque	nci	esw	ere	IOW,	an	dt	hey	1
/ First=9/30 (8/13-10/26) AV Last=10/1(8/13-12/1) / First=4/10 (4/10) AV Last=4/10 (4/10)	were mos	to 20	iy ii nairs	nes	ted	her	e un	til	195	7 w	hen	'n
	81ack-he											
They were also seen on 12 May 1972.	and 6-8-	3-184).	0n 1	1 Oc	tob	er 1	977,	25	wer	e s	eer	ſ
Meadowlarks appeared to be an uncommon fall	but gene	nerally	far f	ewer	we	re f	ound	•				
nd a rare spring migrant. 1-3 birds were seen at a time.												
1-5 Dirus were seen at a time.												
6-B-182. YELLOW-HEADED BLACK8IRD												
r First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De												
5 4/27 4/27 +												
V DAILY FREQ +												
2–90 MONTHLY												
An adult female was noted.												
Eltzroth (1987:16) lists them as being xtremely rare along the Oregon Coast.												
verementy rule along the oregon coast.												

C 8 105

HOODED ODIOLE

6-B-184. BROWN-HEADED COWBIRD Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc Nv De 73 4/25 8/25 ? ? ? 2 10 9 7 4 74 3/28 9/4 + 5 9 10 6 3 + 75 4/18 9/12 4 10 8 8 6 1 76 4/19 9/4 4 10 10 8 8 6 1 77 4/14 8/26 5 10 10 10 8 78 4/17 8/31 3 10 10 7 3 79 4/20 8/15 3 10 10 7 3 80 4/17 8/19 4 10 10 7 3 81 4/20 8/14 3 10 10 7 3 82 4/21 9/1 4 10 10 7 3 83 4/15 8/27
73 $4/25$ $8/25$? ? ? 2 10 9 7 4 . . 74 $3/28$ $9/4$. + 5 9 10 6 3 + . . 75 $4/18$ $9/12$. . 3 10 9 4 1 . . 76 $4/19$ $9/4$. . 4 10 8 6 1 . 77 $4/14$ $8/26$. . 5 10 10 8 . . 78 $4/17$ $8/31$. . 3 10 10 7 3 . . 79 $4/20$ $8/15$. 3 10 10 7 3 . . 80 $4/17$ $8/19$. . 4 10 10 3 . . 81 $4/20$ $8/14$. .
74 $3/28$ $9/4$ $+$ 5 9 10 6 3 $+$ $.$ 75 $4/18$ $9/12$ $.$ 3 10 9 4 1 $.$ 75 $4/18$ $9/12$ $.$ 3 10 9 4 1 $.$ 76 $4/19$ $9/4$ $.$ 4 10 8 6 1 $.$ 77 $4/14$ $8/26$ $.$ 5 10 10 8 $.$ $.$ 78 $4/17$ $8/31$ $.$ $.$ 3 10 0 3 $.$ $.$ 80 $4/17$ $8/15$ $.$ 3 10 0 3 $.$
75 4/18 9/12 $3 10 9 4 4 1$ $76 4/19 9/4$ $4 10 8 8 6 1$ $77 4/14 8/26$ $5 10 10 10 8$ $77 4/14 8/26$ $5 10 10 10 8$ $78 4/17 8/31$ $3 10 10 7 3$ $79 4/20 8/15$ $3 10 10 9 3$ $80 4/17 8/19$ $4 10 10 7 3$ $80 4/17 8/19$ $4 10 10 7 3$ $80 4/17 8/19$ $4 10 10 5 4 1$ $81 4/20 8/14$ $3 10 10 3 1$ $82 4/21 9/1$ $4 10 10 5 4 1$ $83 4/15 8/27$ $5 9 10 ? 2$ $84 4/16 9/6$ $5 10 4 2 3 1$ $86 4/10 9/19$ $3 10 10 ? 7 1$ $86 4/10 9/19$ $5 10 10 10 1$ $88 4/8 7/21$ $7 10 8 4$ $89 4/14 8/30$ $3 9 7 9 2$
