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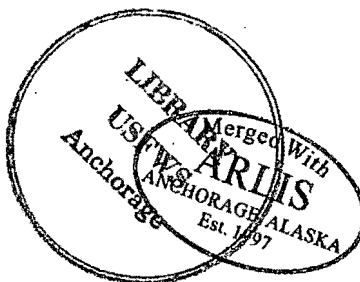


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A RECONNAISSANCE OF THE BREEDING DISTRIBUTION OF
COLONIAL NESTING OF SEABIRDS ON THE SOUTH COAST OF

THE ALASKA PENINSULA, MAY 30 - JUNE 19, 1973

by
Sowl, LeRoy W.



FOR REFERENCE

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A Reconnaissance of the Breeding Distribution of Colonial
Nesting of Seabirds on the South Coast of the Alaska Peninsula,
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February 26, 1982

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ARLIS
Alaska Resources
Library & Information Services
Anchorage, Alaska

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INTRODUCTION

There was a tremendous surge in developmental activity in the State of Alaska in the late 1960s and early 1970s. At the age of 70-odd, the Twentieth Century had finally caught Alaska up in its embrace. The implementation of the Wilderness Act and the National Environmental Policy Act, the proposed construction of the Trans-Alaska Pipeline and the culmination of the native claims settlement battle were just some of the more attention grabbing manifestations of this arrival. Probably no single undertaking more clearly pointed out the dearth of our knowledge on many of Alaska's wild resources than the drafting of the first major environmental impact statement - the one for the Trans-Alaska Pipeline System.

The field notes presented here are from one of the responses to the need for more knowledge about a neglected segment of Alaska's natural resources. It was a cosmopolitan effort with manpower and resources provided by refuges, research and what was then river basins studies. The vessel used was the 65-foot Aleutian Tern, a refuge vessel, enroute to its summer station in the Aleutian Islands. The crew consisted of George Putney, master/engineer; Chris Anderson, cook/deckhand; George Divoky, wildlife biologist (Research); and myself. Ed Bailey from the Aleutian Islands National Wildlife Refuge, joined the group at Sand Point on June 8. Alan McCartney an archeologist accompanied us.

Since these field notes have been used as a source document on a number of occasions it seem desirable to put them in a more accessible form for use by future investigators. This is true even though subsequent coverage of the area has been in greater detail.

The estimates of seabird populations in a given colony were obtained by one quick visit and a visual estimate. We suspected at the time and now know that a really good estimate can be obtained only from an extended visit to a colony. Still, these estimates have been proven to have a great deal of utility. The field notes and the information they contained have been subjected to only minimal editing for the purpose of clarifying there content so that guesses as to what they might mean could be minimized.

To forstall questions on one subject, the plants listed in these notes were based on my observations in the field. Plant collections were not maintained and my identifications have not been verified by specialists.

The original field maps from this field work are on file with the Wildlife Operations Program in Anchorage, Alaska. Copies are being placed with the Alaska Maritime National Wildlife Refuge, Homer and the Alaska Peninsula National Wildlife Refuge, King Salmon.

My involvement in this work has led to the publication of two papers, one, The Historical Status of Nesting Seabirds of the Northern and Western Gulf of Alaska, is a direct outgrowth of this reconnaissance. Because of its existence I have resisted the temptation to annotate these field notes.

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5/30/73

0730 Started engines.

0845 Departed Kodiak Harbor

Docked for fuel at Standard Oil.

There were many pigeon guillemots on the rocky shore of Near Island opposite the Standard Oil fuel dock - obviously nesting.

0920 Departed Standard Oil Dock

Large numbers of tufted puffins were encountered as we crossed Marmot Bay; there were also murre, pigeon guillemots, black-legged kittiwakes, glaucous-winged gulls, pelagic cormorants and a few fulmars. In Marmot Strait, murre became the most common seabird.

North of Marmot Strait, fulmars became very common, especially in the area near Sea Otter Island. There were very few white bodied fulmars, about 1 in 100, plumage varied through all shades of grey. Parakeet auklets were seen occasionally. No other small alcids were observed.

Latax Rocks 1600-1700 low tide 1551 Colony 1

There is a remote light on North Rock. There is little visible vegetation other than algae on the rock. Glaucous-winged gulls, 2 sea lions, pigeon guillemots, and a bald eagle were noted.

Middle Rock

Some mustards (Cruciferae) and possibly some grasses were visible - vegetation was mostly algae.

550 sea lions
250 cormorants
200 glaucous-winged gulls

South Rock

There is a large grass sward (Elymus) at the edge of the rock and a sizeable heath on top.

2,100 sea lions
500 glaucous-winged gulls
400 pigeon guillemots
black oystercatchers
bald eagle

The south island is the best of the lot. It could have burrow nesting alcids or storm-petrels in the turf cover on the south end. We saw pigeon guillemots coming out of holes in the organic layer where turf had broken away. They were obviously nesting in burrows.

I thought I saw some sea otters in the water on the west side of Middle Rock, but could not relocate them.

Stevenson Entrance and the Gulf of Alaska off the north side of Afognak and Shuyak Islands team with marine birds. There were many fulmars, murre, kittiwakes, tufted puffins, etc. We saw 7 parakeet auklets, and 1 rhinoceros auklet between Sea Otter Island and Latax Rocks. There must be several large marine bird colonies in this general area. We observed 3 Kittlitz's murrelets on the northeast side of Shuyak Island and one more on the Shelikof Strait side.

In Shelikof Strait birds are less common than they are on the east side of the island group; fork-tailed storm-petrel were almost as common as fulmars, which were less numerous than in Marmot Strait and the Gulf of Alaska.

Douglas Reef 1920-1940 Colony 2

The large island is low with lots of driftwood on top. There were 200 glaucous-winged gulls, 15 harbor seals, and 2 bald eagles present.

The small, sandy island to the south is a seal haulout of about 300 animals.

There were four pairs of marbled murrelets and a flock of harlequin ducks off the reef.

Murres were more numerous in the area than on the Shelikof Strait crossing.

Crab pots were being fished offshore from the reef.

Two Aleutian terns passed the vessel half way to Kiukpalik.

Kiukpalik Island 2040-2110

This is a flatish, grassy island with a small grove of Sitka spruce on the east side. There are no obvious bird colonies.

There were many murrelets along the coast, more than half were Kittlitz's.

Shakun Islets Colony 3

Weather and sea were not favorable for working these areas, which had already been visited by Dan Gibson. The same applies to next 2 sites.

Low grass covered islands.

Shakun Rock

Tufted puffins and horned puffins have been reported by Dan Gibson. Small alcids were seen on the way south. The day was dark and it was raining.

We anchored for the night behind Aguchik Island, Kukak Bay.

5/31/73

Kukak Bay

0035

0730-1330

We started engines at 0730, but remained at anchor because of wind direction and poor visibility.

There is an eagle nest on the southeast side of Aguchik Island.

Kukak Bay had 100 scoters (mostly white-winged), harlequins and scaup. There were fox on shore.

15' Island (VABM "Jane")

Colony 7

100+ glaucous-winged gulls

This island was unnamed. The assigned name comes from the elevation shown either on the USGS map or the nautical chart.

We encountered many marbled murrelets moving down bay to feed. There were 1,000-2,000 in two's and small groups.

Kukak Bay

1410

Colony 6

30 glaucous-winged gulls

Kukak Point

1425

Colony 5

This site has two rocks, 28' and 20' high respectively.

80 glaucous-winged gulls

75 pelagic cormorants

75 red-faced cormorants

75 double-crested cormorants

Ugyak

Colony 8

This site was visited by Dan Gibson.

Kulichkof Island

1445-1500

Colony 9

50+ glaucous-winged gulls

About 7 murres and 2 pigeon guillemots were seen in the area. Several pairs of marbled murrelets were observed.

Cape Gull

1520

Colony 10

Several rocks.

100 glaucous-winged gulls

100 pelagic cormorants

100 red-faced cormorants
50 black-legged kittiwakes
tufted puffins
pigeon guillemots

Gull Reef Colony 11

100 glaucous-winged gulls
75 pelagic cormorants
75 red-faced cormorants
tufted puffins
pigeon guillemots (nesting in grass at top also)

There was a large flock of birds feeding on a shoal of fish at the mouth of Kuliak Bay.

200 murres
150 black-legged kittiwakes
150 cormorants
25 horned puffins
1 common loon

At 1600 there were a number of seabirds feeding in mid-Kuliak Bay in association with 3 fishing vessels making shrimp hauls.

200 murres
50 glaucous-winged gulls
20 horned puffins
3 red-breasted mergansers

Missak Bay Colony 12

40 glaucous-winged gulls

Geographic Harbor 1830 Colony 14

The Aleutian Tern anchored here for the night.

150 glaucous-winged gulls

This is a cliff colony. The vegetation on the cliff included:

Draba hyperborea
Sedum rosea

Lupinus sp
unidentified grasses

Bear sign was visible in every direction. Saw sign of digging on, or trails across, almost every scoria patch.

