

A 137-Year History of the Summer Avian Community at the Winous Point Marsh, Port Clinton, Ohio, USA

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ABSTRACT. The Winous Point Marsh Conservancy and the Winous Point Shooting Club, with landholdings in both Sandusky and Ottawa Counties, Ohio, has completed a survey of the summer resident bird population on the property 4 times spanning 137 years. Although achieving a true census is unrealistic, these surveys have provided a unique, long-term history of changes in the avian community in northwest Ohio since the 1880s. Surveys were completed in 1880, 1930, 1960, and 2017. Draining and deforestation of the wetlands in northwest Ohio, by the late 1870s, resulted in the loss of many forested-wetland dependent species such as Blue-gray Gnatcatcher (*Polioptila caerulea*), Solitary Sandpiper (*Tringa solitaria*), and Northern Waterthrush (*Parkesia noveboracensis*) after the 1880 survey. Intensification of agricultural practices after the 1930 survey likely resulted in the loss of the early successional habitat that was associated with smaller, less intensive, agricultural practices and consequently the loss of many grassland nesting species such as Bobolink (*Dolichonyx oryzivorus*), Eastern Meadowlark (*Sturnella magna*), Northern Bobwhite (*Colinus virginianus*), Blue-winged Teal (*Anas discors*), Northern Pintail (*Anas acuta*), and Northern Shoveler (*Anas clypeata*). Several new species were documented during the 2017 survey including Osprey (*Pandion haliaetus*), Sandhill Crane (*Antigone canadensis*), Trumpeter Swan (*Cygnus buccinator*), and American White Pelican (*Pelecanus erythrorhynchos*). This long-term dataset provides a unique opportunity to investigate the avian immigration, extirpation, and recolonization of a specific site over the past 137 years, providing insight into how landscape-level habitat changes affected the avian community.

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INTRODUCTION

Some of the most consistent and longest-running wildlife monitoring programs in North America, including the *North American Breeding Bird Survey* (established in 1966) and the *Waterfowl Breeding Population and Habitat Survey* (established in 1955), are available to avian biologists and managers (Smith 1995; Sauer et al. 2013). Furthermore, *The Ohio Breeding Bird Atlas*, describing the distribution of breeding birds across Ohio was completed from 1982 to 1987 (Peterjohn and Rice 1991); a follow-up volume, *The Second Atlas of Breeding Birds in Ohio*, was undertaken from 2006 to 2011 (Rodewald et al. 2016). Long-term biological monitoring datasets are rare, but can be valuable tools for documenting extirpation, colonization, or even long-term population trends of specific species (Franklin 1989). Additionally, population trend data, or even presence/absence data, can ultimately be linked to landscape-level habitat or environmental changes (Ball et al. 2005; Wintle and Bardos 2006). Although on a much smaller spatial

scale, Ohio also has a unique bird survey with data collection dating back to 1880.

The Winous Point Marsh Conservancy (WPMC) in Ottawa and Sandusky Counties, Ohio, United States, was formed in 1999 to further the research and conservation interests of the Winous Point Shooting Club, a historic duck hunting club that has owned and managed approximately 900 hectares of Lake Erie coastal marsh since 1856 (Fig.). On 4 occasions in the history of the organization, experienced naturalists have attempted to survey the summer resident bird species on the property (Langdon 1880; Christy 1931; Anderson 1960). This dataset offers a unique opportunity to investigate changes in the avian community of northwest Ohio over 100 years. Although not a true census, these summer surveys form a dataset spanning 137 years that can be used to illustrate changes in the avian community and the extirpation, immigration, and recolonization of the site by various bird species. This report surmises that many of the changes documented in the avian

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community have coincided with the landscape-level habitat changes that have occurred in northwest Ohio since 1880 (e.g., deforestation, wetland degradation and loss, conversion of grassland, and early successional habitat to agriculture).

METHODS

Study Area

Ohio has lost in excess of 90% of its historical wetland habitat, and much of the habitat that remains has been highly degraded by anthropogenic influences (e.g., increased sediment runoff, nutrient runoff, and invasive species) (Campbell et al. 1995; Wilson and Mitsch 1996). Much of this loss occurred in the coastal marshes of northwestern Ohio. Now only approximately 12,000 hectares of wetlands remain in an area that once consisted of approximately 405,000 hectares and was described as the “Great Black Swamp.” The latter covered parts of Lucas, Ottawa, Sandusky, Seneca, Wood, Hancock, Henry, Putnam, Allen, Defiance, Paulding, and Van Wert Counties in Ohio, and Allen County in Indiana (Campbell et al. 1995). The remaining

wetlands are often hydrologically disconnected from Lake Erie by necessity to prevent further erosion of wetland vegetation (Andrews 1952; Sherman et al. 1996). Consequently, these wetlands do not function ecologically as they would have historically by providing an expanse of shallow water wetland habitat directly connected to Lake Erie.

WPMC is a privately-owned coastal wetland complex situated at the confluence of the Sandusky River, Muddy Creek, Green Creek, South Creek, and Lake Erie. WPMC landholdings consist of approximately 400 hectares of emergent marsh, 100 hectares of forested wetland, and 400 hectares of open water (Fig.). Emergent marsh habitat is dominated by perennial species such as cattail (*Typha* spp.), bulrush (*Schoenoplectus* spp. and *Scirpus* spp.), bur-reed (*Sparganium* spp.), and phragmites (*Phragmites australis*), as well as annuals such as smartweed (*Polygonum* spp.), millet (*Echinochloa* spp.), and nutsedge (*Cyperus* spp.). Forested wetland habitat is dominated by cottonwood (*Populus deltoides*), willow (*Salix* spp.), hickory (*Carya* spp.), and swamp white oak (*Quercus bicolor*). Open water habitat owned by

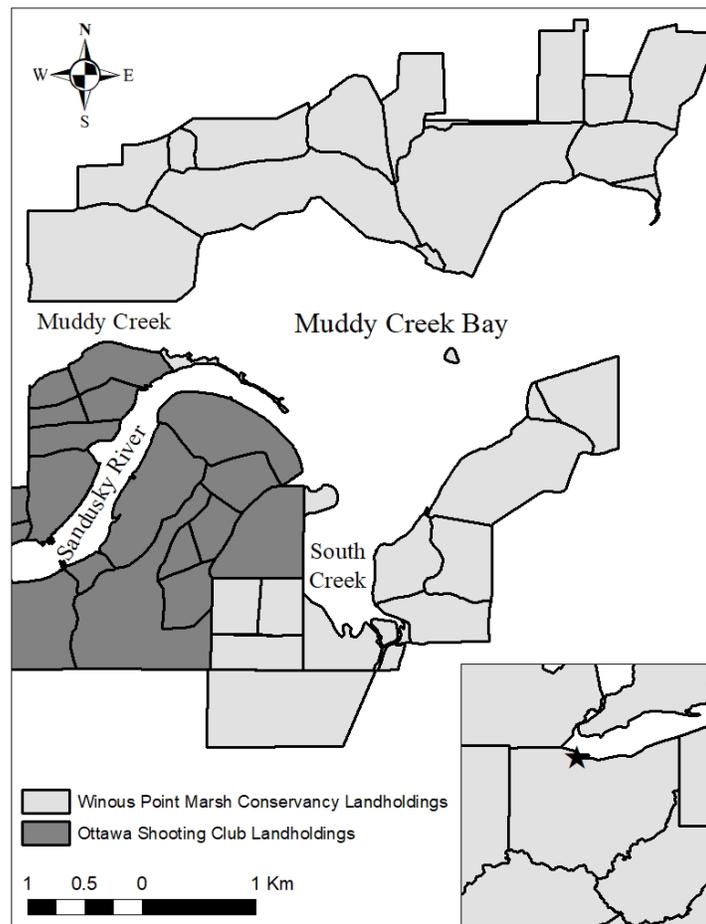


FIGURE. Map with inset showing the areal location of the Winous Point Marsh Conservancy and WPMC property boundaries as well as the current levee system (black outlines)