76 $4/19$ $9/4$. . 4 10 8 8 6 1 . . 77 $4/14$ $8/26$. . 5 10 10 8 . . 78 $4/17$ $8/31$ 79 $4/20$ $8/15$ 79 $4/20$ $8/15$ 80 $4/17$ $8/19$. .
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
80 4/17 8/19 . . 4 10 10 7 3 . . . 81 4/20 8/14 . . 3 10 10 3 1 . . . 82 4/21 9/1 . . 4 10 10 5 4 1 . . 83 4/15 8/27 . . 5 9 10 ? 2 . . 83 4/15 8/27 . . 5 9 10 ? 2 . . 84 4/16 9/6 . . 5 10 4 2 3 1 . . 85 4/11 8/21 . . 4 10 9 9 .
81 4/20 8/14 . . 3 10 10 3 1 . . . 82 4/21 9/1 . . 4 10 10 5 4 1 . . 83 4/15 8/27 . . 5 9 10 ? 2 . . 84 4/16 9/6 . . 5 10 4 2 3 1 . . 84 4/16 9/6 . . 5 10 4 2 3 1 . . 85 4/11 8/21 . . 4 10 9 9 . . . 86 4/10 9/19 . .3 10 10 ? 7 1 . . 87 4/15 8/10 . . . 5 10 10 1 . . 89 4/14 8/30 . . 3
82 4/21 9/1 . . 4 10 10 5 4 1 . . 83 4/15 8/27 . . 5 9 10 ? 2 . . 84 4/16 9/6 . . 5 10 4 2 3 1 . . 85 4/11 8/21 . . 4 10 9 9 . . . 86 4/10 9/19 . . 3 10 10 ? 7 1 . . 87 4/15 8/10 . . 5 10 10 1 . . . 88 4/8 7/21 . . 7 10 8 4 .
86 4/10 9/19 . . 3 10 10 ? 7 1 . ? 87 4/15 8/10 . . 5 10 10 1 . . 88 4/8 7/21 . . 7 10 8 4 . . . 89 4/14 8/30 . . 3 9 7 9 2 . .
86 4/10 9/19 . . 3 10 10 ? 7 1 . ? 87 4/15 8/10 . . 5 10 10 1 . . 88 4/8 7/21 . . 7 10 8 4 . . . 89 4/14 8/30 . . 3 9 7 9 2 . .
86 4/10 9/19 . . 3 10 10 ? 7 1 . ? 87 4/15 8/10 . . 5 10 10 1 . . 88 4/8 7/21 . . 7 10 8 4 . . . 89 4/14 8/30 . . 3 9 7 9 2 . .
87 4/15 8/10 . . 5 10 10 1 . . 88 4/8 7/21 . . 7 10 8 4 . . . 89 4/14 8/30 . . 3 9 7 9 2 . .
88 4/8 7/21 . . 7 10 8 4 . . . 89 4/14 8/30 . . 3 9 7 9 2 . .
89 4/14 8/30 3 9 7 9 2
90 4/14 //13 1 10 8 4
AV DAILY FREQ + 4 10 9 7 3 +
73-81 MONTHLY 1 10 10 10 10 10 3
82-90 MONTHLY 10 10 10 10 8 3
AV First=4/15 (3/28-4/25) AV Last=? (7/13-9/12)
First + 10 Days Last - 10 Days
Obs. Present Obs. Present
YR Days (%) Days (%) 1976 10 90 7 43
1976 10 90 7 43 1977 10 90 10 90
1977 10 90 10 90 1978 10 50 7 29
1979 8 63 7 29
1980 6 100 7 43
Mean 78.6 46.8

