



REFUGE NARRATIVE REPORT

September-December, 1962

ALEUTIAN ISLANDS NATIONAL WILDLIFE REFUGE

and

IZEMBEK NATIONAL WILDLIFE RANGE

Cold Bay

Alaska

U. S. Fish and Wildlife Service
Anchorage, Alaska



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and

IZENBEK NATIONAL WILDLIFE RANGE

Cold Bay

Alaska

Staff:

Robert D. Jones Jr.

Refuge Manager

Vernon D. Berns

Assistant Refuge Manager

Lois H. Shute

Clerk-typist

U. S. DEPT. OF THE INTERIOR
Bureau of Sport Fisheries and Wildlife
Fish and Wildlife Service
Cold Bay, Alaska

US FISH & WILDLIFE SERVICE--ALASKA



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ALEUTIAN ISLANDS NATIONAL WILDLIFE REFUGE
and
IZEMBEEK NATIONAL WILDLIFE RANGE

Narrative Report

September 1962 - December, 1963

I. GENERAL

A. Weather conditions. This period has been characterized by slightly less than normal rainfall, and the development of freezing conditions and snow fall about a week earlier than usual. Some very disagreeable weather occurred in November with the result that Izembek Bay froze earlier than usual.

Climatological Data for Cold Bay Area from the U. S. Weather Bureau:

	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>
Temperature (°F) Max.	60	52	39.1	44
Min.	35	28	32.5	12
Avg.	46.8	39.6	35.8	29.3
Precipitation (inches)	3.84	4.16	2.57	1.02
Snow & Sleet - Total	.0	4.3	2.1	6.7
Winds (MPH) Max.	43	43	41	46
Winds avg. for month (MPH)	16.7	16.3	15.6	16.2
Peak Gusts (MPH)	63	55	40	59

Climatological Data for Adak from Naval Weather Service:

	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>
Temperature (°F) Max.	60	53		
Min.	34	27		
Avg.	47.7	42.3		
Precipitation (inches)	2.70	8.40		
Snow & Sleet - Total	2.3	4.3		
Winds (Knots) Max.	21	23		
Winds avg. for month (Knots)	9	12		
Peak Gusts (Knots)	59	55		

B. Habitat Conditions.

1. Water - as the fall waterfowl concentration is not dependent on lake and marsh water levels, but is based principally on the salt water areas of the Izembek Range, such minor fluctuations as we observe have little effect.

2. Food and cover. Belgrass production on the Izembek Range was less than that of a year ago, but was still more than enough to meet the needs of the large waterfowl community

The crop of berries on the beach was generally large, but spotty. Crowberries (Empetrum nigrum) were the most abundant and most evenly distributed. Cranberries (Vaccinium vitis-idea) were abundant in some cases but sparse in others. Low-bush blueberries (Vaccinium uliginosum), though widely distributed, do not produce enough berries to be of great value to the waterfowl. Nagoon berries (Rubus stellatus) were abundant but we have no evidence that they are of importance to the waterfowl. Though, the strawberries (Fragaria chiloensis) like the blueberries and nagoon berries are of no importance to the waterfowl, this was a year of their great abundance. While most berries were relatively abundant, the almost invariably productive salmonberry (Rubus spectabilis) was at its lowest in several years.

It should be noted that though the berries above listed are not all of use to the waterfowl, they are utilized by one or another of the wildlife in the area, particularly Alaska brown bears.

II. WILDLIFE

A. Migratory birds.

1. Geese. Lesser Canada geese began arriving in late August, with a rapid development of a large population in the first two weeks of September. These birds brought us a problem of an unusual sort. The Federal Aviation Agency had this summer completed an extension of the Cold Bay runway by three thousand feet. The final job was to sow grass on the bare earth adjacent to the landing surface. When this was done a cover crop of oats was sown, and at the end of August the oats were five to six inches high, and the greenest object on the lower Alaska Peninsula. The geese, of course, moved right into it by the hundreds. A pilot taking off to the north was obliged to evade rising flocks of geese, a perilous practice for an airplane grossing over 200,000 pounds.

Every effort was made to drive the birds away, but though the numbers dwindled there were geese grazing on the oats until the migration southward. We encouraged hunters to ambush the geese at daylight and though many a cooking pot was thus filled, this only served to make the birds warier. Fluttering strips of plastic were staked out in the oats but the Cold Bay winds made short work of this project. Regular patrols were made before aircraft landings and departures, but disputes developed as to whose responsibility this was. A Zor exploder was used effectively but this required arising before daybreak to activate the tube Goldberg. All in all it was a pain in the neck to everyone but it pointed out to us a method of luring the geese to where they could be caught and banded. In a country where a super abundance of natural foods

lies in any direction, it seemed unreasonable to suppose that Canada geese would continue to run the gauntlet for the dubious privilege of snatching a few blades of young oats, but this is the fact.