6/1/73

There was a large bear on the beach in the morning. Later we saw two more about a half mile from the anchorage and at noon we saw a fourth galloping along the beach.

The whole Geographic Harbor/Amalik Bay complex has a good number of

white-winged scoters
surf scoters
common eiders
harlequin ducks
red-breasted mergansers

Total for all duck species seen was 6,000-8,000.

500+ marbled murrelets
500+ pigeon guillemots

These species were well distributed throughout the area also.

Common intertidal algae in Geographic Harbor. Fucus sp. On the outer islands in Amalik Bay, Laminaria was most common. There were many invertebrates: Balanus, Thias, Littorina, Mitellia edulis, Katherina tunicata, limpets, sea urchins, starfish, sea anemones, etc. The most common mollusc shell on the beach was the cockle; there were also a number of relatively thin shelled clams.

Amalik Bay Islands Colony 13

Vegetation on these islands was very typical of coastal zone.

<u>Elymus arenarius</u>	<u>Potentilla villosa</u>
<u>Calamagrostis canadensis</u>	<u>Lupinus nootkatensis</u>
<u>Equisetum arvense</u>	<u>Lathyrus maritimus</u>
<u>Fritillaria camschatcensis</u>	<u>Viola langsдорffii</u>
<u>Alnus crispa sinuata</u>	<u>Ligusticum scoticum</u>
<u>Urtica lyallii</u>	<u>Conioselinum chinense</u>
<u>Rumex</u> sp.	<u>Angelica lucida</u>
<u>Honckenya peploides</u>	<u>Heracleum lanatum</u>
<u>Draba hyperborea</u>	<u>Gentiana amarella</u>
<u>Saxifraga punctata insularis</u>	<u>Artemesia</u> sp.

There were layers of scoria under all vegetation.

Song sparrows and hermit thrushes were common. I heard one savannah sparrow and saw another.

4,000+ tufted puffins
800 red-faced cormorants
800 pelagic cormorants
500 glaucous-winged gulls
150 pigeon guillemots
30 harbor seals

This was a highly subjective estimate, the colony was dispersed on a very grassy cliff.

We departed Geographic Harbor at 1340.

The main island was grassy topped. It looked like a very good burrow turf.

1,000 tufted puffins
600 glaucous-winged gulls
150 cormorants
525 sea lions

Mount Pedmar

Colony 16

This is an excellent cliff, but it had few associated birds for so much area.

200 glaucous-winged gulls
50 cormorants

Katmai Bay - There were about 100 harbor seals on the beach.

Kashvik Bay

1645

Colony 17

There are low cliffs extending well up the bay.

250 cormorants
100 glaucous-winged gulls

We didn't go into the bay. There was a strong wind.

Cape Kubugakli

Colony 18

This is all good cliff, but there were no birds until we reached the island on the Alinchak Bay side. The vessel had to stand well off the island which had vertical cliffs and a flat grassy top. Glaucous-winged gulls and cormorants were visible from a distance; it looked like a good bird island.

Alinchak Bay

Fulmars appeared again. There was an eagle nest on the sea stack in Alinchak Bay. There were several pigeon guillemots in the bay.

We dropped anchor at 1830..

6/2/73

Left anchorage at 0815.

South Alinchak

0845

Colony 19

This is a small, low island with grass on top.

500 tufted puffins
50 pigeon guillemots
125 harbor seals

10,000+ tufted puffins
1,500 horned puffins
1,000 glaucous-winged gulls
1,200 cormorants
200 murre
200 harbor seals
2,600 sea lions

There are possibly fork-tailed storm-petrels nesting here, we saw 2.

Puale Bay

1015

We saw the first sea otters since Afognak Island; not many, however.

3,000 white-winged scoter
750 surf scoter

Kittiwakes were feeding in the bay but none were associated with the A colony (2,000-3,000).

Portage Creek

1130

Colony 21

500 glaucous-winged gulls

Puale Cliff

1145

Colony 22

6,000 murre
1,500 cormorants
1,000 glaucous-winged gulls
1,000 horned puffins

This is a beautiful cliff; there is potential nesting for many more birds than were there. While this is the first murre colony of any real size, the number of murre to the north and east indicate we may have missed a couple of colonies.

Much of this coast has good, low cliffs fronted by shoal water and really needs to be covered by a small boat.

Puale Bay is open and received considerable wind from all directions. It is one of the best seabird and marine mammal areas on this part of the coast. The unseen marine life must be quite abundant. This area has much to recommend against it as a future pipeline terminal.

Cape Aklek

Colony 23

4,000 horned puffins

There is a great expanse of good cliff in this area.

VABM "Klek"

Colony 24

500 horned puffins

200,000 murre (135,000 on cliff at time)
2,000 cormorants

A conservative estimate was given to the number seen in the Bay.

Dry Bay 1430 Colony 26

200 glaucous-winged gulls

Cape Unalishagvak Colony 27

275,000 murre
3,000 kittiwakes
2,000 glaucous-winged gulls
2,000 horned puffins

Jute Island 1530 Colony 28

15,000+ tufted puffins
2,500 glaucous-winged gulls

Portage Bay 1630 Colony 29

3,000 red-faced cormorants
pelagic cormorants
horned puffins

Mt. Becharof

There are still a dozen-odd buildings visible at Kanatak.

Kelp Point 1645 Colony 30

50 glaucous-winged gulls

Mt. Becharof has good high cliff at its base, but no bird colonies were observed. There were horned puffins around its base and these probably nest there.

Kanatak Lagoon Colony 31

3,000 glaucous-winged gulls

This is a low, flat island with thin turf and little soil for burrow builders.

Cape Igvak Colony 32

3,000 glaucous-winged gulls

This site consisted of low islands, with grass on top, but very thin turf.

We dropped anchor at 1930 in Wide Bay, about a mile past Titcliff Island. We went ashore on the peninsula across from Titcliff Island. Low areas were grassy, but any slight elevation had a dry tundra cover.

<u>Salix</u> sp.	<u>Ligusticum</u> <u>scoticum</u>
<u>Saxifraga</u> <u>oppositifolia</u>	<u>Empetrum</u> <u>migrum</u>
<u>Saxifraga</u> <u>escholtzii</u>	<u>Rhododendron</u> <u>camschaticum</u>
<u>Dryas</u> <u>octopetala</u>	<u>Lagotis</u> <u>glauca</u>
<u>Oxytropis</u> sp 1/	<u>Pedicularis</u> <u>kanei</u>

1/ A pulvinate, lanate form resembling O. nigrescens pygmaea with yellow flowers.

We saw a brown bear swimming from Slaughter Island to Titcliff Island. This may be part of the explanation of why there are so few marine birds on these likely looking islands.

Marbled murrelets and possibly Kittlitz's are common in Wide Bay. They have been conspicuous by their absence since Alinchak.

Pigeon guillemots are also in the bay.

Other birds observed were—several snow buntings, a semi-palmated plover, 1 whistling swan, and an unidentified swallow.

Slaughter Island Colony 33

1,200 glaucous-winged gulls

Sea otters are present in Wide Bay. None were noted between there and the islands at the north approach to Puale Bay.

6/3/73

We raised anchor at 0820.

We circled the head of the bay. Large numbers of glaucous-winged gulls and cormorants and some kittiwakes were present, but no nesting colonies were found.

There is an old oil exploration dock on the north (peninsula) side of the bay opposite Slaughter Island.

We saw an arctic loon in the bay. The last loon noted was a yellow-billed loon back in Portage Bay. Red-breasted mergansers appear to be common around reef areas in the bay.

Wide Bay Colony 33B

600 red-faced cormorants
pelagic cormorants

Colony was on a cliff on the shore, site was not recorded on a map.

There was a bear on east end of West Channel Island as we left Wide Bay.

We reached Cape Kayakliut at 0935. There was a large flock of black scoters in the water off the cape.

Imuya Bay 1055 Colony 34

100 glaucous-winged gulls

There were two people clamming in Imuya Bay. They had come by air.

Cape Kilokak

About 100 harbor seals were hauled out on rocks on the east side. Puffins were in enough numbers to indicate nesting. The best sea otter numbers around Cape Kilokak and Kilokak Rocks that we've seen yet on this side of Shelikof Strait.

There were about 350 sea lions, 30 harbor seals and 25 sea otters at Kilokak Rocks; also about 150 cormorants roosting on the rocks.

There is a continuous southward and westward movement of murre and kittiwakes.

Cape Kilokak Colony 35

1,000 tufted puffins
150 glaucous-winged gulls

Agripina Bay 1215 Colony 36

300 glaucous-winged gulls
100 cormorants
300 horned puffins

Ashiak Island 1245 Colony 37

20,000 tufted puffins
5,000 horned puffins
500 glaucous-winged gulls

Island had lots of turf, filled with burrows. It looks like a likely spot for burials; many caves and niches.

