THE DUNDAS MARSH BANDING STATION 1963 - 1966 By Harold K. MacPherson and John B. Miles

1. History and Background

The Dundas Marsh, or "Cootes Paradise" is an area of nearly 1,800 acres. Owned by the Royal Botanical Gardens, it is located on the north-west outskirts of the city of Hamilton, Ontario.

The area is loosely triangular in shape, bounded on the north and south by wooded hills, and to the east by a narrow, one-hundred-foot high, sedimentary formation, which serves to isolate it from Hamilton Bay. The western apex touches the town of Dundas. The marsh is fed by two major streams entering near the western end.

Before the area was declared a game sanctuary in 1927, the marsh had been a mecca, first for market hunters in the mid 19th century, and later for sportsmen drawn to the massive concentrations of waterfowl. The marsh has been visited by the province's Ornithologists for many years, and is considered one of the best all round birding areas in Ontario.

Bird banding was first carried out in the western end of the marsh by Les Gray in 1957, and joined by Dr. Robert MacLaren in 1958. After Les Gray moved to Montreal in 1959, interest in banding faded, although Robert Stamp did do some banding in 1960.

2. Coverage

The netting part of the banding program is carried out on weekends from the first mild days of March until the freeze up in late November. The Duck traps are operated daily from April to November.

3. Personnel

The Station is operated by two licensed banders, James F. Anderson, and John B. Miles, who assist each other with their specialties whenever possible. One sub-permit has been issued to Harold K. MacPherson to assist J. B. Miles. Four to six unlicensed co-operators are usually present and assist the licensed banders whenever possible.

4. Trapping Methods

John B. Miles started the present station in the spring of 1963. His participation is by the method of mist netting and accounts for over 95% of all birds banded. The station was located about 100 yards west of the mouth of Spencer's Creek and the Desjardins canal in 1963, 1964. and 1965.

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The station is now operated by James F. Anderson and John B. Miles in the same general area as that utilized by Gray, MacLaren, and Stamp. That is, in the general area where Spencer's Creek flows into the Desjardins Canal.

The operation is two fold. The netting section of the banding station was shifted for the 1966 season about 200 yards east from the site of previous years so that it was at the east side of the mouth of Hopkin's Creek.

The netting in 1963, 1964, and 1965 was conducted with usually three parallel strings, of 2 to 3 nets each, of $40^{\circ}2$ $3/8^{\circ}$ mesh nets set across the open marsh. A second complex of 30° and 40° $1\frac{1}{2}^{\circ}$ mesh nets were placed between the willows growing along the old canal banks.

1966 saw a drastic change in the netting scheme. Two parallel series, of 6 nets each, of 40° 2 3/8° mesh nets were set across the open marsh. The second complex of 40° and 30° $1\frac{1}{2}$ ° and 60° 1° mesh nets was set along the edge of the wooded flood plain of Hopkin's Creek.

The net lanes once they are established early in the spring are rarely changed regardless of the season or weather conditions. This gives constant uniform coverage throughout the year.

(Before proceeding it should be pointed out that although the above description gives an impression of a large number of nets being in use, which is true, only about 50% of the nets are effectively catching birds at a given time. The 2 3/8" nets are effective only early in the morning and late in the evening when the swallows and the blackbirds are going to and from their roost in the middle of the marsh. Rarely is a bird caught in these nets between 8 a.m. and the hour before sundown. The fine mesh nets catch land birds during the day but rarely more than 30 on any given day.)

James F. Anderson maintains and operates two small funnel entrance duck traps on a man made island in a pond west of the mouth of Spencer's Creek. The first trap was installed in September 1965 and used to the end of November of 1965. The trap was reactivated in the spring of 1966 and joined by a second trap in the summer of 1966. The addition of these traps accounts for the marked increase in ducks banded in 1965 and 1966 over 1963 and 1964.

5. Four Years of Banding

Table #1 gives the detailed banding totals for each of the four years the station has been in operation. The grand total of birds banded during these four years is 10,819 individuals of 131 species. The species with the highest total of individuals is the Redwinged Blackbird, 3,616.

