# 

WATERBIRD RECORDS FOR THE SILETZ RIVER AND SOME CREEKS IN THE SILETZ/LOGSDEN AREA OF LINCOLN COUNTY

Bob Llewellyn, 1821 Moonshine Park Road, Logsden, Oregon 97357 Range D. Bayer, P.O. Box 1467, Newport, Oregon 97365

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ABSTRACT.--This article is based on a total of 204 observations, many of which were censuses.

Between Siletz River Mile (RM) 50.0 and 50.6, Llewellyn made 151 observations of waterbirds during 1981-1993. He noted a total of 12 species; most were seen during several years. Hooded and Common mergansers and American Dippers nested or were seen with young.

Llewellyn and other observers also made 37 other Siletz River observations in the Siletz/Logsden area. Most of the same species were seen as between RM 50.0 and 50.6, but one Bald Eagle was also noted feeding on a salmon carcass.

Llewellyn and other observers made 16 observations of creeks in the Siletz/Logsden area. American Dippers were the most common and widespread species, and they also nested.

For all sites, the individual observations are given.

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INTRODUCTION AND AUTHOR'S DIVISION OF LABOR

This article is separated into three chapters, based on the location and number of observations.

Bob Llewellyn made all the observations for Chap. 1 and many of those in Chaps. 2 and 3. Other contributors are cited in the Tables for Chaps. 2 and 3.

Llewellyn also commented on the December 1992 and July 1993 drafts.

Bayer compiled Llewellyn's and other people's field notes into the present format, prepared various drafts of these Chapters for publication, and took the photographs.

This article only includes waterbirds: loons, grebes, tubenoses, pelicans, cormorants, herons, egrets, waterfowl, coots, raptors (including eagles), cranes, coots, shorebirds, gulls, terns, alcids, kingfishers, and dippers. This Chapter does not include swallows, blackbirds, or other marsh or semi-aquatic birds.

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#### 1-A. INTRODUCTION & LLEWELLYN'S BIRDING INFLUENCES

#### 1-A-1. OPENING

In 1981, Bob Llewellyn began recording birds along the Siletz River near his home near Logsden, an unincorporated community (Fig. 1.1).

# 1-A-2. LLEWELLYN'S BIRDING INFLUENCES

Llewellyn has made many observations in the Siletz/Logsden area that are included not only in this article but also in several other articles in this issue of Journal of Oregon Ornithology.

Bayer believes that it is important to learn something about what has motivated observers such as Llewellyn, so he has urged others (e.g., Darrel Faxon in Faxon and Bayer 1993:72-74; Floyd Schrock in Schrock and Bayer 1994) and Llewellyn to overcome their reticence and share their background with us. The following account is about Bob Llewellyn.

Bob was born in 1950 in Pennsylvania into a Quaker family and was raised in a town just north of Philadelphia. His father Robert taught English literature at Temple University, and his mother Jane has been an active volunteer, especially in the American Friends Service Committee. Bob has two older brothers (Mark and Terry) and one younger brother (Phil).

Bob and his wife Martha Doldt moved to Lincoln County in 1977, and they have a daughter, Chelsea, who was born in 1980. For several years after arriving in Lincoln County, Bob was a self-employed gardener and landscaper, and after Chelsea's birth, the name of his business was "The Chelsea Gardening Company," which was prominently painted on the sides of his pickup. In the fall of 1991, Bob began working full-time for Oregon Coast Aquarium as the Head Groundskeeper. Bob has been active in the Logsden community and also enjoys playing music on the banjo, guitar, and harmonica.

Bob wrote the following account on 8 December 1993 [Bayer's comments are in brackets]:

"I have been interested in nature for as long as I can remember. My friend Wright Brady and I were the nature-boys of our neighborhood in the 1950's. We put up bird houses for wrens and bluebirds and flying squirrels moved in! We kept minnows and crawdads and baby snapping turtles in aquariums. We raised worms in boxes and spent hours a' field and a' fishing.

"I think it was around 7th grade that I started becoming particularly interested in birds. My Mother grew up around nature lovers in Ithaca, New York, home of Cornell University. She was best buddies with a daughter of Arthur A. Allen, an early birder and pioneer of color photography of birds [he was also an ornithologist and a co-founder of the Cornell Laboratory of Ornithology, Leahy 1982:25-26]. She recalls his pet Great Horned Owl quite vividly. She lived next door to Louis Agassiz Fuertes [a renowned painter of birds, Leahy 1982:310-311], whom she knew of as "Uncle Louie,"and whose rendition of a Great Blue Heron now adorns my right arm, in tattoo form. We kids spent many hours during vacations at Sapsucker Woods and the Cornell Laboratory of Ornithology soaking up the sights and sounds of this world famous bird center.

"Anyway, in around the 7th grade, I had a little black looseleaf notebook, and I kept track of the natural happenings of my area--nesting birds, bird behavior, insect observations, too. And I joined the Wyncote Bird Club, in my hometown of Wyncote, Pennsylvania. Once a month, I'd walk to the Junior High School Auditorium and listen to the "old" folks discuss sightings and so forth. I also went on early morning bird walks to a small bird sanctuary about three miles away in Jenkintown, Pennsylvania. I remember tagging along after two older men who wore L.L. Bean boots and who obviously enjoyed just being out in the woods on a frosty morning as well as seeing what birds might be about.

"Also, in about 9th grade, my older brother Terry taught me how to do darkroom work, and I soon was taking and making black and white photos of the birds at our feeder--chickadees, Tufted Titmice, and White-throated Sparrows. I even did a little work from a blind of Ring-necked Pheasants eating grain and then of Red-winged Blackbirds and Northern Mockingbirds on their nests. The mockers would fly at the camera lens when I stuck it through the slit in the blind material! They were nesting in a blackberry patch of a farm where I worked for two summers, and I would photograph them before work or at lunchtime. It was an idyllic, old-style fruit and vegetable farm in New Jersey, where having was still done by hand with pitchforks.

"Then in a Quaker boarding High School near Philadelphia, I joined the Bird Club and became President of it for two years. We met every week, I believe, and watched movies I would send away somewhere for. We also took field trips with our fearless faculty advisor, Berdette Bernard. He took us to wonderful places like Bombay Hook in Delaware to see geese and ducks, Brigantine in New Jersey [an impressive refuge, Leahy 1982:106], and Washington's Crossing in Pennsylvania to see spring warblers and wild flowers. Also in High School, I bought a cheap 400 mm Spiratone lens and did more bird photography.

"Later I went to attend Cornell University, where my Mother had grown up and my Grandfather Ralph Hosmer (who had worked with Gifford Pinchot) had taught forestry. I took several bird courses with Tom Cade and his assistant, Ben King. In fact, I took all the bird courses Cornell had to offer. I majored in Wildlife Conservation and Forestry and minored in General Agriculture and graduated with a Bachelor of Science degree in 1971.

"In 1977, my wife Martha Doldt and I spent seven luxurious months travelling from Massachusetts to Oregon, birding all the way. We went through the Smokies down to Louisiana, over to East Texas and the Gulf of Mexico, then out to Arizona, and on up through the Rockies. It was simply wonderful.

"Then we landed in Newport in December 1977. And the rest is history. I saw an Emperor Goose on the rocks by Jump-off Joe in Newport [Lincoln County] and had to report it to some one! So I met Range, and he drew me into the flock of local birders in Lincoln County.

"Back East things are pretty well mapped out and recorded and have been studied for the last 200 years--but out here in Lincoln County, Oregon, that's just not the case at all! Here, there are very few records, and so all of our data are valuable, even the seemingly common and mundane. This is exciting to me. So I love to add material to Range's data base. It reminds me of New England back in the days of Thoreau and Emerson. The birding community here is unusually active, and very open to newcomers.

"So, in a nutshell, I like birds, always have, and always will. They give me great pleasure, from the little wrens and kinglets on up to the herons and egrets and pelicans and eagles."

1-B. STUDY AREA

Location: Township 9S, Range 9W, Section 29 Area Studied: about 7-10 ac (3-4 ha) Habitat(s) Studied: River Elevation: about 175-200 ft (53-61 m) Distance to Coastline: 12.2 mi (19.8 km).

#### 1-B-1. GENERAL DESCRIPTION

From three observation sites (including one swimming hole, see Fig. 1.2) along the eastside of the Siletz River, Llewellyn observed portions of the River between about River Mile 50.0 and 50.6 while walking to and from his home (Fig. 1.1).

The Siletz River in this area has a relatively narrow band of riparian vegetation (including willow, vine maple, bigleaf maple, and alder)(see Fig. 1.2) with farmland nearby. Based on the 1984 Euchre Mtn. 7.5' Quadrangle map, the River is roughly 175 ft (53 m) or less in width, but this map is too large in scale to estimate the width accurately. In any case, the River is not very wide; other views of the River in this vicinity are shown in Figs. 2.1-2.3.

Llewellyn estimated that the water depth of the Study Area was up to 12 ft (3.7 m) in summer and up to 18 ft (5.5 m) during floods.

Stream flows at the town of Siletz are summarized in Friday and Miller (1984:150) and Moffatt et al. (1990:302). Lamprey eels appear to have greatly decreased in abundance in the Siletz River in recent years (Lerma 1993).

#### 1-B-2. HUMAN DISTURBANCE

In summer, the upper portion of the Study Area was commonly used for swimming, but the lower portion was rarely visited. Fishing was common, but boating was rare. Hunting did not occur here.

Great Blue Herons and Belted Kingfishers were wary and often flew away as Llewellyn approached. Other birds on the water would usually swim or fly away.

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#### 1-C-1. METHODS

Llewellyn tried to sneak up quietly to the River, so he probably saw most waterbirds before they left, but some may still have been missed. He usually spent about five minutes each visit at different times of the day observing birds, usually without optical aids such as binoculars, but he did not record the time of his visits.

Although there were a total of 151 observations, they were scattered over 13 years (Table 1.1). The only years with 20 or more observations were 1985 and 1990, and in five years there were fewer than 10 observations (Table 1.1).

The number of observations per month varied widely and was often low (Table 1.1). The greatest total number (33) of observations was in April, and there were usually few in June-November (Table 1.1). The only months with five or more observations were April 1983, January 1985, and April 1989 (Table 1.1).