WPMC, but outside of the current levee system, is generally devoid of plant life due to turbidity and wave action. During the earliest survey period, however, this habitat type was dominated by large stands of bulrush and wild rice (*Zizania* spp.) in addition to vast beds of submerged aquatic vegetation (*Potamogeton* spp., *Vallisneria americana*) (Sedgwick and Kroll 2010).

Bird Surveys

Summer bird surveys have been conducted 4 times in the history of WPMC. J. Bonsall Porter and Dr. Frank W. Langdon surveyed the summer birds of WPMC during the first week of July 1880 (Langdon 1880). John B. Semple and Bayard H. Christy conducted a similar survey 1 July to 3 July 1930 (Christy 1931), and in 1960 John M. Anderson and 5 other observers surveyed the summer resident birds from 2 July to 5 July (Anderson 1960). Finally, in 2017, three WPMC staff members completed survey work on 3 July to 6 July. Observers recorded both visual and auditory detections of birds and estimated abundance to the best of their ability. The entire property was surveyed in all 4 instances using a combination of walking and boats, as well as all-terrain vehicles during the 2017 survey.

In 2017, observers used line transect sampling techniques—following the pre-existing levee system—to survey the property, and approximately 32 kilometers of transect were surveyed. Observers stopped every 200 meters on each transect to record bird observations and search for smaller and more cryptic species. Observers also sampled interior wetland habitat and interior forested habitat (<10 points for both habitat types) using point sampling techniques to detect any species that might be present on the property, but not well represented by levee-based sampling. Two observers worked together for most surveys in 2017, and no transects were sampled more than once to minimize double counting of individuals.

The survey efforts were undoubtedly inconsistent within and between surveys, with no formally established protocol and with varying numbers of observers and observer skill levels. Observers did record count data during all 4 surveys, but due to the inconsistencies in effort this project focused only on presence or absence of different bird species. Included are general interest

notes on relative abundance. Langdon (1880) and Christy (1931) also included bird species with a confirmed presence during the summer months at Winous that were not detected within the brief survey window. Similarly, bird species in the 2017 survey that were present outside of the actual survey window, but confirmed present from known observations, were included. Jaccard's coefficients (J_s) were calculated to compare similarity in species composition among the 4 survey periods after the 2017 survey was completed (Jackson et al. 1989).

RESULTS

WPMC staff observed 88 bird species during the 2017 survey, similar to the 82 species observed by Anderson (1960) and significantly more than the 71 observed by Christy (1931) and 68 observed by Langdon (1880). Furthermore, WPMC staff documented the presence of 7 additional species outside of the survey window (survey window being the first week in July) but still during June and July: American Avocet (*Recurvirostra americana*), American Wigeon (*Anas americana*), Canvasback (*Aythya valisineria*), Cattle Egret (*Bubulcus ibis*), Black-necked Stilt (*Himantopus mexicanus*), Lesser Scaup (*Aythya affinis*), and Peregrine Falcon (*Falco peregrinus*) (Table). Thirty-three species were documented on all 4 surveys and 41 species were unique to only a single survey (Table). Eighteen species were recorded during the 2017 survey that had never been recorded during early surveys, but of these it is likely only some—such as Mute Swan (*Cygnus olor*), Osprey (*Pandion haliaetus*), Sandhill Crane (*Antigone canadensis*), and Trumpeter Swan (*Cygnus buccinator*)—are new colonizers.

Other species documented only in 2017 may or may not have had a historical breeding presence in northwest Ohio. For example, though common now, Herring Gull (*Larus argentatus*) was never noted before the 2017 survey; even though the species was documented in Ohio dating back to the early 1900s, with breeding evidence after 1960 (Rodewald et al. 2016). Some other species, such as Blue Jay (*Cyanocitta cristata*) and Black-capped Chickadee (*Poecile atricapillus*), may simply have been overlooked during earlier surveys as they have a well-documented historical breeding presence in northwest Ohio (Rodewald et al. 2016).

When comparing species composition among surveys, the greatest difference was between the 2017 and 1880 surveys ($J_s = 0.514$). Species composition was most similar between the 1930 and 1960 surveys ($J_s = 0.757$). Of the remaining comparisons, the 1930 and 1880 surveys were the most similar ($J_s = 0.639$) followed by the 2017 and 1960 surveys ($J_s = 0.603$), 2017 and 1930 surveys ($J_s = 0.581$), and finally the 1960 and 1880 surveys ($J_s = 0.544$).

DISCUSSION

The assumed extirpation of many of the species documented only during the 1880 survey could be attributed to the deforestation and draining of the Great Black Swamp. Extensive European settlement of the region began in the 1840s and Campbell et al. (1995) noted that by 1875 logging and burning had entirely cleared the Great Black Swamp. Blue-gray Gnatcatcher (*Poliophtila caerulea*), Solitary Sandpiper (*Tringa solitaria*), and Northern Waterthrush (*Parkesia noveboracensis*) are all inhabitants of wooded wetlands and likely disappeared along with the trees. Similarly, Least Flycatchers (*Empidonax minimus*), Ruffed Grouse (*Bonasa umbellus*), Wild Turkey (*Meleagris gallopavo*), and Wood Thrushes (*Hylocichla mustelina*) are primarily deciduous and mixed deciduous-coniferous forest obligates. They would have been present in some of the drier sections of the Great Black Swamp before they also disappeared (Anders et al. 1998; Rodewald et al. 2016). The Common Loon (*Gavia immer*) was the final species that was never observed after the 1880 survey, although their disappearance from WPMC in the summer months was likely linked to reduced water clarity and increased human disturbance at the end of the 19th century (Vermeer 1973; Campbell et al. 1995; Thompson and Price 2006).

After the 1880 survey, the landscape surrounding WPMC remained relatively unchanged for the next several decades as the Great Black Swamp was replaced by small, family-owned farms (Campbell et al. 1995). These small farms were characterized by a diverse array of relatively low-intensity agricultural practices including pasturelands, haylands, and hedgerows (Rollins and Carrol 2001). Relatively large amounts of early successional habitat remained in areas that were unprofitable or infeasible to farm (Campbell et al. 1995; Rollins and Carrol 2001).

