

Spring and Fall Migration of Geese Across the Coast Range of Lincoln County, Oregon

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Goose migration routes in spring are not thoroughly known in western Oregon. Maps in Bellrose (1976), Kebbe (1976), and Fix (1988) roughly agree that geese fly northwest from the direction of Klamath Basin. They differ in that Fix (1988) suggested that Greater White-fronted Geese (*Anser albifrons*) continue flying northwest over coastal counties, while Bellrose (1976) and Kebbe (1976) note that geese turn at the southern Willamette Valley, fly north to the Columbia River, and then fly west to the coast.

In fall in western Oregon, Bellrose (1976) and Kebbe (1976) indicate that geese reverse their spring route over the Willamette Valley, and Kebbe (1976) also lists a migration route along the Oregon Coast. But neither Bellrose nor Kebbe suggested that geese cross the Oregon Coast Range during migration.

In this paper, we discuss the results of opportunistic observations of goose flights across Lincoln County. Although we did not attempt a systematic, coordinated study of these flights, these observations indicate that goose flights across the Coast Range are common. We first discuss some problems in interpreting our observations, and then we document spring migration mostly by White-fronts and fall migration by White-fronts and Canada Geese (*Branta canadensis*) across the Coast Range of Lincoln County (Fig. 1).

For convenience, we list our records and those made by some other observers chronologically within sections for northern, central, and southern portions of Lincoln County because geese appeared to use different routes when crossing the Coast Range. Times given are in Pacific Standard Time (PST) by the 24-hour clock.

Interpretation of Goose Migration Direction

There are 2 types of errors in our

records. First, the flight direction was roughly estimated by single observers without compasses. It would have been much more accurate to have at least 2 teams of observers on ridges or mountains use radios and theodolites to simultaneously plot the flight paths of flocks over several miles.

Second, geese often fly circuitously and dramatically change direction, so that what sometimes appears to be a flight across the Coast Range may not be. This is particularly a problem for fall flights, when Lowe sometimes saw geese fly eastward up the Alsea River Valley but then return and fly south.

Identification of Migrating Geese

Geese in many of our flocks were not identified to species because they were flying at high altitudes (also see Fix 1988:244), were too distant, or lighting conditions were too poor for visual identification. Additionally, Bayer was not familiar with distinguishing among Canada, White-fronted, and Snow Geese (*Chen caerulescens*) by call, which is often the only way they could be identified. However, Lowe has worked extensively with geese and is familiar with identifying them by their calls.

Spring Westerly or Northwesterly Goose Migration

Northern Lincoln County

On 29 April 1990, Mark Elliott, who was about 2 miles inland at the east side of Siletz Bay, visually identified a flock of 5 Snow Geese and 40 Canada Geese at 1520. They were flying to the northwest from the Siletz River Valley. When they reached the mouth of Siletz Bay, they flew northward along the coastline.

On 2 May 1992, Lowe, who was about 2 miles inland at Siletz Bay, saw a flock of 25-30 White-fronts flying to the northwest from the Siletz River Valley towards Siletz Bay at 1700.

On 11 May 1992, Faxon, Barb Bellin, and Roy Gerig, who were at Siletz Bay, saw a large flock of White-fronts fly in from the southeast, drop in elevation as they approached, and fly northward after reaching the coastline.

Central Lincoln County

About 11 miles from the coastline at Thornton Creek, Faxon noticed flocks of unidentified geese occasionally during the 16 April-3 May period in 15 of 19 years from 1973 through 1991 (Faxon and Bayer 1991, 1993). Most of these flocks were flying north or northwest towards the Siletz River Valley. In late April of many years, Faxon saw numerous flocks of several hundred geese passing during a given day, but they were nearly always flying at high altitudes, so that their calls were sometimes only barely audible.

