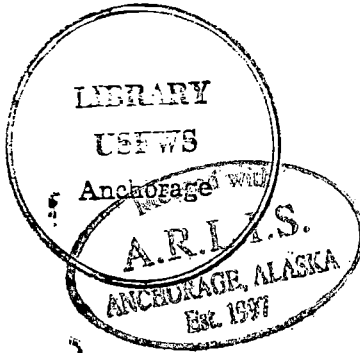


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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
Fish and Wildlife Service  
Bureau of Sport Fisheries and Wildlife

BREEDING GROUND SURVEY, ALASKA

May 18 to June 11, 1965

Submitted by:

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Title : Breeding Ground Survey  
Area Covered : Alaska  
Dates : May 18 to June 11, 1965  
Data supplied by: James G. King and Clinton Lostetter, Bureau of Sport Fisheries and Wildlife

#### Introduction:

This year 206 of the 214, 16 mile transects laid out for breeding pair survey were completed in 101 flying hours by 180 Cessna. The survey showed a 27% decrease in breeding duck pairs from 1964 and a 28% decrease from the 10 year average. Duck production was very poor in 1964 due to the latest spring break-up on record followed by extensive flooding of nesting habitat so the reduced breeding population of 1965 comes as no surprise. The habitat this year appears to be in good shape and nesting began on schedule. What little data we have thus far, mostly for geese and swan, indicates high nest densities and large clutches so we may have a good chance of recovering the 1964 losses or at least producing a fall flight comparable to 1964.

#### Weather & Water Conditions:

An extended thaw in March melted and evaporated most of the snow in Interior Alaska. April brought freezing temperatures again. Thawing weather predominated in May but really warm weather did not occur until June. Ice breakups in the Tanana and Kuskokwim Rivers were 2 and 5 days later than the long term average respectively compared to breakup 14 and 21 days later than average in 1964.

As a result of the March thaw there was very little run off water and there was very little flooding of river valleys. The ponds and lakes did not receive the melt water which normally raises the ice, breaks it loose from the banks and permits the wind to churn it about hastening its destruction. The breeding pair survey was delayed while the ice melted. However, although the ice in many of the lakes persisted later than usual and the weather was cool, there was sufficient open water for the ducks to disperse on schedule. Once dispersed instead of finding the usual soggy or flooded habitat conditions the birds found relatively dry conditions so nesting could proceed at once. Thus although the phenology of the vegetation is slightly later than normal we may find that bird production is right on schedule or early in many areas. The combination of near normal weather with the unusual virtual lack of flooding in any area may permit very favorable nesting conditions and high production.

A hint as to what duck production will be can be gained by observations of geese and swans on the Copper River Delta, the Yukon Delta and the Kenai Peninsula. Greater nest density and larger clutches than during the past several years is reported from each of these areas.

Breeding Population Index:

The tables tell the story very clearly of the breeding population decline especially for Scaup and Pintail which make up the bulk of birds observed in the survey. The slight increase in Widgeon which are never observed in great abundance may be due only to the fact that the observers were changed this year. The increase in teal may be due to the same causes, however, production studies in 1964 indicated that teal did better in some areas than did most other species. The increase shown for canvasbacks likewise may not be real as the sample is small. The decrease in Mallards on the other hand may not be as severe as the survey indicates as they had fair production in 1964 in some areas.

TABLE 1. Statistical summary: Alaska waterfowl breeding population survey, 1963 - 1965

	Stratum		Total
	I	II	
Area (sq. mi.)-----	43,450	33,200	76,650
Sample (sq. mi.):			
1963-----	200	150	350
1964-----	202	182	384
1965-----	208	204	412
Population index:			
Ducks per sq. mi.:			
1963-----	16.5	22.1	18.4
1964-----	17.4	18.7	17.9
1965-----	12.3	13.4	12.8
Total ducks:			
1963-----	679,100	734,500	1,413,600
1964-----	753,930	621,800	1,375,730
1965-----	560,898	444,985	1,005,883
Game ducks: <sup>1</sup>			
1963-----	470,650	672,800	1,143,450
1964-----	533,530	666,020	1,199,550
1965-----	321,956	416,951	738,907

<sup>1</sup> Excludes scoter, eider, old squaw, and merganser.

TABLE 2. Waterfowl breeding population index, by species and stratum, Alaska, 1964 - 1965

	Stratum I		Stratum II		Total		Percent change
	1964	1965	1964	1965	1964	1965	
Dabblers:							
Mallard -----	20,350	12,340	46,640	15,129	66,990	27,469	-59
Gadwall -----	750				750		
American Widgeon--	12,050	7,853	23,630	32,484	35,680	40,337	+13
Green-winged teal-	3,000	4,487	7,460	9,790	10,460	14,277	+36
Shoveler-----			7,460	3,560	7,460	3,560	-52
Pintail-----	207,830	128,445	170,930	111,246	378,760	239,691	-36
Subtotal-----	243,980	153,125	256,120	172,209	500,100	325,334	-35
Divers:							
Canvasback-----		1,683	11,200	19,134	11,200	20,817	+86
Scaup-----	295,550	166,026	266,730	188,674	562,280	354,700	-37
Goldeneye-----	6,000	561	2,500	8,900	8,500	9,461	+11
Bufflehead-----	15,000	561	30,470	28,034	31,970	28,595	-11
Subtotal-----	303,050	168,831	310,900	244,742	613,950	413,573	-33
Miscellaneous:							
Scoter-----	98,350	163,782	49,780	26,699	148,130	190,481	+29
Eider-----	19,600	26,923			19,600	26,923	+37
Old Squaw-----	87,450	48,237	5,000	1,335	92,450	49,572	-47
Merganser-----							
Subtotal-----	205,400	238,942	54,780	28,034	260,180	266,976	+ 3
Grand Total-----	752,430	560,898	621,800	444,985	1,374,230	1,005,883	-27

TABLE 3. Departure of 1965 breeding population index from 10 year average, 1956 thru 1965

Species	Population Index, 1965	% Composition 1965	10 Year Average 1956-65	% Composition 10 Yr. Av.	1965 Depart-ure from 10 Yr. Average
<b>Dabblers:</b>					
Mallard-----	27,469	2.7	68,700	4.9	- 60
American Widgeon---	40,337	4.0	39,565	2.8	+ 2
Green-winged Teal--	14,277	1.4	5,362	.4	+166
Shoveler-----	3,560	.4	7,000	.5	- 49
Pintail-----	239,691	23.8	342,530	24.4	- 30
Subtotal-----	325,334		463,157		- 30
<b>Divers:</b>					
Canvasback-----	20,817	2.0	10,303	.7	+102
Scaup-----	354,700	35.3	535,448	38.2	- 34
Goldeneye-----	9,461	.9	15,221	1.1	- 38
Bufflehead-----	28,595	2.8	26,677	1.9	+ 7
Subtotal-----	413,573		587,649		- 30
<b>Miscellaneous:</b>					
Scoter-----	190,481	18.9	247,263	17.6	- 23
Eider-----	26,923	2.7	18,453	1.3	+ 46
Old Squaw-----	49,572	4.9	85,522	6.1	- 42
Merganser-----					
Subtotal-----	266,976		351,238		- 24
Total ducks-----	1,005,883	99.8	1,402,044	99.9	- 28