#### 1-C-2. FREEZING WEATHER

Temperatures are not available for the Logsden area, so those for Newport through 1992 are arbitrarily used to test if freezing is correlated with the presence or absence of birds. Because Newport is along the coast where temperatures are milder, if it was freezing at Newport, it was undoubtedly also doing so at Logsden, but if it was freezing in Logsden it may not have been in Newport. As of July 1993, the 1993 Newport data are not yet available.

It may be coincidental that birds are present or absent during freezing, so their presence or absence can only be considered to be correlated with freezing, not necessarily caused by it.

1-D. TOLERABLE OBSERVATION EFFORT (TOE)

The term Tolerable Observation Effort (TOE) is used to emphasize that if certain criteria are attained, effort is judged Tolerable (i.e., moderately good or passable), so that observations can be considered as presence/absence data, not just as presence data (Bayer 1993:14-15). 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, common species and, perhaps, some of the more inconspicuous or uncommon species. This is discussed in more detail in Bayer (1993:10-16).

A TOE month is:

 a month with three or more systematic observations by an experienced observer;

- or 2) a month when the number of recorded taxa was 60% or more of the maximum for three or more years for that month, and the observer tried to record all bird taxa present;
- or 3) a month when the observer's effort appears systematic enough to record all taxa present, although the observer has less than three years of observations.

With criterion #1, there would be 16 TOE months (Table 1.1), but Bayer chose to use criterion #2 with 33 TOE months (i.e., see asterisked months in Table 1.2). This choice is not to increase the number of TOE months, but to reflect the number of taxa recorded monthly, which Bayer feels is a better measure of the results of effort than just the number of observations. This distinction is important because observations here were not always systematic.

These different criteria give different results. For example, some months that would be TOE by criterion #1 don't qualify by criterion #2 (e.g., June 1984, February 1985, April 1985, July 1988, December 1992, and April 1993)(Tables 1.1 and 1.2).

1-E. SHORTCOMINGS OF OBSERVATIONS

1-E-1. INTRODUCTION

In any ornithological undertaking, there are shortcomings, and this is no exception. Many possible shortcomings are examined in Bayer (1993:28-31); here, only the most relevant ones are examined.

#### 1-E-2. SHORTCOMING: SEMI-AQUATIC BIRDS NOT INCLUDED

Only waterbirds are included here, not marsh or other birds that may frequent or forage along this part of the Siletz River. Thus, swallows and Red-winged Blackbirds are arbitrarily excluded. This was done because censusing swallows, blackbirds, and other such semi-aquatic birds was not considered to be very accurate and was also not routinely done.

# 1-E-3. SHORTCOMING: NO RECORDS OF TIME OF DAY OR DURATION OF OBSERVATIONS

Llewellyn did not record the time of day when he made observations. But time of day can make a difference in whether or not some species may have been present or observed.

It would also have been helpful to record the duration of observations, so that it is clear that they were consistently of the same length and that a shortage or absence of birds was not a result of too brief of observations.

#### 1-E-4. SHORTCOMING: LOW OBSERVATION EFFORT

Llewellyn made few or no observations during most months (Table 1.1). Thus, the seasonality of many bird species is not as clear as it would have been if there had consistently been three or more observations/month.

#### 1-E-5. SHORTCOMING: NOT ALWAYS RECORDING AN ABSENCE OF BIRDS

It is as important to know when birds are absent as when they are present, so that bird usuage of a site is clearer. However, it is easy to mistakenly feel that there is no point in reporting when no birds were present.

Although Llewellyn occasionally noted when birds were absent (Table 1.4), there were also other times when he saw no birds but didn't record it. For example, he usually observed the River when going to and from his Beaver Pond, but there were 74 fewer observations at the River (Table 1.1, Llewellyn et al. 1994:111). Although these missing observations could all be attributed to no birds being present at the River, Llewellyn notes that there were also some observations when birds were present but that he didn't record them. In any case, the observations given in this article are probably somewhat biased in showing when birds were present, not when they were absent.

#### 1-E-6. SHORTCOMING: OVERLOOKING SPECIES THAT WERE PRESENT

Although Llewellyn tried not to disturb any birds when he arrived, some waterbirds (especially herons and kingfishers) may have flown away, so that they were missed during his observations.

#### **1-E-7.** SHORTCOMING: NOT RECORDING ABUNDANCE

Llewellyn usually only recorded what bird species were present, not how many there were (Table 1.4). Thus, it is not possible to set a baseline for population numbers or to determine

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Llewellyn saw a total of 12 waterbird species, with a range of 1-9 species/year (Table 1.2). The greatest number of species was seen in 1985 when Llewellyn also had the most observation days and total records (Tables 1.1 and 1.2).

Most species (64%) were recorded in at least four of the six years when 60% or more of the yearly maximum number of species was recorded (Table 1.3). The four most frequent species in these years included Hooded and Common mergansers, Belted Kingfisher, and American Dipper (Table 1.3, section 1-G).

Few species were usually recorded each visit (Table 1.1). The only months with four or more taxa/observation were June and July 1985 and June 1986 (Table 1.1).

The range in the maximum number of species seen each month was 2-7 (Table 1.2). The only two months with five or more species are July 1985 and June 1986, which could mean that the greatest number of species may be present in June and July, but many more observations are needed during June-November to confirm this (Table 1.2).

Hooded and Common mergansers and American Dippers were observed nesting at or rearing broods of young along this portion of the River (section 1-G). However, searches for nests may have revealed that Green-backed Herons and Spotted Sandpipers also nested here, since they were often present during their nesting season (section 1-G).

1-G. TAXA ACCOUNTS

#### **1-G-1.** INTRODUCTION

These records are the maximal number of waterbirds recorded each month and are compiled from Table 1.4. A year in which a taxon was not recorded is listed if there is at least one TOE month that year.

Monthly Maximum Codes:

- (number)=maximum number of birds counted during observations; a "O" (zero) is put in front of 1-9 (e.g., 06) to enhance readability of when a taxon was present or it would otherwise be obscured by all the "?"'s.
- ..=taxon not recorded although there was
  Tolerable Observation Effort (TOE)
  (section 1-D), so the taxon should have been
  observed, if it was present. A ".." is used
  instead of "O" (zero) to enhance readability
  of when a taxon appears to have been absent.
- ?=taxon not recorded, but observation effort was
   less than needed for TOE.
- A.=taxon present, but not counted, during 1-15th of a month; it wasn't noted later.

.Z=taxon present, but not counted, during 16th-end of a month; it wasn't noted earlier. AZ=taxon present, but not counted, during

1-15th and 16th-end portions of a month.

#### 1-G-2. AVERAGE MONTHLY FREQUENCY

This is only calculated if there were at least three years of observations.

- FREQ=average relative monthly frequency of occurrence of a taxon (e.g., Bayer 1993:20). The relative frequency is expressed by a number in deciles, "..", "+", "X", or "?", depending on the presence or absence of a taxon and the adequacy of observation effort.
- 1-10=average monthly frequency in deciles. If there were at least three years of TOE for a month (Table 1.2), this was calculated by dividing the number of TOE years in which a taxon was recorded by the total number of TOE years for that month. The result was then multiplied by 10 and rounded off to the nearest whole number.
- ..=decile of zero, and the taxon was also not recorded in non-TOE months. A ".." is used instead of a "O" to enhance readability of when a taxon appears to have been absent.
- +=if a decile was calculable (i.e., there were three or more years with TOE for that month), it was zero, but the taxon was recorded during one non-TOE month; if a decile was not calculable, the taxon was only recorded during one month (whether TOE or not).
- X=if a decile was calculable (i.e., there were three or more years with TOE for that month), it was zero, but the taxon was recorded during two or more non-TOE months; if a decile was not calculable, the taxon was recorded during two or more months (whether TOE or not).
- ?=the taxon was not recorded but there were no observations or observation effort may have been inadequate to detect it.

1-G-3. DOUBLE-CRESTED CORMORANT

Although this species was once noted farther upstream (Table 2.4) and many people consider this species to be common in freshwater, Llewellyn never saw any cormorants here.

														_
	1-G	-4.	G	REA'	T BL	JUE	HE	RON	(M/	AX I	Bird	ls/Mc	onth)	
Year	Ja	Fb	Mr	Ap	Мy	Jn	Jl	Ag	Sp	0c	Nν	De		
1982	?	?	?	?	••	?	?	?	?	?	?	?		
1983	?	?	?	••	?	?	?	?	?	?	?	?		
1984	?	?	••	••	••	?	?	• •	?	?	?	?		
1985		?	••	?	?	?	AZ	••	?	?	?	?		
1986	?	?	?	-		.Z	?			?	?	Α.		
1987	?	?	••	?	?	?	?	?		?	?	••		
1988	?	?	?	?	?	?	?		?	?	?	••		
1989	?	?		••	••	?	?	••	?	• •	?	?		
1990	?		••	••	••	?	?	?	01	••	?	••		
1991	01	?	••	01	••	?	?	?		?	••	?		
1992	?	?	?	?	?	?	?	?	?	?	?	?		
1993	01	?	••	?	?	?	?	'?	?	?	?	?		
FREQ	7	?	••	+	••	+	+	••	+	?	?	3		
	Thi	s s	pec	ies	ma	y h	ave	be	en	pre	sen	t moi	re but	
was r	niss	ed	bec	aus	e ti	hes	e h	ero	ns i	are	so	wary	y.	
	1 0	с С			т с		т							

#### 1-G-5. GREAT EGRET

In spite of all the observations, no egrets were ever recorded here.

	1-6	-6.	G	REE	N-B/	ACKI	ED ł	HER(	DN (	(MA)	( B·	irds	;/Month)
Year	Ja	Fb	Mr	Ap	Мy	Jn	Jl	Ag	Sp	0c	Νv	De	
1982	?	?	?	?	••	?	?	?	?	?	?	?	
1983	?	?	?	••	?	?	?	?	?	?	?	?	
1984	?	?	••	••	••	?	?	••	?	?	?	?	
1985	••	?	••	?	?	Α.	Α.	••	?	?	?	?	
1986	?	?	?	?	?	.Z	?	?	?	?	?	••	
1987	?	?	••	?	?	.Z	?	?	?	?	?	••	
1988	?	?	?	?	?	?	Α.	?	?	?	?	••	
1989	?	?	••	••	••	?	.Z	••	?	••	?	?	
1990	?	••	••	••	••	?	?	?	••	••	?	••	
1991	••	?		?	••	?	?	?	?	?	••	?	
1992	?	?	?	?	?	?	?	?	?	?	?	?	
1993	••	?	••	?	?	?	?	?	?	?	?	?	