Hunter success was good with the Canada geese, perhaps due to berry distribution. Small flocks habitually grazed quite close to the road leading from Cold Bay to Grant's Pt. on Izembek Bay. These flocks invited stalking, and considerable success was scored.

While checking hunter's bags a number of weights were recorded as follows:

<u>Date</u>	<u>Canada geese</u>		<u>Black brant</u>		<u>Emperor geese</u>		<u>Ducks</u>	
<u>Sept.</u>	<u>lbs.</u>	<u>oz.</u>	<u>lbs.</u>	<u>oz.</u>	<u>lbs.</u>	<u>oz.</u>	<u>lbs.</u>	<u>oz.</u>
25	4	8						
27	4	12						
	5	4						
	3	12						
28	5	2						
30	4	8	3	8 A			2	0 F pintail
			3	6 A			2	4 F pintail
			3	4 J			1	14 J pintail
			3	0 J				
<u>Oct</u>								
3	3	12						
8			2	12			2	14 F mallard
			4	2				
			4	8				
			3	12				
			3	8				
			4	0				
9	3	5	4	0	4	0		
	3	15	4	4	4	2		
	3	14	4	2	4	8		
	3	8	3	12				
	6	8						
	6	0						
	3	8						
	3	8						
11	6	2 F						
	4	10 F						
	7	0 M						
	6	17 M						
	6	4 F						
	6	4 M						
12	5	8					1	15 M widgeon
	6	2					1	12 M widgeon

<u>Date</u>	<u>Canada geese</u>		<u>Black brant</u>		<u>Emperor geese</u>		<u>Ducks</u>	
<u>Oct.</u>	<u>lbs.</u>	<u>oz.</u>	<u>lbs.</u>	<u>oz.</u>	<u>lbs.</u>	<u>oz.</u>	<u>lbs.</u>	<u>oz.</u>
13	6	12	4	4 AF	5	0		
	6	0	3	8 JF	4	14		
	6	2	4	6 AM	5	4		
	5	8	4	5 AM				
	6	6 M	4	3 AF				
	6	14 M	4	4 AM				
			3	4 AF				
17	5	8						
	6	4						
	6	2						
24	6	2						
	5	14						
26	3	12 (cackler?)			6	4	2	2 F Steller's eider
	6	8			5	7	2	1 F Steller's eider
	6	12			5	8		
27	4	2						
	6	12						
	7	0						

These figures suggest a striking weight increase between arrival and departure.

The first brant were already in Izembek Bay when the Refuge staff arrived from the western Aleutians in late August. The concentration continued to rise rapidly to its peak which appeared to occur in mid-September.



Fig. 1 - Brant over Izembek Bay

Five banded brant were killed on the Izembek Range.

A trip was made in early October to the lagoons at the head of Morzhovoi Bay, where a part of the waterfowl concentrations occur. A distinct separation of the three types of geese present was clearly evident. As Thin Point (at the southwest corner of Cold Bay) was rounded, a flock of emperor geese (about 50) was observed grazing in the grass on the headland, twenty miles from the nearest part of the goose concentration in Izembek Bay. Emperor geese were present in Littlejohn's Lagoon in lower Morzhovoi Bay, and on the open beaches at the upper end of the Bay. Emperors extended into Big Lagoon but not into Middle Lagoon. The principal brant concentrations were in Big Lagoon and the more open parts of Middle Lagoon, while the Canada geese were found in the more restricted parts of the lagoons and banked in solid masses on the adjacent hills. As is characteristic of the Canada geese these flocks were observed inland all over that part of the Range, some of them flying from Bechevin Bay, some from the lagoons of Morzhovoi Bay, and some from Izembek Bay. Some of these geese were resting on the large lake lying between Middle Lagoon and the Bering Sea Coast. The brant confined their movements to flying between Big Lagoon and Middle Lagoon.

The southbound migration of geese from the Izembek Range was initiated October 25 when heavy movements were observed. The last record of brant flying over Cold Bay is dated November 9, and the last for Canada geese is the 18th. Subsequent reports indicate there were cackling geese still present at a later date, though there is no information indicating the size of this group.

Emperor geese are reported as having begun to arrive at Adak during the last week of November.

This year there are no records of snow geese or white-fronted geese on the Izembek Range.