Mean

On the days following their arrival each year, they were usually present. For example, the previous tabulation indicates that they were found an average of 79% of the days in the 10 day period after their arrival.

The probability that they would be present near their average arrival date each year was low because their average daily presence was only 25% during the five day period before and after their average arrival date (Table 5.2).

Prior to their departure, they were often absent. For instance, they were found an average of only 47% of the days in the 10 days preceding their departure.

They first arrived in 1957 and have adversely affected some other bird species, especially Brewer's Blackbirds (see section 4-F-2). The following species have been observed to feed young cowbirds here: Wrentit, Wilson's and Black-throated Gray warblers, Song and White-crowned sparrows, and Hammond's Flycatchers.

		185.	H00					1	11	٨٠	c -	0.0	Nu	Do
1r 78	First 5/19	Last 5/19	Ja	re I	mr	Ар	ту +	Jn	J I	Ağ	sp •	00	• •	
			•	•	•	•		•	•	•		•	•	•
	DAILY		•	•	•	•	+	•	•	•	•	•	•	•
	-81 MON -90 MON		:	•	:	:		•	:	•	:	•	•	•
					-	o a tier t			2022		- 10/24			
I +	had a	NFIRM	bib	-A	sec	onc	i-sp	ar	ng n nd c	lark	wa wi	is s	seer swi	th
two	o winat	bars.	The	UD	per	• ba	ck	was	; du	111	dar	'kis	sh	
are	en, ar	nd the	res	to	ft	he	plu	Imac	ie v	a s	at	ail	rly	
COL	isister	from b	nge- reas	t t	100	rov	ine vn t	thar		ould		Was	5 MIC	ne
exp	bected	of an	Orc	har	d C)ri(ole.							
200	The cepted	Orego	n Bi	rd	Rec	or	ls (bo		niti	tee	has	5	thre	90
in	late I	Decemb	er-F	ebr	uar	n i rya	ind	one	e i	n ea	irly	y Ji	ine	
(Se	chmidt	1989:	126)	•		•					-			
	6-B	-186.	NOR	THE	RN	(B1	110	ock '	's)	ORI				
Yr		Last	Ja	Fe	Mr	Àp	My	Jn	Jĺ	Ag	Sp	0c	N٧	De
73	- 5/20	5/20	?	?	?	•	+	•	•	•	•	•	•	•
	5/20		:	•	:	:	1	•	•		•	:	•	•
76	-	-	•	•		•	•			•	•	•	•	•
77	- 5/19	- 5/25	•	•	•	•	•	•	•	•	•	•	•	· • •
78	7/3	7/3												
78	10/30		•	•	•	•	2	•	+	•	•	+	•	•
	4/27 10/11					1	2		•	•	•	+		
	5/21		•	•	•	•	ī	•		•	•		•	•
81	-	c.ic	•	•	•	•	+	•		•	•	•		•
	5/21 5/2 4	6/6 5/25	:	•	•	•	1	1	?	•	•	•	:	:
84	-	-	•	•	-	•	•	•	•	•	•	•	•	•
	5/17	5/17	•	•	•	•	-+	•	?	•	•	•	?	•
86 87		5/14	:	•	•	•	2	•	•	•	•	•	•	:
88	5/10	5/11	•		•	•	1	•	•	•	•	•	•	•
89 90		-	٠	:	•		•	•	•	•	•	•	•	•
90	-	-	•	•	•	•	•	•	•	•	•	•	•	•
AV	DAILY 973 MO	FREQ	?	?	?	+?	1	+?			?	+ ?		?
73	-81 MO	NTHLY	•			:	Х 6		1			2		•
00	-90 MO First	NTHE				-	Ē	1				- /:	. :	103
AV	First First	=5/15 =7/3 ((4/2 7/2	27-5 \	0/2	4)	AV	La	ST≕ AV	5/21 a) (st=	5/1 7/3	1 - 6 (7	/0/
ÂV	First=	10/21	(10/	, 11-										
					1	AV	Las	t=1	0/2	1 (10/	11-	10/	30)

One was also seen in May 1961 and May 1969. Only single Bullock's were observed, and there was no indication that they nested here. Most appeared only to be spring migrants.

								-				
6-B-187.	PII	NE (GRO	SBE	AK							
Yr First Last	Ja	Fe	Mr	Ap	My	Jn	J1	Ag	Sp	0c	Νv	De
85 9/2 9/12	•	•	•	•	•	•	•	•	1	•	•	•
AV DAILY FREQ												
73-81 MONTHLY		•										٠
82-90 MONTHLY	•	•	•			٠		•	1	•		•

UNCONFIRMED.--In 1985, four birds on Sept. 2, two birds on Sept. 7, and one bird on Sept. 12 were heard and identified as this species on the basis of call, size, and flight pattern. Their call was similar to the "tu-tu-tu" of the Greater Yellowlegs, but these birds' call was finch-like and very distinctive.

It is considered a vagrant along the Oregon Coast (Eltzroth 1987:17).

		PUR					1			C -	<u> </u>	м	D .
rsı.	Last 10/11	Jd ?	re ?	۳۱۲ ?	AP	riy R	7	JI 5	AG	Sp 1	2	N V	ve
1	9/26	5	2	5	5	ğ	10	10	ğ	3	•		
27	10/13	_	_	_	_		-			_			
/22		1	7	6	6	10 10	9	10	9	2	+++	•	3
-	10/1 9/25	2	2									•	•
2/6	2/6	•	•	5	10	10	10	10	10		•	•	•
/12	10/28		+	•	7	10	7	10	9	6	1		•
3/19	-	•	:	1	6	10	10	10	9	7 10	3	3	3
-	- 10/17	+	3	4	2	10	10	10	9	10	25	T	Ŧ
	11/3			:	4	10	10	10	6	8	•		
2/23	2/23									_			
4/13 3/30	10/15 9/29	•	+	:	6	10	10	?	18	7 7	2		•
4/ 11	-	•	•	1	6	10	10	10	10	9	4	•	4
-	-	2	3	P	9	10	10	?	10	8	3	?	
4/7	11/26	•	•	•	8	10	10	10	10	9	3	1	•
	1/15 10/18												
12/14		1		1	9	9	9	10	8	8	6		1
1/4	1/4		•	_							-	•	_
4/3	-		•••								4		10
-	-	10	10	10	10	10	10	10	10	Ρ	6	P	٠
DAILY	FREQ	1	2	2	7	10	10	10	9	6	2	1	1
	NTHLY									10			
U MU	NTHLY	4	3	4	10	10	10	10	10	10	8	4	3
The	ir grea	ates	st A	٩ve	rag	e Da	il.	y Fi	req	uenc	ies	we	ere
m Apr	il thro	ough	n Se	ept	emb	er,	wh	ich	wa	s wh	nen	the	Эy
	sent e												
	y fema` here '											T	ne
es de	parted	in	fal	11	and	ar	riv	ed '	ែ ក ្	late	è.		-
ter/e	arly s										ludi	ng	
male								<u> </u>	100	h			