FREQ .. ? .. .. X X .. ? ? ? ..

It appears that they mainly used this site in the late nesting season; alternatively, they may have been very wary in the early nesting season and were then missed.

1-G-7.       WOOD DUCK (MAX Birds/Month)         Year       Ja Fb Mr Ap My Jn Jl Ag Sp Oc Nv De         1982       ? ? ? ? ? ? ? ? ? ? ? ?         1983       ? ? ? ? ? ? ? ? ? ? ? ?         1984       ? ? ? ? ? ? ? ? ? ? ?         1985       ? ? ? ? ? ? ? ? ? ?         1986       ? ? ? ? ? ? ? ? ? ? ? ?         1987       ? ? ? ? ? ? ? ? ? ? ? ? ?         1988       ? ? ? ? ? ? ? ? ? ? ? ? ? ?         1989       ? ? ? ? ? ? ? ? ? ? ? ? ? ? ?         1990       ? ? ? ? ? ? ? ? ? ? ? ?         1991       ? ? ? ? ? ? ? ? ? ? ? ? ? ?         1992       ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ?
1982       ? <td?< td=""> <td?< td=""></td?<></td?<>
1983       ? <td?< td=""> <td?< td=""></td?<></td?<>
1984       ? ?       ? ? ? ? ? ? ? ? ? ? ? ?         1985        ? ? ? ? ? ? ? ? ? ? ? ? ?         1986       ? ? ? ? ? ? ? ? ? ? ? ? ? ?         1987       ? ? ? ? ? ? ? ? ? ? ? ? ?         1988       ? ? ? ? ? ? ? ? ? ? ? ? ?         1989       ? ? ? ? ? ? ? ? ? ? ? ? ? ?         1990       ?        ? ? ? ? ? ? ? ? ? ? ? ?         1991        ?       ? ? ? ? ? ? ? ? ? ? ?         1992       ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ?
1985        ?       ?        ?<
1986       ?
1987       ?
1988       ?
1989       ?        ?
1990       ?       ? ? ? ? ? ? ? ?       ?
1991        ?        ?       ?       ?       ?       ?         1992       ?       ?       ?       ?       ?       ?       ?       ?       ?
1992 ? ? ? ? ? ? ? ? ? ? ? ?
1993 . ? . ? 02 ? ? ? ? ? ? ? ?
FREQ ? + ? ? ? ? ?
Wood Ducks were rare here in spring.

	1-G-	-8.	M/	ALL/	٩RD	(M/	AX I	Bird	ls/I	lon	th)	
Year	Ja	FЬ	Mr	Ap	Мy	Jn	Jl	Ag	Sp	0c	Nν	De
1982	?	?	?	?	••	?	?	?	?	?	?	?
1983	?	?	?	••	?	?	?	?	?	?	?	?
1984	?	?	••		••	?	?	••	?	?	?	?
1985	10	?	••	?	?	?	••	••	?	?	?	?
1986	?	?	?	?	?	••	?	?	?	?	?	••
1987	?	?	••	?	?	?	?	?	?	?	?	••
1988	?	?	?	02	?	?	?	?	?	?	?	••
1989	?	02	••	••	••	?	?	••	?	••	?	?
1990	?	••	••	••	••	?	?	?	••	••	?	••
1991		?	••	?	••	?	?	?	?	?	••	?
1992	?	?	?	?	?	?	?	?	?	?	?	?
1993		?	••	?	?	?	?	?	?	?	?	?

# FREQ 3 + .. + .. ? ? .. ? ? ? ..

Mallards were uncommonly present only in late winter and early spring.

It is unclear if the 10 counted on 26 January 1985 may have been a result of cold temperatures, but the two noted in February 1989 occurred during freezing weather (Table 1.4).

*												
	1-G	-9.	Bl	JFFL	EHI	ead	(M/	AX I	Bird	ds/I	Mon	th)
Year	Ja	Fb	Mr	Ap	My	Jn	Jl	Ag	Sp	0c	Nν	De
1982	?	?	?	?		?	?	?	?	?	?	?
1983	?	?	?	••	?	?	?	?	?	?	?	?
1984	?	?	••	••	••	?	?	••	?	?	?	?
1985		?	.Z	?	?	?	••	••	?	?	?	?
1986	?	?	?	?	?	••	?	?	?	?	?	••
1987	?	?	••	?	?	?	?	?	?	?	?	••
1988	?	?	?	?	?	?	?	?	?	?	?	••
1989	?	?	••	••	••	?	?	••	?	••	?	?
1990	?	••	••	01	••	?	?	?	••	••	?	01
1991	••	?	06	?	••	?	?	?	?	?	••	?
1992	?	?	?	?	?	?	?	?	?	?	?	?
1993	01	?	02	?	?	?	?	?	?	?	?	?

FREQ 3 ? 4 3 .. ? ? .. ? ? ? 3

Buffleheads appear to be uncommon in winter and early spring.

	1-G	-10	. 1	100	DED	ME	RGAN	<b>I</b> SEF	R (N	1AX	Biı	rds/	Mont	;h)
Year	Ja	Fb	Mr	Ap	Мy	Jn			Sp	0c	Nν	De		
1982	?	?	. ?	02	Α.	?	?	?	?	?	?	?		
1983	?	?	?	02	?	?	?	?	?	?	?	?		
1984	?	?	••	••	••	?	?	••	?	?	?	?		
1985	.Z	?	••	?	?	01	٠Z	••	?	?	?	?		
1986	?	?	?	?	?	.Z	?	?	?	?	?	01		
1987	?	?	••	?	?	?	?	?	?	?	?	••		
1988	?	?	02	?	?	?	?	?	?	?	01	02		
1989	02	?	••	01	••	?	?	••	?	••	?	?		
1990	05	••	02	02	01	?	?	?	• •	••	?	01		
1991	••	?	••	?	••	?			02	?	••	?		
1992	?	?	?	?	01	?	-	?	?	?	?	?		
1993	03	?	••	?	?	?	?	?	?	?	?	?		
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FREQ	- 7	?	1	8	4	X	+	••	+	?	+	8		
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monti	hc ·	i + 1	na c	of	ton	nri		nt f	thri	וסער	hou	t tþ	ne ve	Par

months, it was often present throughout the year and is one of the species most apt to be found here. A female with young was noted in June 1986.

------1-G-11. COMMON MERGANSER (MAX Birds/Month)1-G-14. SPOTTED SANDPIPER (MAX Birds/Month)Ja Fb Mr Ap My Jn Jl Ag Sp Oc Nv DeYear Ja Fb Mr Ap My Jn Jl Ag Sp Oc Nv De Year Ja Fb Mr Ap My Jn Jl Ag Sp Oc Nv De ? ? ? 02 A. ? ? ? ? ? ? ? ? 1982 1983 ? ? ? AZ ? ? ? ? ? ? ? ? ? ? ? .Z .Z .. ? ? .. ? ? ? ? ? 1984 1985 .Z ? .. ? ? ? 24 .Z ? ? ? A. 1986 A. ? ? 13 ? .Z ? ? ? ? ? .. 1987 A. ?.. ? ? ? ? ? ? ? 01 1988 ? ? ? 02 ? 01 06 ? ? ? ? 01 ? ? 03 03 .. ? ? 02 ? .. ? ? 1989 

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 1993 .. ? 02 02 ? ? ? ? ? ? ? ? ? FREQ 7 + 7 10 4 X X 7 ? + + 5 Although absent some TOE months, this species was usually present throughout the year. The 24 birds counted in July 1985 and 13 birds counted in April 1986 included young. A female with young was also recorded in June 1986, July 1988, and July 1991. 1-G-12. OSPREY (MAX Birds/Month) Year Ja Fb Mr Ap My Jn Jl Ag Sp Oc Nv De 1982 1983 1984 1985 •• 1986 ? ? ? ? ? . ? ? ? ? ? .. ? ? .. ? ? ? ? ? ? ? ? .. ? ? ? ? ? ? 01 ? ? ? ? .. 1987 1988 ? ? .. .. ? ? .. ? .. ? ? 1989 1990 ? .. .. .. .. ? ? ? .. . ? .. 

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 <td FREQ .. ? .. 3 .. ? + .. ? ? ? .. Osprey appear to be a vagrant here. 1-G-13. BALD EAGLE In spite of all the observations, no Bald Eagles were ever seen here.

1982 ? ? ? ? . A. ? ? ? ? ? ? 1983 ? ? ? . ? ? ? ? ? ? ? ? 1983 

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 1993 .. ? .. ? ? ? ? ? ? ? ? ? FREQ .. ? .. .. ? ? .. ? ? + .. Snipe appear to only be a fall vagrant here. 1-G-16. BELTED KINGFISHER (MAX Birds/Month) Year Ja Fb Mr Ap My Jn Jl Ag Sp Oc Nv De 

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In spite of all the observations, Llewellyn never saw this species here.

	1 <b>-</b> 6	-18	. /	AME	RIC	AN C	DIPI	PER	( M/	AX E	Bird	ds/N	Nonth)
Year	Ja	FЬ	Mr	Ар	Мy	Jn	J1	Ag	Sp	0c	Νv	De	
1981	?	?	?	?	?	?	?	?	?	?	Α.	?	
1982	٠Z	?	?	?	••	?	?	?	?	?	?	.Z	
1983	?	Α.		ΑZ		?	?	?	?	?	?	?	
1984	?	?	AZ	ΑZ	ΑZ	Α.	.Z	٠Z	?	?	Α.	?	
1985	ΑZ	.Z	Α.	ΑZ	?	Α.	.Z	.Z	?	Α.	?	?	
1986	?	.Z	?	٠Z	?	ΑZ	?	?		?	?	ΑZ	
1987	?	?	Α.	Α.		?	?	?	?	?	?	01	
1988	?	?	?	?	?	?	?	?	?	?	?	••	
1989	?	?	.Z	ΑZ	Α.	?	.Z	.Z	?	Α.	?	.Z	
1990	Α.	Α.	.Z	?	.Z	?	02	?	01	01	?	01	
1991	Ά.	Α.	Α.	?	02	?	?	?	?	?	Α.	?	
1992	?	.Z	Α.	٠Z	?	?	?	?	?	?	?	?	
1993	••	?	••	?	?	?	?	?	?	?	?	?	