Coverage has been concentrated in the period of June to September each year, and 75 % of all birds banded have been banded during the so called nesting season. Blackbirds with 36.57% and swallows with 23.97% of all the birds banded are the prime species worked with. These birds are mainly caught as they fly into their roost in the middle of the marsh in the evenings. During the hour before sundown it is not uncommon to catch 100 or more birds.

Many of the birds are processed entirely under flash lights. Six volt radar lanterns and head lanterns, as used by commercial worm pickers, are important pieces of equipment for this banding station. It is not unusual to be processing birds as late as 11 or 12 at night, or in an exceptional heavy hit, all night. The banding area is extremely wet and hip waders are a necessity.

The Royal Botanical Gardens will not allow building to be erected for banding or for storage of banding equipment in the banding area, and consequently, all banding equipment must be carried in and out each weekend. It is, indeed, a suspicious group of people who emerge from the marsh late each Sunday night, wearing hip waders, loaded down with knapsacks, and carrying the high powered flashlights commonly used by deer poachers.

6. Recoveries and Returns

At time of writing recoveries so far have been poor. Out of 10,819 birds banded there have only been 43 recoveries (.40%), and 16 of these have been waterfowl. Redwinged Blackbird with 3,616 of all the birds banded have accounted for only 8 recoveries. While the percentage of recoveries has been poor, there have been several interesting recoveries. One Blue-winged Teal was shot at Laguna Ariguanato, Habana, Cuba, in the spring of the year following banding. A Cedar Waxwing was picked up dead in Houston, Texas, and a Spotted Sandpiper was found dead near Brunswick, Georgia. Two Redwinged Blackbirds have been recovered in Georgia, and one was recovered from South Carolina.

Returns have been between 40 to 60 a year consisting of mainly local nesters.

7. Future Plans and Projects

A. It is hoped to add one or more duck traps to the banding area in 1967 and possibly have them manned daily by the local conservation officer under the direction of James Anderson.

B. The station has served to stimulate an interest in banding in the local region and so far has produced one fully licensed bander, one sub-permit holder, and an application is pending for a second full permit. The station has also developed 10 co-operators who would be a credit to any banding station. Several of these co-operators have also

assisted the Long Point Bird Observatory and are now members of the Ontario Bird Banding Association.

Table # 1: Banding Totals

Species	1963	1964	1965	1966	Total
Green Heron				1	1
Black-crowned Night Heron				1 3 66	1
Least Bittern	2			3	5 88
Mallard		2	20	66	88
Mallard X Black Hybrid			7	1	8
Black Duck			65	28	93
Pintail			4	11	15
Green-winged Teal	24	17	8	1	50
Elue-winged Teal	40	16	7	38	101
Shoveler	1				1
Wood Duck	ī		45	181	227
Ring-necked Duck				1	1
Lesser Scaup				ı	1
Sharp-shinned Hawk	1				1
Virginia Rail	3	5	2	1	11
Sora	10	5 4	3	1 3 25 1	20
Common Gallinule	1	1	4	25	
American Coot	_			í	1
Semipalmated Plover		1	5		31 1 6 3 2 7
Killdeer	1		5 2		3
Woodcock	1			1	2
Common Snipe		4	2	1	7
Spotted Sandpiper	43	18	62	2	125
Solitary Sandpiper	í	4	6		11
Lesser Yellowlegs		ı			1
White-rumped Sandpiper			1		1
Least Sandpiper	7		4		11
Dunlin		4	7		11
Semipalmated Sandpiper		13	7 3 2 1		16
Herring Gull			2		2
Black Tern	12			4	17
Mourning Dove			1	15	16
Yellow-billed Cuckoo	1				1
Black-billed Cuckoo		1	2	1	4
Screech Owl	1				1
Long-eared Owl	2 5 14	1			1 3 8 29 3
Saw-whet Owl	5		3		8
Common Nighthawk	14	6	8	1	29
Chimney Swift			3		3
Belted Kingfisher	1		3 8 3 2	10	13
Yellow-shafted Flicker	2		2	3	7

