



PRODUCTION AND BANDING SURVEY

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U.S. Fish & Wildlife Service
377 E. Tudor Road
Anchorage, Alaska 99503

Ken Troyer and Mike Matz
(volunteers)

Under Supervision of Ervin W. McIntosh

Waterfowl
Kanuti Flats
Waterfowl Production

U.S. Fish and Wildlife Service
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PURPOSE

The objective of the July 25-29, 1983, field trip to the cluster of lakes in T16N, R19W, Sections 25, 26, 34 and 35 was twofold. Primarily, the intent was a waterfowl inventory in order to get an approximation of the area's waterfowl production for use in refuge management planning. A secondary concern was to investigate the area for concentrations of molting waterfowl, and should the area harbor a significant number of flightless birds, to determine the viability of conducting a banding operation in the area.

PROCEDURE

On July 25 Ken Troyer (volunteer) and Mike Matz (volunteer) were flown to the irregularly shaped lake in the south portion of Section 26, T16N, R19W. A base camp was set up on the northwest corner of the northern bay, where higher ground supported the growth of birch trees.

The principal means of transportation was a 17-foot Grumman canoe; no motor was used. Where the canoe wouldn't go, the lakes were reached on foot.

For identifying species either a 7 x 35 binoculars or a spotting scope with a tripod were used. A 35 mm Nikon Nikkormat with a telescopic lens provided the means by which to document observations; and Peterson's Field Guide to the Western Birds or the Interior Department's publication Ducks at a Distance were used to aid in identification of birds in question.

The method involved paddling around the perimeter of a particular lake and tabulating the birds as they were flushed from the shoreline, or, as was often the case, when birds stayed out too far ahead for positive identification they were cornered and then tabulated. The entire shoreline and open water of lakes covered on foot were surveyed with the spotting scope.

Data were entered on segment sheets (see attached copy) into the appropriate singles, pairs, groups, or broods column and notations were made as to whether the birds were observed as flightless or not. Additional recordings of topographical, weather, and water conditions were entered on the segment sheets.

DISCUSSION

Recorded in Table I are the broods that were actually observed in each of the three segments. Because many of the ducks seen were either class III or developed enough to fly at least short distances, singles and pairs observations were not considered for this survey as mating pairs and attributed an average class III brood. With the number of young adults in this survey an interpolation of that sort would have led to grossly inflated production figures, shown in Table II.

(Scaup broods were still young at the time of this survey and interpolating mating pairs would not have led to inflated results. For purposes of consistency, though, scaup broods were tabulated the same as other species.)

Table II is not an accurate reflection of waterfowl production in the area because it does exclude first year hatches that were more developed than class III. A more realistic indication of the area's utilization by waterfowl is depicted in table III, population per acre.

As shown in this latter table, this area supports significant densities of scaup, widgeon, and especially white-fronted geese. Concentrations of 28 male scaup individuals on one lake, approximately 158 widgeons and 281 white-fronted geese on an adjacent lake (both in section 34) were observed grouped together. A group of 18 surf scoters, the only scoters noted in this area, was observed on the largest of the three lakes in section 25. Table IV provides a summary of other wildlife observed in the area.

SUMMARY

None of the species located in this survey area were observed to be entirely flightless. Behavior by shoveler and scaup females demonstrated a certain amount of difficulty in flying longer than 100-200 yards, but observations of this low, struggling flapping were generally made around the females' broods and this behavior was undoubtedly instinctive "broken wing" tactics. All other mature or maturing waterfowl had definite flight abilities.

This does not diminish the area's potential for a possible banding site; rather, the timing of a banding operation run at a similar time as this survey was done would be inappropriate. A determination of when a targeted species for banding was flightless would need to be made, but the habitat and topography is such that a banding operation could be staged.

The large lakes in sections 34 and 35 would be especially conducive for banding. The aforementioned concentrations of scaup, widgeon, and, most significantly, white-fronted geese feed on the short grass that grows on the extensive mud flats lining the lake. These mud flats offer prime open areas for capturing and then working with the birds. Additionally, the isthmus of land between the lakes is suitably high, and would be an adequate camp area.

The major problem with these two lakes is accessibility. If the lakes are indeed long and deep enough to fly into, they are small enough to cause a detrimental disturbance to the waterfowl. Investigation of this problem, and a determination of species flightless periods would need to be worked out.

RESULTS

TABLE 1: OBSERVED BROODS

SEGMENT # AND LOCATION	ACTUAL ACREAGE	BROODS
SEGMENT 1: T16N, R19W, South Section 26 Lake including portion of lake in north section 35 and outlet stream up to section 14; small ponds in northwest section 25.	300	Widgeon: 1-10-class III; 1-6-class III Shoveler: 1-8-class III; 1-7-class III Scaup: 1-4-class I; 1-4-class I 1-3-class I; 1-5-class I; 1-6-class II; 1-4-class I
SEGMENT 2: T16N, R19W, three lakes in section 25	170	Widgeon: 1-10-class II; 1-8-class III; 1-7-class III; 1-5-class II Pintail: 1-3-class III Scaup: 1-8-class II; 1-6-class II; 1-6-class II; 1-3-class II; 1-7-class II; 1-7-class II; 1-5-class I; 1-7-class I; 1-7-class I. Canada Geese: 3-4-class II
SEGMENT 3: T16N, R19W, two larger lakes in sections 34 & 35; small pond in central section 35.	220	Widgeon: 1-5-class III; 1-4-class III; 1-6-class-III; 1-7-class III; 1-3-class III; 1-6-class III; 1-5-class III; Green-winged teal: 1-6-class III; 1-9-class III; 1-3-class III Shoveler: 1-7-class III; 1-8-class III; 1-5-class III; 1-3-class III Pintail: 1-6-class III; 1-5-class III
See attached map: check marks on lakes provides pictorial view of lakes in these segments.	Total Acreage= 690	

TABLE II: PRODUCTION PER ACRE

	Number of Observed Broods	Total Young Observed	Average Young/ Brood	Young/Acre
SCAUP	15	82	5.47	.119
WIDGEON	13	82	6.31	.119
SHOVELER	8	47	5.88	.068
PINTAIL	3	14	4.67	.020
G-W TEAL	3	18	6.00	.026
CANADA GEESE	1	4	4.00	.006

TABLE III: POPULATION PER ACRE

	NUMBER OBSERVED/690 ACRES	BIRDS/ACRE
SCAUP	154	.223
WIDGEON	262	.380
SHOVELER	79	.114
PINTAIL	51	.074
G-W TEAL	30	.043
MALLARD	1	.001
SURFSCOTER	18	.026
CANADA GEESE	69	.100
WHITE FRONTED GEESE	392	.568
TUNDRA SWAN	3	.004
REDTHROATED LOON	2	.002
ARCTIC LOON	5	.007
RED NECKED GAESE	2	.002

Table IV
Other Birds and Mammals Observed

T 16N, R 19W

	<u>Species</u>	<u>Number</u>
<u>Birds</u>	Arctic Tern	18
	Mew Gull	7 (5 young)
	Lesser Yellowlegs	30
	Wimbrell	40
	Semipalmated Plover	2
	Common Snipe	1
	Raven	2
	Rusty Blackbird	9
	Great Horned Owl	1
	Marsh Hawk	1
	Bald Eagle	1
<u>Mammals</u>	Mink	1
	Moose	1 (cow)
<u>Fish</u>	Northern Pike	1 (13 inches)

BETTLES (A-4) QUADRANGLE

ALASKA

1:63 360 SERIES (TOPOGRAPHIC)

270050 FEET

R. 19 W. 151.30'

568 000 m.f.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