David Island Colony 38

12,000 tufted puffins
4,000 horned puffins
1,000 red-faced cormorants
 pelagic cormorants
1,000 glaucous-winged gulls

This island and the two following are three very interesting blocks of rock. The visible signs of birdlife are very limited considering the amount of available space. There are trails from the beach, indicating the presence of mammals.

5,000 tufted puffins
2,000 horned puffins
1,000 glaucous-winged gulls
500 cormorants

This is a lower island than David, with more vegetation.

Navy Island Colony 40

3,500 tufted puffins
1,200 horned puffins
300 glaucous-winged gulls
150 cormorants

Aiugnak Columns looked good from a distance but there were no birds; 300 sea lions, 75 seals.

Chiginagak Bay Colony 41

15,000 tufted puffins
2,000 horned puffins
500 glaucous-winged gulls

Chiginagak 730 Colony 42

90 glaucous-winged gulls

We anchored in Chiginigak Bay at 1810.

Murrelet numbers are high in the Bay. Sea otter were not seen in the inner bay; they were very common outside. The numbers have been good around islands since we came around Cape Kilokak. We saw an estimated 1,000 sea otters in the Chiginiagak Bay area with not more than another 500 from there north to Douglas Reef.

6/4/73

We had anchor up at 0920.

Derickson Island 0830 Colony 43

100 horned puffins
60 cormorants

This island appears to be largely unsuited to seabird nesting because of the way the cliffs are fissured.

Cape Kuyuyukak Colony 44

17,000 black-legged kittiwakes
9,000 murre
2,000 tufted puffins
1,400 glaucous-winged gulls
500 cormorants

This colony is located on the north two of three larger islands. All but a few of the gulls and cormorants are on the middle island. This island is outstanding for its size. It has sheer cliff all the way around and a little vegetation on top.

Ugaiushak Island 1030 Colony 45

This island has cliffs on Pacific side.

- 14,000 horned puffins
- 13,000 murre
- 10,000 tufted puffins
- 7,000 black-legged kittiwakes
- 2,500 glaucous-winged gulls
- 600 pelagic cormorants
- 300 common eiders

This is an outstanding mixed colony; should be acquired. Some of the slopes appeared to have burrows in them (Nocturnal small alcids?). There is an old cabin on the southeast bay.

Central Island Colony 46

- 90,000 tufted puffins
- 3,000 horned puffins
- parakeet auklets

This is one of those islands which point out just how ludicrous and inadequate our present colony census methods are.

We saw a flightless murre at very close range - all primaries and secondaries were gone.

VABM "Long" Island Colony 47A

- 5,000 tufted puffins (small island)
- 3,000 pigeon guillemots
- 2,000 horned puffins
- 400 glaucous-winged gulls

NOTE: This colony number includes two adjacent islands censused separately.

This is a string of islands, all low. A cabin on largest indicates a fox farming history.

(Unnamed) 56°48' - 147°00'

Colony 47B

This island is adjacent to, and directly east of VABM "Long."

7,000 tufted puffins
500 horned puffins
300 glaucous-winged gulls
300 pigeon guillemots

Hydra Island Colony 48

4,500 tufted puffins

Eagle Island

300 seals
100 sea otter

This island is low, with a flat top.

Garden Island 1415 Colony 49

500 glaucous-winged gulls
tufted puffins

I saw 3 ancient murrelets fly past the islet northwest of Kumlik Island in the mouth of Aniakchak Bay.

Kumlik Island

No colonies were noted, but there were so many birds around the island that in aggregate the breeding population must be rather large.

horned puffins
pigeon guillemots
tufted puffins
parakeet auklets

There were about 100 sea otters around the island.

We anchored at 1730 behind Kumlik Island.

There are probably 500 sea otters between Cape Kuyuyukak and Cape Kumlik.

Murrelets are numerous in Amber and Aniakchak Bays.

South and west of Agripina Bay, the formerly rather common white-winged scoter flocks seem to have given way completely to common scoters.

There is an old fox farm cabin on a bight on the inside of Kumlik Island. There are several trails on the island so fox may still be present.

6/5/73

-15-

The anchor was up at 0820.

Cape Kumlik Colony 50

2,000 tufted puffins

This is a small, low island and several outlying rocks.

There were large numbers of murres along the route between Kumlik Island and Sutwik Island.

Sutwik Island is precipitous on the north and slopes away to the south. The vegetation is mostly grassy with scrubby alder in some of the more sheltered areas.

Foggy Cape 1130 Colony 51

400 glaucous-winged gulls

300 cormorants

Colony on islets of the cape.

South Sutwik Colony 52

200 glaucous-winged gulls

Large numbers of tufted puffins, horned puffins, pigeon guillemots, murres and cormorants were feeding all around Sutwik Island. They must come from some distance as there is no evidence of any large colonies around the island. Only a very rare suggestion of a trail was noted but there may be fox on the island.

Volcanic Dike 1215 Colony 53

700 glaucous-winged gulls

There were 200+ sea otters around the island.

Coming back from Sutwik, several thousand murres were encountered between Kumlik, Sutwik and Unavikshak Islands.

Two fulmars also crossed our path, the first since Wide Bay.

Unavikshak Colony 54

6,000 tufted puffins

500 horned puffins

Small island east of Unavikshak Island. Unavikshak itself is a volcanic dike and there is little puffin habitat.

We saw 6 rorquals between 1400 and 1430, two more at 1445.

Fulmars appeared around the vessel on the crossing to Nakchamik Island.

33,000 common murre
16,000 black-legged kittiwakes
3,000 glaucous-winged gulls
2,500 tufted puffins
2,000 pigeon guillemots
500 horned puffins

There appeared to be burrows on the island with fresh dirt in front of them (small nocturnal alcids?). There could be several thousands of nocturnal seabirds nesting on the island.

Nakchamik Island

Colony 56

300 glaucous-winged gulls

Nakchamik Island has a fox farm cabin on it. Therefore it must have had birds on it once. This appears to be symptomatic of a broad syndrome; cabin - fox farming - formerly had nesting marine birds.

More and more murre are turning their backs to the sea as we move from colony to colony so brooding must be just starting.

I saw one more ancient murrelet today as we approached Sutwik Island. Very few other murrelets were seen, but we stayed away from mainland bays.

We tied up at Chignik dock after 1900.

Local residents say the only bird colonies closer than Chiginagak are a few gull colonies in Hook Bay. This bay was not visited. Sea otter are said to be common in Kujulik Bay. Sea otters are accused of doing in clam beaches in the area.

There was a large flock of white-winged scoters in Chignik Bay, about 400; 20 surf scoters and 2 marbled murrelets on the way in.

6/6/73

The vessel took on 500 gallons of diesel at Chignik. We left the dock at 0925.

Relying on local reports that there are only a few gulls on the other side of Chignik Bay, we did not cross the bay. Many sheer cliffs here, almost all have a boulder beach at the foot.

The lowland vegetation of this area is alder overstory and grass understory. Step and stripe heath communities start as low as 300-400'.

Here we encountered large numbers of murre in flocks of 50-odd coming out of Castle Bay as we came around Jack Point. They were moving toward Chignik Bay. We also saw 3 ancient murrelets.

Marbled and Kittlitz's murrelets were very numerous at the mouth of Castle Bay.

3,000 murre
700 cormorants
500 black-legged kittiwakes

Horned puffins appear to be the most common puffin near the island. The south side of the island is precipitous, north side is grassy, with a lot of solifluction on steep slopes, not in stripes, but sluffing vertically.

Divoky saw 6 thick-billed murre near this colony.

There was a hole in the face of the cliff with whitewash below it and what appeared to be a peregrine inside.

Necessity Cove contained many murrelets - marbled, Kittlitz's and ancient, in that relative order of abundance.

The fiord country south of Chignik was fogged in except for Kuiutka Bay. We stayed out of these.

Seal Cape Colony 59

2,200 cormorants
tufted puffins
horned puffins

In some places along this coast, horned puffins are as common and widely dispersed as pigeon guillemots.

The band of tufted puffin burrows on the top of the easterly Brother Island is quite wide and has altered the vegetation enough that the band is visible for several miles.

The Aleutian Tern anchored at Mitrofani Island at 1745. The cove on the northwest corner of the island is a good anchorage with 20 fathoms of water and a sandy bottom.

There are king crabs and tanner crabs in the cove.

We went ashore for an hour.

Vegetation on the slope above the cove is grass with braken, moss, and shrubs. Species identified from vegetative materials collected were as follows:

Peltigera apthosa
Peltigera canina
Cladonia spp.
Stica sp.
Parmelia sp.
Sphagnum sp.
Ptilium crista-castrensis
Lycopodium selago selago

Fritillaria camschatcensis
Streptopus amplexifolius
Salix spp.
Urtica sp.
Rumex sp.
Anemone narcissiflora
Thalictrum sp.
Sedum rosea

Lycopodium annotinum annotinum
Equisetum arvense
Cryptogramma crispa
Polypodium vulgare
Thelypteris limbosperma
Calamagrostis sp.
Elymus arenarius
Carex sp.
Ligusticum scoticum
Angelica genuflexa
Heracleum lanatum
Trientalis europaea arctica

Saxifraga caespitosa
Heuchera glabra
Luetkea pectinata
Rubus spectabilis
Geum calthifolium
Sanguisorba stipulata
Epilobium angustifolium
Circaea alpina
Mertensia maritima maritima
Honckenya peploides
Solidago multiradiata
Sambucus racemosa

The shrub overstory is of Alnus, Salix (2 species), Sambucus, and Rubus. Dominant ground cover is a moss, Calamagrostis and Thelypteris.