Gradually, as the 20th century progressed, low-intensity agricultural techniques and small family

farms were consolidated into larger commercial farming operations. This resulted in high-intensity farming, a highly fragmented landscape, and a dramatic reduction in early successional habitat surrounding WPMC (Rollins and Carrol 2001). These changes appear to be reflected in differences between the 1930 and 1960 surveys. For example, Bobolink (*Dolichonyx oryzivorus*), Eastern Meadowlark (*Sturnella magna*), and Northern Bobwhite (*Colinus virginianus*)—all designated as occurring frequently in the 1930 survey—were gone by the 1960 survey. Furthermore, Savannah Sparrow (*Passerculus sandwichensis*) and Ring-necked Pheasant (*Phasianus colchicus*), along with breeding waterfowl species such as Northern Shoveler (*Anas clypeata*), Blue-winged Teal (*Anas discors*), Northern Pintail (*Anas acuta*), and American Black Duck (*Anas rubripes*), were all documented during the 1960 survey but extirpated by the 2017 survey. The aforementioned species typically breed in grassland habitat (Heckert 1995; Brennan and Kuvlesky 2005; Rodewald et al. 2016).

During this same period of surveys, the Black Tern (*Chlidonias niger*), which through the 1960 survey was designated as a common summer breeder at WPMC, also disappeared by 2017. Black Terns typically form loose nesting colonies comprised of floating nests in large stands of bulrush (Maxson et al. 2007; Rodewald et al. 2016). The extirpation of the Black Tern from WPMC property is likely a result of a substantial decrease in the abundance of bulrush and other emergent vegetation that was once prominent in the region. Several factors (such as introduction of common carp (*Cyprinus carpio*) and channelization of the Sandusky River) contributed to decreased water quality and increased turbidity, which in turn likely furthered the decline and eventual extirpation of nesting Black Terns in the region (Sedgwick and Kroll 2010).

Four species of interest were encountered on the 2017 survey, 3 of which have never been documented during previous surveys and 1 that has not been observed since the 1880 survey. Sandhill Crane, Osprey, and Trumpeter Swan—never detected previously—were all observed during the 2017 survey, and breeding attempts have been documented in the region. All 3 species are currently experiencing rapid population growth, and their colonization of WPMC is likely a result of finding suitable habitat in an area that was once on the edge of their historical

range. In the case of Trumpeter Swans, an active introduction program in Ohio also contributed to their population growth (ODNR 2018). In addition, American White Pelicans (*Pelecanus erythrorhynchos*), not documented since the 1880 survey, have also been growing in abundance. For the last 3 years (2016 to 2018) up to 50 non-breeding summer residents have been observed at WPMC.

A final species of note is the Bald Eagle (*Haliaeetus leucocephalus*), even though it was observed on all 4 surveys. The recovery of Bald Eagles in the contiguous 48 states has been well documented, and locally the collapse and recovery of Bald Eagle populations in northwest Ohio was effectively documented by WPMC surveys (Grier 1982). Bald Eagles were noted as “very common” during both the 1880 and 1930 survey; however, by the 1960 survey only a single pair of breeding individuals remained on the property: representing 1 of only 4 nests in Ohio. Following intensive restoration efforts and the banning of DDT, 51 individuals were documented during the 2017 survey and at least 6 active nests were noted on WPMC property.

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Table

Observer notes on relative abundance of bird species documented at the Winous Point Marsh Conservancy during the summers of 1880, 1930, 1960, and 2017. Notes from the 1880, 1930, and 1960 surveys are from Anderson (1960). Capitalization of common names follows standards of the American Ornithologists' Union (1998). An asterisk (*) denotes species with either a probable or confirmed breeding presence in Sandusky or Ottawa Counties according to *The Second Atlas of Breeding Birds in Ohio* (Rodewald et al. 2016). For data analytic purposes, a supplemental spreadsheet titled "Winous Point Supplemental Table" is available at <http://hdl.handle.net/1811/88563>

Species	Date	Notes
Acadian Flycatcher * (<i>Empidonax virescens</i>)	1880	Not listed
	1930	Seen in woods at Winous Point, where the trees stood in water.
	1960	Not found
	2017	Not found
American Avocet (<i>Recurvirostra americana</i>)	1880	Not listed
	1930	Not listed
	1960	Not listed
	2017	Not found, small flock observed in Horseshoe in summers of 2015 and 2018.
American Bittern * (<i>Botaurus lentiginosus</i>)	1880	A few specimens only observed. Breeds.
	1930	Observed frequently
	1960	One seen, probably nesting in Gardiner Marsh.
	2017	Not found, rarely heard during late spring marshbird surveys.
American Black Duck * (<i>Anas rubripes</i>)	1880	Not listed
	1930	In the course of two days we saw 3 or 4 pairs.
	1960	About 110 seen. Nesting population estimated at 20 pairs. Breeding population has increased in last 5 years.
	2017	No breeding individuals observed in last 10 years. Rarely observed as a molting summer resident. Banded 1 to 5 individuals annually from 2014 to 2017. Typically, adult males.
American Coot * (<i>Fulica americana</i>)	1880	A few only observed . . . A nest containing 2 fresh eggs.
	1930	Abundant. Well grown young frequently seen in company with parents.
	1960	Twenty-one pairs, 5 nests, 6 broods. This species has gradually increased in number of breeders in the last 5 years.
	2017	Not found. Usually detected during spring marshbird surveys, likely late spring migrants.
American Crow * (<i>Corvus brachyrhynchos</i>)	1880	Not listed
	1930	Common; less abundant, however, than might be expected.
	1960	Eleven seen
	2017	Not found, rarely observed.

Table (continued)

Species	Date	Notes
American Goldfinch * (<i>Spinus tristis</i>)	1880	Not listed
	1930	Common
	1960	Thirty-eight seen
	2017	Thirty seen; common.
American Redstart * (<i>Setophaga ruticilla</i>)	1880	Not listed
	1930	One pair in woods adjacent to the south marsh.
	1960	Seven seen; apparently this species has increased in recent years.
	2017	Not found
American Robin * (<i>Turdus migratorius</i>)	1880	Common
	1930	Common
	1960	Nine seen; there are more catbirds than robins at Winous Point.
	2017	Not found in survey but commonly nests around yard.
American White Pelican (<i>Pelecanus erythrorhynchos</i>)	1880	One or two instances of the occurrence of this species in summer are noted.
	1930	Not found
	1960	Not found. Stray birds occasionally found in the region.
	2017	Twenty-three observed in Horseshoe. Have been summer residents since 2014 with as many as 50 observed at a time.
American Wigeon * (<i>Anas americana</i>)	1880	Not listed
	1930	Not listed
	1960	Four seen; no nesting evidence. Occasional summer birds appear to be non-breeders.
	2017	Not found; detected occasionally in recent years at summer duck banding sites but no evidence of breeding.
American Woodcock * (<i>Scolopax minor</i>)	1880	Not listed
	1930	One flushed. The steward of the club, Leonard Jones, reported a nest this spring in woods near the clubhouse. The nest was afterward destroyed by high water.
	1960	One seen. One brood raised in woods this spring.
	2017	Not found in 2017. Occasional summer breeder, 1 nest found near dog kennels in 2016.
Bald Eagle * (<i>Haliaeetus leucocephalus</i>)	1880	Several specimens observed during our stay, flapping lazily over the marsh or taking a siesta on some projecting snag. (A nest described.)
	1930	Very common. To be seen at all hours. Birds both in adult and immature plumage. Knowing the existence of a nest in one of the "elm islands", we did not take time to look it up.
	1960	Pair with 1 young beside lane in Gardiner Piece. Pair with 2 young on Graveyard Island. The species appears to be less common than formerly.
	2017	Fifty-one seen; very common. At least 6 active nests on the property.

