

8.6.1

FALL SURVEY OF EMPEROR GEESE OF SOUTHWEST

COASTAL ALASKA

10 - 16 October, 1983

by

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and

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INTRODUCTION

During 10-16 October, the annual fall emperor goose survey was conducted in southwest coastal Alaska. Areas surveyed were the same as in previous years including coastal areas of the Bering Sea from Bethel to Cold Bay and Cold Bay to Wide Bay on the south side of the Alaska Peninsula. In addition, the Sanak Island complex (approximately 50 miles southeast of Cold Bay) was surveyed. This area has not been included in the survey in previous years. Inclement weather precluded us completing the survey from Chignik Bay to Wide Bay, an area where a few hundred emperors are recorded annually. A total of 72,551 emperor geese were recorded which is 10% less than the fall count of 1982. During 22 October another survey, flown by Waterfowl Investigations personnel Bruce Conant and Jim King counted 82,610 emperors (see Table 2).

METHODS

This is the fifth consecutive fall that emperor geese have been counted in southwest Alaska. During the primary survey Rod King was pilot/observer and Dirk Derksen (WA - Migratory Bird specialist, Anchorage) was observer. A Cessna 185 on amphibious floats was flown about 200-500 feet above ground level at approximately 110 miles per hour. Total survey time was 39.3 hours. Survey segments were the same as other segments of previous years (see Table 1) except for the addition of the Sanak Island area.

RESULTS AND DISCUSSION

A total of 72,551 emperor geese were counted during the 1983 fall survey. The survey began on 10 October and continued through 16 October. One day was spent on the ground in Cold Bay because of inclement weather. In general weather conditions were milder than during the 1982 fall survey. Most areas were entirely ice free with some occasional ice forming only at night.

The 72,551 emperor geese counted were 10% less than the number counted in 1982. Areas which had substantially fewer geese than 1982 included Ugashik Bay, Port Heiden, and Seal Islands (Table 2). More than 4,000 additional emperors were counted on Izembek NWR in 1983 than 1982, while the south side of the Alaska Peninsula appeared to have similar numbers in 1983 compared to 1982. Tide conditions were near high when areas on the north side of the Alaska Peninsula were surveyed on 11 October. This along with good light/visibility conditions made the survey as near ideal as possible.

In Table 2 we have included the 22 October survey conducted by Waterfowl Investigations. This survey is of interest because of the location of the major portion of emperor geese. Ideally we try to choose a time for surveying on the western coast after emperor geese have left the Yukon Delta NWR, but have not moved out beyond Unimak Island. The major increase in the 82,610 emperor geese counted on 22 October

came from the Port Heiden area where 28,940 emperors were seen compared to only 11,642 seen there on 11 October (Table 2). This leads one to believe that emperors were still present on the YK Delta NWR when the 10 October survey was initiated.

During 18 October, Richard Sellers (ADF&G - King Salmon, personal communication) noted less than 2,000 emperor geese between the east side of Port Heiden and Cinder River.

RECOMMENDATIONS

Accurate total population estimates of emperor geese is the goal of this survey. To attain this goal it is necessary to: 1) continue fall and spring population counts with the same observers participating on each survey, 2) expand the survey to include the coastal areas of the Yukon Delta NWR, 3) conduct two surveys each fall and spring for more accurate estimates, 4) station ground based observers at strategic locations along the Alaska Peninsula, and 5) monitor wintering populations in various locations of the Aleutian Islands.