	11/22			•	•	•	•		•	•			+	•	
	11/5												+		
87 (6/19	7/11	•	•		•	•	+	+	•	•		•		
	DAILY												+		
73-	81 MON	ITHL Y					•						2		
82-	90 MON	NTHL Y						1	1						
AV	First=	÷6/19 ((5/19))		A۱	/ La	st	=7/:	11 ((7/1	(1)			
AV	First=	=6/19 () =11/14()	11/!	5-11	1/22	2)A1	/ La	ast	=11,	/14	(11/	/5-3	11/2	22)	
						•					• •				

Only was bird was seen at a time. The only juvenile was seen on 19 June 1987.

----c Nv De 85 12/31 12/31 89 11/2 11/2 + . 1 . . . AV DAILY FREQ ÷ + . . ٠ • . . ٠ 73-81 MONTHLY

1 1

. . .

UNCONFIRMED.--In 1985, a flock of crossbills was noted high in a Douglas-fir; the calls were not those of the Red Crossbill and presumably were of this species.

. . .

82-90 MONTHLY

In 1989, a flock of about 12 was seen; they were about 100 ft (30 m) below Faxon. They were crossbill size and shape and flew like crossbills. All had light yellowish-brown heads, had slightly yellower napes, had bright yellow rumps and upper tail coverts, and had dark wings with very obvious wide white wingbars.

Eltzroth (1987:17) lists them as vagrants along the Oregon Coast. ____

Yr First Last Ja Fe Mr Ap My Jn Jl Ag Sp Oc N AV DAILY FREQ	/ De	2
<pre></pre> <pre></pre> <pre></pre> <pre></pre>	??	Ż

UNCONFIRMED.--Faxon noted several in a flock with Pine Siskins on an unknown date prior to 1969 and also in January 1969. On both occasions, the Redpolls were siskin size and had streaked plumage with red caps.

Eltzroth (1987:17) lists them as vagrants along the Oregon Coast.

		-193.	PIN		ISK				500000					174-17 1
Yr	First	Last	Ja	Fe	Mr		Му	Jn	JJ	Ag	Sp	0c		
73	7/19	4/27	?	?	?	+	•	•	2	7	2	+	7	4
74	3/8	8/14				1	1			2				۰.
74	12/20	-	:	;	+	1	1	+	•	3	4	3	8	1
75 76	7/5 11/30	4/7	L L	2	4	1	4	:	8 8	10 9	4		+	2
77	11/30	8/27	1 5 2	7 2 5	4 1 1	1 1 1	3	1 2	10	9	•	.	8	8
78	-	5/4	2	5	Ŧ	+	3	2	10	3	•	5	0	0
78	7/29	7/29	3	1	3	5	+		+					
79	-	3/3	5		5	5	•	•	•	•	•	•	•	•
79	7/7	8/10	1	3	1				5	4	-			
80	7/24	-			-				5 1	4		4 7 1	4	33
81	-	-	27	6 9	i 1	i 1	2		8	10	3 3	7	9	3
82	-	10/2	7	9	1	1	6	i	4	10	3	1		•
83	1/1	2/23												
83	-	8/25												
83	11/4	-	2	+				•	?	- 5			4 5	7
84	-	-	6	8	3	5 2	27	1	? 9 8	5 9 9	10	7	- 5	7 3 3 4 2
85	12/1	8/31	3	4	3	2			8					3
86	-	-	5	8	P	- 4	4	10	?	10	1	1	?	4
87	-	-	4		1	4	2	4	10	4	5		3	2
88		-	2 6 3 5 4 4 2	4	•33 P126	4 2 3	2 3 3	1	<u>•</u>	4	1	1	:	4 7
89	11/1	8/28		9			3	:	7	8	•	•	5	/
90		7/13	10	10	10	10	•	2	1	٠	٠	٠	•	•
A۷	DAILY	FREO	3	4	2	2	2	1	F	6	2	2	2	2
		NTHLY	8	8	á	2	6	2	 	a	2	2 6	3 7	2
		NTHLY	10	9	2 9 9	2 8 9	2 6 8	1 3 8	5 9 9	6 9 9	2 3 6	6	5	3 8 8
02	50 110		10				0	0				0		0

On 18 November 1977, about 500 were around, which wasn't an abnormally high number for here. Siskins were present every year, but they varied in which months they were found and in their Daily Frequencies.

