A PROPOSAL TO ESTABLISH FIXED WATERFOWL SEASON BAG AND POSSESSION LIMITS AND SEASON DATES IN ALASKA

Submitted to the U.S. Fish and Wildlife Service

by the Alaska Department of Fish and Game

James W. Brooks, Commissioner

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INTRODUCTION

For many years Alaska waterfowl seasons and bag and possession limits closely followed those of the other Pacific Flyway states. Unique waterfowl hunting conditions in Alaska were partially recognized in 1969 when 3-day possession limits on game ducks and separate bag limits for emperor geese were established.

Each year the season setting process for Alaska has involved minor changes in the regulations. New provisions for setting waterfowl seasons provide for more public input, but make the process more awkward since the seasons open on September 1 in Alaska. Therefore, we are prepared to accept fixed bag and possession limits and opening and closing dates for all waterfowl, cranes and snipe hunted in Alaska. This system has distinct advantages for both agencies.

We have prepared a regulation package which reflects the unique hunting situation in Alaska. We believe our proposed regulations are justifiable, both biologically and sociologically. We request that the Fish and Wildlife Service adopt the following regulations governing waterfowl sport hunting in Alaska, during the next five hunting seasons - 1977-78 through 1981-82.

Following these proposals are conditions which are part of the package; biological and sociological justifications for the regulations; and anticipated impacts of these regulations.

PROPOSED WATERFOWL SEASONS FOR ALASKA

DUCKS, GEESE, CRANES AND SNIPE

Area	Description	Season Dates
Northern	State Game Management Units 11, 12, 13, 17, 18, 19, 20, 21, 22, 23, 23, 25, 26	September 1-December 16
Gulf Coast	Game Management Units 5, 6, 7, 9, 14, 15, 16 and Unimak Island	September 1-December 16
Kodiak	Game Management Unit 8	Second Saturday in September through second Saturday in October and first Saturday in November extended to 107 total days
Southeast	Game Management Units 1, 2, 3, 4	September 1-December 16
Aleutians	Game Management Unit 10, with the exception of Unimak Island	Second Saturday in October extended to 107 total days

DAILY BAG AND POSSESSION LIMITS

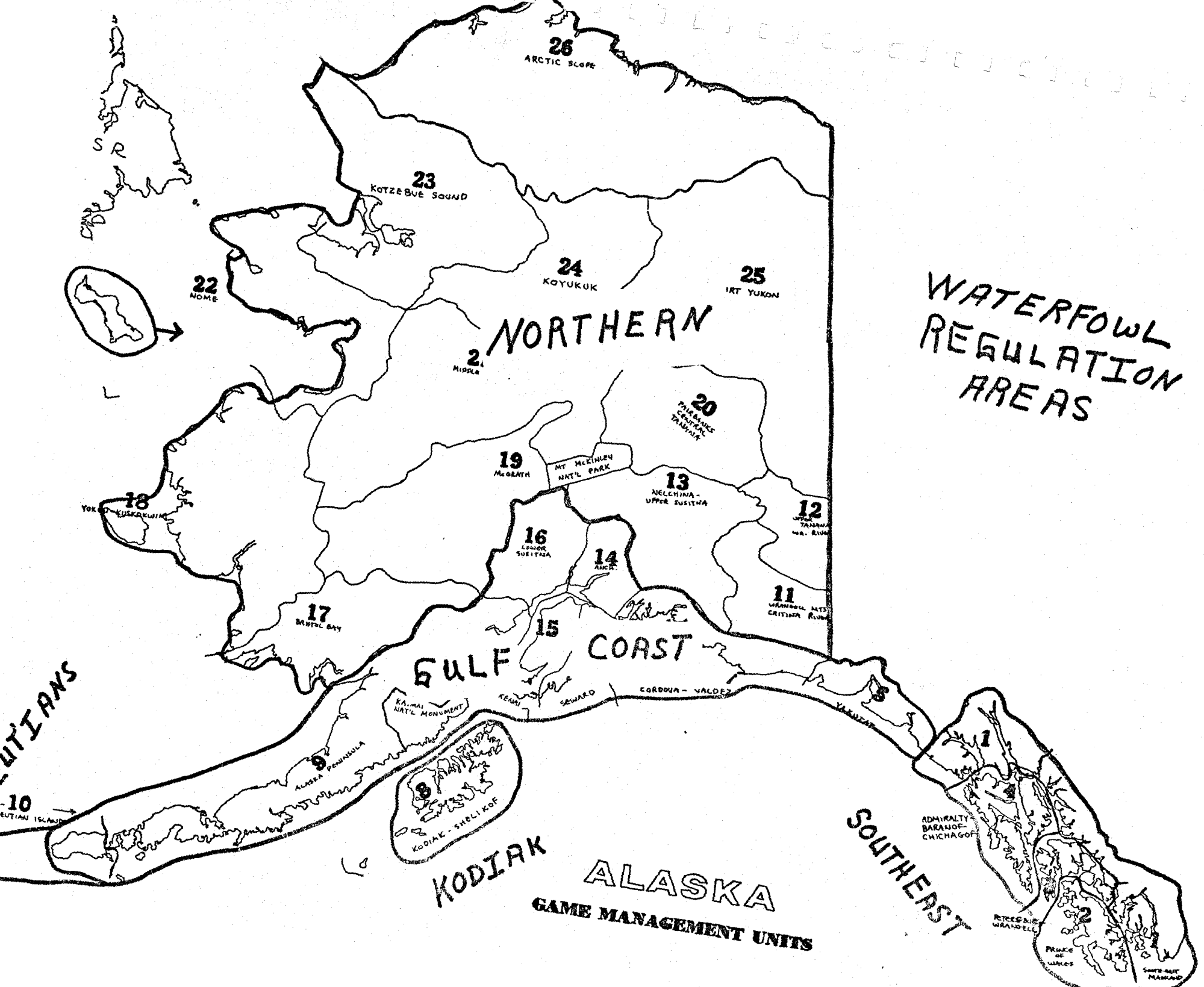
AREA	GAME DUCKS	SEA DUCKS & MERGANSERS	GEESE[1/]	EMPEROR GEESE	BRANT	SNIPE	CRANES[2/]
Northern	10-30	15-30	6-12	6-12	4-8	8-16	2-4
Gulf Coast	8-24	15-30	6-12	6-12	4-8	8-16	2-4
Kodiak	7-21	15-30	6-12	6-12	4-8	8-16	2-4
Southeast	7-21	15-30	6-12	6-12	4-8	8-16	2-4
Aleutians	7-21	15-30	6-12[3/]	6-12	4-8	8-16	2-4