On 6 May 1975, Bayer, who was about 1 mile inland along the south side of Yaquina Bay, heard and then saw 4 flocks of unidentified geese fly over from 1355-1404. Each flock had about 200-400 birds and flew toward the west and Yaquina Bay. When they arrived at the Bay, they changed direction and flew north. He also saw flocks of about 150 and of 500 geese following the same flight path at 1115 on 30 April and at 1300 on 8 May, respectively. A total of about 2000 geese were in these flocks.

On 26 April 1987, Bob Llewellyn, who was about 12 miles from the coast near Logsden, saw 250 unidentified geese fly towards the northwest, down the Siletz River Valley (Llewellyn and Bayer 1994:174).

Southern Lincoln County

On 29 April 1990, Lowe, who was about 2 miles from the coast on the south side of Alsea Bay, noted 1 flock of about 300 and another flock of about 250 White-fronts flying westward. They changed direction as they approached Waldport and then flew to the northwest at 0925 and 1100,

respectively. Because of the lighting conditions and the flocks' elevation, Lowe was unable to identify these geese using binoculars but was able to do so by call. At 1005 and 1245 on the same day, he also heard flocks of White-fronts fly over.

On 1 May 1990, Dorothy Olson, who was about 9 miles from the coastline near Tidewater, saw a flock of about 200 unidentified geese fly from east to west at 1000.

On 2 May 1992, Lowe, who was about 2 miles from the coast on the south side of Alsea Bay, saw a flock of about 550 White-fronts flying very high from east to west at 1040. He first detected them by hearing their faint calls; even with binoculars, they were barely visible, so these flocks could easily be missed.

Spring Migration Summary

In late April and early May, geese were often seen flying from inland

towards the west or northwest until they reached the coastline, where they often changed direction and flew north. When identified, these geese were usually White-fronts. These flocks are probably much more common than our records indicate but are missed because they are flying so high that they were not recorded by observers who were not systematically searching for them.

Fall Easterly or Southeasterly Goose Migration

Northern Lincoln County

We have no observations.

Central Lincoln County

About 11 miles from the coastline at Thornton Creek, Faxon sometimes saw geese flying over during August-December in 17 of 19 years during 1973-1991 (Faxon and Bayer 1991, 1993). These flocks were usually flying from the general direction of the Siletz River Valley towards the

southeast. He specifically noted White-fronts flying over on 1 October 1990 (when thousands were seen), 16 October 1991, 25 and 26 September and 1 October 1992; and 24 September and 19 October 1993. On 12 October 1992, Glen Faxon also saw many flocks of White-fronts fly over.

On 19 October 1981, Bayer, who was about 2 miles inland along the north side of Yaquina Bay, observed a flock of geese flying east at 1345. Several minutes later, Floyd Schrock independently saw a goose flock (presumably the same one) flying eastward over Toledo, about 6 miles from the coastline.

About 11 miles from the coastline at Thornton Creek, Faxon noted several flocks of Canadas on 7 and 8 November 1987 and of unknown geese on 2, 7, and 8 November 1989 that flew east towards the Willamette Valley. He also recorded 2 flocks flying south: one flock of unidentified geese on 13 November 1989 and a flock of Canada Geese on 25 October 1990 (Faxon and Bayer 1991:36).

In November 1989, Lowe was northwest of Harlan in the general area of point X in Figure 1 (Township 11S, Range 9W, section 36), about 16 miles from the coastline. On 7 November, he noted 10 flocks flying east-southeast toward Marys Peak (Benton County) during about 8 hours; 7 of the flocks were Cackling (*B.c. minima*) or Taverner's (*B.c. taverneri*) Canada Geese, 2 flocks were of larger, deeper-voiced Canada Geese, and the size of Canadas in the other flock was not recorded. For flocks on 7 November, the number of geese in one flock was undetermined, there were only 4 in another, and each of the other 8 flocks had about 40-70 geese; 7 of these flocks passed during 0625-0700, and the other flocks passed at 1000, 1623, and 1713. On 11 November from 0620-1050, Lowe heard one flock of small Canada Geese at 0801 and saw 110 and 18 medium- or large-sized Canadas at 0811 and 0900, respectively; all were flying eastward. During 1320-1720 observations on 11 November, 0630-1400 observations on 17 November, and 0620-1050 observations on 20 November, Lowe saw or heard no geese.