Table (continued)

Species	Date	Notes
Baltimore Oriole * (<i>Icterus galbula</i>)	1880	Common
	1930	Not common. A family party noted, the young able to fly. Possibly, since now the birds are all but silent, they are more plentiful than would seem.
	1960	Five pairs
	2017	Twelve seen
Bank Swallow * (<i>Riparia riparia</i>)	1880	A few only observed.
	1930	Not found
	1960	Not found; although very abundant annually in July at clubhouse.
	2017	Seven seen mixed with tree swallows on power lines.
Barn Swallow * (<i>Hirundo rustica</i>)	1880	Much less common than the tree swallow. First brood on the wing.
	1930	Abundant; the most abundant swallow.
	1960	Seven pairs plus about 30 young.
	2017	Thirty-three seen around the boat house where they nest often.
Belted Kingfisher * (<i>Megasceryle alcyon</i>)	1880	Common
	1930	Common
	1960	One seen
	2017	Two seen; spend most of their time around the township ditch. Fairly common.
Black-billed Cuckoo * (<i>Coccyzus erythrophthalmus</i>)	1880	Not listed
	1930	Not listed
	1960	Two seen; probably nesting.
	2017	One seen; uncommon.
Black-capped Chickadee * (<i>Poecile atricapillus</i>)	1880	Not listed
	1930	Not listed
	1960	Not listed
	2017	Three seen
Black-crowned Night-Heron * (<i>Nycticorax nycticorax</i>)	1880	Not listed
	1930	Frequently seen, even in daytime, though usually about sunset.
	1960	Twenty seen; nesting colony on Mink Island abandoned 1948, established in catalpa grove beside lane. This colony abandoned 1952, established on Elm Island. This colony abandoned 1959, no evidence of nesting presently.
	2017	Nine flushed from cattail in the marsh. Seems to be an established roosting site on Little Fox Island.

Table (continued)

Species	Date	Notes
Black-necked Stilt * (<i>Himantopus mexicanus</i>)	1880	Not listed
	1930	Not listed
	1960	Not listed
	2017	Not found, 3 pairs were commonly observed west of the lane and at the Metzger's property in the summer of 2015.
Black Tern * (<i>Chlidonias niger</i>)	1880	A very common summer resident in the marsh; nesting In no instance did we succeed in flushing a bird from the eggs, although they would appear in pairs to the numbers of 20 or 30 and hover about within a few feet of our heads making a great outcry when we approached their property. At other times the birds were not at all gregarious, being usually observed foraging singly or in pairs.
	1930	Common. Possibly less abundant than Dr. Langdon's comment would suggest.
	1960	Seventy-two seen, including 26 known pairs. Nesting colony on muskrat houses in Kickapoo. 2 to 3 eggs per nest. None hatched by July 4th. I suspect there was a nesting colony present, although not discovered, in 1880 and 1930. The dark brown eggs blend very well with a muskrat house.
	2017	Not found. Last known nest in the 1980s in Lattimore. Not observed at any time of year in the last 10 years.
Blue Jay * (<i>Cyanocitta cristata</i>)	1880	Not listed
	1930	Not listed
	1960	Not listed
	2017	Sixteen seen; appears to be more common in July than previously.
Blue-gray Gnatcatcher * (<i>Poliophtila caerulea</i>)	1880	Evidently this species is here much less common than in southern Ohio, as our only identification of it rests on the note of a single individual heard.
	1930	Not found
	1960	Not found; no recent summer records.
	2017	Not found
Blue-winged Teal * (<i>Anas discors</i>)	1880	Breeds; eggs taken in June.
	1930	Notation regarding the presence of Mallard applies to this species as well. We saw none and surmised that already the birds might have lost their flight feathers and might be in hiding.
	1960	Saw only 30, although breeding population was estimated at 80 pairs. Shows marked increase in nesting in last 4 years.
	2017	One nest located in Horseshoe in 2014. Rarely observed in summer.

Table (continued)

Species	Date	Notes
Bobolink * (<i>Dolichonyx oryzivorus</i>)	1880	A few specimens only observed.
	1930	Common in fields at northern base of Winous Point.
	1960	Not found, although it nests in fields north of the marsh.
	2017	Not found
Bonaparte's Gull (<i>Chroicocephalus philadelphia</i>)	1880	Not listed
	1930	Not listed
	1960	Not listed
	2017	Not found, but abundant on Muddy Creek Bay in summer.
Brown Thrasher * (<i>Toxostoma rufum</i>)	1880	Rather common
	1930	Not found
	1960	One pair
	2017	One seen
Brown-headed Cowbird * (<i>Molothrus ater</i>)	1880	Common
	1930	Common
	1960	Fifty-nine seen
	2017	Eight seen; common.
Bufflehead (<i>Bucephala albeola</i>)	1880	Frequently seen and taken in summer. (Evidently not seen in 1880.)
	1930	Not found
	1960	Not found
	2017	Not found
Canada Goose * (<i>Branta canadensis</i>)	1880	Mr. Porter informs me that individuals of this species are frequently seen in the marsh in summer, having probably been crippled during the shooting season and thereby prevented from migrating.
	1930	Not found
	1960	Not found. About 600 now wintering on the marsh; about 1,000 winter on Gressman farm about 10 miles west.
	2017	One hundred ninety-eight observed; the most common breeding waterfowl species.
Canvasback (<i>Aythya valisineria</i>)	1880	Of occasional occurrence in summer. (Evidently not seen.)
	1930	Not found
	1960	Not found
	2017	Not found

Table (continued)

Species	Date	Notes
Cattle Egret (<i>Bubulcus ibis</i>)	1880	Not Listed
	1930	Not Listed
	1960	Not Listed
	2017	None observed during survey. Rarely, but occasionally observed in early summer.
Cedar Waxwing * (<i>Bombycilla cedrorum</i>)	1880	Observed breeding in 1878.
	1930	Two pairs noted in different places.
	1960	Not found, although common in migration.
	2017	One seen; foraging in a mulberry tree near the Locust Grove.
Chestnut-sided Warbler * (<i>Setophaga pensylvanica</i>)	1880	Not found
	1930	Not found
	1960	One female seen; presumably accidental.
	2017	Not found
Chimney Swift * (<i>Chaetura pelagica</i>)	1880	Not listed
	1930	Abundant
	1960	Fifteen to 18 pairs estimated.
	2017	Not found
Cliff Swallow * (<i>Petrochelidon pyrrhonota</i>)	1880	Many observed carrying mud; doubles to repair their nests for the reception of the second brood.
	1930	Not found. A neighboring farmer, in reply to a question, said that the swallows used to nest under the eaves of his barn; that the sparrows drove them away and for a time there were few or none; and that now, nesting within the barn, they had increased in numbers. The farmer's confusion of two species needs but a word: the earlier birds were Cliff Swallows, those of the later years, Barn Swallows.
	1960	Not found. There was a small colony on neighbor's barn in 1947; lasted 1 year.
	2017	Not found
Common Gallinule * (<i>Gallinula galeata</i>)	1880	A very common species, breeding abundantly in the more open portions of the marsh. (Eggs taken and young observed.)
	1930	Very common. The most abundant aquatic bird. Empty nests found and half-grown young frequently seen.
	1960	Sixty-one pairs seen, 11 nests, 15 broods.
	2017	Five seen or heard, common breeder, nests occasionally encountered.