Birds on shore were:

Black oystercatchers
 Hermit thrushs
 Wilson's warblers
 Savannah sparrows

Fox sparrows
 Song sparrows
 Black-capped chickadees
 Black-billed magpies

No small rodents were observed but winter trails and droppings were abundant.

6/7/73

The anchor was up at 0825.

Mitrofanian* (*see Colony 61)

20 glaucous-winged gulls
 pigeon guillemots
 horned puffins

This was a rock slide with 300-400 pigeon guillemots visible sitting in the water or on the rocks. About 100 horned puffins milling around in front.

Pigeon guillemots and horned puffins must nest along much of the north shore.

Spitz Island Colony 60

200,000 murres
 18,000 black-legged kittiwakes
 12,000 tufted puffins
 2,000 glaucous-winged gulls
 1,500 horned puffins

Murres were mainly milling around the colony or rafted up in front. Relatively few were on the cliffs and there hardly seemed room for them. They appeared to be nesting above the cliff on what was essentially tufted puffin type terrain except it was steeper.

There appeared to be many more murres here than at Cape Unalishagvak. Since the counts are reversed, there is an apparent miss-estimate at one or both.

These were two entirely different types of colonies. Cape Unalishagvak was a typical cliff with horizontal ledges. Spitz Island was very short on ledge space and birds nested above the cliffs on the steep slopes.

At Cape Unalishagvak the majority of the murres were on the cliff, 185,000 of 275,000, and the rest rafted at sea. At Spitz Island the vast majority of the birds were either on the water or in the air. It may be necessary to develop different census standards for these two very different situations.

Peak 1975 *

150 red-faced cormorants
pelagic cormorants

This colony may be larger because there were several hundred cormorants mostly red-faced feeding on the cape opposite Spitz Island which weren't tied to a colony there.

Sosbee Bay *

15,000 horned puffins
1,000 tufted puffins

This estimate may be way off. The birds nest in a colony which extends all the way around Sosbee Bay. The actual number of birds in the colony may be higher (or even lower if movements were extensive enough).

Practically the entire coast of Mitrofani is one long horned puffin colony.

Mitrofania Island * Colony 61

* Mitrofania total includes all colonies on the island.

35,000 horned puffins
6,000 tufted puffins
4,000 pigeon guillemots
700 glaucous-winged gulls
300 red-faced cormorants
pelagic cormorants.

The dominant vegetative aspect of Mitrofania Island is that of the cove visited. There are no doubt many alpine plants present but almost no heath is visible. (It could exist under the remaining snow cover).

Any previously existing cabins appear to be gone. Fox trails were not visible from the boat. The number of rodents also indicates likelihood that fox are now absent. Alan McCartney did find a chunk of material containing bird feathers which might have been a fox scat, but might also have been a ball of petroleum tar.

No fork-tailed storm-petrels, which have been reported for Mitrofanía Island, were seen on or near the island. This is not necessarily negative evidence since these birds come to shore in the dark during the breeding season.

Brother Islands Colony 62

45,000 tufted puffins
10,000 murre (all in water)
8,000 black-legged kittiwakes
1,500 glaucous-winged gulls
1,500 horned puffins
200 harbor seals

The bulk of this colony is on the most easterly of these two islands. Sea otters were not visible around Mitrofanía and neighboring islands. I saw 1 northern phalarope on the crossing from Brother Islands to Stirni Point. There was an ancient murrelet in full breeding plumage between Stirni and Coal Points.

Pinusuk Island 1440 Colony 64

9,000 tufted puffins
4,000 glaucous-winged gulls
500 black-legged kittiwakes
50 cormorants

This colony includes Pinusuk Island and islet to the east. At this date the grass around tufted puffin colonies is greener than elsewhere.

Chiachi Bay Colony 63

7,000 tufted puffins
6,000 unidentified burrowers
3,000 glaucous-winged gulls

The burrows observed were away from the edge and have a different look from those observed earlier. There were only enough puffins in the air to account for about 7,000 burrows, the other 3,000 burrows may contain something else or may be puffins also.

Big Koniúji Island was visible from Chiachi Island.

Noon Point 1700 Colony 65

3,000 tufted puffins
100 glaucous-winged gulls
100 horned puffins

The Aleutian Tern was at anchor in Kupreanof Harbor at 1730.

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Little shoal area and few bays were encountered today and few murrelets and no sea otters were seen as a result.

6/8/73

We had the anchor up at 0800.

There were arctic terns (few) around Paul Island. Kris Anderson found a mallard nest with 10 eggs there last night.

A few marbled murrelets and a common loon were observed in Humpback Bay.

There were murrelets in the mouth of Ivanof Bay as we crossed it.

Leader Island Colony 66

3,500 tufted puffins
1,200 glaucous-winged gulls

This is a very good colony island for its size. Most of the puffins were in the air or on the sea, but burrows were there. Vegetation mostly grass and Cochlearia sp.; one clump of Sitka (?) alder in a sheltered dip; columnar rock.

Fox Cape Colony 67

4,000 tufted puffins
1,200 glaucous-winged gulls

Again there were very few puffins on the cliff and not enough puffins in the air to account for the number of well tended burrows. The population estimate is made on the assumption that the burrows do in fact belong to puffins.

I observed 3 horned puffins for several minutes in a flight that had all the earmarks of a courtship flight.

Kupreanof Point Colony 68

3,500 tufted puffins
1,000 horned puffins
400 black-legged kittiwakes
300 glaucous-winged gulls

Peregrine activity indicated that these may have been a peregrine eyrie over this colony.

Several hundred cormorants, predominantly red-faced, feed along this coast of the Kupreanof Peninsula.

Bluff Point

Colony 69

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3,000 tufted puffins
1,700 cormorant

The wind was extremely strong coming out of Stepovak Bay; we couldn't work there. We ran in to Sand Point to pick up Ed Bailey.

We saw more murrelets in Unga Strait, including ancient, also saw Cassin's auklets or parakeet auklets.

We reached Sand Point at 1530. Refueled, took on water, called Anchorage and sent off mail.

Saw magpies, robin, tree swallows and common redpolls, heard yellow-crowned sparrows.

6/9/73

Departed Sand Point dock at 0820.

Round Island

Colony 71

9,000 black-legged kittiwakes
4,000 tufted puffins
4,000 horned puffins
2,400 glaucous-winged gulls
80 red-faced cormorants
pelagic cormorants
2 sea otters

This island has a round shape as implied by its name, it is volcanic rock with grassy vegetation.

Quartz Point

Colony 72

400 glaucous-winged gulls

This is a low islet just across from Round Island.

Gull Island (Zachary Bay)

Colony 73

300 tufted puffins
150 horned puffins
20 pigeon guillemots
50 harbor seals

This is a low rock of columnar basalt.

Guillemot Island

Colony 74

300 glaucous-winged gulls
15 sea otter
5 harbor seals
1 sea lion

About 300 red-faced and pelagic cormorants around island, no nests noted, only roosts.

240,000 murres
10,000 tufted puffins
7,000 horned puffins
6,000 glaucous-winged gulls
double-crested cormorants
2 eagles

There is grassy cover on the island above the cliffs.

NOTES: The estimates for bird numbers contained in these field notes are generally mine, or in the case of large colonies a composite of the counts of all observers. Divoky and I generally were in fairly close agreement whenever we compared estimates, sometimes I was the higher estimator and sometimes Divoky. Bailey, on the otherhand, made estimates consistently higher. Our estimates for the number of murres in this colony were, as follows:

Sowl	240,000
Divoky	250,000
Bailey	400,000

There is, of course, no way in which to determine which of these estimates are the most accurate.

No one in the party had ever seen cormorants that looked like the ones in this colony. They were large and had a crest of long, white plumes on either side of the head. It turns out that these are Phalacrocorax auritus circinatus, a race of the double-crested cormorant, sometimes called the white-crested cormorant. None of us had ever seen it at peak breeding plumage before when it had white crest plumes.

Henderson Island

Colony 76

300 glaucous-winged gulls
300 tufted puffins
200 horned puffins
20 pigeon guillemots
2 sea otters

Korovin Island is poor in birdlife, Korovin Bay has a few rocky places which evidently contain nesting places for horned puffins, tufted puffins and pigeon guillemots as these birds are all along the shore in small numbers. In the bay we saw 50 greater scaups, 2 oldsquaws and several harlequins.

Korovin Bay

Colony 77

Much of the coastline of the bay harbored small horned puffin colony.