1/ No more than 4 per day and 8 in possession may be Canada and white-fronted geese, singularly or in aggregate.

2/ 1977-78 season only, pending expanded bag and possession limits in other states where cranes are hunted.

3/ Closed season on Canada geese in the Aleutian Islands, except Unimak Island.

Sea ducks and mergansers: old squaw, harlequin, scoters, eiders and mergansers.


WATERFOWL REGULATION AREAS
NORTHERN
GULF COAST
KODIAK
SOUTHEAST
ALASKA
GAME MANAGEMENT UNITS
26 ARCTIC SLOPE
23 KOTZEBUE SOUND
24 KOYUKUK
25 IRT YUKON
22 NOME
21 MIDDLE
20 TANANA-KUSKOKWIM
19 McGRATH
MT McKINLEY NAT'L PARK
13 NELCHINA-UPPER SUSITNA
12 UPPER TANANA-WR. RIVER
16 LOWER SUSITNA
14 ANCHORAGE
11 WRANGELL MTS-CHITINA RIVER
18 YUKON-KUSKOKWIM
17 BRISTOL BAY
15
KENAI
SEWARD
CORDOVA-VALDEZ
YAKUTAT
5
1
ADMIRALTY-BARANOF-CHICHAGOF
9 ALASKA PENINSULA
KATMAI NAT'L MONUMENT
8 KODIAK-SHELIKOF
10 ALEUTIAN ISLANDS
2
PETERSBURG-WRANGELL
PRINCE OF WALES
SKAGWAY-HAINES

Should the Fish and Wildlife Service adopt these regulations for the next five hunting seasons - 1977-82 - the Alaska Department of Fish and Game agrees to the following:

1. The Department will not initiate regulation changes except under the following circumstances:

   An emergency or unforeseen situation may arise in which harvest restrictions are desirable. For example, a high harvest area for Aleutian Canada geese may be identified or the dusky Canada goose population may drop below the numerical population objective.

2. Should any of the circumstances in No. 1 arise, the Department will accommodate such circumstances through state law after discussion with the Fish and Wildlife Service, the Pacific Flyway Council and/or others concerned.

3. The Department will continue to monitor waterfowl hunter activity and harvest by a mail questionnaire survey.

4. The Department will provide appropriate data accrued on a yearly basis to the Fish and Wildlife Service and the Pacific Flyway Council.

5. The Department will, before the 1982-83 waterfowl season, review the results of the previous five seasons and recommend changes, if any, to the Fish and Wildlife Service in a manner similar to this document.