Species	1963	1964	1965	1966	Total
Hairy Woodpecker	3	4	3 16		10
Downy Woodpecker	20	14	16	11	61
Eastern Kingbird	7	7	3	2	19
Great Crested Flycatcher	2	3 1		1	6
Eastern Phoebe		1		3	4
Yellow-bellied Flycatcher		1		2	3 76
Traill's Flycatcher	43	7	12	14	76
Least Flycatcher	7	6	3	10	26
Unidentified Empidomax	1				1
Eastern Wood Pewee	2		2	4	8
Olive-sided Flycatcher			1		1
Tree Swallow	7	4	15	2	28
Bank Swallow	566	358	165	35	1124
Rough-winged Swallow	18	4	10	2	34
Barn Swallow	734	31.3	219	92	1358
Cliff Swallow	18	14	16	1	49
Blue Jay	5	2	1	1 5 34 3 7 2	13
Black-capped Chickadee	58	33	29	34	154
White-breasted Nuthatch	2	2	8	3	15
Brown Creeper	4	2	6	7	19
House Wren	3	5	1	2	11
Winter Wren	- 1			ı	2
Long-billed Marsh Wren	6	8	4	4	22
Catbird	14	19	26	130	189
Brown Thrasher	1		2	3	6
Robin	6	10	18	13	47
Wood Thrush	,			11	11
Hermit Thrush	14	5	2	6	27
Swainson's Thrush	2	2	4	20	28
Gray-cheeked Thrush	3		3	8	14
Veery	1	2	2	, 5	10
Golden-crowned Kinglet			5	5 7 8	12
Ruby-crowned Kinglet	1	3 18	9		2]
Cedar Waxwing	37	18	3 2 5 9 51 1	19	125
Northern Shrike		1			2
Starling	47	143	30	336	556
Solitary Vireo			1		1
Red-eyed Vireo	1	1	1	16	19
Philadelphia Vireo				2	2
Warbling Vireo	1		1		2 8
Black-and-white Warbler	1			7	8
Prothonotary Warbler	*	l age		1	1
Tennessee Warbler		4		6	10
Orange-crowned Warbler				2	2
Nashville Warbler		1	3	2	2
Parula Warbler			1		1

Species	1963	1964	1965	1966	Total
Yellow Warbler	38	68	33	16	155
Magnolia Warbler	-	5	6	15	26
Black-throated Blue Warb				2 28	2
Myrtle Warbler	5	12	22	28	2 67 3 8 4
Black-throated Green Warl	oler			3	3
Chestnut-sided Warbler				3 8 4 3 3 13	8
Bay-breasted Warbler				4	4
Blackpoll Warbler		20	1	3	24
Palm Warbler	1	4		3	8
Ovenbird		2	4	13	19
Northern Waterthrush	18	19	16	14	67
Louisiana Waterthrush	1	2			3 1
Mourning Warbler				1	1
Yellowthroat	13	34	16	12	75
Wilson's Warbler		3		14	17
Canada Warbler	1	_		14	1.5
American Redstart	4	5	2	20	31
House Sparrow		-	2 5 1		31 5 2 2 3616
Bobolink		1	1		2
Eastern Meadowlark			1	1	2
Redwinged Blackbird	510	764	571	1771	3616
Baltimore Oriole	2	2	2	13	19
Rusty Blackbird	1	12	1 5 10	17	31.
Common Grackle	11	44	5	42	102
Brown-headed Cowbird	9	12	10	88	119
Scarlet Tanager				1	1
Cardinal	7	3	8	7	25
Rose-breasted Grosbeak	7 3 2		5 2 12	15	23
Indigo Bunting	2	6	2	9	19
Purple Finch			12		12
Pine Grosbeak			3		3
Common Redpoll			1		1
American Goldfinch	18	13	18	20	23 19 12 3 1 69 4
Rufous-sided Towhee	4				
Savannah Sparrow	5 29	3	1	2	11
Slate-colored Junco	29	100	25	4	158
Tree Sparrow	127	127	105	53	412
Chipping Sparrow			1		1
Field Sparrow		2	_		1 2 7 61
White-crowned Sparrow	1	1	_3	2	7
White-throated Sparrow	7 6	20	11	23	61
Fox Sparrow	6			2	8
Lincoln's Sparrow	1		5		6
Swamp Sparrow	13	9	24	2	48
Song Sparrow	87	104	155	83	429

Species	1963	1964	1965	1966	Total
TotalsIndividuals Species	2734 81 +1 Unid.	2492 75	2030 94 +1 Hybrid	3563 98 +1 Hybrid	10819 131 +1 Unid. +1 Hybrid

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