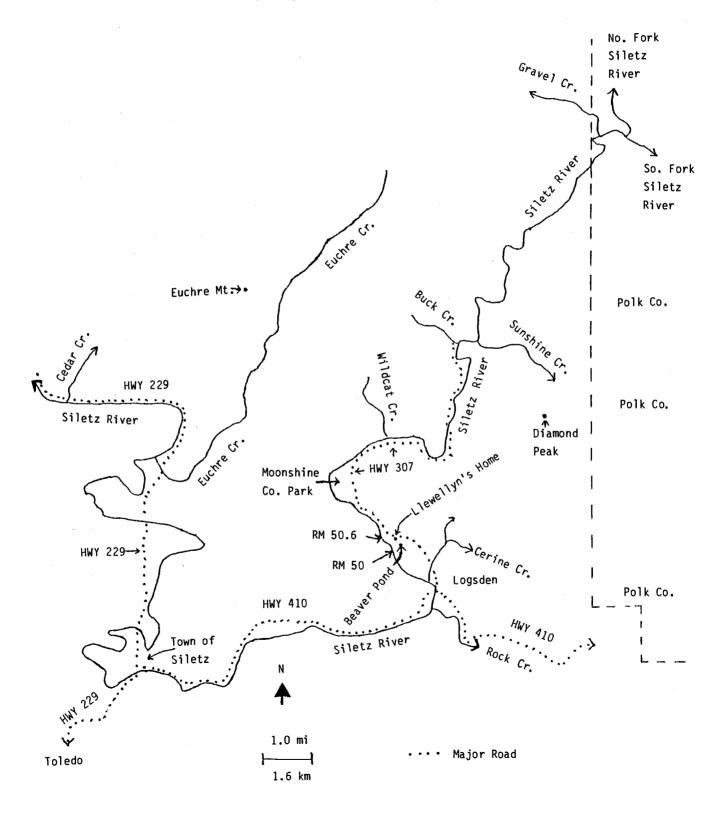
FREQ 7 X 9 10 8 X X 10 + X X 8 Dippers appear to be the species most often found at this site, but they were missed during some TOE months.

Dippers were singing in January 1985, March 1987, and February and December 1990; at least one was carrying nest material in late January 1985.

Llewellyn thought that they nested across the River from his swimming hole observation site, but the nesting dates were not recorded.

#### 1-H. FIGURES AND TABLES

Fig. 1.1. Siletz River and creeks noted in Chaps. 1-3 in the Siletz/Logsden area. The location of Siletz River Mile (RM) 50 is based on the 1984 Euchre Mtn. 7.5' Quadrangle map; Llewellyn's home is one of the homes near the western edge of the "Upper Farm" on this Quadrangle; the West Beaver Pond is noted by a "Per" (permanent) on this Quadrangle.



Chap. 1. River Mile 50.0-50.6

Fig. 1.2. View south at the swimming hole at about RM 50.3 that was one of Bob Llewellyn's observation sites along the east side of the Siletz River. Note that both sides of the River are forested with a mixture of coniferous and deciduous trees. Also somewhat visible is wood debris along the shore to the left of the photo, the fallen log, and the shortly vegetated gravel bar in the middle. (Photographed during sunny afternoon of 19 August 1990 with a "normal," 1x lens.)



**Table 1.1.** Number of Observations and number of Taxa/Observation between RM 50.0 and 50.6 along the Siletz River. There was one Observation per day. These data were calculated from Table 1.4.

Codes: N=number of Observations/Month SD=Standard Deviation -=not applicable Yrs=number of years with at least one observation MAX=maximum (maximum of Means given only if N is or more.

r	Jan	uary. Mean	• • • •	Range	Feb	ruary Mean	SD Range	Mar	ch Mean	• • • • • • • • • •	Apr	il Mean	• • • • • • • • • • •	May	••••	
							SU Kange		mean 	SD Kange		riean	SD Range	N	Mean	SD Rang
1	0	~	-	-	0	-		0	-		0	-		0	-	
2	1	1	-	1	0	-		0	-		1	2	- 2	1	2	- 2
3	0	-	-	-	1	1	- 1	2	1.0	01	7	1.1	0.4 1-2	1	1	- 1
4	0	-	-	-	0	-		3	1.0	01	4	1.5	1.0 1-3	3	1.3	0.6 1-2
5	8	1.1	0.8	0-2	3	0.3	0.6 0-1	2	1.0	01	4	1.0	0.8 0-2	1	1	- 1
6	1	1	-	1	1	1	- 1	0	-		1	2	- 2	0	-	
7	1	1	-	1	0	-		2	1.0	01	1	1	- 1	1	1	- 1
3	0	-	-	-	0	-		1	1	- 1	1	2	- 2	0	-	
)	1	1	-	1	1	1	- 1	1	2	- 2	5	1.4	0.5 1-2	1	2	- 2
)	1	2	-	2	2	1.0	01	2	1.5	0.7 1-2	4	1.5	0.6 1-2	2	2.0	1.4 1-3
1	2	1.5	0.7	1-2	1	1	- 1	3	1.0	01	1	2	- 2	2	1.0	01
2	0	- 1	-	-	1	1	- 1	1	1	- 1	1	1	- 1	1	1	- 1
3	2	1.5	0.7	1 <b>-</b> 2	2	0	0 0	4	0.5	1.0 0-2	3	0.3	0.6 0-1	1	1	- 1
rs	8	-	-	-	7	-		10	-	-	12	-		10	_ '	
UM	17	-	-	-	12	-		21	-		33	-		14	-	
AX	8	1.5	-	2	3	1.0	- 1	4	1.5	- 2	7	1.5	- 3	3	2.0	- 3

	Tax	a/Obs	ervation												
	Jun	e	• • • • • • • • • • •	Jul	y	•••••	Aug	ust		Sep	tembe	r	0ct	ober	
Yr	N	Mean	SD Range	N	Mean	SD Range	N	Mean	SD Range	e N	Mean	SD Range	N	Mean	SD Range
81	0	-		0			0			0			0		
82	1	1	- 1	0	-		0	-		0	-		0	-	
83	0	-		0	-		0	-		0	-		0	-	
84	3	1.0	01	2	1.0	01	1	2	- 2	0	-		0		
85	1	4	- 4	2	4.5	2.1 3-6	1	3	- 3	0	-		1	1	- 1
86	2	4.0	4.2 1-7	0	-		0	-		0	-		0	-	
87	1	1	- 1	0	-		0	-		0	-		0	-	
88	2	1.0	01	3	1.7	0.6 1-2	0	-		0	-		0		
89	0	-		1	2	- 2	1	2	- 2	0	-		2	1.0	01
90	0	-		1	1	- 1	2	1.0	01	1	2	- 2	2	2.0	02
91	1	1	- 1	1	2	- 2	0	-		1	1	- 1	0	-	
92	0	-		0	-		0	-		0	-		0	-	
93	?	?	??	?	?	??	?	?	??	?	?	??	?	?	??
Yrs	7	-		6	-		4			2	-		3	-	
SUM	11	-		10	-		5	-		2	-		5	-	
MAX	3	4.0	- 7	3	4.5	- 6	2	1.0	- 3	1	-	- 2	2	2.0	- 2

(Table 1.1 continued on next page)

		•	servatic r SD Ra	D		••••			ervations/			
	81 82 83	2 1.0 0 - 0 -	01		0 - 1 1 0 -	 - -	- 1 -		2 5 11			
	84 85	1 1 0 -	- 1		0 <del>-</del> 1 1	-	- 1		17 24			
	86 87	0 -			2 2.0 1 2		1-3 2		7 7			
	88	1 1	- 1		2 1.5				10			
	89 90	0 - 0 -			1 1 3 1.0		1 1		14 20			
	91 92	2 2.0	1.4 1-	•3	0 <del>-</del> 4 0.3	-	-		14 8			
	93	??	??		4 0.3 ? ?		?		12			
	Yrs	4 -			8 -	-	-		13			
	SUM Max	6 <del>-</del> 2 2.0			5 <del>-</del> 4 2.0	-	- 3		51 24			
	*******											
and year between RM Siletz River. Thes Table 1.1 and secti Codes: *=TOE month with 60 (section 1-D) Record=one bird tax Observation Monthly Records (ca (number of Obs rounded to the	e data a on 1-G. % or mon con seen lculated ervation neares	are cal re of M or hea d from ns) X ( t whole	culated lonthly M rd durir Table 1. Mean Tax e number	from MAX ng one 1)= a/Obs.	),	Reco Reco .=z MAX= #Tax	rds/Ta the t rds/Ob numbe Table ero (" naximu a=tota	xon=Tota otal num s.=Total r of Obs l.1 ." is us m l number	umber of tax l Records ber of tax. Records for ervations ed to enhan of taxa su	for year a noted or year that yea nce read een dur	r divided that yea divided ar from dability ing 1981-	l by ar by the 1993.
			lay Jun							Taxa	Records Taxon	per Obs.
1981 . 1982 1	•••	• 2	•••• 2* 1	•	•	•	•	$1 \cdot 1$	2 7	1 4	2.0 1.8	1.0 1.4
1983 .	1 1	3*	1.	•	•	•		• •	12	3	4.0	1.1
1984 • 1985 4*	· 2* 1 2*	3*	2* 2 1 4	2 7*	2* 3*	•		1	21	4	5.3	1.2
1985 4.	1 2*	2 2	1 4	-	3~	•	1	• 1 • 3*	35 16	9 7	3.9 2.3	1.5 2.3
1987 1	. 2*	1	1 1	•	•	•	•	. 2*	8	4	2.0	1.1
1988 .	. 1	2	. 2	4	•	•	•	1 2*	14	6	2.3	1.4
1989 1	1 2*	3*	2* •	2	2*	•	2*	. 1	20	6	3.3	1.4
1990 2 1991 3*	2* 3* 1 3*	4*	3* . 2* 1	1	1	2*	2*	. 3*	29	6	4.8	1.5
1002	1 3* 1 1	2 1	1	2	•	1	•	4* . • 1	19 5	8 3	2.4 1.7	1.4
1992 • 1993 3*	. 2*	1	1 ?	?	• ?	?		??	5 7	5	1.4	0.6 0.6
MAX 4	2 3	4	3 7	7	3	2		43	35	9	5.3	2.3
	.2 1.8		1.8 4.2					.4 1.8	21.0	5.4	-	-
	1 7	4	51	1	3	1	2	14	3	6		
#Taxa 6	35	9	6 7	8	4	3		5 5	-	12	-	•

(Table 1.1 continued)

@ There were a grand total of 195 Records.