Table (continued)

Species	Date	Notes
Common Grackle * (<i>Quiscalus quiscula</i>)	1880	Several shot for identification.
	1930	Very common
	1960	One hundred and twelve seen.
	2017	Twenty-seven seen; common.
Common Loon (<i>Gavia immer</i>)	1880	Three or four specimens observed in summer.
	1930	Not found
	1960	Not found; no recent summer records.
	2017	Not found; observed occasionally during spring migration.
Common Tern * (<i>Sterna hirundo</i>)	1880	Four specimens taken and others observed by Mr. Porter. We were informed that the "larger" terns (probably this species) are quite plentiful in the marsh during rough weather, which drives them in from the lake.
	1930	Noted twice or three times, singly or in pairs, flying over bay or marsh; and, on another occasion, in late afternoon, a compact company of 30 to 40, flying rather high, up the bay and up the wind, toward an approaching shower.
	1960	Two seen
	2017	Four seen on the bay. Known to nest at 2 locations locally.
Common Yellowthroat * (<i>Geothlypis trichas</i>)	1880	Rather common, though not so abundant as would be expected, considering the adaptation of the locality to its habits.
	1930	Abundant
	1960	Twenty-five seen
	2017	Twenty-two seen
Cooper's Hawk * (<i>Accipiter cooperii</i>)	1880	May 1877
	1930	Not found
	1960	Not found
	2017	Not observed but known to be common summer resident.
Dickcissel * (<i>Spiza americana</i>)	1880	Three or four species observed and taken.
	1930	Not found on this visit. Three years ago (1927) a colony was found in a clover field within a mile to the northward from Winous Point. This year (1930) the clover crop was poor and the fields few. A hasty survey of fields of clover and of alfalfa passed on the way from Winous Point to Port Clinton failed to disclose the bird.
	1960	Not found. Throughout Ottawa County numbers of Dickcissels fluctuate widely from year to year, but they have not been common adjacent to Winous Point for over 10 years.
	2017	Twelve seen; seem to be confined to the northern edge of the property near Latimore and Gardiner.

Table (continued)

Species	Date	Notes
Double-crested Cormorant *	1880	Two specimens, male and female, taken in June 1878.
(<i>Phalacrocorax auritus</i>)	1930	Not found
	1960	Not found
	2017	Only 2 observed; frequent summer resident, more common in fall.
Downy Woodpecker *	1880	Not listed
(<i>Dryobates pubescens</i>)	1930	Common in woods adjacent to the marsh.
	1960	Two pairs seen.
	2017	Twenty-three seen; most common woodpecker species seen in summer.
Eastern Bluebird *	1880	Not listed
(<i>Sialia sialis</i>)	1930	Rare. Noted at Port Clinton.
	1960	Not found
	2017	Not found. Occasionally observed nearby Hwy. 53.
Eastern Kingbird *	1880	In the woods and groves bordering the marsh we met with this species in greater number than I have ever seen it elsewhere; they were not in flocks, but in some places almost every tree appeared to be occupied by a pair of these vociferous insect collectors. The abundance of the deer fly and other insect pests about the marsh at this season is such that the kingbird is an exceedingly welcome addition to the fauna.
(<i>Tyrannus tyrannus</i>)	1930	Abundant. Dr. Langdon's words, if applied to the present status, are not inappropriate; perhaps "almost every tree" would be thought hyperbole, but Dr. Langdon suggests as much.
	1960	Twelve seen; common nester, one nest seen on census.
	2017	Twenty-four seen; common summer bird.
Eastern Meadowlark *	1880	Common
(<i>Sturnella magna</i>)	1930	Common
	1960	Not found, although it is a common permanent resident.
	2017	Not found.
Eastern Phoebe *	1880	In spite of the abundance of insect food, we observed but a few of this species.
(<i>Sayornis phoebe</i>)	1930	One noted
	1960	Not found; has nested on foot bridge in recent years.
	2017	Three seen; a pair nesting under the overhang of the bungalow.
Eastern Screech-Owl *	1880	Two specimens, young of the year, taken; both were in the grey phase of plumage.
(<i>Megascops asio</i>)	1930	One seen, in red phase.
	1960	Two seen; nest frequently in wood duck boxes and hollow trees. Probably about 10 pairs on club lane. Several young banded annually.
	2017	One pair seen.

Table (continued)

Species	Date	Notes
Eastern Wood-Pewee * (<i>Contopus virens</i>)	1880	Common
	1930	Common
	1960	Two seen
	2017	Four seen
European Starling * (<i>Sturnus vulgaris</i>)	1880	Not listed
	1930	Abundant; already gathered in flocks.
	1960	Two hundred estimated in small flocks of 10 to 50. One pair tried to nest in side of the eagle's nest.
	2017	Seventy-three seen; commonly seen foraging in the lawn around manager's house and bungalow.
Field Sparrow * (<i>Spizella pusilla</i>)	1880	Summer resident
	1930	A few noted on a farm adjacent to the south marsh.
	1960	Not found
	2017	One heard in the North Bay property.
Gray Catbird * (<i>Dumetella carolinensis</i>)	1880	Not listed
	1930	Common; present in suitable localities.
	1960	Eleven seen
	2017	Forty-one seen
Great Blue Heron * (<i>Ardea herodias</i>)	1880	Very common and shy, as usual.
	1930	Very common
	1960	Rookery on Elm Island contains over 590 nests.
	2017	Forty observed; common across the property. The rookery mentioned on Elm Island has since been abandoned, as was a previous rookery in Mackey woods. Rookery exists on Ottawa Shooting Club.
Great Crested Flycatcher * (<i>Myiarchus crinitus</i>)	1880	Not listed
	1930	A pair, repeatedly noted in coming and going through the woods on Winous Point, gave the impression, perhaps subject to correction, that the species is a common one.
	1960	Three seen; probably nesting.
	2017	Six seen; uncommon.
Great Egret * (<i>Ardea alba</i>)	1880	Usually common in August and September.
	1930	Mr. Semple in the late summer of 1929 observed a flock of 12, which roosted in woods near the clubhouse.
	1960	Five seen; one nesting pair, prior to 1959, about 25 pairs nested on Elm Island, the only breeding colony on the mainland of Ohio.
	2017	Ninety observed; very common but no rookery on the property.