6-B	-194.	LE	SSE	R GC	LDI	IN	СН						
Yr First		Ja	Fe	Mr	Ap	Мy	Jn	J1	Ag	Sp	0c	N٧	De
77 4/9	4/9			•	+	•	•	•	:		•		•
79 8/4		•			•	•	•	:	4	•	•	•	•
85 7/4		•	•	٠			•	1	•	•	٠		•
86 4/20	4/20	•	٠		+	•	•	?	•	٠	٠	ſ	•
AV DAILY 73-81 MO		٠	٠	•	+	•	•	+	+	•	•	•	•
82-90 MO			•		i	•	•	i	-	•	•	•	•
AV First AV First	=4/15	(4/9 (7/	9-4	/20))	AV AV	La: La:	st= st=	4/19 8/2	5 ((7	4/9 /5-	-4/3 B/2	20) 9)

Usually only a single bird was seen, but in 1979, small flocks of up to 7-8 birds were found.

				-										
	6-B-	-195.				GOL								
Yr	First	Last	Ja	Fe	Mr	Ap	Мy	Jn	Jl	Ag	Sp	0c	Νv	De
73	5/1	10/17	?	?			10	10	10	9	8	- 5		
74	1/16	1/19									_	_	_	
	4/26		1			1	9	10	10	9	2	8	1	•
75	1/4	1/4												
75						_	_	_	_		_			
	12/30		+		•	1	9		10		6	4	•	+
	4/23					2	10	9	10	10	2	2	•	•
77	1/19					-						-		
77	4/17	10/12	+		•	- 4	10	10	10	10	4	2	•	•
	4/24	9/25	•		•	1	10	10	10	7	2 3	:	•	•
	4/24		•	٠	•	2	10	10	10	2	3	2	•	•
	4/27	10/29				2	10	10	10	10	9	2	•	•
81	4/14	10/1				4		6	10	8	+	+		
	4/28		٠		•	1	10	9	8	7	3	4	•	•
	4/11	10/13	•			5	10	10	?		6	5		•
	4/18	9/29			•	1	8	4	6	4	3		•	
	4/30	10/7	٠		•	+	10	10	9	5	5	2	:	•
	4/25	-	•	٠	•	+	7	10	?		10	8	?	•
87		10/9	•	•	•	2	10		10	10	6	1		
	4/25		•	•	٠	2		8	9	7	4	4		
	4/19	11/1	•	٠	•	ુ 3	10	9	-	4		4	1	
90	5/5	10/17	•	•	•	•	9	10	10	10	Ρ	3		
617		EDE0	+			2	10	9	9	8	4	3	+	+
	DAILY		4	•	•				10		•			i
	-81 MO		- 4	•	•						10	-	-	+
82	-90 MO	=4/24	(Al.	· • • •	= / =	1 4	10	10	-10	/1/				161
AV	rirst	=4/24 =1/10	$\frac{4}{12}$	/21	11	101	v ∟ ∧v/i	ast	-10. +=1	/14	(12	/23	-11 -17	10
AV	rirst	-1/10	(12)	121.	-1/	1911	n v 1	Las	L-1,	/ 1 1	(12	121	-1/	12)
		F	ins	F +	10	Da	vs		las	t -	10	Da	vs	

		First	+ 10 Days	Last -	10 Days
		Obs.	Present	Obs.	Present
	YR	Days	(%)	Days	(%)
	1976	10	90	10	10
	1977	10	90	9	44
	1978	10	60	6	17
	1979	9	100	7	57
	1980	7	100	6	0
Mean			88.0		25.6
	(First	is for	April dates	; Last i	s for
	C	A	England Andrea A	-	

September-October dates.)

On the days following their arrival each year, they were usually present. For example, the previous tabulation indicates that they were found an average of 88% of the days in the 10 day period after their arrival.

The probability that they would be present near their average arrival date each year was low because their average daily presence was only 35%

during the five day period before and after their average arrival date (Table 5.2). Prior to their departure, they were not often present. For instance, they were found an average of only 26% of the days in the 10 days preceding their departure.

American Goldfinches, like White-crowned Sparrows, did not usually overwinter here, even though they winter closer to the coast. In fact, in recent years, American Goldfinches have overwintered less often than previously.

In 1986, these goldfinches were feeding begging young in flocks as late as Sept. 8.

