

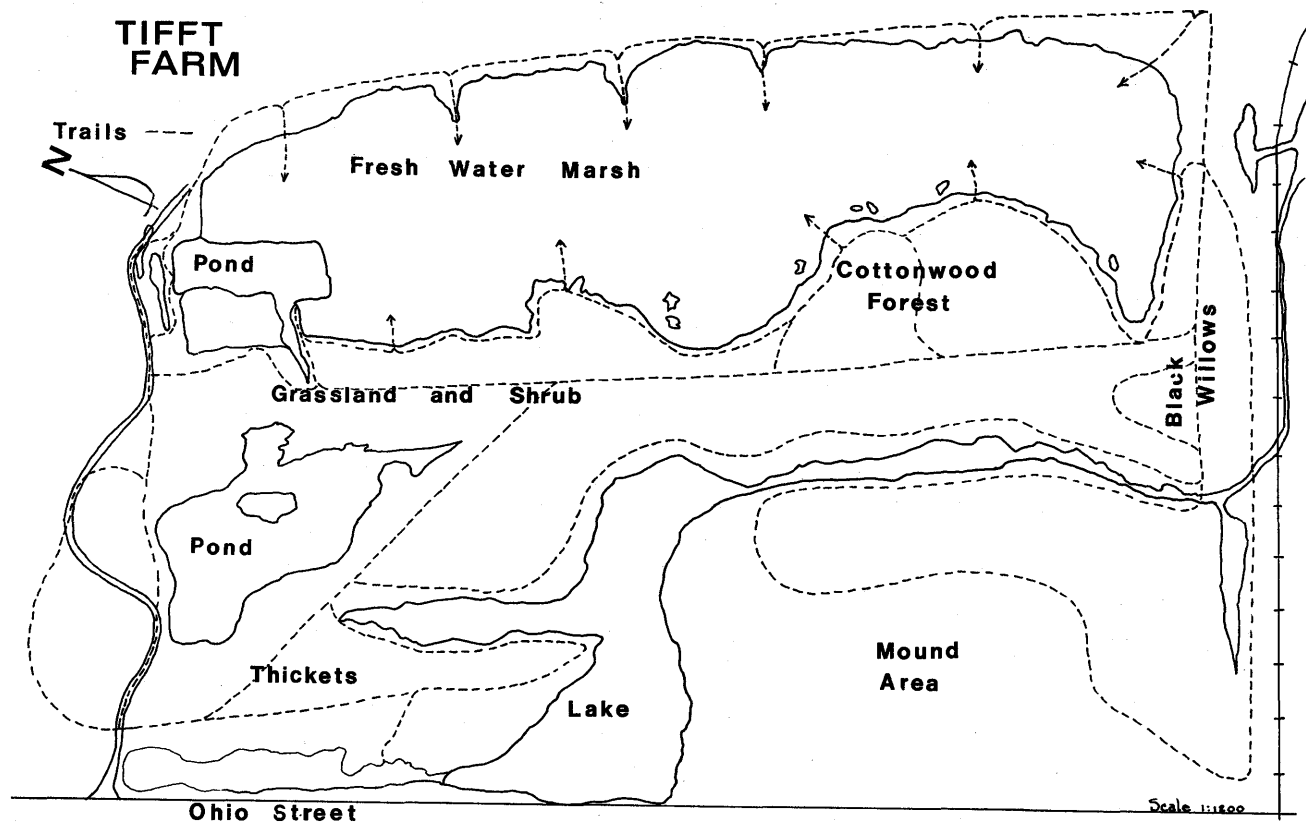
TIFFT FARM NATURE PRESERVE WINTER BIRD POPULATION STUDY

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Tifft Farm, Buffalo's unique nature preserve, is located in an industrial area of Buffalo ($42^{\circ} 51' N$; $78^{\circ} 51' W$) within the southern city limits, 2.5 mi. from the downtown business section. It is owned by the City of Buffalo and managed by Tifft Farm, Incorporated, a recently created nonprofit corporation whose nucleus is a group of environmental experts who have voluntarily worked on the project for several years as a Technical Advisory Committee to the City. Tifft Farm is bordered on three sides by railroad tracks and on the fourth by highways into the city. It is approximately 260 acres in area, rectangular in shape, and situated lengthwise on a northwest-southeast axis. A fresh water cattail marsh covers about 75 acres; fifty acres are grassy mounds and the remaining acreage consists of varied habitats of aspen and cottonwood groves and woods, brushy areas, scattered shrubs, large willows in wet sections and three water areas. These are a rectangular opening in the northern end of the cattail marsh, a large pond in the northwestern part of the preserve and a lake and waterway in the west-central and southern portions. The latter are remnants of an old ship basin and canal. The mounds (ca. 45 ft. high) are decomposed refuse from the Squaw Island dump, contoured and covered with soil, culminating in four hills of nearly equal height.

Tifft Farm lies very close to Buffalo Harbor along the eastern shore of Lake Erie, on an important spring and fall flyway for migrant land and water birds. Its winter bird population consists of a combination of resident species and some derived from the fall migration. This study was a project of the Research Committee of the Buffalo Ornithological Society. Its primary purpose was to lay a good foundation for future investigations of winter bird populations on Tifft Farm. The study was conducted from 1 January through 7 February 1976, which is within the dates suggested by Haven Kolb in *The Audubon Winter Bird-Population Study* (Audubon Field Notes, June 1965).