River for selected calculated from se had 60% or more of taxa recorded in a	).O and 1 years ection f the m	l 50.6 . The 1-G on maximum	along se dat ly for numbe	a are years r of	letz that		1990, (	and 1 Other	s incl 1991. Taxa≖ than 6	numbe	r of t	taxa	only	found	liny	
			W	o. of ith 609 ore of	6 or	No	terbin . of xa	9	6 of Total							
			-	1 2 3 4 5			2 0 2 3 2		18.2 0 18.2 27.3 18.2							
				6			2		18.2							
			S	um		1	1	1	100.1							
			0	ther Ta	axa		1		-							
(Fig. 1.1). Water tubenoses, pelicar waterfowl, coots, cranes, coots, sho	rbirds ns, cor raptor prebird	includ morant s (inc ls, gul	e loon s, her luding ls, te	s, greb ons, eg eagles rns, a	bes, grets, s), lcids,		F=fema M=ider .=spe	Codes: ale on ntifia ecies	r imma able a not r	s a m ecord	ale ed					
between RM 50.0 ar (Fig. 1.1). Water tubenoses, pelicar waterfowl, coots, cranes, coots, sho kingfishers, and c and other marsh or included.	rbirds ns, cor raptor prebird dippers r semi- 1981.	includ morant s (inc ls, gul a Bla aquati	e loon s, her luding ls, te ckbird c bird 1982.	s, gret ons, eg eagles rns, a s, swa s are r	pes, grets, s), lcids, llows, not		F=fema M=ider .=spe +=at 1 X=spec	Codes ale on ntifia ecies least cies p	r imma able a not r the i presen 1983	s a m ecord ndica t but	ale ed ted nu the n	umber numbe	of b rwas	oirds s not	were recor	seen ded.
(Fig. 1.1). Water tubenoses, pelicar waterfowl, coots, cranes, coots, sho kingfishers, and c and other marsh or included.	rbirds ns, cor raptor prebird dippers r semi- 1981.	includ morant s (inc ls, gul Bla aquati	e loon s, her luding ls, te ckbird c bird 1982.	s, gret ons, eg eagles rns, a s, swa s are r	pes, grets, s), lcids, llows, not		F=fema M=ider .=spe +=at 1 X=spec	Codes ale on ntifia ecies least cies p	r imma able a not r the i presen 1983	s a m ecord ndica t but	ale ed ted nu the n	umber numbe	of b rwas	oirds s not	were recor	seen ded.
(Fig. 1.1). Water tubenoses, pelicar waterfowl, coots, cranes, coots, sho kingfishers, and c and other marsh or included.	rbirds ns, cor raptor prebird dippers r semi- 1981.	includ morant s (inc ls, gul a Bla aquati	e loon s, her luding ls, te ckbird c bird 1982.	s, gret ons, eg eagles rns, a s, swa s are r 4/4 1M1F	pes, grets, s), lcids, llows, not 5/3 X		F=fema M=ider .=spe +=at 1 X=spec	Codes ale on ntifia ecies least cies p	r imma able a not r the i presen 1983	s a m ecord ndica t but	ale ed ted nu the n	umber numbe 4/7	of L r was 4/8	oirds s not	were recor	seen ded.
(Fig. 1.1). Water tubenoses, pelicar waterfowl, coots, cranes, coots, sho kingfishers, and c and other marsh or included. Hooded Merganser Common Merganser Spotted Sandpiper	rbirds ns, cor raptor prebird dippers r semi- 1981. 11/5	includ morant s (inc ls, gul s. Bla aquati 11/9	e loon s, her luding ls, te ckbird c bird 1982. 1/29	s, greb ons, eg eagles rns, a s, swa s are r 4/4	pes, grets, s), lcids, llows, not 5/3 X		F=fema M=ider .=spe +=at 1 X=spec	Codes: ale on ntifia ecies least cies p /27	r imma able a not r the i presen 1983 2/6 3	s a m ecord ndica t but /13	ale ed ted nu the n 3/19	umber numbe	of b r was 4/8	oirds s not	were recor 4/11	seen ded. 4/1
(Fig. 1.1). Water tubenoses, pelicar waterfowl, coots, cranes, coots, sho kingfishers, and c and other marsh or included. Hooded Merganser Common Merganser Spotted Sandpiper	rbirds ns, cor raptor prebird dippers r semi- 1981.	includ morant s (inc ls, gul a Bla aquati	e loon s, her luding ls, te ckbird c bird 	s, gret ons, eg eagles rns, a s, swa s are r 4/4 1M1F	pes, grets, s), lcids, llows, not 5/3 X	6/13	F=fema M=ider .=spe +=at 1 X=spec	Codes ale on ntifia ecies least cies p	r imma able a not r the i presen 1983	s a m ecord ndica t but	ale ed ted nu the n	umber numbe 4/7	of L r was 4/8	oirds s not	were recor 4/11	seen ded.
(Fig. 1.1). Water tubenoses, pelicar waterfowl, coots, cranes, coots, sho kingfishers, and c and other marsh or	rbirds ns, cor raptor prebird dippers r semi- 1981. 11/5	includ morant s (inc ls, gul s. Bla aquati 11/9	e loon s, her luding ls, te ckbird c bird 1982. 1/29	s, gret ons, eg eagles rns, a s, swa s are r 4/4 1M1F	pes, grets, s), lcids, llows, not 5/3 X	6/13	F=fema M=ider .=spe +=at 1 X=spec	Codes: ale on ntifia ecies least cies p /27	r imma able a not r the i presen 1983 2/6 3	s a m ecord ndica t but /13	ale ed ted nu the n 3/19	umber numbe 4/7	of b r was 4/8	oirds s not	were recor 4/11	seen ded. 4/1
(Fig. 1.1). Water tubenoses, pelicar waterfowl, coots, cranes, coots, sho kingfishers, and c and other marsh or included. Hooded Merganser Common Merganser Spotted Sandpiper American Dipper	rbirds ns, cor raptor prebird dippers r semi- 1981. 11/5	includ morant s (inc ls, gul s. Bla aquati 11/9 X X X	e loon s, her luding ls, te ckbird c bird 1982. 1/29	s, gret ons, eg eagles rns, a s, swa s are r 4/4 1M1F 1M1F 1M1F 4 1984	bes, grets, s), lcids, llows, not 5/3 X X X	6/13 X	( F=fema M=ider .=spe +=at i X=spec 12,	Codes: ale on ntifia ecies least cies p /27	r imma able a not r the i presen 1983 2/6 3	s a m ecord ndica t but /13 	ale ed ted nu the n 3/19 X X X	umber humbe 4/7 X X	of b r was 4/8 X X X	average of the second s	were recor 4/11 1M1F 2	seen ded. 4/1
(Fig. 1.1). Water tubenoses, pelicar waterfowl, coots, cranes, coots, sho kingfishers, and c and other marsh or included. Hooded Merganser Common Merganser TOTAL TOTAL	rbirds ns, cor raptor prebird dippers r semi- 1981. 11/5 X X X X	includ morant s (inc ls, gul s. Bla aquati 11/9 X X X	e loon s, her luding ls, te ckbird  1982. 1/29  X X X	s, gret ons, eg eagles rns, a s, swa s are r 4/4 1M1F 1M1F 1M1F 4 1984	bes, grets, s), lcids, llows, not 5/3 X X X	6/13	( F=fema M=ider .=spe +=at i X=spec 12,	Codes: ale on ntifia ecies least cies p /27	r imma able a not r the i presen 1983 2/6 3	s a m ecord ndica t but /13 	ale ed ted nu the n 3/19	umber humbe 4/7 X X	of b r was 4/8 X X X	average of the second s	were recor 4/11 1M1F 2	seen ded. 4/1
(Fig. 1.1). Water tubenoses, pelicar waterfowl, coots, cranes, coots, sho kingfishers, and c and other marsh or included. Hooded Merganser Common Merganser Spotted Sandpiper TOTAL TOTAL	rbirds ns, cor raptor prebird dippers r semi- 1981. 11/5	includ morant s (inc ls, gul s. Bla aquati 11/9 X X X X 4/29	e loon s, her luding ls, te ckbird c bird 1982. 1/29  X X X 5/4	s, gret ons, eg eagles rns, a s, swa s are r 4/4 1M1F 1M1F 1M1F 1M1F 1984 3/4	bes, grets, s), lcids, llows, not 5/3 X X X X	6/13	(F=fema M=ider .=spe +=at X X=spec 12, 12, 4/5	Codes: ale on ntifia ecies least cies p /27	r imma able a not r the i presen 1983 2/6 3	s a m ecord ndica t but /13 X X X X	ale ed ted nu the n 3/19	umber humbe 4/7 X X	of b r was 4/8 X X X	2017ds 5 not 4/9 X X 5/28	were recor 4/11 1M1F 2 6/4	seer ded. 4/1
(Fig. 1.1). Water tubenoses, pelicar waterfowl, coots, cranes, coots, sho kingfishers, and c and other marsh or included. Hooded Merganser Common Merganser Spotted Sandpiper American Dipper	rbirds ns, cor raptor prebird dippers r semi- 1981. 11/5	includ morant s (inc ls, gul s. Bla aquati 11/9 X X X X 4/29	e loon s, her luding ls, te ckbird  1982. 1/29  X X X	s, gret ons, eg eagles rns, a s, swa s are r 4/4 1M1F 1M1F 1M1F 4 1984	bes, grets, s), lcids, llows, not 5/3 X X X X	6/13	( F=fema M=ider .=spe +=at i X=spec 12,	Codes: ale on ntifia ecies least cies p /27	r imma able a not r the i presen 1983 2/6 3	s a m ecord ndica t but /13 X X X X	ale ed ted nu the n 3/19	umber humbe 4/7 X X X 4 5/	of b r was 4/8 X X X	average of the second s	were recor 4/11 1M1F 2	seen ded. 4/1

