

THE BIRDS NORTH OF LESSER SLAVE LAKE, ALBERTA

by HUGH C. SMITH*

The area north of Lesser Slave Lake, Alberta, has only recently been opened to vehicular travel and, as a result, ornithological investigations have been few. Erskine was the first to go into the area by car and report his findings.⁵ Early naturalists through the area, Preble,⁷ Williams¹⁹ and Eaton³, did not travel far from the two major rivers that border the area, the Peace on the west and north and the Athabasca on the east. Baker and Walkinshaw², Soper⁹ and Godfrey⁶ reported on their work in the area south of Lesser Slave Lake.

The Provincial Museum of Alberta spent 52 days during the last 4 years inventorying birds in the area. Camps were set up at Utikuma Lake (S4-Tp80-R8W5) from June 1 to 6 and at a small lake, locally known as Bear Lake, (84-9W5) from June 14 to 20 in 1971; at Goosegrass Lake (91-3W5) from May 29 to June 10, 1972, from June 4 to 12 and June 21 to 30, 1973, and from May 28 to June 3, 1974. From here trips were made to God's Lake and Skunk Lake 5 and 2 miles (8 and 3 km) away. The study area extended 75 miles (120 km) northeast of Utikuma Lake and was 2 to 3 miles (4 to 5 km) wide. Erskine's study area was between Salt Prairie and Gift Lake. (Fig. 1).

The study area is within the mixed-wood section of the Boreal Forest Region.⁸ The major trees are Trembling Aspen (*Populus tremuloides*), Balsam Poplar (*Populus balsamifera*), White Spruce (*Picea glauca*), Black Spruce (*Picea mariana*), and Balsam Fir (*Abies balsamea*). Forest fires have occurred in most of the region at one time or another, so that in many places there is a large amount of deadfall which makes walking through the forest extremely difficult. Two oilfields, Nipisi and Red Earth, are located within the study area. As a result large sections of the forest are crossed by survey lines. Lakes of various sizes are found throughout the forest. The area is slightly rolling with no major topographic features. Trout Mountain, at an elevation of approximately 2,600 feet above sea level, is the highest point. The drainage is poor. Several small, slow moving streams connect many of the lakes and eventually drain into the Wabasca River which empties into the Peace River.

A number of people from the Provincial Museum were involved in field trips to the study area and their contribution to this paper is appreciated. Ludo Bogaert, Rod Burns, Michael Hampson, Jasper Keizer, Ron Solkoski, and David Spalding made their field notes available.

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SPECIES LIST: The nomenclature used in this list (Table 1) is according to the