Harvest and Hunter Activity Estimates

The harvest estimates in this proposal are the result of five (1971-75) ADF&G mail surveys and the USFWS parts collection survey. There are several exceptions. Goose kill by species is derived from the state survey because technicians agree state estimates are more accurate. Also, we believe the federal parts collection survey does not adequately assess the sea duck and merganser harvest in Alaska. Hence, these estimates are derived from the state survey. Federal estimates are lower than the state estimates for these species.

We did not use FWS estimates of total harvest and hunter activity because most of these data are not available for the five regions. Also, estimates of crane and snipe harvests are not made in Alaska by the FWS. For all species, state harvest estimates exceed those calculated by the FWS. Average hunter days in Alaska is one exception (federal estimates exceed state figures). Appendix I provides a five year comparison between surveys.

Breeding Duck Populations and Fall Flights of Geese

Average breeding game duck populations for Alaska were derived from annual FWS breeding pair survey reports. Sea duck estimates in these reports are conservative due to incomplete coverage of sea duck habitat.

Fall flight estimates of geese from Alaska are a combination of mid-winter inventory information and a general concensus from state and federal waterfowl biologists in Alaska.

BIOLOGICAL JUSTIFICATION

Ducks

Tables 1 and 2 demonstrate that: (1) a very substantial fall flight of game ducks (over 6 million) and sea ducks (over 4 million) comes from Alaska and (2) hunters in Alaska harvest a very small percentage of the annual fall flight of game ducks (1.3%) and an even smaller proportion of the sea ducks (0.1%).

Of the 12 game duck species harvested in Alaska, only the mallard, canvasback, ringneck and redheads have received special protection in other parts of the U.S. However, there are so few ringnecks in Alaska that they aren't recorded on FWS breeding duck surveys. Redheads are rare as breeding birds and migrants in Alaska.

We believe that most mallards breeding in Alaska also winter here. For example, all 11 recoveries of Alaskan winter-banded birds were recovered in Alaska (over 300 have been banded). An estimated 250,000 or more mallards winter along the Gulf Coast, Aleutian Islands, Kodiak and in Southeastern, depending on winter severity.

About one-third of all recoveries from summer-banded mallards in Alaska were recovered within the state. This rate is high considering Alaska's low annual harvest and high harvests elsewhere, indicating most birds remain in Alaska. Of interest is the fact that one-third of the birds banded outside but recovered in Alaska have come from the Central Flyway, probably indicating overflight in dry years from Canadian prairies. Only 3 percent of the mallards banded in Alaska were recovered in the Central Flyway.

Sex ratios have been obtained from about 700 overwintering mallards in Southeastern and on the Kenai Peninsula, averaging about 55 percent males for both areas. This is perhaps indicative of a discrete population as opposed, for example, to the Central Flyway where the proportion of males in wintering areas decreases from north to south (various High Plains Mallard Management Unit reports). In northern areas of the Central Flyway mallard populations are frequently composed of over 80 percent males.

Table 1. TEN YEAR 1967-1976 ESTIMATED AVERAGE FALL FLIGHTS OF DUCKS BY SPECIES AND 1971-75 FIVE YEAR STATEWIDE DUCK HARVEST.

Species	Fall[1/] Flight	Retrieved Harvest		
		Number	% of Flight	% of Harvest
Mallard	338,000	20,875	6.2	24.8
Pintail	2,023,700	19,125	0.9	22.7
Am. Widgeon	824,600	14,675	1.8	17.4
G-W Teal	487,600	11,875	2.4	14.1
Shoveler	148,000	3,875	2.6	4.6
Scaups	1,849,900	3,600	0.2	4.3
Bufflehead	112,800	1,900	1.7	2.2
Goldeneyes	236,500	1,550	0.6	1.8
Gadwall	2,200	700	32.0	0.8
Ringneck	Tr.	350	--	0.4
B-W Teal	2,700	225	8.3	0.3
Canvasback	112,200	250	0.2	0.3
Ruddy duck	Tr.	Tr.	--	Tr.
Total Game Ducks	6,138,200	79,000	1.3	93.7
Sea Ducks and Mergansers	4,200,000	5,300	0.1	6.3
Total Ducks	10,338,200	84,300	0.8	100.0

1/ Production estimated to be: dabblers - .8 yg./ad.
divers - .6 yg./ad.
seaducks - .4 yg./ad.