(Table 1.4 continued on next page)

		7/14	7/23		11/5				1/20		1/26	1/28	1/31	2/7	2/9
Mallard											 10*				
Hooded Merganser		•	•	•	•	•	•	x	•	•	•	•	•	•	•
Common Merganser	•	•	•	•	•	•	Х	•	•	•	1	•	•	•	•
Spotted Sandpiper	Х	Х	•	Х	•	•	•	•	•		•	•	•	•	•
American Dipper	•	•	X	X	X	X	X	X@	X@	•	•	•	X\$	•	•
TOTAL	x	х	x	х	X	х	х	х	х	0	11	0	x	0	0
@ Singing.					\$ Car	rying	nesti	ng mat	erial.						
* Minimum temperatu (NCDC), so it 10 Mallards.	ures a is un	t Oti: nclear	s for 2 if fre	3-26 J ezing	anuary tempera	1985 v tures	vere 2 could	6-30 F   have	but w result	ere ab ed in 	ove fr the ab	eezing onormal	at Ne prese	wpor nce	t of 
					6 4/11		3 4/2	0 5/3	6/10	7/10	7/16	8/20	10/5	12	 /3
Great Blue Heron		•	•	• • •	•	•	••	•		 Х	X	•			•
Green-backed Her	on	•	•		•	•	•	•	X	Х	•	•	•		•
Bufflehead		•	•	х.	•	•	•	•	•	•	•	•	•		•
Hooded Merganser		•	•	• •	•	•	•	•	· 1F	•	Х	•	•		•
Common Merganser		•	•	• •	•	•	•	•	•	24#		Х	•		X
Spotted Sandpiper		•	•	• .•	•	•	Х	X	Х	•	X	•	•		•
Belted Kingfishe American Dipper	r	x	· x	• •	×	×.	• x	•	, x	•	X X	X X	×		•
American Dipper		^	*	• •		*	~	•	~	•	^	~	~		•
TOTAL # Adults and your	ng.	X	X	x (		X			X	24+		X	X		X
									987					••••	
	1/14 	2/23	4/30	6/10	6/21	12/2	2 12/	25 1	./11 3	/10 3	/30 4	1/9 5/	11 6/	16	12/25
Great Blue Heron	•	•	•	•	x	X		•	•	•	•	•	•	•	٠
Green-backed Heron		•	•	•	X	•	_	•	•	•	•	•	•	X	•
Hooded Merganser	•	•	•	•	X#	11	F	•	•	•	•	•	•.	•	•
Common Merganser	X	•	13#	•	X#	•		•	X	•	•	•	•	•	_1F
Spotted Sandpiper Belted Kingfisher	•	•	•	•	X	•		•	•	•	• v	•	•	•	•
American Dipper	•	x	×	×	X X	x		× ×	•	x@	X •	x	x	•	i
TOTAL # One adult female	X with	X young	13+ • @	X Singi	7+ ing.	x		X	X	x	x	x	x	x	2

(Table 1.4 c	ontinued)
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(Table 1.4 continued on next page)

# (Table 1.4 continued)

	1988.										1989.				
	3/20	4/14	6/5	6/12	7/2	7/4	7/7	11/15	12/20	12/22	1/15	2/3*	3/17	7 4/2	4/15
Green-backed Heron	•	•	•	•	•	x	X			•	•	•		• • • • • • •	
Mallard	•	1M1F	•	•	•	•	•	•	•	•	•	1M1F	* .	•	•
Hooded Merganser	2	•	•	•	•	•	•	1F	1F	1M1F	1M1F	•	•	•	•
Common Merganser	•	1M1F	•	1F	6#	•	•	•	•	1F	•	•	1M2F	•	•
Osprey	•	•	•	•	1	•	•	•	•	•	•	•	•	•	•
Spotted Sandpiper	•	•	Х	•	•	•	Х	•	•	•	•	•		•	•
American Dipper	•	•	•	•	•	•	•	•	•	•	•	•	X	X	X
TOTAL	2	4	X	1	7	x	x	1	1	3	2	2	4-	⊦ X	X
# One adult female															
* For 1-3 February freezing temp	1989, eratur	maxim es are	um te corr	mperat elatec	ures I with	at Ne the	wport abnorm	were 2 mal pre	1-39 F a sence h	and mir ere of	ima we Mallar	re 12 ds.	-27 F	(NCDC	), so
	1989.	•••••	••••	•••••	••••	••••	••••••			. 199	0	••••	••••		•••••
	4/16 	4/22	4/28	5/7 	7/26	8/2	7 10/	4 10/	29 12/	17 1/1	4 2/4	2/1	0 3/2	24 3/3	1 4/4
Green-backed Heron	•	•	•	•	X	•	•		•	•	•	•	•	•	•
Hooded Merganser	1M	•	•	•	•	•		,	•	. 2M3	· · · ·	•	•		F 1M1F
Common Merganser	•	•	1M2F	•	•	2	F.		•	• •	1M1F	•		. 11	\$.
Belted Kingfisher	•	•	•	Х		•		,	X	• •	•	•			Х
American Dipper	Х	X	X	X	X	Х	>	(	•	x x	•	X	0)		•
TOTAL	х	X	4+		X	3				x e	+ 2	х	)	( 13	3+
	e floc	k of 1													
@ Singing. \$ On	1990.					 	 						•••••		
@ Singing. \$ On  Great Blue Heron	1990. 4/8					 	 						•••••		
@ Singing. \$ On Great Blue Heron Bufflehead	1990. 4/8 1	4/24				 	 		2 9/30				•••••		
<pre>@ Singing. \$ On Great Blue Heron Bufflehead Hooded Merganser</pre>	1990. 4/8 1	4/24 1M	4/30	5/20	5/25	7/2	 	.6 8/2	2 9/30	10/13			/19	12/26	
<pre>@ Singing. \$ On Great Blue Heron Bufflehead Hooded Merganser Common Merganser</pre>	1990. 4/8 1	4/24	4/30	5/20	5/25	7/2	 	.6 8/2	2 9/30	10/13		0 12	/19	12/26	
@ Singing. \$ On Great Blue Heron Bufflehead Hooded Merganser Common Merganser Belted Kingfisher	1990. 4/8 1	4/24 1M	4/30	5/20	5/25 1F	7/2	 	6 8/2	2 9/30 1	10/13	10/2	0 12	/19	12/26	
@ Singing. \$ On Great Blue Heron Bufflehead Hooded Merganser Common Merganser Belted Kingfisher	1990. 4/8 1 2F	4/24 1M	4/30 1F	5/20	5/25 1F 1	7/2	9 8/1	6 8/2	2 9/30 1	10/13	10/2	0 12	/19	12/26	
<pre>@ Singing. \$ On Great Blue Heron Bufflehead Hooded Merganser Common Merganser Belted Kingfisher American Dipper TOTAL</pre>	1990. 4/8 1 2F	4/24 1M	4/30 1F	5/20	5/25	7/2	9 8/1 ,	6 8/2	2 9/30 1 1	10/13	10/2	0 12	/19	12/26	12/28
<pre>@ Singing. \$ On Great Blue Heron Bufflehead Hooded Merganser Common Merganser Belted Kingfisher American Dipper</pre>	1990. 4/8 1 2F	4/24 1M 1	4/30 1F 1	5/20	5/25	7/2	9 8/1 ,	6 8/2	2 9/30 1 1	10/13	10/2	0 12	/19 1M	12/26 1M	12/28
<pre>@ Singing. \$ On Great Blue Heron Bufflehead Hooded Merganser Common Merganser Belted Kingfisher American Dipper TOTAL</pre>	1990. 4/8 1 2F	4/24	4/30	5/20	5/25	7/2	9 8/1	6 8/2	2 9/30 1	10/13	10/2	0 12	/19 1M 1	12/26 1M 1	12/28
<pre>@ Singing. \$ On Great Blue Heron Bufflehead Hooded Merganser Common Merganser Belted Kingfisher American Dipper TOTAL</pre>	1990. 4/8 1 2F	4/24 1M 1	4/30	5/20	5/25	7/2	9 8/1	6 8/2	2 9/30 1 1	10/13	10/2	0 12	/19 1M 1	12/26 1M	12/28
@ Singing. \$ On Great Blue Heron Bufflehead Hooded Merganser Common Merganser Belted Kingfisher American Dipper TOTAL @ Singing. Great Blue He	1990. 4/8 1 2F 3	4/24	4/30	5/20	5/25	7/2	9 8/1 9 8/1 X X X X X	6 8/2	2 9/30 1	10/13	10/2	0 12	/19 1M 1	12/26 1M 1	12/28
<pre>@ Singing. \$ On Great Blue Heron Bufflehead Hooded Merganser Common Merganser Belted Kingfisher American Dipper TOTAL @ Singing. </pre>	1990. 4/8 1 2F 3	4/24	4/30	5/20	5/25	7/2	9 8/1	6 8/2 1 1 4/21	2 9/30 1	10/13	10/2	0 12	/19 1M 1	12/26 1M 1	12/28
<pre>@ Singing. \$ On Great Blue Heron Bufflehead Hooded Merganser Common Merganser Belted Kingfisher American Dipper TOTAL @ Singing. Great Blue He Bufflehead Hooded Mergan</pre>	1990. 4/8 1 2F 3 3 eron	4/24	4/30	5/20	5/25	7/2	9 8/1 9 8/1 X X X X X	6 8/2 1 1 4/21	2 9/30 1	10/13	10/2	0 12	/19 1M 1	12/26 1M 1	12/28
<pre>@ Singing. \$ On Great Blue Heron Bufflehead Hooded Merganser Common Merganser Belted Kingfisher American Dipper TOTAL @ Singing. Great Blue He Bufflehead Hooded Mergan Common Mergan</pre>	1990. 4/8 1 2F 3 3 eron nser nser	4/24	4/30	5/20	5/25	7/2	9 8/1 9 8/1 X X X X X	6 8/2 1 1 4/21	2 9/30 1	10/13	10/2 10/2 10/2 22 7/	0 12 9 9/2	/19 1M 1	12/26 IM	12/28
<pre>@ Singing. \$ On Great Blue Heron Bufflehead Hooded Merganser Common Merganser Belted Kingfisher American Dipper TOTAL @ Singing. Great Blue He Bufflehead Hooded Mergan Common Mergan Spotted Sand</pre>	1990. 4/8 1 2F 3 eron nser piper	4/24	4/30	5/20	5/25	7/2	9 8/1 9 8/1 X X X X X	6 8/2 6 1 1 4/21	2 9/30 1	10/13	10/2 10/2 10/2 22 7/	9 9/	/19 1M 1	12/26 IM	12/28
<pre>@ Singing. \$ On Great Blue Heron Bufflehead Hooded Merganser Common Merganser Belted Kingfisher American Dipper TOTAL @ Singing. Great Blue He Bufflehead Hooded Mergan Common Mergan Spotted Sand Common Snipe</pre>	1990. 4/8 1 2F 3 eron nser piper	4/24	4/30	5/20	5/25	7/2	9 8/1 9 8/1 X X X X X	6 8/2 6 1 1 4/21	2 9/30 1	10/13	10/2 10/2 10/2 22 7/	9 9/	/19 1M 1	12/26 IM	12/28
<pre>@ Singing. \$ On Great Blue Heron Bufflehead Hooded Merganser Common Merganser Belted Kingfisher American Dipper TOTAL @ Singing. Great Blue He Bufflehead Hooded Mergan Common Mergan Spotted Sand</pre>	1990. 4/8 1 2F 3 eron nser piper	4/24	4/30	5/20	5/25	7/2	9 8/1 9 8/1 X X X X X	6 8/2 6 1 1 4/21	2 9/30 1	10/13	10/2 10/2 10/2 22 7/	0 12 9 9/ 21	/19 1M 1	12/26 1M	12/28        
<pre>@ Singing. \$ On Great Blue Heron Bufflehead Hooded Merganser Common Merganser Belted Kingfisher American Dipper TOTAL @ Singing. Great Blue He Bufflehead Hooded Mergan Common Mergan Spotted Sand Common Snipe</pre>	1990. 4/8 1 2F 3 eron nser piper isher	4/24	4/30	5/20	5/25	7/2	9 8/1 9 8/1 X X X X X	6 8/2 6 1 1 4/21	2 9/30 1	10/13	10/2 10/2 10/2 22 7/ 4 4	0 12 9 9/ 21	/19 1M 1	12/26 1M	12/28    
<pre>@ Singing. \$ On Great Blue Heron Bufflehead Hooded Merganser Common Merganser Belted Kingfisher American Dipper TOTAL @ Singing. Great Blue He Bufflehead Hooded Mergan Common Mergan Spotted Sand Common Snipe Belted Kingf</pre>	1990. 4/8 1 2F 3 eron nser piper isher	4/24	4/30	5/20 3M 3 2/4	5/25	7/2	9 8/1 9 8/1 X X X X X	6 8/2 6 1 1 4/21	2 9/30 1	10/13	10/2 10/2 10/2 22 7/ 4 4	0 12 9 9/1 21	/19 1M 1	12/26 1M	12/28  10 10 1