Dark Cliffs Colony 78

2,400 glaucous-winged gulls
1,200 red-faced cormorants
pelagic cormorants

High Island Colony 79

6,000 tufted puffins
2,000 glaucous-winged gulls
500 horned puffins

The Aleutian Tern was anchored in Fox Hole by 1750.

One bison came down on the beach. Glen Davenport of ADF&G saw 11 last spring.

We went ashore in the evening.

I found the following plants on High Island:

<u>Equisetum arvense</u>	<u>Heracleum lanatum</u>
<u>Thelypteris limbosperma</u> (?)	<u>Epilobium angustifolium</u> (?)
<u>Polypodium vulgare</u>	<u>Romanzoffia unalaschensis</u>
<u>Elymus arenarius</u>	
unidentified grasses	
<u>Fritillaria camschatcensis</u>	
Unidentified mustards	
<u>Anemone narcissiflora</u>	
<u>Ligusticum scoticum</u>	
<u>Coniselinum chinense</u>	

Tufted puffins using only the outer 20-30 feet of the island except on the steepest slope where the depth of use into the island increased. Vegetation in the area used by puffins is disturbed. A clumpy grass (unid.) and Heracleum were the most common species. In relatively undisturbed parts of the island, Elymus usually dominated. I examined about 10 puffin breeding chambers; only one contained an egg. None of the gull nests which I found contained eggs. Red-faced cormorant nests on Dark Bluff contained 1-4 eggs.

Overgrazing by the bison was not evident, but their trails were.

6/10/73

We were underway at 0810.

Parakeet auklets crossed our path several times on the way across to Andronica Island.

Andronica West Bay Colony 80

200 horned puffins
30 pigeon guillemots

Andronica Spires

Colony 81

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250 black-legged kittiwakes
300 horned puffins

Andronica Light

Colony 82

6,000 tufted puffins
50 glaucous-winged gulls

Andronica East Bay

Colony 83

300 horned puffins
200 pigeon guillemots

Andronica Islet

Colony 84

600 glaucous-winged gulls

There were horned puffins almost all the way around Andronica; few sea otters. The Whaleback is a roost for gulls, cormorants and harlequin ducks.

The Haystacks

Colony 85

30,000 murres
22,000 black-legged kittiwakes
19,000 tufted puffins
5,000 horned puffins
500 pigeon guillemots

The murre component of this colony was at least 40 percent thick-billed murres.

We saw first Cassin's auklets on the passage between The Haystacks and Nagai Island.

Nagai Island

The low rocky coast of Nagai Island is not suited to large colonies but some areas are almost continuous habitat for horned puffins and pigeon guillemots. Porpoise Harbor had a seabird density that averaged 236 birds per square nautical mile.

The next bay north of Porpoise Harbor had an estimated 5,000 ancient murrelets feeding there.

Ancient murrelets in breeding plumage are circled on the median by a black band interrupted at the neck; the back and wing tops have a light gray aspect by comparison. In flight they look like they are composed of three layers, from the top one each of medium tone, dark tone and light tone.

In East Nagai Strait there were 206 birds per square nautical mile.

Big Koniuji Island is extremely different geologically and vegetatively from Nagai Island. The broken granitic rock of Big Koniuju probably constitutes an almost continuous horned puffin colony with an estimated 300 birds per mile of rocky coast.

Castle Rock Colony 86

85,000 tufted puffins
20,000 horned puffins
8,000 murre
6,000 black-legged kittiwakes
1,000 parakeet auklets
400 sea lions

There was a very dense siting of burrows.

Cape Thompson Colony 87

4,800 black-legged kittiwakes
1,200 tufted puffins
600 cormorants
600 horned puffins

We sighted our first crested auklets near the northeast corner of Big Koniuji Island. Parakeet auklets were also common at this corner of the island.

From the Cape Thompson colony area to Flying Eagle Harbor, very few birds were seen.

We were at anchor in Flying Eagle Harbor by 1710.

The island is littered with broken granitic rock. The existing beaches are white sand.

We went ashore in the evening and I noted the following plants:

Lycopodium selago
Lycopodium annotinum
Equisetum arvense
Thelypteris limbosperma
Thelypteris phegopteris
Gymnocarpium dryopteris
Polypodium vulgare
Calamagrostis sp.
Elymus arenarius
Other grasses
Carex spp.
Tofieldia coccinea
Fritillaria camschatcensis
Salix spp
Betula nana
Alnus crispa sinuata
Polygonum viviparum
Claytonia sibirica
Stellaria spp.

Lathyrus palustris
Geranium erianthum
Viola sp.
Epilobium angustifolium macrophyllum
Circea alpina
Ligusticum scoticum
Conioselinum chinense
Angelica lucida
Angelica genuflexa
Heracleum lanatum
Empetrum nigrum
Ledum palustre decumbens
Loiseluria procumbens
Cassiope lycopodioides
Arctostaphylos alpina
Vaccinium vitis-idea
Vaccinium uliginosum
Primula cuneifolia saxifragifolia
Androsace chamaejasme (?)

Honckenya peploides
Aconitum delphinifolium
Anemone narcissiflora villosissima
Ranunculus occidentalis
Cruciferae family
Sedum rosea
Saxifraga bronchialis
Heuchera glabra
Luetkea pectinata
Rubus chamaemorus
Rubus arcticus stellatus
Rubus spectabilis
Potentilla villosa
Geum macrophyllum
Geum calthafolium
Sanguisorba stipulata
Lupinus nootkatensis
Lathyrus maritimus

Trientalis europea arctica
Gentiana sp. (amarella?)
Romanzoffia unalaschensis
Lagotis glauca
Pedicularis kanei kanei
Boschniakia rossica
Pinguicula vulgaris vulgaris
Sambucus racemosa pubens
Coptis trifolia
Achillea borealis
Senecio pseudo-arnica
Cladenia alpestris
Cladonia spp.
Umbilicaria sp.
Stereocaulon sp.
Cetraria spp.
Thamnia vermicularis

I saw or heard the following birds:

Savannah sparrow
 Hermit thrush
 Song sparrow

Rock ptarmigan, willow ptarmigan, fox sparrow, yellow warbler, redpoll, water pipit, wandering tanager, snow bunting, rosy finch. There was a red fox on the island.

6/11/73

The anchor was up at 0805.

There are good puffin cliffs south of Flying Eagle Harbor (loose colony).

Yukon Harbor had 3,000-4,000 crested auklets in dense flocks. In the morning sun, the red-orange tone of the bill was what I really saw at a distance. The smell of orange peel was very strong from each of these flocks.

Hall Island Colony 88

4,000 parakeet auklets
 2,000 tufted puffins
 1,500 pigeon guillemots
 400 glaucous-winged gulls
 200 black-legged kittiwakes
 50 cormorants
 Cassin's auklet

There was a large number of sea birds feeding between Hall and Herendeen Island including 5,000-odd crested auklets.

9,000 tufted puffins
5,000 glaucous-winged gulls
3,000 parakeet auklets (9,000 in later visit)
500 horned puffins
Cassin's auklets

The island is grassy on the southwest, rocky on the other sides.

Atkins Island

Colony 90

8,000 tufted puffins
5,000 parakeet auklets
2,500 pigeon guillemots
500 horned puffins
6,000 sea lions

This island was grassy on the south with moderate cliff on the north.

There were few birds on the east side of Little Koniuji south of Atkins Island.

There were 1,300 birds per square nautical mile between Little Koniuji Island and Chernabura Island. These were more than half ancient murrelets.

From the sea, Chernabura Island appears to be overgrazed. Several head of ferral cattle were visible from the boat. There are very few birds visible on or near the island. I saw on yellow-billed loon.

Bird Island

Colony 91

43,000 black-legged kittiwakes
24,000 murres
6,000 cormorants
tufted puffins

Where are the tufted puffins which were the main component in the breeding population during Jones' and Bailey's earlier visit. Some freshly dug burrows were visible, but very few puffins were about.

We dropped anchor in Simeonof Harbor at 1950.

Simeonof Island

Equisetum arvense
Gymnocarpium dryopteris
Zostera marina
Poa spp.
Salix sp.
Rumex acetosella
Rumex sp.

Ligusticum scoticum
Heracleum lanatum
Empetrum nigrum
Vaccinium vitis-idea
Pedicularis kanei kanei
Solidago sp.
Anaphalis margaritacea

Sagina sp.
Aconitum maximum
Ranunculus occidentalis
Parnassia kotzebuei
Rubus chamaemorus
Rubus arcticus stellatus
Potentilla egedii
Geum macrophyllum
Sanguisorba stipulata
Epilobium angustifolium

Pinguicula vulgaris
Achillea borealis
Viola langsdorfii

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The range appears badly overgrazed; the permittee has a 275 animal permit, the caretaker told Bailey that there were 340 head on the island. Cattle live on kelp in winter; several dead animals were visible.

Arctic foxes and Alaska ground squirrels were common.

The archeological value of the island appears to be much deminished, the coastal fringe is badly eroded from overgrazing.