Table 2. TEN YEAR AVERAGE BREEDING DUCK POPULATIONS (1967-76) IN ALASKA AND PERCENT BAND RECOVERIES IN ALASKA FROM ALASKA BANDED BIRDS

SPECIES	BREEDING POPULATION	TOTAL BAND[1/] RECOVERIES	PERCENT OF TOTAL RECOVERIES IN ALASKA
Scaups	1,156,200	-	Est. 1.0
Pintail	1,124,300	660	7.6
Am. Wigeon	458,100	951	3.3
G-W Teal	270,900	104	3.8
Mallard (Banded Summer)	187,800	90	32.2
Mallard (Banded Winter)		11	100.0
Goldeneyes	147,800	81	95.1
Shoveler	82,200	133	6.0
Canvasback	70,100	296	2.0
Bufflehead	70,500	40	57.5
B-W Teal	1,500	6	16.7
Gadwall	1,200	3	100.0
Redhead	100	14	0
Total Game	3,570,700	-	-
Sea Ducks[2/]	3,000,000(est.)	58[3/]	24.1
Total	6,570,700	-	-

1/ Only birds shot or found dead during legal hunting seasons.
2/ All species: harlequin, merganser (3 spp.), eider (4 spp.), old squaw, scoters (3 spp.).
3/ 71 percent from Russia.

Table 3. AVERAGE DUCK HARVEST IN ALASKA BY AREA, 1971-75, FIVE-YEAR AVERAGE

	GAME DUCKS		SEA DUCKS		TOTAL DUCKS	
Area	No.	% of Total	No.	% of Total	No.	% of Total
Northern	19,500	24.7	1,400	26.4	20,900	24.8
Gulf Coast	41,150	52.1	1,825	34.4	42,975	51.0
Kodiak	2,100	2.6	1,100	20.0	3,200	3.8
Southeast	15,850	20.1	800	15.1	16,650	19.7
Aleutians	400	0.5	175	3.3	575	0.7
Statewide	79,000	100.0	5,300	100.0	84,300	100.0

An average of about 14 percent of the breeding canvasbacks in North America are found in Alaska. The average fall flight of this species from Alaska is estimated to be 112,200 while the Alaska harvest averages 250 birds per year. About 70 percent of the recoveries from canvasbacks banded in Alaska have occurred on the west coast. The west coast wintering population has been gradually increasing and is in better status than elsewhere.

A high proportion of the recoveries of goldeneyes and buffleheads occurred in Alaska, indicating most of these birds do not leave the state.

The insignificant sea duck harvest in Alaska is reflected by the fact that only 24 percent of the total recoveries came from Alaska while 71 percent have come from Russia (Table 2).

Average duck harvests for the past 5 years in each proposed state harvest region are shown in Table 3.

Geese

Although we are not proposing changes in goose bag and possession limits, we believe a review of the goose harvest situation is desirable. Review of Tables 4 and 5 demonstrates that: (1) a very substantial fall flight of geese comes from Alaska and (2) hunters in Alaska harvest a very small percentage of the estimated annual fall flight (1.1%).

Of the 10 species, subspecies or populations of geese coming from and/or through Alaska, four have received special consideration in other parts of the U.S. for biological reasons. These are: dusky Canada geese, Aleutian Canada geese, mid-continent whitefronts, and snow geese from Wrangell Island.

The status of dusky geese has been closely monitored for some years and this is one of the most precisely managed populations in the U.S. Harvest in Alaska averages about 9 percent of the total harvest. Adequate management procedures are provided in the management plan for this subspecies.

The presence of Aleutian Canada geese has not been verified in Alaska outside the Aleutian Islands. Although these birds may migrate along the Gulf Coast for an unknown distance in the fall, they do not frequent heavily hunted areas. The Aleutian Chain is closed to Canada goose hunting and no change is proposed. Existing provisions for emergency season closures are adequate, should a harvest area in Alaska be identified.

Status of the mid-continent whitefront population has been a cause for concern for many years. Alaska is the major breeding grounds for most of this population. However, average harvest in Alaska is estimated to be only 400 birds per year. Mid-continent whitefronts leave Alaska early (as do most Pacific whitefronts). Whitefronts are rarely seen in the Northern region after mid-September.

Table 4. ESTIMATED AVERAGE FALL FLIGHT OF GEESE AND 1972-75 4-YEAR STATEWIDE GOOSE HARVEST.

Species	Fall Flight	Retrieved Harvest Number	% of Flight	% of Harvest
Vancouver Can. Goose	60,000	1,275	2.1	-
Lesser Can. Goose	225,000	6,485	2.9	-
Dusky Can. Goose	28,225	800	2.8	-
Cackling Can. Goose	150,000	1,625	1.1	-
Aleutian Can. Goose	1,500	0	0	-
Tot. Can. Goose	464,725	10,185	2.2	66.6
Whitefront (Pacific)	150,000	465	0.3	
Whitefront (Mid-Cont.)	250,000	400	0.2	
Total Whitefront	400,000	865	0.2	5.6
Black Brant	175,000	1,320	0.7	8.6
Emperor	150,000	2,295	1.5	15.0
Snow Geese (Canada-Russia)	250,000	635	0.2	4.2
Total Geese	1,439,725	15,300	1.1	100.0