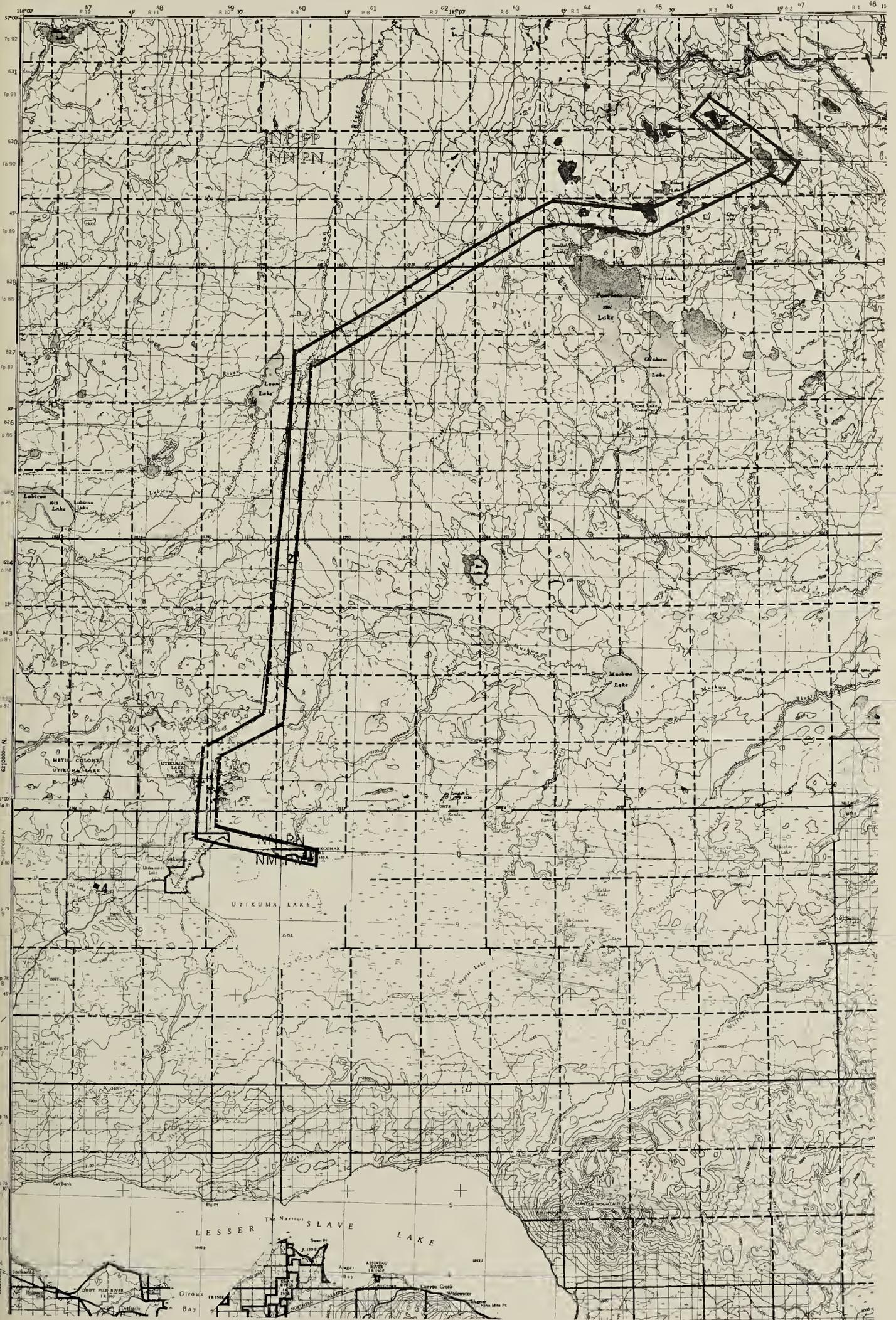


Fig. 1. Map of North Central Alberta, showing approximate route and the following camps: (1) Utikuma Lake Camp; (2) Bear Lake Camp; (3) Goosegrass Lake area; (4) Erskine's Camp.

Table 1
Species list for Uitikuma Lake - Goosegrass Lake area

Species	Utikuma Lake	Bear Lake	Goosegrass Lake	God's Lake	Skunk Lake	No. of days seen — Largest no. seen on any one day.	% of days seen	
							Erskine	Smith
Common Loon*	x	x	x		x	14-3	40.9	26.9
Red-necked Grebe* †		x	x		x	22-6	56.8	42.3
Horned Grebe†	x		x		x	5-4	50.0	9.6
Eared Grebe†	x	x				2-2	11.4	3.8
Western Grebe†	x			x		4-25	6.8	7.7
Pied-billed Grebe†		x				3-2	11.4	5.8
White Pelican	x					1-1	2.3	1.9
Double-crested Cormorant			x			1-1		1.9
Great Blue Heron			x			4-2	2.3	7.7
American Bittern							2.3	
Canada Goose (Seen along Wabasca River)						3-4		5.8
Mallard* †	x	x	x	x	x	22-17	61.4	42.3
Gadwall		x	x	x		6-2	6.8	11.5
Pintail	x			x		2-7	9.1	3.8
Green-winged Teal* †	x		x		x	9-5	47.7	17.3
Blue-winged Teal†	x		x		x	13-5	50.0	25.0
American Wigeon* †	x	x	x	x	x	17-21	61.4	32.7
Northern Shoveler†	x	x	x		x	5-6	18.2	9.6
Redhead†	x					1-1	20.5	1.9
Ring-necked Duck†		x	x		x	3-5	18.2	5.8
Canvasback†	x					1-1	9.1	1.9
Lesser Scaup†	x	x	x	x	x	15-32	75.0	28.8
Common Goldeneye* †	x	x	x	x	x	16-30	52.3	30.8
Barrow's Goldeneye							18.2	
Bufflehead* †	x	x	x	x	x	18-100	72.7	34.6
White-winged Scoter†	x	x	x	x	x	22-24	59.1	42.3
Surf Scoter			x		x	4-15	2.3	7.7
Ruddy Duck†		x				3-2	47.7	5.8
Common Merganser (Seen along Wabasca River)						1-2		1.9
Goshawk	x		x	x		4-1	2.3	7.7
Cooper's Hawk							2.3	
Sharp-shinned Hawk	x					3-2		5.8
Red-tailed Hawk†	x	x	x			12-1	38.6	23.1
Bald Eagle*		x	x			14-4	2.3	26.9
Marsh Hawk	x	x		x		7-4	15.9	13.4
Osprey	x					3-2		5.8
American Kestrel†	x	x	x		x	11-4	56.8	21.1
Spruce Grouse†							4.5	
Ruffed Grouse†	x	x	x	x	x	8-1	13.6	15.4
Sharp-tailed Grouse†							2.3	
Sora	x	x	x		x	9-1	31.8	17.3
American Coot* †	x	x	x		x	12-3	65.9	23.1
Killdeer*	x	x	x			8-2	56.8	15.4
Common Snipe†	x	x	x	x	x	22-4	47.7	42.3