Table (continued)

Species	Date	Notes
Great Horned Owl * (<i>Bubo virginianus</i>)	1880	Not listed
	1930	Not listed
	1960	One pair plus single bird seen. Nests in woods above clubhouse, occupied an eagle nest this year. Probably at least three pairs nesting on club grounds. An adult was collected at the club in the spring of 1881. Probably was overlooked on previous censuses.
	2017	One seen flying in woods east of Gottrons. Common summer resident.
Greater Yellowlegs (<i>Tringa melanoleuca</i>)	1880	July 1879
	1930	Not found
	1960	Not found
	2017	Not found. Only 26 banded during summer months from 2006 to 2015.
Green Heron * (<i>Butorides virescens</i>)	1880	Breeds
	1930	Common, nest found.
	1960	Three nesting pairs seen.
	2017	Not found during the survey but frequently encountered during summer.
Green-winged Teal * (<i>Anas crecca</i>)	1880	Not listed
	1930	Not listed
	1960	Two seen. First nest for Winous Point discovered in Lattimore Marsh June 16th. I collected downy young on Ohio side of Pymatuning Lake in 1937. Aside from the nest in the Lattimore, I know of but one other nest for this species in Ohio.
	2017	Rare nester locally, none known on Winous since 2008. Observed most summers but in very low numbers, likely non-breeders.
Hairy Woodpecker * (<i>Dryobates villosus</i>)	1880	Not listed
	1930	Not listed
	1960	Not listed
	2017	Two seen; may have been confused with Downy Woodpeckers on previous surveys.
Herring Gull * (<i>Larus argentatus</i>)	1880	Not listed
	1930	Not listed
	1960	Not listed
	2017	One seen on Muddy Creek Bay.

Table (continued)

Species	Date	Notes
Hooded Merganser * (<i>Lophodytes cucullatus</i>)	1880	Not listed
	1930	Not listed
	1960	Not listed
	2017	Common summer breeder in marsh, broods frequently observed.
House Finch * (<i>Haemorhous mexicanus</i>)	1880	Not listed
	1930	Not listed
	1960	Not listed
	2017	Three seen in trees between Darr and Bunker Hill.
House Sparrow * (<i>Passer domesticus</i>)	1880	Common at Port Clinton, within 5 or 6 miles of the marsh.
	1930	Abundant about the club buildings and on adjacent farms.
	1960	Twelve pairs about the buildings. Two pairs trying unsuccessfully to nest in side of eagle's nest.
	2017	Five seen; didn't spend much time on this species. Common around the buildings.
House Wren * (<i>Troglodytes aedon</i>)	1880	Breeds
	1930	Abundant in all suitable localities.
	1960	Twenty seen; including 7 males, 5 juveniles, and 8 undetermined.
	2017	Nineteen seen and heard in Mackey Woods.
Indigo Bunting * (<i>Passerina cyanea</i>)	1880	Very common
	1930	Certainly common and well distributed. I should be disposed to drop the "very" from Dr. Langdon's comment.
	1960	Twenty-five seen; status probably about the same as in 1930.
	2017	Forty-two seen; common species.
Killdeer * (<i>Charadrius vociferus</i>)	1880	Breeds
	1930	Several noted, among them birds of the year.
	1960	Only 3 seen during this period; much more abundant during nesting season.
	2017	Six seen; common.
King Rail * (<i>Rallus elegans</i>)	1880	One specimen taken by Mr. Porter July 3rd.
	1930	Not found
	1960	One seen; this game bird was abundant on the marsh in the late 1940s, reached its peak in 1952, and has been declining in numbers since.
	2017	Six seen; one adult with 5 young crossing the dike north of North Lily. Occasionally other broods and individuals have been seen since 2008. We have banded 18 known summer resident birds since 2014.

Table (continued)

Species	Date	Notes
Least Bittern * (<i>Ixobrychus exilis</i>)	1880	Quite common (eggs taken).
	1930	Quite common
	1960	Ten seen; nests in dense emergent vegetation.
	2017	One seen; commonly flushed in dense emergent vegetation in April and May and is a known breeder.
Least Flycatcher * (<i>Empidonax minimus</i>)	1880	One specimen taken.
	1930	Not found
	1960	Not found; no recent summer records.
	2017	Not found
Least Sandpiper (<i>Calidris minutilla</i>)	1880	Not listed
	1930	Not found
	1960	Seven seen
	2017	Six seen. Over 3000 banded during summer months from 2006 to 2015.
Lesser Scaup (<i>Aythya affinis</i>)	1880	Not listed
	1930	Not listed
	1960	One hen seen, apparently non-breeding bird.
	2017	Not found; 1 individual observed on a trail camera photo at summer duck banding site in 2017.
Lesser Yellowlegs (<i>Tringa flavipes</i>)	1880	Not listed
	1930	A party of four jumped from marsh, and by whistling called back, within easy range of identification.
	1960	Four seen
	2017	Seventy-three seen; mostly in the southeast corner of Horseshoe. Banded 662 during summer months from 2006 to 2015.
Loggerhead Shrike (<i>Lanius ludovicianus</i>)	1880	A single pair observed.
	1930	A single bird seen by the highway near Sandusky.
	1960	Two pairs seen.
	2017	Not found
Mallard * (<i>Anas platyrhynchos</i>)	1880	Breeds. (Evidently none were observed.)
	1930	Generally recognized to be a nesting species. The steward, well acquainted with waterfowl, reported an individual feeding with his live decoys at the edge of the marsh. (Evidently none were seen.)
	1960	About 200 seen; nesting population estimated at 110 pairs. Three broods seen. One hundred molting drakes estimated on marsh. Shows marked increase in last 5 years.
	2017	Common local breeder and molts by the thousands in late summer. We have banded approximately 1,500 in the summertime since 2015.

Table (continued)

Species	Date	Notes
Marsh Wren * (<i>Cistothorus palustris</i>)	1880	An abundant species, its lively grasshopper-like notes resounding on all sides in the marsh. Five eggs appears to constitute a full set, although we took sets of four that were slightly incubated; and while most of those taken were fresh, or nearly so, a few sets were far advanced in incubation. (July 2nd.)
	1930	Would accept Dr. Langdon's statement of abundance.
	1960	Thirty-five pairs seen, estimated about 100 pairs on entire marsh.
	2017	Nest in extremely high densities and closely linked to cattail stands. Hundreds of breeding individuals.
Mourning Dove * (<i>Zenaida macroura</i>)	1880	Nest containing half fledged young observed July 2nd.
	1930	Very common. Many young flown from nests.
	1960	At least 50 pairs. Many fledglings have been banded annually in last 10 years.
	2017	Eleven seen; common.
Mute Swan * (<i>Cygnus olor</i>)	1880	Not listed
	1930	Not listed
	1960	Not listed
	2017	Present locally but uncommon specifically at Winous Point.
Northern Bobwhite * (<i>Colinus virginianus</i>)	1880	Not listed
	1930	Frequently heard whistling on grassy upland adjacent to the marsh.
	1960	Not found. No records for the marsh or adjacent fields for at least 13 years.
	2017	Not found. No records since 1940s.
Northern Cardinal * (<i>Cardinalis cardinalis</i>)	1880	Rare
	1930	Common
	1960	Common. Three observed.
	2017	Common. Thirty-four observed.
Northern Flicker * (<i>Colaptes auratus</i>)	1880	Not listed
	1930	Common
	1960	Twelve seen, including nesting pair in yard.
	2017	Fourteen seen
Northern Mockingbird * (<i>Mimus polyglottos</i>)	1880	Not listed
	1930	Not listed
	1960	Not listed
	2017	One seen in landscaping around the bungalow.