(Table 1.4 continued on next page)

# (Table 1.4 continued)

	1992. 2/29		4/19	5/9	12/12	12/18	12/25	12/26	1993 1/9		2/12	2/13	3/6	3/8	3/13
Great Blue Heron Bufflehead Hooded Merganser Common Merganser American Dipper	X	X	X	• 1F •		•	2F	•	1F 2F1M	1 • •		•		•	•
TOTAL	Χ	Х	X	1	0	0	2	0	4	1	0	0	0	0	0
									4/26 5						<b>-</b>
				ehead	ganser	1M1F 1M1F		•	. 1	M1F					
				TOTAL		4	2	0	0	2					

# Chap. 2. OTHER WATERBIRD RECORDS FOR THE SILETZ RIVER IN THE SILETZ/LOGSDEN AREA

#### 2-A. INTRODUCTION

Although there are only 7-15 observations per site in Tables 2.1-2.4, they are included because they give some perspective to data in Chap. 1 and because there are so few observations for Lincoln County rivers.

The records for each part of the Siletz River are separated and put into one of four tables; each table is divided into three sections. In the first section (A), the years in which a species was recorded are given for each month; in the second section (B), the observers are listed; and, in the third section (C), the date, observer, and species observed are listed.

#### 2-B-1. GENERAL DESCRIPTION

The areas observed for Tables 2.1 and 2.3 are shown in Fig. 1.1. The study areas for Tables 2.2 and 2.4 are not as precisely known but are probably also shown in Fig. 1.1, although some of the Table 2.4 observations may also be east of Fig. 1.1 in Polk County.

Figures 2.1-2.3 show the Siletz River at several points. In particular, note the trees lining the banks.

#### 2-B-2. HUMAN DISTURBANCE

The study areas are rural or uninhabited. The town of Siletz is an incorporated city listed as having a population of 995 in an Oregon Highway map from the 1980's. Logsden is an unincorporated community. The area upstream of Moonshine Park has many logging roads, but no permanent human inhabitants.

These areas are influenced by human disturbance. Most of the disturbance may be fishermen, but some sites (e.g., Moonshine County Park) are also popular in summer for swimmers. Although hunting is probably rare, there are probably a few people that occasionally shoot at herons, mergansers, and kingfishers at these sites because they eat fish; such shooting does occur in Lincoln County.

2-C. METHODS AND SHORTCOMINGS

These are all incidental records, and the time of day, duration, and methods of observations are all unknown. Further, there are too few observations to make substantial conclusions.

# 

Basically, the same species noted in Chap. 1 were also recorded here (Tables 2.1-2.4). However, two species were only noted here and not at RM 50.0-50.6; these include one sighting of two Double-crested Cormorants (Table 2.4) and three sightings of Bald Eagles (Tables 2.3 and 2.4).

Species recorded with young or nesting at these portions of the Siletz River included Common Merganser (Tables 2.1, 2.2, and 2.4) and American Dipper (Table 2.3).

Other items of interest include an immature Bald Eagle feeding on a salmon carcass in November 1988 (Table 2.3), and a count of about 10-15 Spotted Sandpipers along three miles of the Siletz River in July 1983 (Table 2.2). 2-E. FIGURES AND TABLES

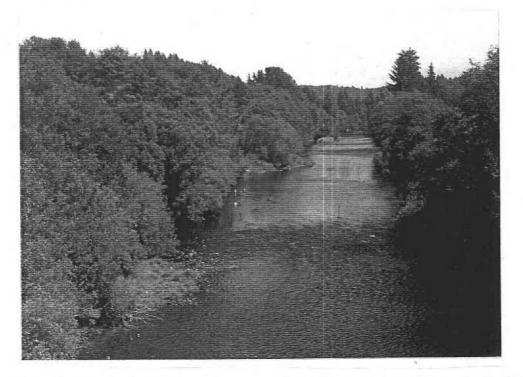


Fig. 2.1 (above). View eastward, upstream of Siletz River from the bridge (which is at about River Mile 40.8) at the south end of the town of Siletz. Note the riffles in the foreground and

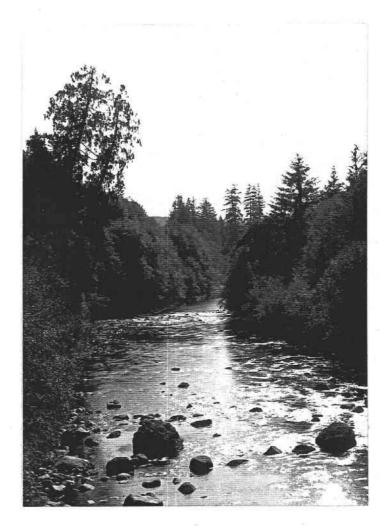
Fig. 2.2 (below). View towards the northeast and upstream of Siletz River at the eastern edge of Moonshine County Park at about River Mile 52.6.

the deciduous and coniferous trees along both banks. This was photographed with a "normal," 1x lens on 19 August 1990.

Note the deciduous and coniferous trees along both banks. This was photographed with a "normal," 1x lens on 19 August 1990.



Fig. 2.3. View towards the southwest and downstream of Siletz River from the Siletz River bridge near Wildcat Creek at River Mile 54. Note the deciduous and coniferous trees along both banks, and the two red cedar trees on the left side of the photo. This was photographed with a "normal," 1x lens on 19 August 1990.



\_\_\_\_\_\_ Table 2.1. Waterbirds of Siletz River near the Town of Siletz. One view of the River in this area is shown in Fig. 2.1. N=7 observations. (A) Years of occurrence for records in (C). Yr=year (e.g., 82=1982). Ja Fb Mr Ap My Jn Jl Ag Sp Oc Nv De 
 Bufflehead
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 <th?</ Common Merganser ? ? 90 ? ? ? 82 ? ? ? ? (July record included young) Osprey ? ? ? ? 82 ? 90 ? ? ? Belted Kingfisher ? 90 ? ? ? ? ? ? ? ? ? (B) Observer's initials: RB=Range Baver **GM=George Miller** JK=Jerry Kosydar FS=Floyd Schrock BL=Bob Llewellyn (C) Observations: 6/28/82 (4 miles north of Siletz)(JK fide FS). 7/29/90 (both sides of River visible from Bridge Osprey caught a large eel (lamprey?). at north of Town of Siletz at 1945 PST)(RB). 7/4/82 (Bridge at Siletz)(FS). 15 Common No waterbirds present. 8/2/90 (5 mi [8 km] north of Town of Siletz)(GM). Mergansers including young. 1 Osprey dove into River after a fish. 1/21/85 (Siletz)(BL). Hooded Merganser, Bufflehead. 3/1/90 (Siletz)(BL). 2 Belted Kingfishers, Bufflehead. 3/1/90 (Siletz)(BL). 2 Belted Kingfishers, No waterbirds present. Barton of Siletz at 1330 PST)(RB). \_\_\_\_\_ Table 2.2. Waterbirds of Siletz River in the Siletz/Logsden area. N=7 observations. (A) Years of occurrence for records in (C). Yr=year (e.g., 82=1982). \*=adult with young. Ja Fb Mr Ap My Jn Jl Ag Sp Oc Nv De ? ? ? ? ? ? ? ? ? 81 ? 78 ? ? 82 ? 83 ? ? ? ? (July record included young) Wood Duck Common Merganser ? ? ? 90 ? ? ? ? ? ? ? ? ? ? ? ? ? ? 83 ? ? ? ? (10-15 per 3 miles) Osprey Spotted Sandpiper 78,84 ? ? ? ? ? 83 ? ? ? ? ? Am. Dipper (B) Observer's initials: BL=Bob Llewellyn PR=Paul Reed FS=Floyd Schrock (C) Observations: 1/25/78 (PR). 3 Common Mergansers, 7/18/83 (near Logsden)(FS). Am. Dipper, 10-15 2 Am. Dippers. Spotted Sandpipers along about 3 mi (5 km), 11/24/81 (FS). Wood Duck. flock of 1 adult female & 20 young Common 5/28/82 (FS). Common Merganser. Mergansers. 1/21 & 22/84 (FS). Am. Dipper. 4/14/90 (Logsden)(BL). 1 Osprey over River. 