*Evidence of nesting in this study.

†Evidence of nesting in Erskine's study.

Species	Utikuma Lake	Bear Lake	Goosegrass Lake	God's Lake	Skunk Lake	No. of days seen — Largest no. seen on any one day.	% of days seen	
							Erskine	Smith
Upland Plover							2.3	
Spotted Sandpiper*	x	x	x	x	x	23-4	34.1	44.2
Solitary Sandpiper†			x			2-1	68.2	3.8
Greater Yellowlegs		x	x	x		7-4		13.4
Lesser Yellowlegs	x	x	x	x	x	22-10	65.9	42.3
Baird's Sandpiper			x			1-1		1.9
Pectoral Sandpiper							4.5	
Least Sandpiper							9.1	
Dowitcher							6.8	
Semipalmated Sandpiper							4.5	
Northern Phalarope							2.3	
Wilson's Phalarope							13.6	
Herring Gull	x			x	x	3-3		5.8
California Gull			x	x	x	6-12		11.5
Ring-billed Gull	x		x			3-2		5.8
Franklin's Gull†	x		x			3-4	56.8	5.8
Bonaparte's Gull†	x	x	x	x	x	11-50	11.4	21.1
Common Tern†	x		x	x	x	7-4	15.9	13.4
Black Tern†	x	x	x			16-20	77.3	30.8
Rock Dove†							2.3	
Mourning Dove							6.8	
Great Horned Owl		x	x		x	6-1	2.3	11.5
Hawk Owl		x				1-1		1.9
Long-eared Owl	x					1-1		1.9
Short-eared Owl	x					1-1		1.9
Common Nighthawk	x	x	x	x		16-10	54.5	30.8
Belted Kingfisher			x			4-1	4.5	7.7
Common Flicker* †	x	x	x	x	x	26-3	68.2	50.0
Pileated Woodpecker			x			3-1	4.5	5.8
Yellow-bellied Sapsucker* †	x	x	x	x	x	20-3	54.5	38.5
Hairy Woodpecker†			x			2-2	6.8	3.8
Downy Woodpecker†			x	x		2-1	6.8	3.8
Northern Three-toed Woodpecker			x			4-1	2.3	7.7
Eastern Kingbird* †	x	x	x		x	9-2	61.4	17.3
Eastern Phoebe			x			4-1		7.7
Say's Phoebe			x			1-1		1.9
Alder Flycatcher	x	x	x	x		12-4	36.4	23.1
Least Flycatcher*	x	x	x	x	x	19-6	43.2	36.5
Western Wood Pewee*	x	x				13-10	75.0	25.0
Olive-sided Flycatcher		x	x	x		9-2	29.5	17.3
Horned Lark	x					1-1		1.9
Tree Swallow	x	x	x	x	x	32-20	61.4	61.5
Bank Swallow	x					1-1	4.5	1.9
Barn Swallow†	x	x	x	x		10-2	4.5	19.2
Cliff Swallow (Colony seen at Red Earth)						1-?	20.5	1.9
Purple Martin	x		x			4-1	31.8	7.7
Gray Jay	x	x	x		x	20-10	54.5	38.5
Blue Jay							6.8	
Black-billed Magpie	x	x				5-2		9.6
Common Raven	x	x	x	x	x	23-13	9.1	44.2
Common Crow	x		x			6-3	18.2	11.5
Black-capped Chickadee†	x	x	x	x		9-2	40.9	17.3
Boreal Chickadee*			x			7-2	13.6	13.4
White-breasted Nuthatch			x			1-1		1.9