2. Ducks. None of the large flights of pintails which usually occur in Izembek Bay were recorded. We think that the numbers of these birds was less by about 50% than usual but this leaves a still substantial number. The area available to the ducks is so large that movements within the area may conceal the true size of the population. Very large numbers of pintails were present in the lagoons of Morzhovoi Bay but not enough to account for the apparent reduction in Izembek Bay. The northeastern end of the Bay, an area of heavy pintail concentrations normally, was not surveyed.

The duck population in the lagoons of Morzhovoi Bay was found to be larger than expected. The large lake between Middle Lagoon and the Bering Sea Coast held a considerable number of them, and at dusk more flew in from the lagoons, apparently to spend the night. On the two days we were there the wind was so strong the lake was quite rough and identifications could not be made reliably. The

largest percentage was undoubtedly pintails, but mallards, greater scaup, and what appeared to be a substantial number of gadwalls was also present. Even at this late date (early October) two broods of large mallard ducklings were present on the lake. An unusually large flight of mergansers, numbering perhaps a thousand birds was observed on October 9, flying from out in Morzhovoi Bay to Big Lagoon. It was not possible to distinguish the species. Hunter success on ducks was not high, primarily because most hunters here pursue geese and rarely reach the duck marshes. Recorded from hunter's bags were the following species: pintail, mallard, gadwall, widgeon, green-winged teal, greater scaup, common goldeneye, Steller's eider, and bufflehead.

In 1961 a project to band Steller's eiders in Izembek Bay was undertaken. At that time 466 of these ducks were banded, all within a short distance of Grant's Pt. They were moulting birds that were simply driven into traps. This year the project was continued with some improvements in techniques. As before, the banding crew was largely volunteer and changed frequently so that real efficiency could never be achieved. However, the results were deemed satisfactory, 367 new bands were applied and 32 of the birds banded a year earlier were recaptured. Of these 32 birds one was subsequently shot. This was an adult female Steller's eider banded Sept. 6, 1961 near an island in Izembek Bay just $2\frac{1}{2}$ miles northeast of Grant's Pt. All of the work in the project thus far has been done within a few hundred yards of that same island. This duck was again caught Sept. 7, 1962. And then, just a day or two prior to October 15, 1962 the duck was shot, still within a few hundred yards of the spot where it was banded and recaptured. Two other Steller's eiders bearing bands were shot this fall, and all were killed within a few hundred yards of where they were banded. The other 31 recaptures were likewise caught both times almost in the same spot.

All the above suggests a strong disposition to remain in one part of the Bay but a bias is introduced by our efforts having been in only one part of the Bay (for convenience) and the hunting pressure being largely channeled into the same area.

We were privileged to have with us during part of the eider project Dr. Paul Johnsgard of the University of Nebraska and Glen Smart of the Round Lake Waterfowl Station. Dr. Johnsgard after completing his doctorate in the U. S. had conducted two further years of study at the Wildfowl Trust. He is especially interested in evolutionary studies of the Anatidae. Glen Smart concluded his master's degree in studies of the Anatidae at the Delta Waterfowl Research Station. These two biologists were with us incident to securing live Steller's eiders for both the Round Lake Waterfowl Station and the Wildfowl Trust. Twenty pairs were retained from the banding operations. When the Refuge Manager visited the Round Lake Station at about Thanksgiving time the surviving ducks were in good flesh and

appeared to be settling down. The drakes' moult had been considerably retarded. The biggest problem with these birds seems to be in keeping the drakes alive.

3. Swans. A flock of presumably whistling swans was observed off and on all fall until October 25. Generally these birds were to be seen in a group of lakes straddling the boundary between the Izembek Range and the FAA reservation about two miles northwest of the Cold Bay runway. On one occasion twenty-five birds, both adults and cygnets were counted.

4. Loons. In Morzhovoi Bay a large number of large loons was noted. Unfortunately, circumstances were not such that it was considered desirable to stop the dory and attempt to identify the species. The sea was rough and it is doubtful that the attempt would have been successful.

B. Upland Game Birds.

1. Ptarmigan. The willow ptarmigan population on the lower Alaska Peninsula, if the rather sketchy information available to us is a valid guide, is climbing the curve from its recent low figure. Four times it was possible to secure observations in the alder thickets where no interference had occurred from hunting, etc. In each of these cases substantial flocks of the birds were present. Though the Cold Bay hunters rarely bagged ptarmigan this fall there is evidence of birds scattered over the heath. One morning when the writer was preparing to activate the Zen exploder in the oats patch along the runway the calling of cocks was very apparent. Usually at Cold Bay there is enough wind to influence in a directional way the sounds one may expect to hear. On this occasion the air was not stirring, and the first light of dawn was in the sky. It is at this hour when ptarmigan leave their roosts and the cocks begin to crow (not unusual among gallinaceous birds). Though the area adjacent to the runway is surely not considered good ptarmigan habitat the calling of birds left no doubt that willow ptarmigan were present.