	6-B-	-196.	EVE	INI	IG G									
Yr	First		Ja		Mr	Ap	Mу	Jn	J1	Ag	Sp	0c	Νv	De
73	-	10/17	? 2	?	?	1	1	2	1	2	8	9	•	•
74	-	11/1	2	+	5	7	6	+		1	+	8	1	•
75	4/3	5/18											_	
75	8/7	-				6 5 4	4 2 4		•	1	6 7	9 5	4	1
76	-	-	1	+	3	5	2	3	1 4	8	7	5	2	1
77	-	•	3	2 5	3	4	4	3 9 4		8 9 5	9	8		1
78	-	-	4	5	3	1	6	4	2 5		7	2	1 5	+
79	-	-	1 3 4 1 3	1		3	5	4		10	10	8		3
80		11/22	3	8	9	10	10	3	4	9	5	5	1	•
81	2/17	2/17												
81	4/16	10/19	•	+	•	2222333	4	+	4	4	8 3 7	5 3 7	•	•
82	1/27	10/25	2	1	5	2	7	3 1 3 4 4	3 ? 4	2 4	3	3	•	•
83	4/12	11/26				2	5	1	?		7	- 7	4	•
84	2/7	10/24	•	4	4	2	ż	3	4	9	9	2 3		•
85	-	-	2		2	3	7	4	6	10	10		1 ?	•5 5 3 5
86	-	-	4	4	3	3	6 5	4	?	10	10	7		5
87	-	-	2	1	3	3	- 5	4	9	3	10	10	4	3
88	-	-	2 4 2 3 1		+	6		2 2 5	1 3 3	4	10	8	4	5
89	-	-	1	3	•	4	6	2	3	- 7	10	8	2	3
90	-		1	•	7	10	5	5	3	3	Р	10	•	•
			-	_			_	-		-			-	-
	DAILY		2	2	3	4	5	3	3	6	8	7	2	2 6
	-81 MO	NTHLY	8	9		10	10	9	8	10	10	10	7	
82	-90 MO	NTHLY	8	6	7	10	8	10	10	10	10	10	6	6

Their Average Daily Frequencies were greatest in April-May and August-October during spring and fall migration, respectively. In some years, this species appeared to be migratory, but the pattern was not consistent. Although only about 10% of his observations were along ridge tops, Faxon noted a post-breeding dispersal along ridge tops for this species, and hundreds could be present during fall migration "waves" (section 5-G-3).

		-										-	
	-197.		JSE	SP/	ARR	WC							
Yr First		Ja			Ap	Mу	Jn	J1	Ag	Sp	0c	Νv	De
	10/15	?	?	?	•		•	•	•	•	+	•	
74 -	-			•			•						
75 5/28	5/28	٠	٠	•		+	•	•			•	۲	
76 -	-			•	٠		٠		٠	٠	٠		
77 3/22	3/22		•	+		٠	•	٠	100				٠
78 10/18		٠	•	2		٠	•	٠	•	٠	Ť	•	٠
79 3/14				2	+		٠		٠		٠	٠	
80 4/27			•	٠	1		•						
81 4/30													
81 8/13	8/13	•	•	٠	+			٠	Ť		•	•	•
82 6/13	6/13			•		٠	1	?	٠		•	٠	•
83 4/30		•	•		+ 2	•	٠	1	٠		•	٠	•
84 3/6	4/18			1	2				•		•	•	
85 -	-			•							•	:	
86 4/7	4/7			•	+		٠	?		٠	•	?	
87 4/30	4/30				+				•			•	
88 -	-			•	٠		٠	•	٠	٠			٠
89 -	-		•	•			٠						٠
90 -	-	•	•	•	•	•	•	•	٠	30	٠	•	٠
AV DAILY	EREO			+	+	+	+		+		+		
73-81 MO				3	3	1			1		2		
82-90 MO			- 1	3 1	4	-	i		-		-		
		•											
AV First	=4/20	(3/	6-6	/13)	A۷	Las	t=4	/27	(3	/22	-6/	13)
AV First					18)								
					Á	۷L	ast	=9/	25	(8/	13-	10/	18)

When they appeared, Faxon sometimes shot them, so that may have contributed to their absence.

Appendix I. Alphabetized list of plant and animal common names with scientific names.