The caretaker shot an osprey about a month back. He says that emperor geese and some black brant winter there.

6/12/73

We departed Simeonof Harbor at 1250.

We counted 78 sea otter from the point on the north side of the harbor to the islet on the south. There are less than 150 around entire island, most of these are in Simeonof Harbor and around the north end to the cove just across the island from the harbor.

The most common bird around island is the harlequin duck.

There were many ancient murrelets in Twelve Fathom Strait again.

Little Koniuji is short on birds unless ancient murrelets nest there.

We anchored in Northwest Harbor, Little Koniuji Island at 1800.

The swell was too great to allow for keeping the Avon on shore so I landed Divoky and McCartney.

Divoky saw many ground squirrels on Herendeen and also saw burrows smaller than theirs. There was fox sign on the island so fox evidently cross from Little Koniuji.

None of the parakeet auklets seen on 6/11 were in evidence around Herendeen. This was in constrast to the crested auklets which were in Yukon Harbor and behind Hall Island in large numbers again.

There was one dark peregrine falcon on Herendeen Island which acted like it might have an eyrie there.

Parakeet auklets were very much in evidence around Herendeen Island again; instead of (3,000, would now have to estimate 9,000.

Koniuji Strait was an unbelievable sight as we came through with 70-odd thousand horned puffins feeding there along with flocks of crested auklets and scattered parakeet auklets.

Koniuji Strait Colony 92

140,000 horned puffins
50,000 crested auklets
10,000 parakeet auklets
3,000 pigeon guillemots

The horned puffins nest high up on the slope of the mountain, clear to the summit, in a boulder field, actual numbers possibly far exceed the estimate.

Crested auklets nest on cove at base of mountain. One total and at least three partial albinos were seen in the flocks.

Yukon Harbor Colony 93

10,000 crested auklets

These birds were not seen on the rocks but the circumstances are such that the presence of a colony is indicated. It may in fact be part of a continuous colony extending all the way around the headland to the Koniuji Strait colony.

There is a regular distribution of pigeon guillemots and horned puffins along west side of Big Koniuji.

Koniuji Point Colony 94

4,000 pigeon guillemots
2,000 tufted puffins
1,000 parakeet auklets

Peninsula Island Colony 95

35,000 tufted puffins
2,500 pigeon guillemots

Between Peninsula Island and Pirate Shake there were 219 birds per square nautical mile.

Bendel Ranch Colony 96

2,500 glaucous-winged gulls

Quite a few horned puffins and parakeet auklets between Turner and Bendel Islands.

Bendel

Colony 97

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2,000 tufted puffins
50 cormorants
peregrine falcons

There is a loose colony of horned puffins along south coast of Bendel Island.

Twins

Colony 98

18,000 tufted puffins
6,500 black-legged kittiwakes
2,000 horned puffins
2,000 red-faced cormorants
500 glaucous-winged gulls
200 murres

There were not enough tufted puffins around the island to account for the number of burrows, the burrows were fresh, however.

Larson Bay

Glaucous-winged gulls noted on the bar by Ed Bailey.

Near Island

Colony 99

8,000 tufted puffins
7,000 horned puffins
6,000 black-legged kittiwakes
2,500 glaucous-winged gulls
40 cormorants
pigeon guillemots
100 sea otter

The north side of the island is grassy with several talus slopes suitable for small alcids, south with cliffs.

Saddler Peak

Colony 100

500 horned puffins

Saddler's Mistake

Colony 101

2,000 glaucous-winged gulls

East Saddler's Cove

Colony 102

3,000 glaucous-winged gulls

Mountain Point

Colony 103

8,000 tufted puffins

West Saddler's Cove

Colony 104

200 cormorants

We dropped anchor in Falmouth Harbor at 2130.

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Falmouth Harbor

Colony 105

1,400 glaucous-winged gulls

Vessel departed Falmouth Harbor anchorage at 2245 in response to a MayDay. Provided surface coordination between USCG helicopter and F/V Normar for a rescue pickup. Rescue operation completed at 0240.

We reanchored at Sandborn Harbor at 0420.

Fork-tailed storm-petrels visible in vessel lights off Cape Wedge.

6/14/73

We had anchor up at 1230.

Putney heard fork-tailed storm-petrels around anchorage in Eagle Harbor at 0700.

Large number of birds in Eagle Harbor and Sandborn Harbor again, these included:

black-legged kittiwakes
pigeon guillemots
glaucous-winged gulls

red-faced cormorants
horned puffins
Cassin's auklets

Birds seen on passage from Wooly Head, Nagai Island to Sea Lion Rocks south of Unga Island were as follows:

126 black-legged kittiwakes
49 glaucous-winged gulls
8 red-faced cormorants
50 tufted puffins
172 horned puffins
35 murre
3 pigeon guillemots
4 ancient murrelets
1 northern fulmar
2 Kitlitz's murrelets

Eagle Harbor

Colony 106

700 glaucous-winged gulls

Sea Lion Rocks

Colony 107

150 glaucous-winged gulls
150 sea lions

Delarof Harbor

Colony 108

6,000 tufted puffins
5,000 black-legged kittiwakes
2,000 red-faced cormorants
1,000 horned puffins
500 glaucous-winged gulls
pelagic cormorants
pigeon guillemots

(Sowl 43,000; Divoky 70,000) Number cited is a compromise between two estimates. While we did not usually disagree this much, the fact that we did is worthy of note.

Popof Head Colony 109

40 black-legged kittiwakes

Egg Island Colony 70

8,000 tufted puffins

3,500 glaucous-winged gulls

1,000 horned puffins

40 black-legged kittiwakes

Vessel was tied up at Wakefield oil dock in Sand Point by 1830.

6/15/73

(0800) Aleutian Tern departed Sand Point at 0835.

There is a petrified forest on the west side of Unga Island between Unga Spit and Bay Point. Bailey commented that this forest contained Sequoia.

Bay Point Colony 110

13,000 black-legged kittiwakes

6,000 murres

5,000 red-faced cormorants

1,000 pigeon guillemots

Bay Point is formed of columnar basalt. The spit leading to it and the one leading northwest from it are sand.

Kennoy's Island Colony 111

1,200 glaucous-winged gulls

500 tufted puffins

50 pigeon guillemots

300 harbor seals

This island is low, grassy and probably well battered by storms, except for the very top.

Jude Island Colony 112

3,000 pigeon guillemots

550 sea lions

There were enough puffin burrows for 1,500 pairs. No puffins were observed. Burrows appeared to be used by guillemots.

150 pigeons
harbor seals

Wosnesenski Island Colony 114

3,000 tufted puffins
1,200 red-faced cormorants
200 pigeon guillemots

Egg Island Colony 115

500 glaucous-winged gulls (estimated from a distance)

Wosnesenski Stack Colony 116

2,000 tufted puffins

Wosnesenski South Colony 117

400 tufted puffins

Clay Island Colony 118

1,000 glaucous-winged gulls
200 black-legged kittiwakes

The Pinnacle Colony 119

1,000 tufted puffins
600 red-faced cormorants
50 pigeon guillemots

Wosnesenski Island is grazed, but it is the first grazed island in the area which does not appear to be overgrazed.

Ancient murrelets were noted between Ukolnoi and Wosnesenski Islands.

Cormorants on rocks at the northeast corner of Wosnesenski were about evenly split between red-faced and pelagic cormorants.

The Aleutian Tern dropped anchor at Ivan Island at 1830.

Vegetation on the island included:

Peltigera canina
Cladonia alpestris
Cladonia spp.
Cetraria sp.
Umbilicarium sp.
Lycopodium selago selago
Athyrium filix-femina
Gymnocarpium dryopteris
Elymus arenarius mollis
Carex sp.

Rubus arcticus stellatus
Rubus spectabilis
Potentilla villosa
Geum rossii
Dryas octopetala
Dryas integrifolia
Sanguisorba stipulata
Lupinus nootkatensis
Oxtropis nigrescens bryophila
Geranium erianthum

Tofieldia coccinea
Streptopus amplexifolius
Salix spp.
Rumex sp.
Polygonum viviparum
Oxyria digyna
Stellaria sp.
Cerastium sp.
Honkenya peplodes major
Silene acaulis acaulis
Ranunculus sp.
Cruiciferæ family
Parrya nudicaulis (?)
Saxifraga flagellaris setigera
Sedum rosea
Parnassia kotzebuei
Luetkea pectinata
Rubus chamaemorus

Viola langsдорffii
Epilobium angustifolium
Ligusticum scoticum
Conioselinum chinense
Heracleum lanatum
Cornus suecica
Pyrola asarifolia
Empetrum nigrum
Rhododendron camtschaticum
Vaccinium vitis-idea minus
Vaccinium uliginosum
Androsace chamaejasme
Veronica sp.
Lagotis glauca
Pedicularis capitata
Sambucus racemosa pubens
Achillea sibirica
Senecio psuedo-arnica

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The island is covered with 1/4 inch of volcanic ash. Its central area is grassy and in some parts of the outer rim, this becomes a heath vegetation.