C. Big Game Animals.

1. Alaska brown bear. Six brown bears were reported killed this fall, all save one, within 15 miles of the Range headquarters, and all smaller than what is considered "trophy" class.

While in the Morzhovoi Bay area on the occasion mentioned above in connection with waterfowl, the bear habitat was investigated. On either side of the lower end of the Bay are streams possessing substantial runs of salmon, hence are of considerable importance to the bear population. On the east side these runs are in Littlejohn's Lagoon, are principally chum salmon, and frequently

quite late. On the west side is a system, known as Hanson's Creek involving a lake and stream and a sizeable run of red salmon. From the lake shore to the mouth of this system red salmon carcasses littered the banks. Both here and across the Bay in Littlejohn's Lagoon sign of bear utilization was heavy. On Hanson's Creek two bears, possibly yearlings, were noted feeding on dead salmon. Only one bear was observed in Littlejohn's Lagoon. Connected with the lagoons at the upper end of Morzhovoi Bay is one large system in which a sizeable run of red salmon was present at the time of our visit in early October. The principal feature of this system is a large lake lying between the head of Middle Lagoon and the Bering Sea Coast, and a stream that runs from the lake into Middle Lagoon. Several lakes, marshes, springs, and trickles meandering among the low rolling hills of the area are tributary to the big lake, and all of these had spawned-out red salmon in them in the first ten days of October. In addition to this system a smaller one with a smaller run of red salmon flows into Big Lagoon. Thus there is a large area on this part of the Range where the traveler continually encounters red salmon and can expect to encounter bears. In addition to the salmon in the fresh water, the Bering Sea Coast hard by, is the repository for dead animals left in the wake of fishing and whaling activities in Bering Sea and Bristol Bay. Moreover, an immense population of pelagic birds inhabits the Bering Sea off this coast, depositing its natural dead on the beach.



Fig. 2 A Bear on the Big Lake Above Morzhovoi Bay

We encountered numerous bears around the big lake, and found clear signs of heavy current usage throughout the area. Though we did not cross to the Bering Sea Coast the trails leading over the dunes to the coast were evident from a considerable distance. The evidence suggests that there is a Morzhovoi Bay bear population numbering upwards of 25 animals, utilizing the food re-

sources within twelve miles down either side of Morzhovoi Bay and tending to focus on the later salmon runs at the north end in fall. In considering the figure 25 the writer recalls November 16, 1955 when he observed precisely this many bears in one day, centered around a whale on the Bering Sea beach a mile east of the big lake referred to above. Utilization of this group by hunters probably occurs in the spring hunts in Littlejohn's Lagoon, which in past years have accounted for about four bears annually. The illegal kill has probably been substantially reduced by closing the salmon trap that for years stood on the west side of the Bay, just north of Boiler Pt. Littlejohn's Lagoon is closed to commercial fishing, and has been for many years, no doubt a very substantial contribution to the maintenance of this bear population.

The area described above on the western portion of the Izembek Range is reasonably typical of the whole area and the bears on the Range represent a rather large percent of the bears remaining on the Alaska Peninsula. This may be sharpened by the invasion, by oil interests, of much bear habitat farther up the Peninsula. These people are using amphibious vehicles that, in addition to permanently defacing the wilderness, deny the wilderness areas necessary to the maintenance of Alaska brown bear populations. Concern is felt that hunting pressure will be increasingly directed to the Range and that now is the time to institute permit hunting as a means of control. Concern is also being expressed at the increasing use of light planes for hunting these bears. Brown bears are extremely vulnerable to this sort of "hunting" on the open ground of the Range. To counter this it is proposed to prescribe the parts or places on the Range where a landing may be made by airplane. This raises the question of a means to enforce the regulation.

2. Caribou. A band of five caribou appeared on Frosty over the Labor Day weekend, and all five were killed. These are the only caribou reported within driving distance of Cold Bay.

One caribou bull was observed near Big Lagoon (Morzhovoi Bay) October 7, and a small band has been reported several times in the area just north of Littlejohn's Lagoon.

D. Other mammals.

1. Our last record of ground squirrels is October 30.
2. We have a report of a large pod of sea otters near Thin Pt. in Mid-September. By early October when the writer passed there in the dory, they were gone, and no sea otters were observed on the passage to Morzhovoi Bay.

