

TRIP REPORT

AERIAL WATER BIRD SURVEY - Bethel to Bechevin Bay, Alaska  
(October 1-4, 1979)

by

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During the first week of October 1979 a survey was flown along the west coast of Alaska from Bethel to Bechevin Bay (Figure 1) to assess waterbird use of nearshore and littoral areas. The survey was conducted in the Fish and Wildlife Service (FWS) turbo-beaver (N754), piloted by Bruce Conant, FWS, with Robert Gill, FWS, along as a second observer. On 2 October Margaret Petersen, FWS, was picked up at Nelson Lagoon and acted as a third observer on the Nelson and Izembek Lagoon portions of the survey. Observations were made from approximately 250 feet at a speed of 125 miles per hour (mph). The survey track generally followed the water/shore interface, but deviations occurred when large expanses of mudflats were encountered. Here the track line followed approximately 200 meters inshore of the water/mud interface and, depending on the extent of flats exposed at the time, entailed a second track inshore of the first. Observations of shorebirds were usually made within a 200 meter swath along the survey track.

Realizing the futility of trying to census all waterbirds over such an expanse of coastline, particularly in relation to changing tides, we concentrated our efforts on Emperor Geese, Steller's Eiders, all shorebirds, and to a lesser extent all large gulls. We feel our figures for Emperor Geese, Dunlin and Steller's Eiders probably approach absolute numbers of each species over the area at time of the survey. For large gulls (Glaucous Gull) the figures from Bethel to Togiak represent all birds seen. For the Alaska Peninsula these figures are incomplete as are the figures for Canada Geese and Black Brant in Izembek Lagoon.

All beached marine mammals and the numbers and ages of large gulls associated with them were recorded and are summarized by census leg.

The following total numbers were recorded over the survey area: Emperor Geese - 59,808; Steller's Eider - 42,010; Unidentified small sandpiper (mostly Dunlin but undoubtedly includes some Rock Sandpipers) - 188,710; Bar-tailed Godwit - 7848; American Golden Plover - 128; Black-bellied Plover - 203; Sanderling - 75; Rock Sandpiper - 1337; Glaucous Gull - 792, of which 447 were adults and 48 hatching year.

The numerous lagoons of the Alaska Peninsula supported the greatest diversity and numbers of waterbirds over the entire survey route. Shorebirds, mostly Dunlin, were concentrated along the east shore of Kuskokwim Bay and along every major lagoon of the Peninsula. The extensive intertidal of Nushagak Bay was essentially void of shorebirds. Waterfowl were similarly distributed but appeared to be more selective in their use of lagoons along the Peninsula.

Start: October 1, 1979, 1045 hours. No wind, high overcast, temperature 52°F

Leg 1. Kuskokwak Creek to Warehouse Creek

Unidentified small sandpiper (Dunlin): 2027  
Glaucous Gull (adult = A): 4  
Glaucous Gull (hatching year = HY): 1  
Mew Gull: 5  
Common Raven: 1

Leg 2. Warehouse Creek to Qwinhagak Village

Unidentified small sandpiper: 1375  
Glaucous Gull: 4A  
Mew Gull: 20  
Bonaparte's Gull: 20  
Bar-tailed Godwit: 40

Leg 3. Qwinhagak Village Flats

Unidentified small sandpiper: 10  
Rock Sandpiper: 1  
Glaucous Gull: 70A, 0HY  
Glaucous Gull (second year = SY): 3

Leg 4. Qwinhagak Village to Jacksmith Bay

Glaucous Gull; 53A, 2 HY  
Bar-tailed Godwit: 80

Leg 5. Jacksmith Bay

Unidentified small sandpiper: 60  
Bar-tailed Godwit: 350  
American Golden Plover; 30  
Glaucous Gull: 12A, 2HY

Leg 6. Jacksmith Bay to Carter Spit

Unidentified small sandpiper: 365  
Glaucous Gull: 49A, 1SY  
Glaucous Gull (mixed age = MA): 40  
Mew Gull: 20

Leg 7. Carter Bay and Spit

Unidentified small sandpiper: 8052  
Bar-tailed Godwit: 1945  
Glaucous Gull: 36A  
Mew Gull: 250A  
Bonaparte's Gull: 200  
Snow Bunting: 70

Beached walrus: one with 1HY Glaucous Gull feeding on it.

Leg 8. Carter Bay to Goodnews Bay

Sanderling: 5  
Glaucous Gull: 9A, 3HY, 3SY  
Common Raven: 3  
Snow Bunting: 1

Beached gray whale: one with 7A Glaucous Gulls feeding on it  
and a second with no gulls associated.