Common Name	Scientific Name	Common Name	Scientific Name
alder, red	Alnus rubra	Hawk, Red-tailed	Buteo jamaicensis
blackberry, trailing	Rubus ursinus	Hawk, Sharp-shinned	Accipiter striatus
Blackbird, Brewer's	Euphagus cyanocephalus	hemlock, western	Tsuga heterophylla
Blackbird, Red-winged	Agelaius phoeniceus	Heron, Great Blue	Ardea herodias Butorides striatus
Blackbird, Yellow-headed	xanthocephalus	Heron, Green-backed	Calypte anna
Bluebird, Western	Sialia mexicana	Hummingbird, Anna's Hummingbird, Broad-taile	d Selasphorus platycercus
Bufflehead	Bucephala albeola	Hummingbird, Calliope	Stellula calliope
Bunting, Lark	Calamospiza melanocorys	Hummingbird, Rufous	Selasphorus rufus
Bunting, Lazuli	Passerina amoena	Jaeger spp.	Stercorarius spp.
Bushtit	Psaltriparus minimus	Jaeger, Parasitic	Stercorarius parasiticus
Canvasback	Aythya valisineria	Jay, Gray	Perisoreus canadensis
cascara	Rhamnus purshiana	Jay, Scrub	Aphelocoma coerulescens
cattail Chickadee, Black-capped	Typha latifolia Parus atricanillus	Jay, Steller's Junco, Dark-eyed	Cyanocitta stelleri Junco hyemalis
Chickadee, Chestnut-back		Kestrel, American	Falco sparverius
Cormorant, Double-creste		Killdeer	Charadrius vociferus
Cowbird, Brown-headed	Molothrus ater	Kingbird, Western	Tyrannus verticalis
coyote	Canis latrans	Kingfisher, Belted	Ceryle alcyon
Creeper, Brown	Certhia americana	Kinglet, Golden-crowned	Regulus satrapa
Crossbill, Red	Loxia curvirostra	Kinglet, Ruby-crowned	Regulus calendula
Crossbill, White-winged		Longspur, Lapland	Calcarius lapponicus
Crow, American	Corvus brachyrhynchos	Magpie, Black-billed	Pica pica Anac platurburchos
Cuckoo, Yellow-billed Dipper, American	Coccyzus americanus Cinclus mexicanus	Mallard maple, bigleaf	Anas platyrhynchos Acer macrophyllum
Douglas-firsee fir, Do		Martin, Purple	Progne subis
Dove, Mourning	Zenaida macroura	Meadowlark, Western	Sturnella neglecta
Dowitcher, Long-billed	Limnodromus scolopaceus	Merganser, Common	Mergus merganser
Duck, Ring-necked	Aythya collaris	Merganser, Hooded	Lophodytes cucullatus
Duck, Wood	Aix sponsa	Merganser, Red-breasted	Mergus serrator
Dunlin	Calidris alpina	Merlin	Falco columbarius
Eagle, Bald	Haliaeetus leucocephalus	Mockingbird, Northern	Mimus polyglottos
Eagle, Golden	Aquila chrysaetos	Nighthawk, Common	Chordeiles minor Sitta canadensis
Egret, Great Falcon, Peregrine	Casmerodius albus Falco peregrinus	Nuthatch, Red-breasted Oriole, Hooded	Icterus cucullatus
fern, bracken	Pteridium aquilinum	Oriole, Northern	Icterus galbula
fern, sword	Polystichum munitum	Oriole, Orchard	Icterus spurius
Finch, House	Carpodacus mexicanus	Osprey	Pandion haliaetus
Finch, Purple	Carpodacus purpureus	Owl, Barn	Tyto alba
fir, Douglas-	Pseudotsuga menziesii	Owl, Barred	Strix varia
Flicker, Northern	Colaptes auratus	Owl, Great Gray	Strix nebulosa
Flycatcher, Dusky	Empidonax oberholseri	Owl, Great Horned	Bubo virginianus Acio otuc
Flycatcher, Hammond's Flycatcher, Least	Empidonax hammondii Empidonax minimus	Owl, Long-eared Owl, Northern Pygmy-	Asio otus Glaucidium gnoma
Flycatcher, Olive-sided		Owl, Northern Saw-whet	Aegolius acadicus
Flycatcher, Pacific-slop		Owl, Spotted	Strix occidentalis
Flycatcher, Willow	Empidonax traillii	Owl, Western Screech-	Otus kennicottii
Gadwall	Anas strepera	Pewee, Western Wood-	Contopus sordidulus
Goldeneye, Barrow's	Bucephala işlandıca	Phalarope, Red	Phalaropus fulicaria
Goldeneye, Common	Bucephala clangula	Phalarope, Red-necked	Phalaropus lobatus
Goldfinch, American	Carduelis tristis	Phalarope, Wilson's	Phalaropus tricolor
Goldfinch, Lesser Goose, Canada	Carduelis psaltria Branta canadensis	Phoebe, Black Phoebe, Eastern	Sayornis nigricans Sayornis phoebe
Goose, Gr. White-fronted		Pigeon, Band-tailed	Columba fasciata
Goose, Snow	Chen caerulescens	pine, lodgepole	Pinus contorta
Goshawk, Northern	Accipiter gentilis	Pintail, Northern	Anas acuta
Grebe, Eared	Podiceps nigricollis	Pipit, American	Anthus spinoletta
Grebe, Red-necked	Podiceps grisegena	Pygmy-Ow1see Ow1, Nort	hern Pygmy-
Grosbeak, Black-headed	Pheucticus melanocephalus	Quail, California	Callipepla californica
Grosbeak, Evening	Coccothraustes vespertinus	Quail, Mountain	Oreortyx pictus Ballus limicola
Grosbeak, Pine Grouse, Blue	Pinicola enucleator Dendraganus obscurus	Rail, Virginia Paven Common	Rallus limicola Corvus corax
Grouse, Ruffed	Dendragapus obscurus Bonasa umbellus	Raven, Common Redpoll, Common	Carduelis flammea
gull spp.	Larus spp.	Robin, American	Turdus migratorius
Gull, California	Larus californicus	salal	Gaultheria shallon
Gull, Mew	Larus canus	salmon spp.	Oncorhynchus spp.
Gull, Ring-billed	Larus delawarensis	salmonberry	Rubus spectabilis
Harrier, Northern	Circus cyaneus	Sandpiper, Least	Calidris minutilla
Hawk, Cooper's	Accipiter cooperii	Sandpiper, Solitary	Tringa solitaria
Hawk, Red-shouldered	Buteo lineatus	Sandpiper, Spotted	Actitis macularia