3. About 12 mink were taken by local residents following the opening of trapping season November 16.

4. Several red foxes have been staying around town where they have the opportunity to acquire food fairly easily.

5. Land otter sign is conspicuous around Izembek and Morzhovoi Bays, and three otters were twice observed in Middle Lagoon (Morzhovoi Bay). Two otters had been taken in the Cold Bay area by the end of the period.

6. Whales. Several whales were observed in Morzhovoi Bay in early October. Of these the writer feels reasonably certain some were finback whales and some were possibly sperm whales, but one seen at a distance with an unusually high spout and no flukes shown in diving was a stranger. This possibly was a blue whale.

F. Fish

We have a report from the ADF&G that there were 140,000 pink and chum salmon (with pinks predominating two to one) that had run into Russell Creek during the summer of 1962. This must surely be regarded as optimistic, as earlier observations by experienced fish biologists show totals considerably under 50,000 fish with never a proportion of two pinks to one chum. Commercial fishermen do not regard Russell Creek as a "pink stream" but a "chum stream" instead.

The silver salmon run arrived at about the usual time and seemed average in size. This is not large enough to encourage commercial utilization, except on a small scale. Sometimes a fisherman catches a load of one to two thousand silvers and smokes them. They will then command a premium price. The principal utilization in Cold Bay, however, is for sport fishing.

Specimens of the so-called Dungeness crab (Cancer magister) were found around the head of Morzhovoi Bay.

III. REFUGE DEVELOPMENT AND MAINTENANCE

Nothing to report.

IV. RESOURCE MANAGEMENT

A. Grazing. Though we continue to receive inquiries regarding leases for various islands we still have only two: Caton's Island in the Aleutian Refuge and Simeonof Island. The latter is administered by BLM and is now assigned to H. S. Woodworth of Anchorage.

B. Fur harvest. The Alaska Department of Fish and Game took a number of sea otters at Amchitka in late October and early November but we have no information concerning this.

V. FIELD INVESTIGATIONS ON APPLIED RESEARCH

Nothing to report.

VI. PUBLIC RELATIONS

A. Recreational uses. This is the season of the highest recreational use of the Izembek Range. It includes fishing for silver salmon and Dolly Varden trout, hunting for brown bear and caribou, waterfowl hunting, ptarmigan hunting, berry picking, camping, beachcombing, and finally trapping. The beachcombing is directed principally to gathering Japanese net floats inside Izembek Bay and on the Bering Sea Coast. In the Cold Bay area these are not found on the Pacific Coast.

B. Refuge visitors.

<u>Name</u>	<u>Organization</u>	<u>Address</u>	<u>Purpose</u>
Glen Smart	Resident Biologist Round Lake Waterfowl Station	Round Lake, Minn.	Secure live eiders
Dr. Paul Johnsgard	University of Nebraska	Lincoln, Nebraska	Observe waterfowl
Fred Barnett	Fire Chief, FAA	Cold Bay, Alaska	Inspection
Robert Smith	BLM	Anchorage, Alaska	Seeking information
Russell Drabeles	BLM	Anchorage, Alaska	Seeking information
Joe Toderick	USN	Adak, Alaska	Observe wildlife
Don Ferrin	USN	Adak, Alaska	Hunting
Mike Dallam	USMC	Adak, Alaska	Hunting
Gay Ristow	Civil Service	Adak, Alaska	Hunting
Jim Branson	BSFW, USGMA	Anchorage, Alaska	Enforcement business
Jim Frazier	FBI	Anchorage, Alaska	Business
Chuck Hunter	BCF (Biologist aboard the GEORGE B. KELEZ)	Seattle, Wash.	Courtesy call
Trygve Matheson	BCF (First Officer of the KELEZ)	Seattle, Wash.	Courtesy call
Carl Simms	BCF (Biologist aboard the KELEZ)	Seattle, Wash.	Courtesy call

C. Refuge Participation.

1. Participation as volunteer members of the Cold Bay Fire and Crash Crew was continued. In addition to weekly drills, two fire calls were answered, both (happily) minor.

2. Berns gave assistance in rescuing one of the local FAA personnel who became stranded on one of the outer islands of Izembek Bay when he lost his boat.

3. Jones took part in the freight handling chore attendant upon the pre-Christmas arrival of the mail boat. The FAA usually does this but it is really a community enterprise.

D. Hunting. See under wildlife.

E. Violations. Berns apprehended a fisherman engaging in his sport without a license. \$100 and ten days, said Maggie the Magistrate, suspending \$75 and the jail term.