Leg 9. Goodnews Bay - north side

Glaucous Gull: 67A, 8HY  
Common Raven: 4  
Black-bellied Plover: 2  
Mallard: 20

Leg 10. Goodnews Bay - south side

Unidentified small sandpiper: 1142  
Glaucous Gull: 25A, 10HY  
Mew Gull: 2HY  
Common Raven: 2  
Snow Bunting: 45

Leg 11. Platinum to Chagvan Bay

Glaucous Gull: 3A  
  
Walrus: one hauled out on beach.

Leg 12. Chagvan Bay

Unidentified small sandpiper: 154  
Rock Sandpiper: 407  
Sanderling: 11  
Dowitcher spp. (probably Long-billed): 15  
Glaucous Gull: 31A  
Canada Goose (cackling): 419  
Pintail/Mallard: several 1000 of each  
Gyrffalcon: 2

Leg 13. Chagvan Bay to Nanvak Bay, including Nanvak Bay

Unidentified small sandpiper: 422  
American Golden Plover: 3  
Rock Sandpiper: 34  
Glaucous Gull; 84A, 22HY, 250MA  
Mew Gull: 1  
Common Raven: 1  
Snow Bunting: 400  
Cormorant spp: 1

Leg 14. Cape Peirce to Asigyugpak Spit (time 1240 hrs.)

Unidentified small sandpiper: 520  
Whimbrel/Bristle-thighed Curlew: 8  
Glaucous Gull: 17A, 17HU  
Steller's Eider: 1850 (mixed sex and/or age)  
Bald Eagle: 1A

Leg 15. Asigyugpak Spit to Osviak

Unidentified small sandpiper: 60  
Rock Sandpiper: 1  
Glaucous/Glaucous-winged Gull: 15A, 3HY  
Steller's Eider: 100 (20% males) + 1500 at spit (mixed age/sex)

Leg 16. Osviak Bay to Tounge Point

Glaucous/Glaucous-winged Gull: 48A, 1HY  
Common Raven: 6  
Steller's Eider: 105 (10% males) + 70 (females or juveniles)



Leg 17. Tounge Point to Togiak

Glaucous/Glaucous-winged Gull: 174A, 355HY  
Steller's Eider: 55 males, 30 female/juvenile  
Yellowlegs spp: 4  
Rock Sandpiper: 30

Beached walrus: one with 1A and 5HY gulls; one with 1A and 2HY gulls; one with 1A and 4HY gulls.

Leg 18. East side of Togiak Bay to Kulukak Point (incomplete coverage)

Unidentified small sandpiper: 230  
Black-bellied Plover: 6  
Glaucous-winged Gull: 75A, 75HY  
Steller's Eider: 300, 15 all males, 75 female/juvenile

Leg 19. Kulukak Point to Protection Point

Unidentified small sandpiper: 65  
Oldsquaw: 1  
Bonaparte's Gull: 150  
Black-bellied Plover: 2

Beached walrus: one with 1A and 5HY gulls associated; four with 1A each; 13 with none; one with 8A and 1HY; one with 2A and 1HY; one with 11A and 5HY; one with 4A and 2HY.

Beached seal: one

Beached gray whale: one with 9A and 2HY gulls associated.

Leg 20. Protection Point to Igushik River mouth

Unidentified small sandpiper: 770 (at Nichols spit)  
Bald Eagle: 1A

Leg 21. Igushik River to Snake River

Unidentified small sandpiper: 290  
Black-bellied Plover: 10

Leg 22. Snake River to Dillingham

Canada Goose: 500

Leg 23. Dillingham to Clarks Point (time 1510 hrs.)

Glaucous-winged Gull: 32A

Leg 24. Ekuk to Etoling Point

Unidentified small sandpiper: 17

Black Scoter: 800

Pintail/Mallard: several 1000 each

Leg 25. Etoling Point to Nakeen (tide low)

Unidentified small sandpiper: 575

Black-bellied Plover: 31

Glaucous-winged Gull: 700MA

Mallard: 300

Steller's Eider: 685 (mixed age/sex)

Leg 26. Koggiung to Naknek

No birds

October 2, 1979. Start at 1015 hrs. (wind) SW at 20 knots, ceiling 500 feet)

Leg 27. Johnston Hill (8 km SW Naknek) to Egegik Bay (tide high)

Unidentified small sandpiper: 24

Black-bellied Plover: 6

Glaucous-winged Gull: 450MA

Pintail: 1000

Snow Bunting: 16

Leg 28. Egegik Bay (tide 3/4 high)

Unidentified small sandpiper (Dunlin): 51,925 (all along SW shore)

Emperor Goose: 60

Bar-tailed Godwit: 1100

Black-bellied Plover: 3

Steller's Eider: 350 (at Goose Point)

Leg 29. Base of South Spit to Smoky Point

Unidentified small sandpiper: 400  
American Golden Plover: 2  
Black-bellied Plover: 2  
Steller's Eider: 1000 (mixed age/sex in channel)  
Pintail: 4000  
Mallard: 6000  
Canada Goose: 250 (5km N of Cape Greg)  
Snow Bunting: 196