\_\_\_\_\_ Table 2.3. Waterbirds of Siletz River at Moonshine County Park. A view of the River at the eastern edge of the Park is shown in Fig. 2.2. N=15 observations. (A) Years of occurrence for records in (C). Yr=year (e.g., 82=1982). 

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 (immature singletons; one

 Hooded Merganser Common Merganser Bald Eagle feeding on a salmon carcass) ? ? ? ? ? ? ? ? 92 ? ? Belted Kingfisher 83 89,92 83,88 ? ? 92 ? 83 ? 90-92 ? ? (January: one singing; Am. Dipper February 1989: carrying nest material; June: young) (B) Observer's initials: FB=Fred Bremner D&BM=Dawson & Bobby Mohler AD=Anne Decius FS=Floyd Schrock DS=Dale Snow BL=Bob Llewellyn (C) Observations: 1/23/83 (FS). 3 Am. Dippers singing. 2/15/89 (BL). 2 Am. Dippers with one carrying 3/20/83 (AD). Common Merganser, Am. Dipper. 3/22/83 (FS). Am. Dipper. nesting material, 1 F Common Merganser. 10/14/90 (FB). 1 Am. Dipper. 8/27/83 (BL). Am. Dipper. 10/11/91 (D&BM). 2 Am. Dippers. 2/7/92 (D&BM). 2 Am. Dippers. 12/26/87 (DS). 12 Common Mergansers. 1/3/88 (DS). 1 imm. Bald Eagle. 3/19/88 (BL). Am. Dipper. 6/9/92 (D&BM). 2 Am. Dippers attending chicks in a nest at the waterfall; the young were very 11/5/88 (DS). 1 immature Bald Eagle feeding noisy when an adult approached. 10/15/92 (D&BM). Am. Dipper, Belted Kingfisher. on a salmon carcass. 12/28/88 (BL). Pair of Hooded Mergansers. \_\_\_\_\_ Table 2.4. Waterbirds of Siletz River Gorge that may include portions of the River not shown in Fig. 1.1 and in Polk County. A view of the River included in this area is shown in Fig. 2.3. N=8 observations. (A) Years of occurrence for records in (C). Yr=year (e.g., 82=1982) D 6 1

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	Ja	FЬ	Mr	Ар	Mу	Jn	J1	Ag	Sp	0c	Νv	De	
Dcrest. Cormoran	t?	?	?	?	?	?	?	?	?	?	?	88	
Great Blue Heron	?	?	?	?	?	?	?	?	91	?	?	?	
Bufflehead	?	89	?	?	?	?	?	?	?	?	?	?	
Common Merganser	?	91	?	?	?	?	82	?	?	?	?	?	(July record included young)
Osprey	?	?	?	?	?	?	91	?	?	?	?	?	
Bald Eagle	?	?	?	82	?	?	?	?	?	?	?	?	(1 adult)
Spotted Sandpiper	?	?	?	?	?	?	91	?	?	?	?	?	
Belted Kingfisher	?	?	?	?	?	?	?	?	91	?	?	?	
Am. Dipper	?	?	?	?	?	?	91	?	?	?	?	87	
(B) Observer's initials:													
?=observer unknown				BL=B	1			RS≖R	Starr				
<pre>(C) Observations: 4/10/82 (Gorge)(RS fide BL). 1 adult Bald Eagle 2/23/91 (Gorge)(BL). 1 M</pre>										rge)(BL). 1 M and 1 F Common			

4/10/82 (Gorge)(RS fide BL). 1 adult Bald Eagle perched on a rock.

- 7/20/82 (Gorge)(?). 8 Common Mergansers including young, 3 Am. Dippers.
- 12/30/87 (Gorge)(BL). Am. Dipper.
- 12/25/88 ("Boulder Patch" about 1 mile upstream of Moonshine Park)(BL). 2 Dble.-cr. Cormorants. 2/9/89 (Gorge)(BL). 2 M & 1 F Buffleheads.

2/23/91 (Gorge)(BL). 1 M and 1 F Common Merganser.

- 7/11/91 (near fish ladder that is less than about 1 mile downstream of mouth of Gravel Creek)(BL). 1 Osprey, Am. Dipper, Spotted Sandpiper.
- 9/8/91 (Gorge)(BL). 2 Great Blue Herons, 2 Belted Kingfishers.

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Chap. 3. WATERBIRD RECORDS FOR CREEKS IN THE SILETZ/LOGSDEN AREA										
3-A. INTRODUCTION AND STUDY AREAS Although there are only 16 observations, these records are given because there are so few records for creeks in Lincoln County.	spawning surveys in which a biologist wades up the stream looking for signs of salmon in some of these creeks (e.g., see Phil Lamberson's observations in Table 3.1C).									
All records for different creeks are pooled together into Table 3.1. The general location of a creek is shown in Fig. 1.1 and is also given	<b>3-B.</b> METHODS AND SHORTCOMINGS These are all incidental records, and the									
in Table 3.1A. In Table 3.1B, the years in which a species were recorded are given for each month; in 3.1C, the observers are listed; and, in 3.1D, the date, creek, observer, and species observed	time of day, duration, and methods of observations are unknown. Further, there are too few observations to make substantial conclusions. ************************************									
are listed. The actual location of each observation is not clear because only the Creek is known and the	<b>3-C.</b> RESULTS The most ubiquitous species and the only one									
creek can extend over several sections (see Table 3.1A).	noted nesting was the American Dipper (Table 3.1B).									
The degree of human disturbance is unknown, but may chiefly be fishermen. In fall, the Oregon Department of Fish and Wildlife conducts salmon ************************************	It is not clear if the two Bald Eagle records are of fly-overs or of birds that may have been foraging on spawned-out salmon.									
<b>3-D.</b> TABLE										
Table 3.1. Waterbirds of creeks in the Siletz/Logsde Polk County (Fig. 1.1). N=16 observations.	en area. Some of these observations may have been in									
<ul> <li>(A) Approximate locations of Creeks, but not nec Buck Creeksee T9S, R9W, Section 4</li> <li>Cedar Creeksee T9S, R10W, Sections 4, 5, &amp; 8</li> <li>Cerine Creeksee T9S, R9W, Sections 27 &amp; 35</li> <li>Euchre Creeksee T9S, R10W, Sections 1, 11, and others; T8S, R10W, Section 36; T8S, R9W, Section 30</li> </ul>	essarily the site of observations: Gravel Creeksee T8S, R9W, Sections 3 & 11 Rock Creeksee T1OS, R9W, Sections 3 & 2 Sunshine Creeksee T9S, R9W, Sec. 2 & 12									
(B) Years of occurrence for records in (D). Yr= Ja Fb Mr Ap My Jn Jl Ag Sp C										
Bald Eagle ? 92 ? ? ? ? ? ? ? Common Snipe ? ? ? ? ? ? ? ? ?	<ul> <li>? ? 81 (1 adult at Cerine &amp; Euchre Creeks)</li> <li>? 87 (unclear if effect of freezing)</li> <li>82 82,88 (at six creeks; nested at Euchre Cr.)</li> </ul>									
<pre>(C) Observer's initials: PL=Phil Lamberson (who made his observations while conducting salmon spawning surveys for the Oregon Department of Fish and Wildlife) BL=Bob Llewellyn</pre>	CP≂Chuck Philo FS=Floyd Schrock									
<ul> <li>(D) Observations:</li> <li>12/31/81 (Euchre Creek)(FS). 1 adult Bald Eagle.</li> <li>10/7/82 (Rock Creek)(PL). Am. Dipper.</li> <li>10/20 &amp; 27/82 (Sunshine Creek)(PL). Am. Dipper.</li> <li>10/28/82 (Gravel Creek)(PL). Am. Dipper.</li> <li>11/12/82 (Euchre Creek)(PL). Am. Dipper.</li> <li>11/14/82 (Rock Creek)(FS). Am. Dipper.</li> <li>11/15/82 (Cedar Creek)(PL). Am. Dipper.</li> <li>11/15/82 (Euchre Creek)(PL). Am. Dipper.</li> </ul>	<pre>11/22/82 (Gravel Creek)(PL). Am. Dipper. 12/14/82 (Gravel Creek)(PL). Am. Dipper. 12/28/87 (Euchre Creek)(BL). 35 Common Snipe*. 6/19/88 (Euchre Creek, "Fishing Hole")(BL). Am. Dipper feeding young in nest. 12/25/88 (Buck Creek)(BL). Am. Dipper. 1/24/90 (Buck Creek)(BL). Am. Dipper. 2/6/92 (Cerine Creek)(CP). One adult Bald Eagle.</pre>									
* Temperatures at Newport during 26-28 December 1987	are not available in NCDC and minimum temperatures									

\* Temperatures at Newport during 26-28 December 1987 are not available in NCDC, and minimum temperatures at Otis and Tidewater during this period were just barely freezing (28 F or more) (NCDC), so it is unclear if the presence of so many snipe was correlated with freezing weather. ACKNOWLEDGMENTS

We thank the contributors that graciously shared their observations in Chaps. 2 and 3. Bob also thanks Martha and Chelsea for their companionship, observations, and fine cooking.

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