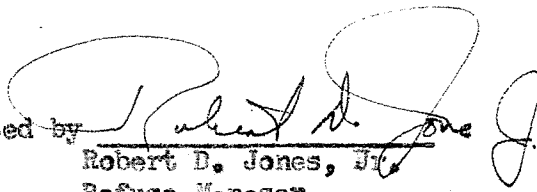
The problem at Cold Bay stems from having one licensing officer who refuses to conduct this business except during business hours. The Flying Tigers Airline changes its crews at Cold Bay and members of the waiting crews like to fish. Frequently these men cannot buy a license because of the irregular hours of their arrival and departure, and are presented with the choice of not fishing or running the risk of being picked-up on an unlicensed fishing charge. This is considered a very poor risk at Cold Bay.

In Middle Lagoon (Morzhovoi Bay) and Kinzarof Lagoon (Cold Bay) are the areas where most of the residents of King Cove, False Pass, and other villages of the Alaska Peninsula, do their waterfowl hunting. They go to these areas by fishing boat and remain a couple of days. Because of the remoteness of Middle Lagoon we have never inspected these hunters. The visit to Middle Lagoon in October demonstrated the imperative necessity to conduct such inspections. The form of the land, and the presence of the lagoons close together, channels the birds markedly and they become extremely vulnerable. This is especially true because they are not wary. The brant fly from Big Lagoon over a narrow (about 150 feet) strip of land to a lake, thence down the length of the lake and over another narrow strip of land to Middle Lagoon. Most of the birds cross this pass at about five feet elevation in big bunches, unfortunately a marked characteristic of brant. At this point there is an excellent natural blind. It had been occupied by a single man who had evidently done quite well. This writer, between interruptions caused by getting out of the way of brant pouring through the pass, counted 47 spent shells in this one location. Under the conditions we saw, the discharge of 47 shells at brant would have been murderous. The evidence was fairly conclusive that only one trip had been made to the Lagoon all fall, that the trip was fairly brief, that not more than a dozen persons were involved but probably less, and that the better part of three cases of ammunition (2 of 12 gauge, and 1 of 20 gauge) were expended. There seems no reason to doubt that the numbers of geese (brant and lesser Canada geese) killed on that occasion figure in three digits.

F. Safety

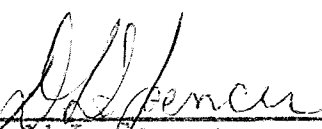
1. One safety meeting to discuss fire prevention.
2. No accidents.
3. Fire extinguishers were added in needed places.
New wiring was installed in the office.
4. Record to date: 27¹/₂ days.

Submitted by


Robert D. Jones, Jr.
Refuge Manager

January 11, 1963

Approved:


David L. Spencer,
Regional Refuge Supervisor

3-1750
Form NR-1
(Rev. March 1953)

W A T E R F O W L

REFUGE ~~Izembek National Wildlife Range~~

MONTHS OF September TO December, 1962

[illegible]

3 -1750a

Cont. NR-1

(Rev. March 1953)

W A T E R F O W L
(Continuation Sheet)

REFUGE Aleutian Islands National Wildlife RefugeMONTHS OF September TO December, 19 62

(1) Species	(2) Weeks of reporting period								(3) Estimated waterfowl days use	(4) Production Broods: Estimated seen : total
	11	12	13	14	15	16	17	18		
Swans:										
Whistling	20									
Trumpeter Whooper	500									
Geese:										
Canada	5000									
Cackling Aleutian Canada	300									
Brant	10,000									
White-fronted	--									
Snow	--									
Blue	--									
Other Emperor	200,000									
Ducks:										
Mallard	40,000									
Black	--									
Gadwall	1,000									
Baldpate	--									
Pintail	25,000									
Green-winged teal	500									
Blue-winged teal	90,000									
Cinnamon teal	--									
Shoveler	100									
Wood	--									
Redhead	--									
Ring-necked	--									
Canvasback	--									
Scaup greater	20,000									
Goldeneye common	20,000									
Bufflehead	20,000									
Ruddy	--									
Other										
King eider	200,000									
Common eider	5,000									
Harlequin	1,000,000									
Coot: Old Squaw	1,000,000									
European widgeon	100									

(over)

	(5) Total Days Use	(6) Peak Number	(7) Total Production	SUMMARY
Swans	:	:	:	Principal feeding areas
Geese	:	:	:	
Ducks	:	:	:	Principal nesting areas
Coots	:	:	:	
				Reported by

INSTRUCTIONS (See Secs. 7531 through 7534, Wildlife Refuges Field Manual)

- (1) Species: In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and national significance.
- (2) Weeks of Reporting Period: Estimated average refuge populations.
- (3) Estimated Waterfowl Days Use: Average weekly populations x number of days present for each species.
- (4) Production: Estimated number of young produced based on observations and actual counts on representative breeding areas. Brood counts should be made on two or more areas aggregating 10% of the breeding habitat. Estimates having no basis in fact should be omitted.
- (5) Total Days Use: A summary of data recorded under (3).
- (6) Peak Number: Maximum number of waterfowl present on refuge during any census of reporting period.
- (7) Total Production: A summary of data recorded under (4).