Glaucous-winged gulls on the island were feeding on Alaska ground squirrels and possibly the smaller rodents there also. Sea urchin tests and chiton (Katherina) plates were less common than hair casts.

Sea otters have been uncommon since leaving Sand Point. Seabirds have been less common as a general rule also.

I noted 2 swallows and 1 Wilson's warbler between Unga and Kennoy's Islands.

6/16/73

Aleutian Tern had anchor up at 0810.

Ivan Island Colony 120

3,000 glaucous-winged gulls
600 red-gaced cormorants
300 pigeon guillemots
300 tufted puffins
300 horned puffins
pelagic cormorants

Round Island Colony 121

1,500 black-legged kittiwakes
400 tufted puffins
100 pigeon guillemots
25 harbor seals

This is a small island with some grassy turf on top.

Flat Island

Colony 124

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200 tufted puffins
80 harbor seals

There is extensive surrounding platform and little bird turf on this island.

Dolgoi Cove

Colony 125

6,000 tufted puffins
250 glaucous-winged gulls
100 pigeon guillemots
40 harbor seals

Ukolnoi

Colony 126

500 tufted puffins
100 glaucous-winged gulls
60 cormorants

This colony is a scattering of rocks and islets on the southeast corner of Ukolnoi Island.

Wind out of Pavlof Bay made this count almost impossible.

More birds and sea otters were seen after we passed south between Poperechnoi and Dolgoi Islands.

East Dolgoi Entrance

Colony 127

500 glaucous-winged gulls
100 pigeon guillemots

Entrance Island

Colony 128

200 glaucous-winged gulls

Iliasik Passage

Colony 129

500 glaucous-winged gulls

Iliasik

Colony 130

1,100 cormorants

Rona Island

Colony 131

6,000 tufted puffins
1,500 glaucous-winged gulls
200 horned puffins
200 pigeon guillemots

Colony on low, grassy islands, with Heracleum in area disturbed by puffins; low rocky cliffs along coastline.

6/17/73

We had anchor up and were departed by 0810.

Sarana Island Colony 132

Sarana Island is grassy on the north facing slope - it has only fair cliff on the south side. The disturbed earth area on the 45 degree slope above the cliff on the south as evidenced by Heracleum and other plants indicates that the island has or does support a tufted puffin colony of about 4,000 birds. None were visible, however. Birds feeding around the island and cliff types indicate that modest numbers of breeding horned puffins and pigeon guillemots are probably also present. A few glaucous-winged gulls were also present on or near the island.

Hunter Island Colony 133

Hunter Island has bare rock and cliff on all sides and only a modest amount of grassy vegetation on the center. It had an eagle nest. Probably supports a few pairs of horned puffins and pigeon guillemots.

Rose Island Colony 134

Rose Island is low, 52 feet, with a wide rock shelf all around and a relatively small amount of grassy vegetation in the center

1,000 glaucous-winged gulls
tufted puffins
pigeon guillemots

Sushilnoi Island Colony 135

Sushilnoi Island is high enough, 137 feet, and large enough that it can provide good nesting habitat for a sizeable breeding population of tufted puffins. It has only slight rocky cliffs all around and a large amount of grassy turf. It has enough relief to allow for a relatively dense colony of burrow nesters.

7,000 tufted puffins
600 glaucous-winged gulls

We tried to reach Pinnacle Island which is across the main uncharted area on the Sandman Reef from Sushilnoi Island. Conflicting swells and shallow water, 2 fathoms or shallower, defeated this attempt. At 1130 we gave up attempt to work Sandman Reefs and moved inshore to find shelter. We soon encountered a full gale. We finally got the Aleutian Tern tied up to a dolphin at King Cove at 1700.

King Cove is the most progressive appearing little town west of Kodiak. Its homes, etc., are generally neat and appear in good repair.

6/18/73

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The Aleutian Tern remained tied to the dolphin at King Cove until late because of a number of problems with wind, dirty fuel, and refueling.

Very windy outside of Cold Bay. Large numbers of seabirds outside near the buoy, many small alcids - among them Cassin's auklet.

Egg Island Colony 135

3,000 tufted puffins
1,500 horned puffins
1,400 glaucous-winged gulls
red-faced cormorants

This island looked better than the numbers of birds showing would indicate. We did not get a look at the north side where cormorants are.

Amagat Island Colony 136

50,000 horned puffins
40,000 tufted puffins
12,000 glaucous-winged gulls
1,000 parakeet auklets
400 parakeet auklets
200 red-faced cormorants
150 harbor seals
20 sea otters

This is an excellent, dense packed colony. The island is almost totally utilized. I had one quick glimpse of a rhinoceros auklet.

Kenmore Head Colony 137

This is on Izembek National Wildlife Refuge.

The Aleutian Tern anchored in Sankin Bay at 2000.

6/19/73

We departed Sankin Bay at 0820.

Palisade Cliff Colony 138

500 glaucous-winged gulls
300 red-faced cormorants

Sankin Island Colony 139

7,000 tufted puffins
1,000 horned puffins
600 red-faced cormorants
100 pigeon guillemots

There was a consistent north to south movement of tufted puffins, horned puffins, and murres on the passage from Sankin Island to Unga Island. Amagat Island is the logical source of the puffins. Cape Ponkof or some nearby area on or near the Ikatan Peninsula is the likely source of the murres.

Unga Island Colony 140

22,000	tufted puffins
3,000	horned puffins
300	pigeon guillemots
80	red-faced cormorants
	glaucous-winged gulls

Sozavareka Island Colony 141

10,000	horned puffins
1,500	tufted puffins
400	pigeon guillemots
300	glaucous-winged gulls
	parakeet auklets
80	harbor seals
70	sea otters

Let Island Colony 142

10,000	tufted puffins
3,000	horned puffins
1,000	glaucous-winged gulls
	pigeon guillemots
	parakeet auklets

Fawn Island Colony 143

2,500	tufted puffins
500	pigeon guillemots
300	horned puffins
	parakeet auklets
	glaucous-winged gulls

High Island Colony 144

40,000	horned puffins
20,000	tufted puffins
2,000	red-faced cormorants
300	common murres
300	glaucous-winged gulls
200	pigeon guillemots
	parakeet auklets

Sozavareka Island, Let Island and Fawn Island are all basically similar - low, flat, negligible cliff and well developed grassy turf.

High Island is almost totally utilized and supports a tremendous number of birds for its size.

Midun Island Colony 145

12,000 tufted puffins
6,000 murres
3,000 horned puffins
3,000 black-legged kittiwakes
1,500 glaucous-winged gulls
ancient murrelets
red-faced cormorants
pigeon guillemots

"38" Island Colony 146

2,500 tufted puffins
100 glaucous-winged gulls
50 pigeon guillemots

"83" Island Colony 147

12,000 black-legged kittiwakes
10,000 tufted puffins
6,000 murres (1 in 3 are thick-billed murres)
2,000 horned puffins
pigeon guillemots
glaucous-winged gulls

This is a low, flat island with many indentations in the low cliffs where murres and kittiwakes nest.

Buyan Rocks Colony 148

4,000 tufted puffins
500 glaucous-winged gulls
400 horned puffins
100 pigeon guillemots

This is a string of small, low islands only three of which have much vegetation at all. Many, apparently non-nesting, gulls resting there.

Patton Island Colony 149

2,000 tufted puffins
300 glaucous-winged gulls
300 horned puffins
250 red-faced cormorants
100 pigeon guillemots
parakeet auklets

This is a low island, with negligible cliff and thin turf. There were fewer birds than the situation seem to indicate. We tied up at Cold Bay dock at 1956. I left the Aleutian Tern there. In straight line distances we had traveled 1,556 miles.