Species	Utikuma Lake	Bear Lake	Goosegrass Lake	God's Lake	Skunk Lake	No. of days seen — Largest no. seen on any one day.	% of days seen	
							Erskine	Smith
Red-breasted Nuthatch*			X			10-3	2.3	19.2
Brown Creeper			X			4-3		7.7
House Wren							18.2	
Winter Wren							9.1	
Long-billed Marsh Wren (Seen at Loon Lake)						1-1	9.1	1.9
Gray Catbird			X			1-1		1.9
American Robin* †	X	X	X	X	X	23-4	90.1	44.2
Hermit Thrush*	X		X	X	X	10-2	22.7	19.2
Swainson's Thrush* †	X	X	X	X	X	30-6	43.2	57.7
Mountain Bluebird							2.3	
Golden-crowned Kinglet							2.3	
Ruby-crowned Kinglet		X	X	X		12-9	15.9	23.1
Bohemian Waxwing		X	X			5-5		9.6
Cedar Waxwing	X	X	X			3-6	47.7	5.8
Common Starling* †	X					3-2	34.1	5.8
Solitary Vireo			X			5-5		9.6
Red-eyed Vireo*	X	X	X	X	X	20-6	34.1	38.5
Philadelphia Vireo			X			3-2		5.8
Warbling Vireo	X	X		X		4-2	28.6	7.7
Black-and-White Warbler	X		X	X		11-3	22.7	21.1
Tennessee Warbler*	X	X	X	X	X	45-17	28.6	86.5
Yellow Warbler	X		X		X	14-9	38.6	26.9
Magnolia Warbler	X		X	X		4-4	2.3	7.7
Cape May Warbler			X			3-6	2.3	5.8
Yellow-rumped Warbler	X		X	X	X	21-13	18.2	40.4
Black-throated Green Warbler							4.5	
Bay-breasted Warbler			X			8-25	4.5	15.4
Blackpoll Warbler	X			X		2-1	4.5	3.8
Palm Warbler		X	X		X	3-2	6.8	5.8
Ovenbird		X	X	X		12-8	38.6	23.1
Northern Waterthrush	X		X	X	X	16-3	25.0	30.8
Connecticut Warbler	X					1-1	2.3	1.9
Mourning Warbler	X	X	X			9-5	18.2	17.3
Common Yellowthroat	X	X	X			9-2	18.2	17.3
Wilson's Warbler	X					1-1		1.9
Canada Warbler			X			1-2		1.9
American Redstart	X		X			6-5	15.9	11.5
House Sparrow	X	X	X			5-1	28.6	9.6
Yellow-headed Blackbird							4.5	
Red-winged Blackbird* †	X	X	X		X	25-25	90.1	48.1
Northern Oriole							2.3	
Rusty Blackbird*			X	X	X	7-10	15.9	13.4
Brewer's Blackbird	X	X			X	5-5	11.4	9.6
Common Grackle†			X		X	5-4	31.8	9.6
Brown-headed Cowbird	X	X	X	X	X	10-25	28.6	19.2
Western Tanager	X		X			17-5	2.3	32.7
Rose-breasted Grosbeak	X	X	X	X		16-3	9.1	30.8
Evening Grosbeak			X			2-4	2.3	3.8
Purple Finch		X	X			7-3	6.8	13.4
Pine Grosbeak			X			2-1	2.3	3.8
Pine Siskin		X	X	X		8-10	22.7	15.4
American Goldfinch	X		X			2-1	2.3	3.8
White-winged Crossbill		X				2-2	13.6	3.8
Savannah Sparrow	X					5-1	11.4	9.6
LeConte's Sparrow	X	X		X	X	4-2	22.7	7.7
Sharp-tailed Sparrow							11.4	



Ruffed Grouse drumming.