3-1751
Form NR-1A
(Nov. 1945)

MIGRATORY BIRDS
(other than waterfowl)

Refuge Alutian Islands Months of Sept. to December 1942

(1) Species	(2) First Seen		(3) Peak Numbers		(4) Last Seen		(5) Production			(6) Total
Common Name	Number	Date	Number	Date	Number	Date	Number Colonies	Total # Nests	Total Young	Estimated Number
I. <u>Water and Marsh Birds:</u>										
Pelagic cormorants			Slender-billed shearwaters							
Red-faced cormorant			Sooty shearwaters							
Tufted puffins			Fulmars							
Horned puffins			Fork-tailed petrels							
Least auklets			Leach's petrel							
Whiskered auklets			Laysan albatross							
Crested auklets			Black-footed albatross							
Parakeet auklets										
Ancient murrelets										
Pigeon guillemots			We do not attempt to assign numbers to these pelagic birds.							
Common loon										
Arctic loon										
Red-throated loon										
Common murre										
Thick-billed murre										
II. <u>Shorebirds, Gulls and Terns:</u>										
Glaucous-winged gull		Arctic tern								
Sabine's gull										
Black-legged kittiwake			These are the shorebirds we have encountered but we have no basis for the assignment of numbers.							
Parasitic jaeger										
Black oystercatcher										
Northern phalarope										
Red phalarope										
Least sandpiper										
Ruddy turnstone										
Little brown crane										
Rock sandpiper										
Wandering tattler										
Lesser yellow-legs										
Bar-tailed godwit										

(over)

(1)	(2)	(3)	(4)	(5)	(6)
III. <u>Doves and Pigeons:</u>					
Mourning dove					
White-winged dove	None present				
IV. <u>Predaceous Birds:</u>					
Golden eagle	None				
Duck hawk	500				
Horned owl	None				
Magpie	20				
Raven	1000				
Crow	None				
Bald eagle	1000				
Gyr Falcon	100				
Snowy owl	500				
Northern shrike	50				
Reported by.....					

INSTRUCTIONS

- (1) Species: Use the correct names as found in the A.O.U. Checklist, 1931 Edition, and list group in A.O.U. order. Avoid general terms as "seagull", "tern", etc. In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and national significance. Groups: I. Water and Marsh Birds (Gaviiformes to Ciconiiformes and Gruiformes)
 II. Shorebirds, Gulls and Terns (Charadriiformes)
 III. Doves and Pigeons (Columbiformes)
 IV. Predaceous Birds (Falconiformes, Strigiformes and predaceous Passeriformes)
- (2) First Seen: The first refuge record for the species for the season concerned.
- (3) Peak Numbers: The greatest number of the species present in a limited interval of time.
- (4) Last Seen: The last refuge record for the species during the season concerned.
- (5) Production: Estimated number of young produced based on observations and actual counts.
- (6) Total: Estimated total number of the species using the refuge during the period concerned.

3-1752

Form NR-2

(April 1946)

UPLAND GAME BIRDS

Refuge ALEUTIAN ISLANDS NATIONAL WILDLIFE Months of September to December, 1962

(1) Species	(2) Density		(3) Young Produced		(4) Sex Ratio	(5) Removals			(6) Total	(7) Remarks
Common Name	Cover types, total acreage of habitat	Acres per Bird	Number broods obs'd.	Estimated Total	Percentage	Hunting	For Re- stocking	For Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
Rock ptarmigan	1,800,000	Unknown	none	Unkn	About 50-50	abt 100	None			We can only provide positive information for Amchitka I. There the population is substantially increasing. Evidently the large blue fox population prevented cyclic variations, which have now resumed since destruction of the foxes.
Willow ptarmigan										The only willow ptarmigan on the Refuge are on Unimak I. and there they are found in the alder patches. Several hundred of these birds fly back and forth between Unimak I. and the Alaska Peninsula.

INSTRUCTIONS

Form NR-2 - UPLAND GAME BIRDS.*

- (1) SPECIES: Use correct common name.
- (2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.). Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) YOUNG PRODUCED: Estimated number of young produced, based upon observations and actual counts in representative breeding habitat.
- (4) SEX RATIO: This column applies primarily to wild turkey, pheasants, etc. Include data on other species if available.
- (5) REMOVALS: Indicate total number in each category removed during the report period.
- (6) TOTAL: Estimated total number using the refuge during the report period. This may include resident birds plus those migrating into the refuge during certain seasons.
- (7) REMARKS: Indicate method used to determine population and area covered in survey. Also include other pertinent information not specifically requested.