Table (continued)

Species	Date	Notes
Northern Pintail * (<i>Anas acuta</i>)	1880	Not listed
	1930	Not listed
	1960	About 100 molting birds west of Horseshoe Island. Breeding population estimated at 60 pairs. In recent years has become an uncommon but regular nester.
	2017	Not known to nest or molt locally since 2008.
Northern Rough-winged Swallow * (<i>Stelgidopteryx serripennis</i>)	1880	Not listed
	1930	Common
	1960	Not found; no recent summer records.
	2017	Ten seen near Fox Island bridge on Green Creek.
Northern Shoveler * (<i>Anas clypeata</i>)	1880	Not listed
	1930	Not listed
	1960	Fifteen seen, including 3 pairs and 9 males. At least 2 males defended nesting territory in the research area this spring. Has definitely become established as a nesting species in recent years.
	2017	Not observed as a summer resident.
Northern Waterthrush (<i>Parkesia noveboracensis</i>)	1880	One specimen only observed; so close that there could be no question as to its identity.
	1930	Not found
	1960	Not found
	2017	Not found
Orchard Oriole * (<i>Icterus spurius</i>)	1880	Common
	1930	One pair noted, nesting near clubhouse; a second pair along the highway two miles away. Manifestly not a common species.
	1960	Two pairs; not considered common.
	2017	Twelve seen
Osprey * (<i>Pandion haliaetus</i>)	1880	Not listed
	1930	Not listed
	1960	Not listed
	2017	One seen; individual was perched on cell tower along Lattimore Road. Osprey platforms erected in 2014 (Metzger's) and 2016 (Lattimore). Nest building activity at Lattimore in 2016 and 2017. Rare summer resident since 2008. Known to nest at Ottawa National Wildlife Refuge.
Pectoral Sandpiper (<i>Calidris melanotos</i>)	1880	Not listed
	1930	Not listed
	1960	Three seen
	2017	Not seen but common; 906 banded in summer from 2006 to 2015.

Table (continued)

Species	Date	Notes
Peregrine Falcon (<i>Falco peregrinus</i>)	1880	Not listed
	1930	Not listed
	1960	Not listed
	2017	None seen during surveys but known to nest in Port Clinton and Toledo. Occasionally observed chasing shorebirds in summer and teal in early fall. One captured in 2009 during shorebird mist-netting operations.
Pied-billed Grebe * (<i>Podilymbus podiceps</i>)	1880	Six nests containing eggs observed.
	1930	Frequently seen, accompanied by well-grown young.
	1960	Seven pairs, 3 nests, 2 broods of 5 to 6 young.
	2017	Seven seen; known breeder.
Pileated Woodpecker * (<i>Dryocopus pileatus</i>)	1880	Not listed
	1930	Not listed
	1960	Not listed
	2017	Very rare. One seen in woodlot just west of the Locust Grove. Was seen leaving the property flying north.
Prothonotary Warbler * (<i>Protonotaria citrea</i>)	1880	Not listed
	1930	A pair in damp wood at edge of the marsh near the clubhouse. One of the birds carried food in its bill, inferentially for its young.
	1960	Two nesting pairs in same woods.
	2017	One seen on the banks of Green Creek.
Purple Martin * (<i>Progne subis</i>)	1880	Not listed
	1930	Frequently seen in air; colonies in neighboring towns.
	1960	Estimated 75 pairs in the martin houses in yard and in eaves of boat house.
	2017	Forty-six seen; new martin houses installed this year.
Red-breasted Merganser (<i>Mergus serrator</i>)	1880	Identified in summer.
	1930	Not found
	1960	Not found; no recent summer records.
	2017	Not found
Red-bellied Woodpecker * (<i>Melanerpes carolinus</i>)	1880	Not listed
	1930	Not listed
	1960	Not listed
	2017	One seen

Table (continued)

Species	Date	Notes
Red-eyed Vireo * (<i>Vireo olivaceus</i>)	1880	Much less numerous than in southwestern Ohio, being evidently replaced to a great extent by the Warbling Vireo which was exceedingly common.
	1930	Would accept Dr. Langdon's statement.
	1960	Two pairs seen.
	2017	Not found
Redhead * (<i>Aythya americana</i>)	1880	One specimen, a male, taken June 28, 1879. (Evidently not seen in 1880.)
	1930	Not found
	1960	Pair seen, probably non-breeding birds.
	2017	Not found
Red-headed Woodpecker * (<i>Melanerpes erythrocephalus</i>)	1880	Common
	1930	Common
	1960	Two pairs seen; this species is probably much less abundant than formerly.
	2017	Not found; this species is present but not abundant.
Red-tailed Hawk * (<i>Buteo jamaicensis</i>)	1880	Not listed
	1930	Not listed
	1960	One seen
	2017	Eight seen
Red-winged Blackbird * (<i>Agelaius phoeniceus</i>)	1880	As would be expected, the redwings were abundant in the marsh, rising before us at every few yards from their nests. At the time of our visit the young of the first brood were on the wing, and the second set of eggs had evidently not yet been completed in most cases, as most of the nests observed contained but 2 or 3 eggs which were quite fresh.
	1930	Very abundant. Dr. Langdon's notes apply to present conditions.
	1960	Estimated 1,200 seen. Probably more abundant than in 1880.
	2017	There were 483 seen; many more than that present. Very abundant breeding species throughout summer.
Ring-billed Gull * (<i>Larus delawarensis</i>)	1880	Not listed
	1930	Not listed
	1960	Two seen
	2017	Seven seen over the bay.
Ring-necked Duck (<i>Aythya collaris</i>)	1880	Not listed
	1930	Not listed
	1960	One male, apparently non-breeding bird.
	2017	Not found

Table (continued)

Species	Date	Notes
Ring-necked Pheasant * (<i>Phasianus colchicus</i>)	1880	Not listed
	1930	Common at edges of woods bordering the swamp.
	1960	Seventeen adults plus 3 broods. The Mackey Piece, where pheasants are very common, was not checked since it was not included in previous censuses.
	2017	Not found
Ruby-throated Hummingbird * (<i>Archilochus colubris</i>)	1880	Not listed
	1930	Not listed
	1960	One pair seen regularly between dog kennels and woods.
	2017	Not found on survey. Occasionally observed.
Ruffed Grouse (<i>Bonasa umbellus</i>)	1880	Rare
	1930	Not found
	1960	Not found
	2017	Not found
Sandhill Crane * (<i>Antigone canadensis</i>)	1880	Not listed
	1930	Not listed
	1960	Not listed
	2017	Two seen; flying out of Hopfinger's west of Darr. Nested in Ottawa Shooting Club near Dry Bunch in 2016.
Savannah Sparrow * (<i>Passerculus sandwichensis</i>)	1880	Not listed
	1930	Common in boggy pasturelands between Winous Point and the highway.
	1960	Nine seen. Status probably unchanged since 1930.
	2017	Not found
Semipalmated Sandpiper (<i>Calidris pusilla</i>)	1880	Not listed
	1930	Not listed
	1960	Not listed
	2017	Not observed. Common, have banded over 3,000 in summer banding from 2006 to 2015.
Sharp-shinned Hawk (<i>Accipiter striatus</i>)	1880	May 1877
	1930	Not found
	1960	Not found
	2017	Not observed but known to be a summer resident.