Table 5. ESTIMATED AVERAGE FALL FLIGHTS OF GEESE FROM ALASKA AND PERCENT BAND RECOVERIES IN ALASKA FROM ALSAKA BANDED BIRDS

Species	Ave. Fall Flight	Total Band Recoveries[1/]	Percent of Total Recoveries in Alaska
Vancouver Can. Goose	60,000	389	83.8
Lesser Can. Goose	225,000	244	8.2
Dusky Can. Goose	28,225	2,616	9.4
Cackling Can. Goose	150,000	631	8.9
Aleutian Can. Goose	1,500	11	0
Whitefront (Pacific)	150,000	614	2.0
Whitefront (Mid-Cont.)	250,000	642	1.6
Black Brant	175,000	-	est. 2.0-4.0
Emperor	150,000	16	87.5
Snow	500	63	1.6
Total	1,190,225	-	-

1/ Only birds shot or found dead during legal hunting seasons.

Snow geese have recently received added protection in the Pacific Flyway. Since 1971 production has been poor on Wrangell Island. Production was good in 1975 and 1976, however, as FWS personnel on Clarence Rhode Refuge recorded 29 and 42 percent young in the population, respectively. Total average annual snow goose harvest in Alaska is calculated to be only 635 birds. On that segment of the population wintering in Oregon, harvest in Alaska (Copper Delta, Yakutat area and Stikine Delta) is estimated to be about 200 birds per year.

The status of black brant populations has also been cause for recent concern. However, production in 1975 and 1976 was good (about 35 percent young in the population both years were recorded at Izembek Lagoon by FWS personnel). We do not believe the average sport harvest of 1,320 birds in Alaska is significant, and we anticipate no significant increase in harvest in the near future - Izembek Lagoon at Cold Bay is the primary harvest area and is discussed in Appendix II.

About 85 percent of the band recoveries from Vancouver Canada geese and emperor geese have come from Alaska. Both of these geese are essentially Alaskan species. Some exchange does occur between Russia (emperors) and Oregon, Washington and British Columbia (Vancouvers). Sport harvest on both populations is very light (Tables 4 and 6).

Table 6 provides the past 4-year average sport harvest of geese by species for each of the five harvest regions in Alaska.

Cranes

The average yearly crane harvest in Alaska is a calculated 820 birds (Table 7). Of this total we estimate about 500 birds were taken from the Central Flyway population and 320 from the Pacific Flyway flock. The 580 birds harvested in the northern region (Table 7) are not all from the central population as some birds were shot on the Yukon Delta and in the Innoko River drainage. However, the exact breeding grounds derivation of either population is unclear.

Total continental retrieved harvest on the Central Flyway flock may be as high as 15,000 birds each year. However, spring counts in Nebraska have shown about 400,000 birds in the population. Harvest in Alaska must be considered insignificant - even if population recruitment is as low as 10-15 percent per year.

Except for Mexico, the only known legal harvest of Pacific Flyway cranes occurs in Alaska. However, the precise breeding, migration and wintering areas for this population are not clear.

Extending the crane season in Alaska to run concurrently with regular waterfowl seasons will provide hunting opportunity in some areas of Alaska comparable to some other states where sandhill cranes are hunted.

Table 6. GOOSE HARVEST BY SPECIES BY AREA, 1972-75 FOUR-YEAR AVERAGE

SPECIES	NORTHERN	GULF COAST	KODIAK	SOUTHEAST	ALEUTIANS	STATE
Canada	1,730	6,755	10	1,665	35[1/]	10,185
Emperor	185	1,925	40	0	145	2,295
Black Brant	390	920	0	10	0	1,320
Whitefront	530	270	0	60	0	865
Snow	305	265	0	60	0	635
Total	3,140	10,135	50	1,795	180	15,300

1/ 1972 Harvest only - season closed 1973-1974 to present.

Table 7. SANDHILL CRANE AND JACKSNIPE HARVEST BY AREA, 1971-75 FIVE-YEAR AVERAGE

	NORTHERN	GULF COAST	KODIAK	SOUTHEAST	ALEUTIANS	STATEWIDE
Crane	580	220	0	20	0	820
Snipe	345	1,420	505	735	0	3,005

Table 8. A COMPARISON BETWEEN SEASONAL DUCK HARVEST AND DAYS HUNTED FOR THE PACIFIC FLYWAY AND ALASKA BY AREA, 1972-75 FOUR-YEAR AVERAGE

AREA	DUCK BAG PER ACTIVE ADULT HUNTER	DAYS HUNTER PER ACTIVE ADULT HUNTER
Northern	8.5	5.1
Gulf Coast	7.4	4.7
Kodiak	11.8	7.3
Southeast	8.0	6.0
Aleutians[2/]	6.8	6.8
Alaska Average	7.9	5.2
Pacific Flyway[1/]	10.6	8.5

1/ Does not include Alaska.
2/ Sample less than 10 hunters per year.