* Only columns applicable to the period covered should be used.

INSTRUCTIONS .

Form NR-3 - BIG GAME

- (1) SPECIES: Use correct common name; i.e., Mule deer, black-tailed deer, white-tailed deer. It is unnecessary to indicate sub-species such as northern or Louisiana white-tailed deer.
- (2) DENSITY: Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) YOUNG PRODUCED: Estimated total number of young produced on refuge.
- (4) REMOVALS: Indicate total number in each category removed during the year.
- (5) LOSSES: On the basis of known records or reliable estimates indicate total losses in each category during the year.
- (6) INTRODUCTIONS: Indicate the number and refuge or agency from which stock was secured.
- (7) TOTAL REFUGE POPULATION: Give the estimated population of each species on the refuge at period of its greatest abundance and also as of Dec. 31.
- (8) SEX RATIO: Indicate the percentage of males and females of each species as determined from field observations or through removals.

(June 1945)

BIG GAME

Refuge Alutian Islands

Calendar Year _____

(1) Species	(2) Density	(3) Young Produced	(4) Removals				(5) Losses			(6) Introductions		(7) Estimated Total Refuge Population		(8) Sex Ratio
			Hunting	For Re- stocking	Sold	For Research	Predation	Disease	Winter Loss	Number	Source	At period of Greatest use	As of Dec. 31	
Alaska brown bear	Though these animals reach all but the most craggy parts of Unimak Island, they are most abundant in three areas: (1) Lazaref River (2) Orillia Bay (3) Swanson's Lagoon These are all marsh areas and the area of most use probably comprises between 200 and 300 square miles		None							None		80	80	?
ibou	The herd now on Unimak I. has come about through natural migration from the Alaska Peninsula. It ranges over about 1000 square miles, some marsh-land and some heath. This has not yet been broken down.		None	-	-	-	Unknown					Est. 900	Est. 500	Probable 50-50
ibou	Adak. Introduced in 1958 & 59. Now estimate using about 50,000		None	-	-	-	Unknown			None		30 in Jan. Est.		
Remarks:	acres of marsh, grassland, and heath.												45	Unk
ndeer	Atka. Estimate using about 300 sq. mi. of grassland and heath.		Est. 50	None	-	-	Unknown		None			Est. 2500		Prob. 50-50

Reported by _____

PUBLIC USE

Refuge Alutian IslandsCalendar Year 1962

Total Use Visitor-Days	Hunting Use	Fishing Use	Miscellaneous Use
3400	400	1000	2350

Where practical, by means of occasional spot checks, or other methods, show by percent and visitor-days the breakdown of the above figures and other related information:

Hunting (on refuge lands):	Percent	Visitor-Days	Acres	Miscellaneous	Percent	Visitor-Days
Waterfowl	<u>50</u>	<u>200</u>	<u>14,000</u>	Recreation*	<u>85</u>	<u>2000</u>
Inland Game	<u>37</u>	<u>150</u>	<u>974,000</u>	Official	<u>8.5</u>	<u>200</u>
Big Game	<u>13</u>	<u>50</u>	<u>960,000</u>	Economic Use	<u>6.5</u>	<u>150</u>
Supervised by refuge <u>0</u> by State <u>0</u> No. of blinds <u>0</u>				Other		

Hunting (off
refuge lands): Estimated man days of hunting on lands

adjacent to the refuge None (These figures
should not be included in hunting-use totals above).

Fishing:

Acres of ponds or lakes 2200 and miles of streams

8 open to fishing

Comments:

Fishing is almost entirely on Adak and acres
of lakes and miles of streams represents
only that within accessible distances of the po-
tential users. None on the Island is closed.

*(including picnicking, swimming, boating,
camping, viewing wildlife, and photographing)

3-1760
Form NR-10
(April 1946)

HAYING AND GRAZING

Refuge.....~~Aleutian Islands National Wildlife Refuge~~ Year 195...62

Permittee	Permit No.	Unit or Location	Actual Acreage Utilized	Animal Use Months	Tons of Hay Harvested	Period of Use From - To	Rate	Total Income	Remarks
Gundersen, Chris	SUP 28741	Caton Island	4000	528	None	Jan. 1 to Dec. 31	150/yr	unknown	

Totals:

Acreage grazed.....

Animal use months.....

Total income Grazing.....

Acreage cut for hay.....

Tons of hay cut.....

Total income Haying.....