Figure 1. Location of segments surveyed
10 to 16 October, 1983

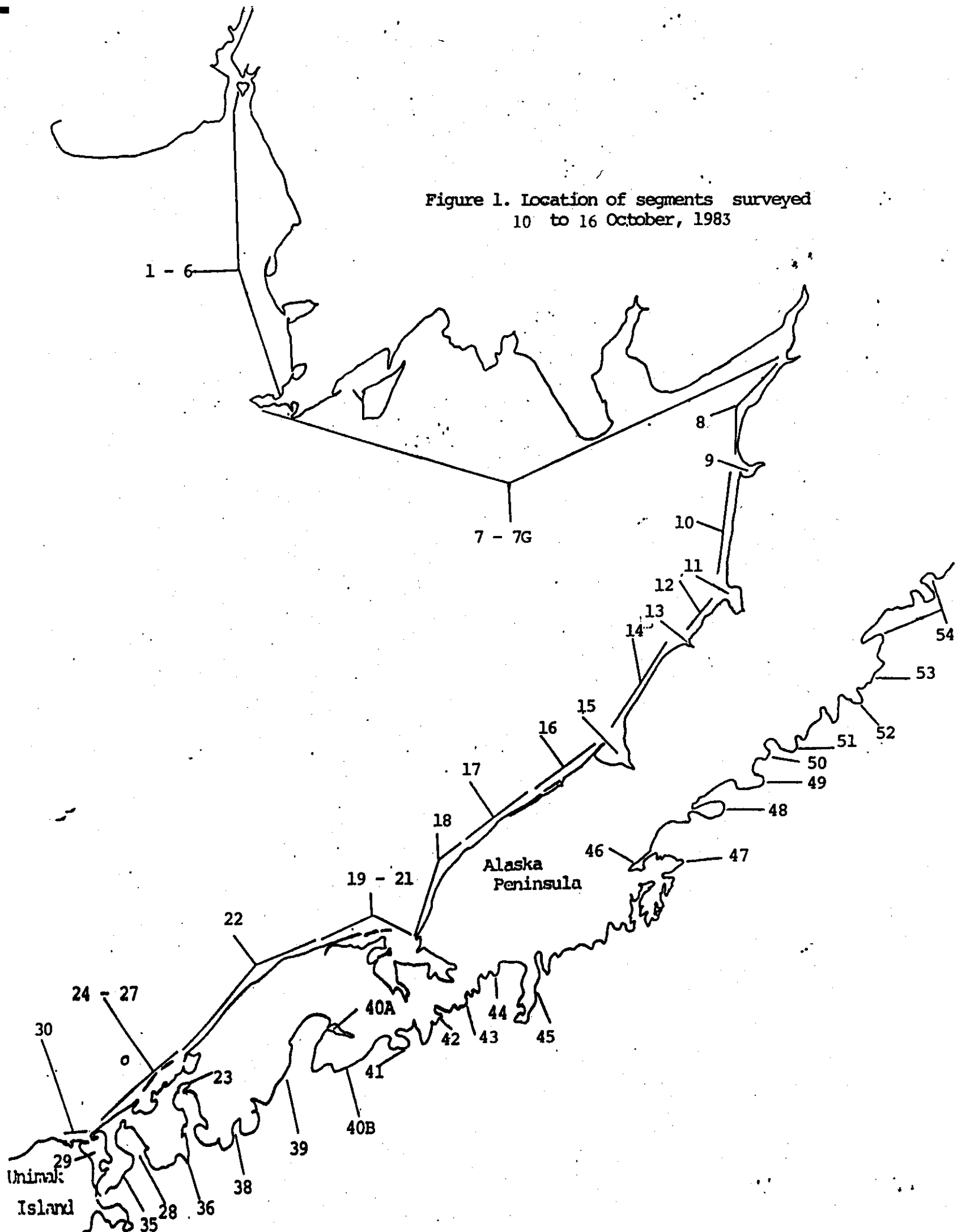


Table 1. Emperor goose numbers observed (in parentheses) by segment.

10 October 1983 - Wind Southeast at 10 kts, 40 degrees F, Scattered clouds.
Survey time 1110 to 1642 hours.

1. Bethel to Quinhagak	(0)
2. Quinhagak to Jacksmith Bay	(0)
3. Jacksmith Bay to Carter Spit	(0)
4. Carter Spit to Goodnews Bay	(0)
5. Goodnews Bay to Chagvan Bay	(0)
6. Chagvan Bay to Nanvak Bay	(0)
7. Nanvak Bay to Cape Pierce	(19)
7A. Cape Pierce to Hagemeister Is.	(0)
7B. Hagemeister Is. to Tongue Pt.	(0)
7C. Tongue Pt. to Summit Is. Pt.	(0)
7D. Summit Is. Pt. to Kulukak Pt.	(0)
7E. Kulukak Pt. to Dillingham	(0)
7F. Dillingham to Kvichak	(0)
7G. Kvichak to Naknek	(0)

11 October 1983 - Wind Southwest 20 kts., Partly cloudy, 45 degrees F.
Survey time 1111 (low tide) to 1840 hours (high tide)

8. Naknek to Egegik Bay	(33)
9. Egegik Bay to 6 km South of Goose Pt.	(336)
10. 6 km So. of Goose Pt. to Smokey Pt.	(0)
11. Smokey Pt. to Cape Menshikof (Includes Ugashik Bay)	(723)
12. Cape Menshikof to Cinder River Lagoon	(0)
13. Cinder River Lagoon	(5,029)
14. Cinder River Lagoon to Port Heiden	(101)
15. Port Heiden to 24 km South of Stroganof Pt.	(11,541)

Table 1. Continued

11 October 1983 Continued

16. South of Strogonof Pt. to Seal Islands	(0)
17. Seal Islands to Ilnik Lake	(4,510)
18. Ilnik Lake to Port Moller	(0)
19. Port Moller to Herendeen	(1,491)
20. Herendeen to Cape Rozhnof (Including Mud Bay)	(11,165)
21. Cape Rozhnof to Lagoon Pt. (Including Kudobin Islands)	(16,276)
22. Lagoon Pt. to Kinzarof Lagoon	(70)

12 October 1983 - Wind Southeast 5 kts., 44 degrees F, Scattered clouds at 2,000 feet. Survey time 1130 to 1643 hours (mid to high tide)

23. Kinzarof Lagoon	(1,003)
24. Moffet Lagoon	(4,789)
25. Izembek Lagoon	(3,874)
26. Applegate Cove to Big Lagoon	(428)
27. Big Lagoon/Hook Lagoon	(1,302)
28. Morzhovoi Bay	(134)
29. Bechevin Bay	(2,007)
30. Swanson Lagoon	(0)
31. Urilia Bay	(0)
32. South side Unimak Island (Cape Luke to Cape Aksit)	(105)
33. Otter Cover	(0)
34. Ikatan Bay to Kenmore Head	(0)
35. Kenmore Head to Thin Point	(not surveyed)

