

WATERFOWL BREEDING PAIR
SURVEY: ALASKA, MAY 21
TO JUNE 20, 1972

By
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Bureau of Sport Fisheries and Wildlife

ALASKA
WATERFOWL BREEDING PAIR SURVEY

May 21 to June 20, 1972

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Title : Waterfowl Breeding Pair Survey; Alaska
Strata Covered : 37, 38
Dates : May 21 to June 20, 1972
Data supplied by: James G. King, Bureau of Sport Fisheries
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Abstract

For the second year in a row Alaskas waterfowl nesting season got off to a late start and the survey was delayed by poor survey weather. Some flooding occurred in most valleys. In spite of poor to mediocre production last year there was a 17% increase in the duck breeding populations. Most indications are that production will be poor again this year. With the increase in breeding population we can expect a slight increase in the 1972 fall flight of ducks. Swans and geese will probably be less than last year.

I. Methods

The Alaska survey was completed according to standard procedures using an amphibious Beaver aircraft as in the past. The survey commenced May 21 on the first day of open water at Anchorage's Lake Hood and was completed June 20, 3 days later than last year. As usual the survey was held up until the Yukon Delta was at optimum survey condition. By the time we left the coast (Stratum 37) and returned to the Interior (Stratum 38) temperatures there had been in the nineties and it was mid summer. Thus in the Koyukuk and Nelchina valleys many dabblers had deserted. Except in these two areas survey conditions were normal.

II. Weather and Habitat Conditions

Although the first open water and early migrants coincided in late April, snow cover lingered through the first half of May in the Interior and almost to the first of June on the tundra and along the Gulf Coast. Ice remained in the lakes even longer. Warm weather came to the Interior about May 20 after which temperatures reached the seventies and eighties. Some flooding occurred in most of the river valleys. The result was a shortage of available nest sites in many areas and some confusion for early nesters.

On the Yukon Delta black brant nesting was delayed by at least 10 days and heavy ice was still present in the larger lakes and tidal sloughs on June 13. Dusky Canada geese on the Copper Delta were delayed by snow cover and nested more than two weeks late.

A review of past survey reports seems to indicate that the abnormal year is the norm in Alaska and this year was no exception. In Stratum 37 and along the coast we clearly had a late year and nesting was obviously delayed for all species. In Stratum 38 the situation is more difficult to assess. After what appeared to be a late start, hot weather came so suddenly that perhaps production will be good there especially for the divers and later nesting dabblers.

III. Breeding Population Indexes

Breeding population indexes are generally up for the important Alaskan species with a 17% overall increase indicated.

Mallard - Up 23%. Although the sample is small this appears to be a significant increase

American Widgeon - Up 6%. There was a slight decrease in widgeons in Stratum 37 compensated for by an increase in Stratum 38. The widgeon population is essentially the same as last year.

Green-winged teal - Down 10%. The decrease was all in Stratum 37 and Stratum 38 remains the same as last year. This is not a significant change and the teal population is probably about the same as last year.

Shoveler - Down 21%. The sample is very small but probably reflects a valid decrease.

Pintail - Up 49%. A significant increase in both strata.

Canvasback - Up 91%. The sample is too small to be sure of an increase but it seems likely.

Scaup - Up 8%. This is a good sample and a slight increase is indicated in both strata.

Goldeneye - Down 71%. Goldeneye are sometimes recorded as scaup when they don't fly. With such a small sample we can not be sure there is a real decrease. Perhaps some goldeneye contributed to the indicated scaup increase

Bufflehead - Up 4%. No significant change.

Scoter - Up 28%. As the survey timing was the same last year late arriving scoters were included both years thus this appears to be a significant increase.

Eider - Down 67%. The sample is too small for a valid conclusion.

Old Squaw - Down 6%. This is essentially no change.

IV. Conclusion

With an increase in overall breeding population and the possibility of fair production in Stratum 38 we can expect a modest increase in the fall flight of all ducks except Old Squaw.