L. A. Morgotch

Species	Utikuma Lake	Bear Lake	Goosegrass Lake	God's Lake	Skunk Lake	No. of days seen — Largest no. seen on any one day.	% of days seen	
							Erskine	Smith
Vesper Sparrow							6.8	
Lark Sparrow (A flock seen vicinity Trout Mtn.)						1-4		1.9
Dark-eyed Junco* †		x	x	x	x	21-8	40.9	40.4
Chipping Sparrow*	x	x	x	x	x	24-12	34.1	46.2
Clay-colored Sparrow	x					6-2	15.9	11.5
White-throated Sparrow*	x	x	x	x	x	44-7	59.1	84.6
Fox Sparrow			x		x	4-1	25.0	7.7
Lincoln' Sparrow	x	x	x		x	6-4	47.7	11.5
Swamp Sparrow	x			x	x	3-1	28.6	5.8
Song Sparrow	x	x	x			12-3	40.9	23.1

A.O.U. Checklist, as amended by Eisenmann.^{1 4} To provide a comprehensive list of the birds of the area I have included species recorded by Erskine.

DISCUSSION: This study recorded 140 species with evidence of nesting for 29. Erskine reported 138 species of which 44 were nesting. The two studies combined recorded 164 species with 58 nesting.

To indicate abundance Erskine reported the number of days a species was seen as well as the greatest number of individuals seen on a given day. For example, his notation "18-3" indicated that a species was seen on 18 days and that 3 individuals was the greatest number seen on one day. In order to compare Erskine's data with this study I used the same index and then converted the days seen to a percentage of possible days seen for both studies. I used 45 days for Erskine's study as determined from the dates listed in his paper.

The two studies disagree on the most frequently recorded species (Table 2). These differences may not be solely a factor of abundance but may be, and probably are, artifacts of the studies. For example, the way data was recorded, the skill of the observers in identifying birds, the diligence with which areas were searched for birds, and the amount of time spent in different habitats all tend to distort the number and frequency of birds recorded. As an illustration of this, it is tempting to say

Table 2

Five most frequently recorded species
in decreasing order of frequency

SMITH

Tennessee Warbler
White-throated Sparrow
Tree Swallow
Swainson's Thrush
Common Flicker

ERSKINE

American Robin and
Red-winged Blackbird
Black Tern
Lesser Scaup
Western Wood Pewee

that Robins and Red-winged Black-birds were the most common birds of the area according to Erskine. This may be so but, if Erskine's camp was so situated that it was adjacent to a marsh or was within the nesting area of a Robin, these birds would have a tendency to be recorded more frequently than others. If, however, the recording of species was always done away from the camp site these data would have a different meaning.

Table 3
Six most frequently recorded ducks

	Smith	Erskine
Mallard	1	3
Wh.-wgd. Scoter	1	5
Bufflehead	3	2
Am. Wigeon	4	3
Com. Goldeneye	4	6
Lesser Scaup	6	1

In spite of these inherent problems, it is interesting to note the similarity in the two studies if the birds are broken down into groups (Tables 3, 4, 5). It

Table 4
Five most frequently recorded warblers

	Smith	Erskine
Tenn. Warbler	1	3
Yel.-rmpd. Warbler	2	—
N. Waterthrush	3	4
Yellow Warbler	4	1
Ovenbird	5	2
B.&W. Warbler	—	5

Table 5
Five most frequently recorded fringillids

	Smith	Erskine
Wh.-thr. Sparrow	1	1
Chipping Sparrow	2	5
Dark-eyed Junco	3	3
Rose-br. Grosbeak	4	—
Song Sparrow	5	4
Lincoln's Sparrow	—	2

will be interesting to see if changes occur in these groups as more studies are done in the area.

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