Table 9. WATERFOWL HUNTER DAYS AND DISTRIBUTION OF DUCK STAMP SALES BY AREA, 1971-75 FIVE-YEAR AVERAGE[2/]

Area	HUNTER DAYS No.	HUNTER DAYS % of Total	STAMP SALES % of Total[1/]
Northern	12,410	22.8	27.5
Gulf Coast	26,945	49.6	46.4
Kodiak	1,915	3.5	4.1
Southeast	12,435	22.9	21.1
Aleutians	615	1.1	0.9
Statewide	54,320	99.9	100.0

1/ From Schroeder, et al., 1974
2/ Stamp sales by year: 1971-14,320
1972-14,824
1973-16,449
1974-15,750
1975-15,130

Snipe

Little is known about snipe in Alaska except that the breeding population and fall flight are large and harvest is small, 3,005 birds per year (Table 7). There are, however, a few hunters in Alaska who actively hunt snipe for the time they are available and these hunters might benefit from an increased season length. Also, the regulations will be simplified as proposed.

Bag Limit vs. Harvest

It is generally accepted that with each increment of increase in the daily duck bag the percent increase in total harvest decreases. Carney and Smart (1964) analyzed the results of FWS wing collection data for the three hunting seasons 1961-63. They found for the Pacific Flyway (excluding Alaska) an increase from 4 to 5 ducks per day would probably result in a 7.1 percent increase in harvest. For California only, a limit increase from 5 to 6 ducks would result in an average harvest increase of 6.1 percent.

Corollary data are not available for Alaska, but the above data provide an indication of what might be expected in Alaska.

It is estimated that the proposed daily bag limit increase in Alaska would result in an average statewide game duck harvest increase of 4.4 percent, or 3,595 birds per year.

Potential Hunter Days

Harvest and hunting opportunity are believed to be of equal value to waterfowl hunters. However, if uncontrollable circumstances limit one factor (opportunity in Alaska), then additional harvest can in part compensate.

Waterfowl hunters in Alaska have several major handicaps which hunters elsewhere do not have. Geography and the expense involved to have good hunting for many people are two factors. However, hunters in Alaska, like most waterfowl hunters elsewhere, gladly spend the money to hunt. What most hunters in the state lack is opportunity. We propose to balance the paucity of hunting opportunity with an increased daily bag of game ducks.

We do not propose additional game ducks in the daily bag in Southeastern, Kodiak or Aleutian harvest areas over the present daily bag of 7. In these regions hunters can expect to shoot waterfowl each day of the season. In the Gulf Coast and Northern regions we propose a daily bag of 8 and 10, respectively, to compensate for the paucity of hunting opportunity.

Table 8 compares average days hunted and ducks bagged per active hunter in Alaska by region to these statistics in the lower Pacific Flyway. Hunters in Alaska average 7.9 ducks per season while in the lower Pacific Flyway hunters average 10.6 birds per season. Days spent per hunter in Alaska average 5.2 while hunters in the lower Pacific Flyway spend 8.5 days afield. Slightly better than average seasonal success for hunters

in the Northern region is attributed to the increased vulnerability of birds shot on their immediate breeding grounds. In the Kodiak region over one-third of the 11.8 ducks per hunter per season are sea ducks and mergansers.

Table 9 compares the total average number of hunter days by region to the distribution of duck stamp sales by region.

Regional Boundaries

The proposed harvest region boundaries (Fig. 1) follow established State Game Management Unit boundaries with which hunters in Alaska are familiar. These units are the best method to describe harvest regions rather than conventional boundaries used elsewhere. Game Management Units utilize geographic and geologic features for boundaries where possible.

Public Sentiment

The department has received numerous complaints from the public in the Northern region that the season opens too late (September 1). Hunters contend that many birds have already left or leave shortly after September 1. Larger bag limits here will, to some degree, satisfy these people and as importantly, not adversely affect the resource.

Complaints that the present season and bag limits are too liberal are few, but most appear to come from hardcore anti-hunters.

There are a few avid snipe and crane hunters in Alaska who have requested increased bag limits. Our proposal for increased season length would have no adverse biological impacts.

IMPACTS OF THE PROPOSAL

The following is a summary of anticipated biological impacts on ducks, cranes and snipe.