Appendix I. Common & Scientific Names

Common Name	Scientific Name	Common Name	Scientific Name
Sandpiper, Western	Calidris mauri	Teal, Blue-winged	Anas discors
Sapsucker, Red-breasted		Teal, Cinnamon	Anas cyanoptera
Sapsucker, Red-naped	Sphyrapicus nuchalis	Teal, Green-winged	Anas crecca
Sapsucker, Yellow-bellie		Thrush, Hermit	Catharus guttatus
Scaup, Greater	Aythya marila	Thrush, Swainson's	Catharus ustulatus
Scaup, Lesser	Aythya affinis	Thrush, Varied	Ixoreus naevius
Screech-Owlsee Owl, W	estern Screech=	Towhee, Rufous-sided	Pipilo erythrophthalmus
Shrike, Northern	Lanius excubitor	Vireo, Hutton's	Vireo huttoni
Siskin, Pine	Carduelis pinus	Vireo, Solitary	Vireo solitarius
Snipe, Common	Gallinago gallinago	Vireo, Warbling	Vireo gilvus
Salitaina Toursondis	Myadestes townsendi	Vulture, Turkey	Cathartes aura
Solitaire, Townsend's		Warbler, Black-and-white	
Sparrow, Chipping	Spizella passerina	Warbler, Black-throated	Gray Dendroica nigrescens
Sparrow, Clay-colored	Spizella pallida	Warbler, Black-throated	Groon Dendroica virens
Sparrow, Fox	Passerella iliaca		Dendroica pensylvanica
Sparrow, Golden-crowned	Zonotrichia atricapilla	Warbler, Chestnut-sided	
Sparrow, House	Passer domesticus	Warbler, Connecticut	Oporornis agilis
Sparrow, Lark	Chondestes grammacus	Warbler, Hermit	Dendroica occidentalis
Sparrow, Lincoln's	Melospiza lincolnii	Warbler, MacGillivray's	Oporornis tolmiei
Sparrow, Sage	Amphispiza belli	Warbler, Orange-crowned	Vermivora celata
Sparrow, Savannah	Passerculus sandwichensis	Warbler, Palm	Dendroica palmarum
Sparrow, Song	Melospiza melodia	Warbler, Townsend's	Dendroica townsendi
Sparrow, Vesper	Pooecetes gramineus	Warbler, Wilson's	Wilsonia pusilla
Sparrow, White-crowned	Zonotrichia leucophrys	Warbler, Yellow	Dendroica petechia
Sparrow, White-throated	Zonotrichia albicollis	Warbler, Yellow-rumped	Dendroica coronata
spruce, Sitka	Picea sitchensis	Waxwing, Cedar	Bombycilla cedrorum
Starling, European	Sturnus vulgaris	Wigeon, American	Anas americana
stint spp.	Calidris spp.	willow spp.	Salix spp.
Stint, Temminck's	Calidris temminckii	Woodpecker, Downy	Picoides pubescens
Swallow, Bank	Riparia riparia	Woodpecker, Hairy	Picoides villosus
Swallow, Barn	Hirundo rustica	Woodpecker, Lewis'	Melanerpes lewis
Swallow, Cliff	Hirundo pyrrhonota	Woodpecker, Pileated	Dryocopus pileatus
Swallow, Northern		Woodpecker, Red-headed	Melanerpes erythrocephalu
Rough-winged	Stelgidopteryx serripennis	Wood-Pewee, Westernse	e Pewee, Western Wood-
Swallow, Tree	Tachycineta bicolor	Wren, Bewick's	Thryomanes bewickii
	Tachycineta thalassina	Wren, House	Troglodytes aedon
Swallow, Violet-green Swan, Tundra	Cygnus columbianus	Wren, Marsh	Cistothorus palustris
Swift, Black	Cypseloides niger	Wren, Winter	Troglodytes troglodytes
	Chaetura vauxi	Wrentit	Chamaea fasciata
Swift, Vaux's		Yellowlegs, Greater	Tringa melanoleuca
Tanager, Scarlet	Piranga olivacea	Vollowlogs Losser	Tringa flavipes
Tanager, Western	Piranga ludoviciana	Yellowlegs, Lesser	Geothlypis trichas
		Yellowthroat, Common	deorniypis riirnas

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A Little Knowledge Goes a Little Way

We know only a little about the comings and goings of the birds around us, and birds are only a small segment of Nature.

Perhaps we would better appreciate the *Mystery* of Nature if we could comprehend how little we really know.

RB

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