

WATERFOWL BREEDING POPULATION SURVEY

ALASKA

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by

Henry A. Hansen

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Spring break-up was about two weeks later than normal north and east of a line from Anchorage to Kotzebue. To the south and west the break-up appeared to be on schedule. With the weather having broken, however, the season advanced very rapidly creating optimum nesting conditions. Except for a small flooded area on the Iditarod Flats adjacent to the Innoko River the habitat everywhere appeared to be in an ideal condition. A period of unprecedented good weather was experienced during the survey, especially along the Bering Sea coast from Bristol Bay northward. Not one day was lost to weather and consequently the survey was accomplished in the shortest period of time to date.

The aerial waterfowl breeding population survey was conducted in Alaska between May 18 and June 5. A Cessna 180 on floats was used with Hansen as pilot-observer and Game Management Agent King as the second observer. All areas except the low density stratum I were covered with 189 sixteen-mile transects censusing 756 square miles of habitat. All the data summarized in the accompanying tables are directly comparable between 1958 and 1959.

Overall there was no significant change in the total breeding population index. There were changes of definite significance in relative abundance of the various species, however, and in geographical distribution. Scoter, eider and oldsquaw showed large reductions particularly on the Yukon Delta and in Bristol Bay. Likewise scaup were reduced to a marked degree in these two areas, but an increase of scaup elsewhere, held the total scaup reduction to about ten per cent. There was a sizeable reduction of widgeon in the coastal areas with moderate increases in the interior not sufficient to offset the coastal losses. Widgeon were down about forty per cent. Teal and shoveller also showed a loss but they are tallied in insignificant numbers.

Pintail, mallard, canvasback and goldeneye made remarkable gains even in the coastal areas where the other species declined. The attached map shows the geographical location of the various censusing areas. The gain or loss indicated in each area of reference is for total ducks, game and non-game species combined.

Under ideal weather conditions an intensive coverage of the Yukon Delta brant nesting area was flown on May 31. Very few brant were present at the time although the cackling geese appeared to be in normal abundance. Refuge Supervisor Spencer estimated about 40,000 brant at Izembek Bay on May 27, however. This appears to be a rather delayed migration for the species. Another detailed coverage will be attempted to assess the brant production prior to the July 27 report date.

It was very apparent during the survey that the isolated, normally marginal habitat lying outside the boundaries of the survey areas was supporting many more mallards, pintail and scaup than ordinarily. There is no way of assessing this increment to the breeding population quantitatively, in the aggregate the total increase must be quite significant. What the production success might be in these marginal areas is problematical.

In summary, production outlook for game ducks in Alaska appears favorable at this time, with a moderate increase of brood stock and good weather and habitat conditions.

Waterfowl Population Index, Alaska - Comparative Data 1958 - 1959

Species	Stratum II		Stratus III		Stratum IV		Stratum V		Total	
	1958	1959	1958	1959	1958	1959	1958	1959	1958	1959 Trend
Scaup	37,340	41,800	258,750	184,485	265,700	261,950	25,700	44,535	587,490	532,770 - 10%
Pintail	15,035	30,075	132,785	229,850	109,500	195,250	15,290	18,920	272,610	474,095 + 74%
Mallard	4,425	22,690	22,000	27,825	17,500	27,550	19,050	20,235	62,975	98,300 + 56%
Widgeon	1,750	6,500	31,110	6,650	15,800	17,750	4,000	1,425	52,660	32,325 - 39%
Bufflehead	7,190	5,860	1,520	2,420	2,800	3,000	7,130	6,915	18,640	18,195 N.C.
Shoveller			2,280	3,025	5,600	2,450	1,650	2,540	9,530	8,015 - 15%
Teal	1,750		760	1,210	1,700		2,575	1,220	6,785	2,430 - 64%
Goldeneye	2,675	2,930	835	3,630	1,700	600	1,000	1,220	6,210	8,380 + 35%
Canvasback			1,520	1,815	1,100	7,350	775	2,540	3,395	11,705 + 245%
Gadwall						600	230	400	230	1,000 + 335%
Scoter	13,365	17,585	221,560	116,740	88,000	47,135	1,000	1,730	323,925	183,190 - 43%
Old Squaw			78,160	27,220	29,900	31,850			108,060	59,070 - 45%
Eider					24,200	16,550			24,200	16,550 - 31%
Merganser					565				565	
Total	83,530	127,440	751,280	604,870	564,065	612,035	78,400	101,680	1,477,275	1,446,025 - 6%

Statistical Summary - Alaska Waterfowl Breeding Population, 1958 vs. 1959

Stratum Number	Location	Area Sq. Mi.	No. of 16-mi. x-sects	Sq. Mi. Sampled	Mean Density Ducks per Sq. Mi.		Population Index Total Ducks		Population Index Game Ducks	
					1958	1959	1958	1959	1958	1959
II	Tanana- Kuskokwim	8,900	17	68						
	Nelchina	2,250	6	24						
	Innoko	1,000	2	8						
	Kenai-Susitna	3,000	10	40						
	Total	15,150	35	140	5.5	8.4	83,530	127,440	70,165	109,855
III	Nelchina	1,750	7	28						
	Ft. Yukon	3,000	5	20						
	Koyukuk	4,650	10	40						
	Bristol Bay	9,200	15	60						
	Innoko	2,500	6	24						
	Yukon Delta	17,500	34	136						
	Noatak	550	2	8						
	Seward Pen.	2,000	8	32						
	Beetles	1,200	4	16						
	Total	42,350	91	364	17.7	14.3	751,280	604,870	521,560	460,910
IV	Ft. Yukon	2,800	14	56						
	Yukon Delta	8,700	15	60						
	Kotzebue Sd.	4,800	11	44						
	Norton Bay	700	5	20						
	Total	17,000	45	180	33.2	36.0	564,065	612,035	421,400	516,500
V	Minto	950	6	24						
	Northway	700	7	28						
	Copper Delta	300	5	20						
	Total	1,950	18	72	40.2	52.1	78,400	101,680	77,400	99,950
Alaska Total		76,450	189	756	19.3	18.9	1,477,275	1,446,025	1,090,525	1,187,215