Eleven separate surveys were taken by the 16 observers who participated. However, four of these achieved only partial coverage.



Surveys were taken on 1, 2, 3, 4, 6, 8, 17, 25, 31 January and 1 and 7 February 1976. All were made between the hours of 0800 and 1400.

The weather during January was cold, the mean temperature for the month being 19.7° F., 4° below normal. There were 8 partly cloudy, 23 cloudy, and no clear days in the month. Precipitation occurred on 19 days. The temperature on Lake Erie on 1 January was 38° F. and the lake was mostly frozen by the middle of the month. Temperature and wind data kept by observers indicated that temperatures never rose above 35° F. on any survey, dipping to 6° F. on 1 February, and that winds were primarily westerly from 0 to 20 miles per hour. There was snow cover on all the surveys, varying from 4 inches deep to drifts of over 3 feet in the marsh.

The total number of species seen at Tifft Farm on count days was 41. The fourteen of these classed as uncommon to rare winter visitors in *Birds of the Niagara Frontier Region* by Clark S. Beardslee and Harold D. Mitchell (1965) are:

Great Blue Heron	Hermit Thrush
Redhead	Golden-crowned Kinglet
Sharp-shinned Hawk	American Goldfinch
Killdeer	Pine Grosbeak
Common Flicker	Red Crossbill
Brown Creeper	White-throated Sparrow
American Robin	Song Sparrow

Five of the 41 species were only observed flying over the tract. They are:

Mallard	Pine Grosbeak
Canvasback	Red Crossbill
Greater Scaup	

The following species were considered to compose the resident winter population of the tract during the survey period. The number following each species is the average number of individuals seen based on the eleven surveys. The + indicates an average of less than one individual. The maximum number recorded on a single survey follows in parentheses. Species are listed according to decreasing abundance. The species followed by an asterisk probably breed on the site.

Ring-necked Pheasant	74 (139)*	Black Duck	+ (1)*
Black-capped Chickadee	18 (24)*	Redhead	+ (1)
House Sparrow	14 (21)*	Common Goldeneye	+ (1)
Snow Bunting	12 (110)	Sharp-shinned Hawk	+ (2)
Rock Dove	11 (55)	Cooper's Hawk	+ (1)
Tree Sparrow	10 (18)	Killdeer	+ (1)*
Downy Woodpecker	5 (7)*	Great Black-backed Gull	+ (3)
Dark-eyed Junco	5 (12)	Bonaparte's Gull	+ (5)
Common Crow	4 (11)*	Mourning Dove	+ (1)
Ring-billed Gull	3 (71)	Snowy Owl	+ (1)
Starling	2 (6)	Common Flicker	+ (4)*
American Goldfinch	2 (10)*	Blue Jay	+ (1)
Song Sparrow	2 (6)*	White-breasted Nuthatch	+ (1)
Red-tailed Hawk	1 (2)	Brown Creeper	+ (1)
Herring Gull	1 (10)	American Robin	+ (1)
Cardinal	1 (3)*	Hermit Thrush	+ (1)
White-throated Sparrow	1 (3)	Golden-crowned Kinglet	+ (2)
Great Blue Heron	+ (1)	Common Redpoll	+ (1)

Single Great Blue Herons were seen twice before 9 January but not thereafter, probably because of ensuing severe winter conditions. Two Sharp-shinned Hawks were sighted together on 3 and 31 January. By 17 January the intense cold and snow had been present two weeks. A Common Flicker was seen on this date and four were noted on 25 January flying in the open over fields and foraging in areas of sparse cover, making them easy prey for predators. On the latter date the fresh remains of a Common Flicker were found in the willow thicket at the northern end of the marsh pond.

Large quantities of Staghorn Sumac (*Rhus typhina*) were available and utilized as a food source during the study. Other foods observed being eaten by birds were: Bitter Nightshade (*Solanum dulcamara*), dormant insects, weed seeds, cattail spikes, and grain spilled from railroad cars.

The accompanying map of Tifft Farm shows habitats and trails. The highest density of birds was in the Black Willow sector (2/acre). Areas of somewhat lower density were along the eastern and western borders of the marsh and along the northern edge of the preserve. The inner parts of the large marsh and the sections between the northwest pond and the lake had few or no birds and the open grassy mounds had none. Ring-necked Pheasants, Dark-eyed Juncos,

and Song Sparrows preferred the cattail marsh habitat; Downy Woodpeckers, Black-capped Chickadees, Brown Creepers, and Golden-crowned Kinglets preferred the Black Willows, and Cardinals and White-throated Sparrows, the shrubby areas. Resident birds preferred to concentrate in areas of heavy cover rather than in those which had ample food supplies.

I would like to thank R. F. Andrie for his critical reading of the paper.

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ABOUT THE AUTHOR

Marcya Foster is continuing her population study at Tifft Farm this winter, as well as conducting bird walks for the public at Tifft during January and February. One wonders if there will be any such walks in Buffalo this winter? She is active in the Buffalo Ornithological Society as current program chairman and is the compiler for the Buffalo area Christmas Count for National Audubon. Not the least of her affiliations is with the Federation of New York State Bird Clubs.