WATERFOWL

		Game Ducks		
Area	Present Ave. Harvest	Anticipated % Increase	Change	Anticipated Ave. Tot. Harvest
Northern	19,500	10	1,950	21,450
Gulf Coast	41,150	4	1,645	42,795
Kodiak	2,000	0	0	2,000
Southeast	15,850	0	0	15,850
Aleutians	400	0	0	400
Statewide	79,000	4.4	3,595	82,495

Of the total anticiapted game duck harvest increase of 3,595 birds, mallard harvests would increase 890 to a statewide average harvest of 21,765 birds. Canvasback harvest is anticipated to increase about 50 for a total average harvest of 300. Canvasback harvest cannot be projected on a proportionate basis since about 75 percent of the kill occurs in the Northern region.

Although sea duck and merganser bag limits would not change, harvest may increase very slightly. Some hunters will stay in the field longer to achieve more harvest of these species. However, we believe the increase will be less than 5 percent (250 birds) since most people do not hunt in areas where sea ducks occur in significant numbers.

Extending the snipe and crane seasons to run concurrently with ducks and geese will have little biological impact as these birds leave most of the state by late October. This merely constitutes a simplification of the regulations and permits additional hunting opportunity in Southeastern Alaska where these species stay the latest.

During the 1969-70 season Alaska hunters had, for the first time, a 3-day game duck possession limit. The average season duck bag per potential adult hunter was 6.9 birds during the four hunting seasons 1965-68. During the six hunting seasons 1969-74, the average season duck bag per potential hunter was 5.2 birds. These data indicate that triple possession limits have had no significant effects of harvest.

The above data were obtained from Fish and Wildlife Service Administrative Reports Nos. 138, 152, 172, 186, 216 - July 6, 1973, July 10, 1974 and July 7, 1975. The average season bags are for potential hunters (duck stamp buyers, less stamp collectors) rather than active hunters. Correcting to an average seasonal duck bag for active hunters would increase the average, but the ratio between years would remain the same. Comparative data were not available for Alaska prior to the 1965 season.

Sociological Impacts

The major positive impact will be to provide hunters more recreation by increasing the opportunity to harvest more birds.

The same opening and closing dates for all species in each harvest region will greatly simplify the regulations and lead to less public confusion.

Considerable monetary savings for the department and people of Alaska will result from seasons being established several years in advance.

There will also be people who will find discomfort in the proposed regulations because they appear too excessive, even though some are themselves hunters and should recognize the negative biological impact.

LITERATURE CITED

Carney, S.M. and G. Smart. 1964. Increases in the duck kill that might be anticipated due to increases in the daily bag limit as derived from the wing collection data. U.S. Fish and Wildl. Serv. Admin. Rept. No. 56. 13pp.

Schroeder, L.D. and S.M. Carney. 1974. Distribution of duck stamp sales within states during fiscal years 1962-71. U.S. Fish and Wildl. Spec. Sci. Rept.-Wildl. No. 180. 46pp.

Data used in this report were derived from a variety of sources - both federal and state. Where practical, acknowledgements have been given. However, in some cases, such as with band recovery data, many people were involved.

APPENDIX I. A COMPARISON BETWEEN USFWS AND ADFG WATERFOWL HUNTER SUCCESS AND HARVEST ESTIMATES IN ALASKA, 1971-1975 FIVE-YEAR AVERAGE

	ADFG	USFWS
Percent active hunters	70.6	70.8
Number of active hunters	10,580	10,715
Days per active hunter	5.1	5.9[1/]
Total hunter days	54,120	63,560[1/]
Duck bag per active hunter	8.0	6.8
Total duck harvest	84,260	73,275
Goose bag per active hunter	1.3	0.9
Total goose harvest[2/]	15,300	10,100

Goose harvest by species:[2/]	No.	% of Total	No.	% of Total
Canada	10,185	66.6	8,320	82.3
Emperor	2,295	15.0	425	4.2
Black Brant	1,320	8.6	370	3.7
Whitefronted	865	5.6	785	7.8
Snow	635	4.2	200	2.0

1/ The USFWS does not correct reported hunter days for reporting bias, ADFG does.

2/ 1972-1975 Four-Year Average: The USFWS corrects for hunter reporting bias, ADFG does not.

APPENDIX II. REGIONAL HUNTING CONDITIONS

Northern

Hunting opportunity and success in this area are limited by early freeze-up and early waterfowl migration. Freeze-up occurs from mid-September in the north to generally no later than Octover 10 in the south. Thus, in the Northern region only 15-40 days of hunitng are possible.

The major harvest and hunter concentration area in this region is Minto Flats, about 50 miles WNW of Fairbanks. Access to Minto is either by float plane or by a 3- to 4-hour drive from Fairbanks and then by boat. Hunting here is almost always over by October 5.