No.	Geographic Coordinates		Named Geographic Locality	Date	Notes
<u>Bald Eagles (continued)</u>					
76	54°51'N	162°25'W	Let Island	6/19	NE 20', 1 AD
77	54°48'N	162°44'W	Umga Island	6/19	Cliff, NE 150', 2 AD on nest
78	54°54'N	162°54'W	Amagat Island	6/18	Stack, NE 20'
79	54°49'N	163°17'W	Sankin Island	6/18	NE 30', 1 AD on nest
<u>Peregrine Falcons</u>					
1	65°09'N	158°06'W	Chankliut Island	6/06	In hole, NE 40'
2	55°34'N	159°37'W	Kupreanof Point	6/08	Nest presence assumed from adult behavior
3	55°04'N	159°23'W	Herendeen Island	6/11	Nest presence assumed from adult behavior
4	55°04'N	159°45'W	Bendel Island	6/13	Nest presence assumed from adult behavior
5	54°48'N	162°43'W	Umga Island	6/19	Nest presence assumed from adult behavior

No.	Geographic Coordinates		Named Geographic Locality	Date	Notes
<u>Bald Eagles (continued)</u>					
61	55°10'N	161°06'W	Kennoys Island	6/15	Islet, NE 30', 2 AD
62	55°15'N	161°14'W	Omega Island	6/15	NE 30', 2 AD
63	55°11'N	161°19'W	Wosnesenski Island	6/15	NE 30', 1 AD
64	55°03'N	161°44'W	Dolgoi Cape, Dolgoi Island	6/16	Stack, NE 100', 1 AD on nest
65	55°17'N	161°47'W	Dolgoi Harbor, Dolgoi Island	6/16	Cliff, NE 70'
66	55°08'N	161°35'W	Dolgoi Island	6/16	Cliff, NE 60'
67	55°29'N	161°37'W	Lump Island, Pavlof Bay	6/16	NE 50', 1 AD
68	55°31'N	161°39'W	Ivan Island, Pavlof Bay	6/16	Cliff, NE 80', 1 AD
69	55°33'N	161°36'W	Round Island, Pavlof Bay	6/16	Islet, NE 20', 2 AD
70	54°58'N	161°46'W	Hunter Island	6/16	NE 55', 2 AD
71	55°00'N	161°52'W	Outer Iliasik Island	6/16	Cliff, NE 120', 2 AD on nest
72	54°59'N	161°53'W	Outer Iliasik Island	6/16	Stack, NE 40', 1 AD on nest
73	54°54'N	162°08'W	Patton Island	6/16	NE 30', 2 AD
74	54°48'N	162°08'W	Sandman Reefs	6/16	Island between Midun and Hunt
75	54°49'N	162°19'W	High Island	6/19	NE 150', 2 AD

No.	Geographic Coordinates		Named Geographic Locality	Date	Notes
<u>Bald Eagles (continued)</u>					
46	55°16'N	159°54'W	West Nagai Strait, Nagai Island	6/10	Stack, 1 AD on nest
47	55°15'N	159°56'W	West Nagai Strait, Nagai Island	6/10	NE 100', 2 AD
48	55°10'N	159°59'W	Porpoise Harbor, Nagai Island	6/10	Stack, NE 70'
49	55°04'N	160°09'W	Cape Horn, Nagai Island	6/13	Cliff, NE 70', 2 AD on nest
50	55°03'N	160°10'W	Cape Horn, Nagai Island	6/13	Cliff, NE 100', 1 AD on nest
51	55°07'N	160°10'W	Eagle Harbor, Nagai Island	6/14	2 AD
52	54°57'N	159°52'W	Twins	6/13	Islet, NE 100', 1 AD on nest, chick probable
53	54°56'N	160°02'W	Near Island	6/13	Cliff, NE 120', chicks
54	55°04'N	160°31'W	Sea Lion Rocks	6/14	Islet, NE 120', 2 AD
55	55°08'N	160°31'W	Unga Cape, Unga Island	6/14	Cliff, NE 100', 1 AD
56	55°10'N	160°31'W	Delarof Harbor, Unga Island	6/14	Islet, NE 100', 2 AD
57	55°20'N	160°19'W	Dark Cliffs, Popoff Island	6/09	Cliff, NE 100', 2 AD on nest
58	55°17'N	160°02'W	The Haystacks	6/10	Cliff, NE 190', 1 AD on nest
59	55°21'N	160°03'W	Andronica Island	6/10	Islet, NE 150'
60	55°24'N	160°12'W	Korovin Bay, Korovin Island	6/09	Cliff, NE 125'

No.	Geographic Coordinates		Named Geographic Locality	Date	Notes
<u>Bald Eagles (continued)</u>					
31	55°50'N	158°42'W	Mitrofanía Island	6/07	Near VABM "Lion", cliff, NE 90'
32	55°51'N	158°53'W	Mitrofanía Island	6/07	West peninsula, cliff, NE 100', 1 AD on nest
33	55°49'N	158°54'W	Mitrofanía Island	6/07	West peninsula, stack, NE 120', 1 AD on nest
34	55°48'N	159°18'W	Paul Island	6/07	Stack, NE 120', 1 AD on nest
35	55°40'N	159°32'W	Cape Fox	6/08	Stack, NE 80', 2 AD on nest
36	55°01'N	159°30'W	Castle Rock	6/10	2 AD
37	55°13'N	159°30'W	Cape Thompson, Big Koniuji Island	6/10	Stack, NE 50', 1 AD on nest
38	55°04'N	159°29'W	Yukon Harbor, Big Koniuji Island	6/11	Cliff, NE 25', 1 AD
39	55°07'N	159°39'W	Big Koniuji Island	6/13	Stack, NE 25', 1 AD on nest
40	55°03'N	159°19'W	Northwest Harbor, Little Koniuji Island	6/11	Cliff, NE 35', 2 AD on nest
41	55°00'N	159°24'W	Northeast Harbor, Little Koniuji Island	6/12	Near VABM "Little", cliff NE 40'
42	55°51'N	159°41'W	Peninsula Island	6/13	Cliff, NE 120', 1 AD clutch visible
43	55°10'N	159°47'W	VABM "Over" Peninsula, Nagai Island	6/13	Cliff, NE 70', 2 chicks
44	55°17'N	159°52'W	Cape Wedge, Nagai Island	6/10	Stack, NE 70', 1 AD on nest
45	55°21'N	159°53'W	Cape Wedge Light, Nagai Island	6/10	Stack, NE 70', 2 AD on nest

No.	Geographic Coordinates		Named Geographic Locality	Date	Notes
<u>Bald Eagles (continued)</u>					
16	56°53'N	156°33'W	Aluqnak Columns	6/04	NE 95', 2 AD
17	56°51'N	156°53'W	Central Island	6/04	- -
18	56°48'N	157°00'W	Yantarni Bay	6/04	Unnamed island east of VABM "Long", NE 100', 2 AD
19	56°47'N	157°10'W	Cape Kunmik	6/04	Stack, NE 100', 2 AD
20	56°39'N	157°26'W	Kumlik Island	6/04	Ledge, NE 50'
21	56°36'N	157°29'W	Cape Kumlik	6/05	Islet off cape, cliff, NE 60', 2 AD
22	56°32'N	157°19'W	Sutwik Island	6/05	Western cape, stack, NE 100', 1 AD
23	56°35'N	157°16'W	Sutwik Island	6/05	West coast, stack, NE 40', 2 AD
24	56°35'N	157°06'W	Sutwik Island	6/05	North coast, stack, NE 40', 2 AD on nest
25	56°33'N	157°01'W	Sutwik Island	6/05	East coast, stack, NE 60'
26	56°09'N	158°09'W	Chankliut Island	6/06	Near VABM "Fool", pinnacle, NE 65', 2 AD on nest
27	56°04'N	158°24'W	Devil's Bay	6/06	Cape between Devil's Bay and Ross Cove, 2 AD
28	55°59'N	158°30'W	Cape Ikti	6/06	Pinnacle, NE 100', 1 AD on nest
29	55°57'N	158°41'W	Herring Lagoon	6/06	Unnamed cape, stack, NE 70', 1 AD on nest
30	55°56'N	158°51'W	West Brother Island	6/06	Cliff, NE 60', 2 AD on nest

Raptor Nests Observed Between Cape Douglas and Isanotski Strait,
The Alaska Peninsula, May 30 - June 19, 1973

No.	Geographic Coordinates		Named Geographic Locality	Date	Notes
<u>Bald Eagles</u>					
1	58°19'N	154°17'W	Aguchik Island, Kukak Bay	5/31	- -
2	57°58'N	155°03'W	Atmo Mountain	6/01	On cape between Katmai and Kashvik Bays
3	57°52'N	155°20'W	Alinchak Bay (N)	6/01	Estimated nest evaluation (NE) 30'
4	57°45'N	155°17'W	Alinchak Bay (S)	6/02	Nest on cliff, NE 35', 1 AD present
5	57°41'N	155°22'W	Puale Bay	6/02	Nest on stack at mouth of NE 30', 1 AD
6	57°28'N	156°02'W	Cape Igvak	6/02	Stack, NE 35'
7	57°20'N	156°19'W	Slaughter Island, Wide Bay	6/02	NE 40', 2 AD
8	57°20'N	156°19'W	Titcliff Island, Wide Bay	6/02	Stack, NE 30', 2 AD
9	57°10'N	156°21'W	Kilokak Creek	6/03	NE 60', AD on nest
10	57°08'N	156°24'W	Glacier Creek	6/03	NE 60', 1 AD on nest
11	57°05'N	156°25'W	Agripina Bay	6/03	NE 60', 1 AD on nest
12	57°01'N	156°44'W	Chiginagak Bay	6/03	Cliff, NE 70', 2 AD
13	56°58'N	156°41'W	VABM "Foul" Islet	6/03	In Chiginagak Bay, NE 95', 2 AD
14	56°55'N	156°38'W	Chiginagak Bay	6/03	Unnamed island, NE 65', 2 AD
15	56°47'N	156°51'W	Ugaiushak Island	6/04	No nest seen; 2 AD's became extremely upset at our presence

1/ Stacks are columnar erosion products, remnants of coastal islands and cliffs, resembling industrial exhaust stacks.