Nesting conditions were not good for swans and all geese except Lesser Canadas. We certainly have no basis for expecting an increase in geese and brant, and it seems more likely there will be a decrease in the fall flight.

--Alaska - comparative status of waterfowl breeding population indexes by species and stratum, 1971 - 1972

(index numbers in thousands)

Species	Stratum		Total		Average 1963-1972	Percent Change From	
	37	38	1971-1972			1971	Ave.
Ducks:							
Dabblers:							
Mallard	16	63	64	79	66	+ 23	+ 20
Am. widgeon	36	94	123	130	90	+ 6	+ 44
Gr-winged teal	5	15	22	20	26	- 10	- 23
Shoveler	3	16	24	19	16	- 21	+ 19
Pintail	198	209	273	407	350	+ 49	+ 16
Subtotal	258	397	506	655	544	+ 29	+ 20
Divers:							
Canvasback	1	41	22	42	23	+ 91	+ 83
Scaup	217	268	450	485	460	+ 8	+ 5
Goldeneye	4	5	31	9	22	- 71	- 59
Bufflehead	2	24	25	26	29	+ 4	- 10
Subtotal	224	338	528	562	534	+ 6	+ 5
Miscellaneous:							
Scoter	175	121	231	296	230	+ 28	+ 29
Eider	3		9	3	12	- 67	- 75
Old Squaw	89	15	111	104	93	- 6	+ 11
Subtotal	267	136	351	403	335	+ 15	+ 20
Total ducks	749	871	1,385	1,620	1,413	+ 17	+ 15

--Alaska - 10 year trend in breeding population indexes by species, 1963 - 1972
(index numbers in thousands)

Species	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	Average
Ducks:											
Dabblers:											
Mallard	83	67	27	32	42	76	53	134	64	79	66
Am. Widgeon	27	36	40	32	59	133	144	174	123	130	90
Gr. Wing teal	2	10	14	17	24	45	41	63	22	20	26
Shoveler	5	7	4	5	6	32	21	33	24	19	16
Pintail	378	379	240	250	247	622	294	409	273	407	350
Subtotal	495	499	325	336	378	908	523	813	506	655	544
Divers:											
Canvasback	17	11	21	17	15	43	21	22	22	42	23
Scarp	585	562	355	425	314	498	488	441	450	485	460
Goldeneye	10	9	9	13	38	35	39	25	31	9	22
Bufflehead	37	32	29	22	30	21	26	44	25	26	29
Subtotal	649	614	414	477	397	597	574	532	528	562	534
Miscellaneous:											
Scoter	165	148	190	252	250	301	246	220	231	296	230
Fider	11	20	27	14	16	7	6	9	9	3	12
Old Squaw	94	92	49	79	87	133	93	90	111	104	93
Subtotal	270	260	266	345	353	441	345	319	351	403	335
Total Ducks	1,414	1,373	1,005	1,158	1,128	1,946	1,442	1,664	1,385	1,620	1,413

--Alaska - whistling swan breeding population indexes, 1963 - 1972

(index numbers in thousands)

	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	10-year Average
Square miles sampled	468	414	208	212	210	212	212	212	212	212	
Number counted	567	481	298	256	208	213	367	227	220	286	
Population index	64	50	62	52	43	43	75	46	45	59	60

--Alaska - stratum data sheet 1972

Strata

Survey Design	37	38
Square miles in the stratum	43,450	33,200
Square miles in the sample	212	214
Lineal miles in the sample	1,696	1,712
Number of transects in the sample	30	63
Number of segments in the sample	106	107
Expansion factor	205	155

Data

Strata

	37		38	
Numbers of	Sample	Stratum	Sample	Stratum
Lone Males	895	183,475	905	140,275
Duck pairs	783	160,515	922	142,910
Flocked ducks	84	17,220	539	83,545
Unidentified ducks	135	27,675	969	150,195