On 16 October 1991, Mark

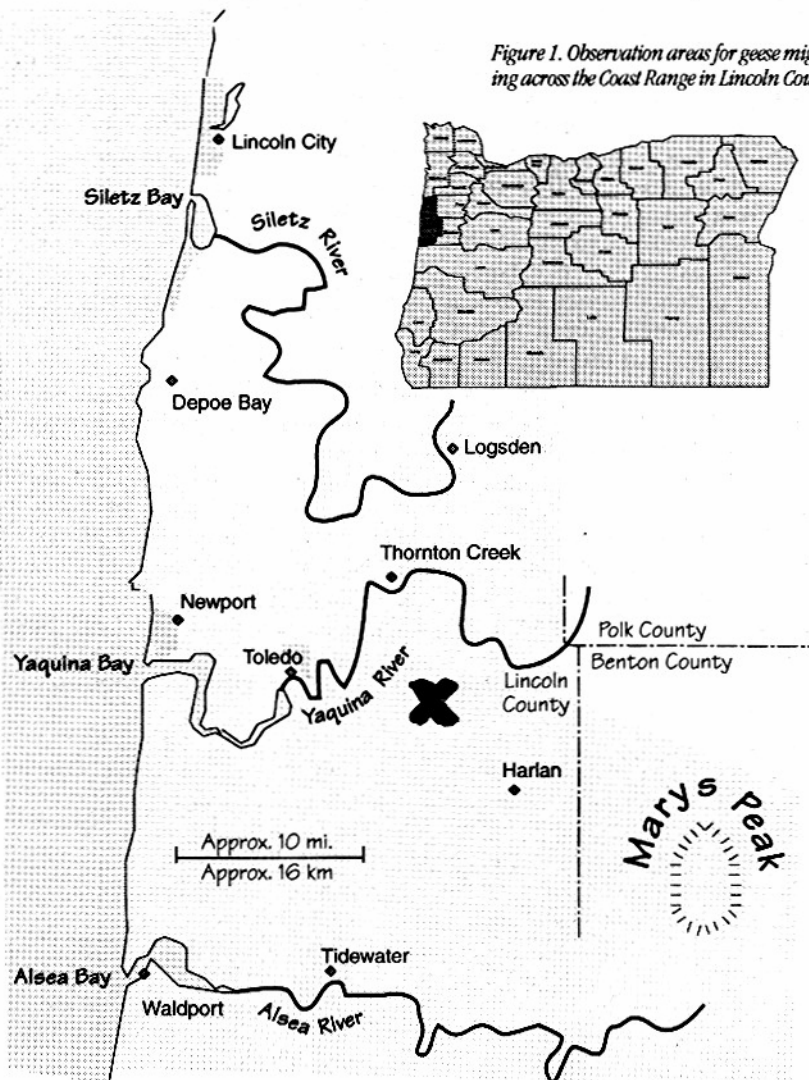


Figure 1. Observation areas for geese migrating across the Coast Range in Lincoln County.

Hedrick, who was along the north side of Yaquina Estuary and about 6 miles inland, saw 5 flocks with a total of at least 200 small Canada Geese fly eastward. After they passed, he waited to be sure that they did not return.

On 11 October 1992 at 1200, Bayer, who was about 1 mile inland along the south side of Yaquina Bay, saw a flock of 50-100 unidentified geese fly from the ocean towards the southeast and not return.

On 24 and 25 September 1993, Bob Llewellyn, who was about 12 miles from the coast near Logsdan, reported 12 large flocks of White-fronts flying over in an unspecified direction.