Table 1. Continued

14 October 1983 - Wind Southeast 15 kts, 40 degrees F, Scattered clouds
at 1500 feet. Survey time 1305 to 1645 hours

36. Thin Point to Cold Bay (385)

Sandman Reefs and Sanak Is. Complex (1,497)

15 October - Wind Southwest 10 kts., 45 degrees F, Partly Cloudy at
5,000 feet. Survey time 1120 to 1440 hours.

37. Cold Bay to King Cove (45)

38. King Cove to Pavlof Bay (350)

39. Pavlof Bay (807)

40A. Canoe Bay to Seal Cape (184)

40B. Seal Cape to Balboa Bay (280)

41. Balboa Bay to Dorenoi Bay (0)

42. Dorenoi Bay to American Bay (0)

43. American Bay to Ramsey Bay (50)

44. Ramsey Bay to Ivanof Bay (0)

45. Ivanof Bay to Chignik Lagoon (115)

46. Chignik Lagoon to Chignik Bay (2,282)

47. Chignik Bay to Kujulik Bay (not surveyed)

48. Kujulik Bay to Aniakchak Bay (not surveyed)

49. Aniakchak Bay (not surveyed)

50. Amber Bay to Cape Kunmik (not surveyed)

51. Cape Kunmik to Cape Providence (not surveyed)

52. Cape Providence to Agripina Bay (not surveyed)

53. Agripina Bay to Wide Bay (not surveyed)

16 October 1983 - Wind East 30+ kts., 45 degrees F, Overcast 700 feet
and rain. Survey time 1240 to 1350

54. Wide Bay to Portage Bay (1,600)

55. Portage Bay to Puale Bay (20)

TOTAL EMPERORS 72,551

Table 2. Fall populations of Emperor Geese 1979 - 1983.

Area	1-4 Oct. 1979	1-9 Oct. 1980	3-8 Oct. 1981	6-10 Oct. 1982	10-16 Oct. 1983	22 Oct. 1983
Yukon Delta	--	--	105 (0.2)	--	--	--
Chagvan Bay	0	8 (0.01)	1 (0.01)	0	0	--
Nanvak Bay	0	0	25 (0.04)	0	19	--
N. Bristol Bay	0	0	0	0	00	--
Egegik Bay	60 (0.1)	588 (0.9)	2,288 (3.6)	1,056 (1.3)	369	1,020
Ugashik Bay	84 (0.1)	322 (0.5)	2,405 (3.8)	2,063 (2.5)	723	5,090
Cinder R. Lagoon	3,255 (5.5)	5,284 (8.4)	1,626 (2.6)	5,000 (6.2)	5,029	11,540 (14)
Port Heiden	28,603 (48.4)	9,695 (15.4)	7,299 (11.6)	14,097 (17.5)	11,642 (16)	28,940 (35)
Seal Islands	6,719 (11.4)	4,064 (6.4)	5,552 (8.8)	9,980 (12.4)	4,510	7,070
Nelson Lagoon	13,067 (22.1)	35,481 (56.2)	30,585 (48.4)	30,684 (38.1)	29,002 (40)	28,950 (35)
Izembek NWR ²	7,326 (12.4)	7,649 (12.1)	7,580 (12.0)	9,580 (11.9)	13,642 (19)	--
Coastal Bering ³ Sea Total	59,114 (100)	63,091 (99.9)	57,466 (91.0)	72,460 (89.9)	64,936 (90)	82,610
So. Ak. Peninsula	--	--	5,690 (9.0)	8,148 (10.1)	7,615 (10.5)	--
TOTAL	59,114 (100)	63,091 (99.9)	63,156 (100)	80,608 (100)	72,551 [*] (100)	82,610

-- indicates areas not surveyed

1 () indicates % of total.

2 Includes lagoons west of Izembek NWR including Swanson Lagoon.

3 All areas surveyed from Yukon Delta and North side Alaska Peninsula.

UNITED STATES GOVERNMENT

memorandum

U. S. FISH AND WILDLIFE SERVICE

Route / File
8.6.1
for
MB

Migratory Bird Management - North
1412 Airport Way
Fairbanks, Alaska 99701

TO: All Stations listed below

FROM: Project Leader, MBMP-N
Fairbanks, Alaska

DATE: MAY 29 '84

SUBJECT: Fall 1983 Emperor Goose Survey

Find attached your copy of the above mentioned trip report. The survey crew would especially like to thank personnel at Yukon Delta NWR, Alaska Peninsula NWR, Becharof NWR, and Izembek NWR for their support in providing bunkhouse space and vehicle rides.

Rod
Rod King

cc: Migratory Bird Specialist, Anchorage
Yukon Delta NWR, Bethel
Togiak NWR, Dillingham
✓ Alaska Peninsula NWR, King Salmon
Izembek NWR, Cold Bay
Waterfowl Investigations, Juneau
Alaska Maritime, Homer
Richard Sellers, ADF&G, King Salmon
Sam Patten, ADF&G, Bethel