Leg 30. Ugashik Bay up to Ugashik Village (approx. 400 m of flats exposed)

Unidentified small sandpiper: 2230 (on NE side to village)  
Unidentified small sandpiper: 11,981 (on SW side)  
Bar-tailed Godwit: 58  
American Golden Plover: 20  
Black-bellied Plover: 37  
Dowitcher spp: 1  
Rock Sandpiper: 2  
Northern Shrike: 1  
Canada Goose: 200  
Emperor Goose: 84  
Common Eider: 400 (subadults)

Leg 31. Cape Menshikof to Cinder River

No birds

Leg 32. Cinder River Lagoon

Unidentified small sandpiper: 12,460  
Bar-tailed Godwit: 1,875  
Black-bellied Plover: 6  
Canada Goose: 300  
Emperor Goose: 3,255  
Pintail: 20,000+  
Steller's Eider: 4-5000 (at mouth)



Leg 33. Mud Creek Lagoon

Unidentified small sandpiper: 582  
Dowitcher spp: 20  
Pintail: several 1000

Beached walrus: one with 1A Glaucous Gull feeding.

Leg 34. Port Heiden (time 1200 hrs., tide low)

Unidentified small sandpiper: 500 (incomplete census)  
Rock Sandpiper: 2  
American Golden Plover: 3  
Black-bellied Plover: 15  
Black Scoter: rafts of 2000, 6000, and 40-60,000  
Common Eider: 550  
Steller's Eider: 3,500 (mixed age/sex) and 4-7000 (all blue speculum)  
Emperor Goose: 28,603  
Pintail/Mallard: 4,000+  
Pintail: 8,000  
Mallard: 500

Port Heiden (4 October, 1200 hrs, tide 1/3 low)

Unidentified small sandpiper: 19,607 (only S and SW sides censused)  
Bar-tailed Godwit: 2,250  
Black-bellied Plover: 90  
American Golden Plover: 20  
Greater Yellowlegs: 2  
Steller's Eider: 5,007 (mixed age/sex)

Leg 35. Seal Islands

Unidentified small sandpiper: 13,840  
Emperor Goose: 6,719  
Arctic Tern: 1A  
Bald Eagle: 1A  
Gyr Falcon: 2

Leg 36. Nelson Lagoon (1400 hrs., includes Mud Bay and Walrus Island group)

Unidentified small sandpiper: 49,246

American Golden Plover: 50

Black-bellied Plover: 8

Bar-tailed Godwit: 150

Sanderling: 29

Greater Yellowlegs: 1

Dowitcher spp: 150

Emperor Goose: 13,067

- Common Eider: 525

Steller's Eider: 1,286 MA/sex, 910 males, and 2,455 female/juvenile

Gray whale: one feeding in upper lagoon.

October 3, 1979. Start at 0930 hrs., tide 3/4 high (wind SW 10 knots, overcast.

Leg 37. Izembek Lagoon - SW Applegate Cover

Black Brant: 50,590

Emperor Goose: 731

Mallard: 27

Leg 38. Grant Point to Blain Point

Black Brant: 30,775

Emperor Goose: 947

Canada Goose: 165

Pintail: 6,345

Unidentified small sandpiper: 420

Rock Sandpiper: 460

Leg 39. Blain Point to Moffet Lagoon

Black Brant: 13,785

Emperpor Goose: 4,572

Canada Goose: 452

Pintail: 112

Mallard: 8

Rock Sandpiper: 395

Unidentified small sandpiper: 6,689

Bald Eagle: 3A

Leg 40. Operal Island

Unidentified small sandpiper: 97  
Sanderling: 15  
Rock Sandpiper: 5  
Emperor Goose: 37  
Gyr Falcon: 2

Leg 41. Glen Island

Black Brant: 9,435  
Emperor Goose: 11  
Canada Goose: 2,825  
Green-winged Teal: 4  
Unidentified small sandpiper: 2,690  
Sanderling: 20  
Bonaparte's Gull: 25

Leg 42. Glazenap to SW Applegate Cove

Black Brant: 22,662  
Emperor Goose: 585  
Pintail: 888  
Mallard: 45  
Double-crested Cormorant: 6  
Unidentified small sandpiper: 85  
Bald Eagle: 2A

Leg 43. Bechevin Bay

Black Brant: 4,550  
Emperor Goose: 1,174  
Canada Goose: 1,450  
Whistling Swan: 2  
Pintail: 700  
Unidentified small sandpiper: 300

Total Steller's Eider for Legs 37-43

HY: 3,662  
Flightless females: 3,400  
Flying males: 2,121  
Flightless males: 300  
Mixed age/sex: 2,584  
Total birds: 12,067

Location of census legs, aerial survey, October 1-4, 1979.