Table (continued)

Species	Date	Notes
Short-billed Dowitcher (<i>Limnodromus griseus</i>)	1880	Not listed
	1930	Not listed
	1960	Not listed
	2017	Seven seen wading and feeding in southeast corner of Horseshoe; 799 banded from 2006 to 2015 in the summer months.
Snowy Egret (<i>Egretta thula</i>)	1880	Not listed
	1930	Not listed
	1960	Not listed
	2017	None observed during survey. Rarely but occasionally observed in early summer.
Solitary Sandpiper * (<i>Tringa solitaria</i>)	1880	July 1879 to 1880
	1930	Not found
	1960	Not found
	2017	Not found
Song Sparrow * (<i>Melospiza melodia</i>)	1880	Common
	1930	Common
	1960	Forty-seven seen; by far the dominant sparrow around the marsh.
	2017	Sixty-four seen; observations concur with the 1960 survey.
Sora * (<i>Porzana carolina</i>)	1880	Not listed
	1930	Identified once by its high double-noted call.
	1960	One seen
	2017	Frequently heard and observed during spring and summer marshbird surveys, known to nest, likely nests less frequently than Virginia Rails. Banded 128 spring migrants since 2015.
Spotted Sandpiper * (<i>Actitis macularius</i>)	1880	Common
	1930	Common
	1960	Twenty-six seen
	2017	Four seen
Swamp Sparrow * (<i>Melospiza georgiana</i>)	1880	Not listed
	1930	Not listed
	1960	Not listed
	2017	Three heard; probably under represented.

Table (continued)

Species	Date	Notes
Tree Swallow * (<i>Tachycineta bicolor</i>)	1880	An abundant species; the prevailing swallow of the locality. Numerous young of the first brood observed on the wing in their peculiarly silver drab first plumage. On June 29th, a nest containing one egg and a young bird (probably of the second brood) was observed.
	1930	Present but not abundant.
	1960	At least 98 seen along lane and adjacent marsh. Still the prevailing swallow of the locality.
	2017	Three hundred and five seen. The most abundant breeding swallow at WPMC.
Trumpeter Swan * (<i>Cygnus buccinator</i>)	1880	Not listed
	1930	Not listed
	1960	Not listed
	2017	Estimated 4 to 6 breeding pairs on Winous Point. Introduced in the 1990s.
Tufted Titmouse * (<i>Baeolophus bicolor</i>)	1880	Not listed
	1930	Not listed
	1960	Not listed
	2017	One seen
Turkey Vulture * (<i>Cathartes aura</i>)	1880	Not listed
	1930	Not listed
	1960	One seen
	2017	Two seen flying over fields north of North Lily.
Upland Sandpiper * (<i>Bartramia longicauda</i>)	1880	Not listed
	1930	One seen in stubble field, a mile to the north of Winous Point.
	1960	Not found. No recent summer records; regular spring visitor, probably breeds in fields adjacent to marsh.
	2017	Not found
Virginia Rail * (<i>Rallus limicola</i>)	1880	Not listed
	1930	One seen. A note believed to be theirs frequently heard. Generally regarded as common.
	1960	One seen
	2017	Frequently heard and observed during spring and summer marshbird surveys, known to nest, although uncertainty about how common nesting is at WPMC. Banded 342 spring migrants since 2015.

Table (continued)

Species	Date	Notes
Warbling Vireo * (<i>Vireo gilvus</i>)	1880	As above stated, this species was found in considerable numbers, the woods and scattered groves on the borders of the marsh resounding with their notes.
	1930	Would accept Dr. Langdon's statements.
	1960	Nine seen. Perhaps disappearance of elms is causing decline of this species.
	2017	Three seen in Mackey woods.
Wild Turkey * (<i>Meleagris gallopavo</i>)	1880	Rare
	1930	Not found
	1960	Not found
	2017	Not found, but previously, albeit rarely, observed in last ten years.
Willow Flycatcher * (<i>Empidonax traillii</i>)	1880	Not listed
	1930	Not listed
	1960	Eight seen; nests in thickets along ditches.
	2017	Fourteen seen; often heard before visually observed. Can be found in thick shrubbery lining the dikes.
Wilson's Snipe * (<i>Gallinago delicata</i>)	1880	Several shot in July 1878.
	1930	Not found
	1960	One seen
	2017	Not found. Common fall migrant.
Wood Duck * (<i>Aix sponsa</i>)	1880	Not listed
	1930	The duck most abundantly seen in the marsh. We surmised several family parties in the sheltered bays amid the cattails. In one case the young, unable to fly, scurried away through the stalks.
	1960	Thirty-two seen; four nests in boxes around clubhouse.
	2017	Common summer breeder, ducklings observed frequently. We have summer banded 1,291 individuals since 2011.
Wood Thrush * (<i>Hylocichla mustelina</i>)	1880	A few observed in the groves bordering the marsh.
	1930	Not found
	1960	Not found
	2017	Not found
Yellow-breasted Chat * (<i>Icteria virens</i>)	1880	Not listed
	1930	One pair in open, bush-grown, dry woods near the clubhouse.
	1960	Not found
	2017	Not found

Table (continued)

Species	Date	Notes
Yellow Warbler * (<i>Setophaga petechia</i>)	1880	A very common species in the woods bordering the marsh; young of the first brood observed on the wing.
	1930	Would accept Dr. Langdon's statement.
	1960	Twenty-nine seen
	2017	Sixty-seven seen; by far the most common warbler on the property during the summer.
Yellow-billed Cuckoo * (<i>Coccyzus americanus</i>)	1880	Not listed
	1930	Pair noted, calling constantly about borders of wood adjacent to clubhouse.
	1960	Six seen. Common nester along lane and around clubhouse.
	2017	Three seen; uncommon. Seen mostly in shrubbery or trees along dikes.
Yellow-headed Blackbird * (<i>Xanthocephalus xanthocephalus</i>)	1880	Not listed
	1930	Not listed
	1960	One, possibly two, birds seen around clubhouse since June 8, 1960. One appears to be a female, the other a sub-adult male. This appears to be the first record for the Sandusky Bay Area. Neither specimen has been seen since July 8, 1960.
	2017	Not found, only observed once at any time of year since 2008.

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