Other areas of minor hunting intensity include the immediate Fairbanks area, the Delta area, Mineral Lakes and the Tok-Tetlin area. Other waterfowl hunting is usually incidental to big game hunting or occurs in the immediate vicinity of towns and villages.

Gulf Coast

Hunting opportunity and success along the Gulf Coast are also limited by early freeze-up and waterfowl migration. Over most of this region freeze-up occurs by October 15-20 making only 45-50 days of hunting possible. However, there are some exceptions.

Inland and nearshore waters on the southern portion of the Alaska Peninsula usually do not freeze until mid-November. However, most birds except emperor geese have left by November 5.

Huntable populations of sea ducks, divers and mallards overwinter in Kachemak Bay (southern Kenai Peninsula) and in Prince William Sound. Hunting pressure in Kachemak Bay is light to moderate and in Prince William sound very light.

Huntable numbers of ducks and geese remain some years in the Yakutat area (eastern end of region) until October 20-31. Hunting pressure in this area is light.

Other areas in this region have substantial numbers of wintering birds, mainly sea ducks, goldeneyes and buffleheads. However, severe weather and difficulties of access preclude most hunting.

The major duck harvest locations in this region are the Copper River Delta, Susitna Flats, Palmer Hay Flats, Potter Marsh, Eagle River Flats and Trading Bay. Susitna Flats and Trading Bay are accessible only by plane or boat, while Potter, Palmer Flats, Eagle River and the Copper Delta can be reached by automobile. However, many people utilize a boat or plane to hunt the Copper Delta.

Major goose harvest areas along the Gulf Coast (and in the state) are: Cold Bay, Pilot Point and the Copper River Delta. Other areas of lesser significance include Chickaloon Flats, Yakutat area, Trading Bay, Susitna Flats, Port Heiden and Port Moller. These goose harvest areas are accessible only by airplane to all Alaska hunters except for the few local residents.

Kodiak

Although freeze-up of upland ponds and some intertidal flats occurs usually by mid-November, substantial numbers of ducks and some emperor geese overwinter. The majority of ducks are sea ducks and mergansers, goldeneyes, buffleheads and mallards, with a few pintails, widgeons and gadwalls.

Since only a minor amount of local duck production occurs locally, hunters rely on migrating birds the first week of September through early October. Few ducks are available on September 1 when the season opens over most of Alaska so we open here one week later. From mid-October to early November few birds are available until areas to the north freeze and move the birds south; thus we split the season in this region.

Hunting is limited mainly to three areas along the short road system out of Kodiak and around the small villages elsewhere. Other hunting occurs in conjunction with deer, elk and bear hunts.

Although birds are available in this region during all 107 days of the season, severe weather conditions and the expense involved in flying preclude much hunting except that from the road system. However, there are a few individuals in this region who hunt the entire season and have excellent sea duck and diver hunting.

When compared to the rest of Alaska there are no major harvest areas in this region. However, most ducks here are taken in Middle, Kalsin and Woman Bays.

Southeast

Hunters in Southeast have birds available throughout the entire season. A significant (but unmeasured) amount of duck and goose production occurs in the Southeast which provides reasonably good hunting early in the season. Some species have also begun to migrate by September 1. However the best hunting usually occurs in mid to late September and October when most birds from the north are migrating.

A large number of ducks and Vancouver Canada geese overwinter in Southeastern Alaska. The majority of these ducks are sea ducks and mergansers, goldeneyes, buffleheads and dabblers (95%+ mallard). The total population probably exceeds 1 million.

The two major harvest areas in Southeast are the Mendenhall Flats near Juneau and the Stikine River Delta near Wrangell. Other areas of lesser significance include Rocky Pass, Duncan Canal, Gustavus Flats, Eagle River Flats, St. James Bay, Farragut Bay and Blind Slough.

There are few hunting areas in the Southeast which can be reached by car; most areas can be reached only by plane or boat. Consequently, some of the duck and goose harvest occurs incidentally to deer and bear hunting trips.

Often severe weather conditions after mid-November preclude all but the most avid hunters or those people combining hunts.

Aleutians

Although there is some local production, mainly sea ducks and common teal, most waterfowl do not arrive unitl mid-October. Most of the birds present in the Aleutians in mid-October will winter there.

Sea ducks and mergansers, some divers, a few dabblers and emperor geese comprise the wintering population. The number of wintering birds is large (probably over 1 million), but unmeasured. Hunting pressure is very light and occurs mostly on Adak where the Navy has a base. Waterfowl hunting also occurs around small villages.

Due to a low human population, very severe weather, lack of facilities and the travel expense involved, waterfowl harvest is quite small in this region.