Southern Lincoln County

On 27 October 1986, Lowe, who was about 8 miles inland near Tidewater, saw a flock of 26 medium- to large-sized Canada Geese at 1530 fly east up the Valley.

On 7 November 1987, Lowe, who was about 2 miles inland at the south side of Alsea Bay, saw a flock of 25 Snow Geese circle over lower Alsea Bay, fly east, return within a few minutes, and then fly towards the south or southwest. On 9 November 1987 and 6 November 1989, a flock of Canada Geese did the same thing.

On 16 October 1991, Lowe, who was about 2 miles inland at the south side of Alsea Bay, saw a flock of 45 Cackling or Taverner's Canada Geese fly eastward and not return.

On 19 September 1992, Lowe, who was about 2 miles inland at the south side of Alsea Bay, saw 11 white-fronts at 1115 and 85 White-fronts at 1315 fly east up the Alsea River Valley and not return. At the same location, Lowe also saw a flock of 50 White-fronts fly south at 1330 on 25 September, and, on 26 September, he heard two flocks of White-fronts flying south at 1605.

Fall Migration Summary

Geese were often seen flying to the east or southeast across the Coast Range in fall. When identified, they were usually White-fronts or various sizes of Canada Geese. These flocks appeared to sometimes be exploring, as they occasionally flew east before returning and flying south, so an observer needed to be patient and watch for several minutes after the

passage of a flock to determine if it returned.

Conclusions

Some geese cross the Lincoln County Coast Range during daylight in spring and fall. But it is unclear how important these routes are because our observations were opportunistic, not systematic. Further, our observations were only during daylight, so we do not know how many, if any, geese migrated across the Coast Range in darkness.

Geese also cross the Oregon Coast Range outside of Lincoln County. In Spring, Lowe saw 3 flocks of White-fronts flying from the southeast toward Tillamook Bay (Tillamook County) on 23 April 1994. In Autumn, Lowe has received reports of Canada Geese flying southeast up the Little Nestucca River Valley (Tillamook County), Rick Frenzel saw a flock of small Canada Geese flying east up the Coquille River Valley (Coos County) on 16 October 1991, and a farmer at Agness (Curry County) recovered a radio-tagged White-fronted Goose in his cornfield in the fall of 1987 and reported that flocks of Canada Geese occasionally landed in his field in fall before flying east.

Geese may migrate across the Coast Range to conserve energy. Geese could save distance if they followed a Great Circle route between the Klamath Basin area and the southwestern mainland of Alaska by flying directly over the Coast Range rather than over the Willamette Valley (e.g., Bellrose 1976:106, 116).

As a consequence of our observations, it is important to recognize that flocks of geese migrating along the Oregon coastline in spring may have already crossed the Coast Range and flocks flying along the coastline in fall may yet cross the Coast Range. Thus, without observing the flight routes of many flocks over at least 50 miles, determining the relative importance of coastline, trans-Coast Range, or Willamette Valley routes of goose migration is conjecture. Another problem with determining the relative importance of routes is that geese that cross the Coast Range may not all fly along the coastline where they can be observed. For example, Terry Thompson observed a flock of about 150 Canada Geese flying north 10

miles offshore of Three Arch Rocks (Tillamook County) on 26 April 1988.

A reader could infer that geese migrated across the Coast Range approximately along river valleys, but this is probably misleading because most of our observers were along valleys. Observation sites farther from valleys or precise plotting of flock routes may reveal that many geese may not fly over valleys. Further, some of our observations were of geese that crossed over 2 valleys (i.e., Thornton Creek in spring) or that were clearly not flying along a river valley (i.e., near Harlan in fall).

Finally, it was our impression that Marys Peak may be an important navigational landmark for geese migrating across central Lincoln County. In spring, geese appeared to be coming from the direction of Marys Peak towards Siletz or Yaquina Bays; in fall, this direction was reversed.

Acknowledgments

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