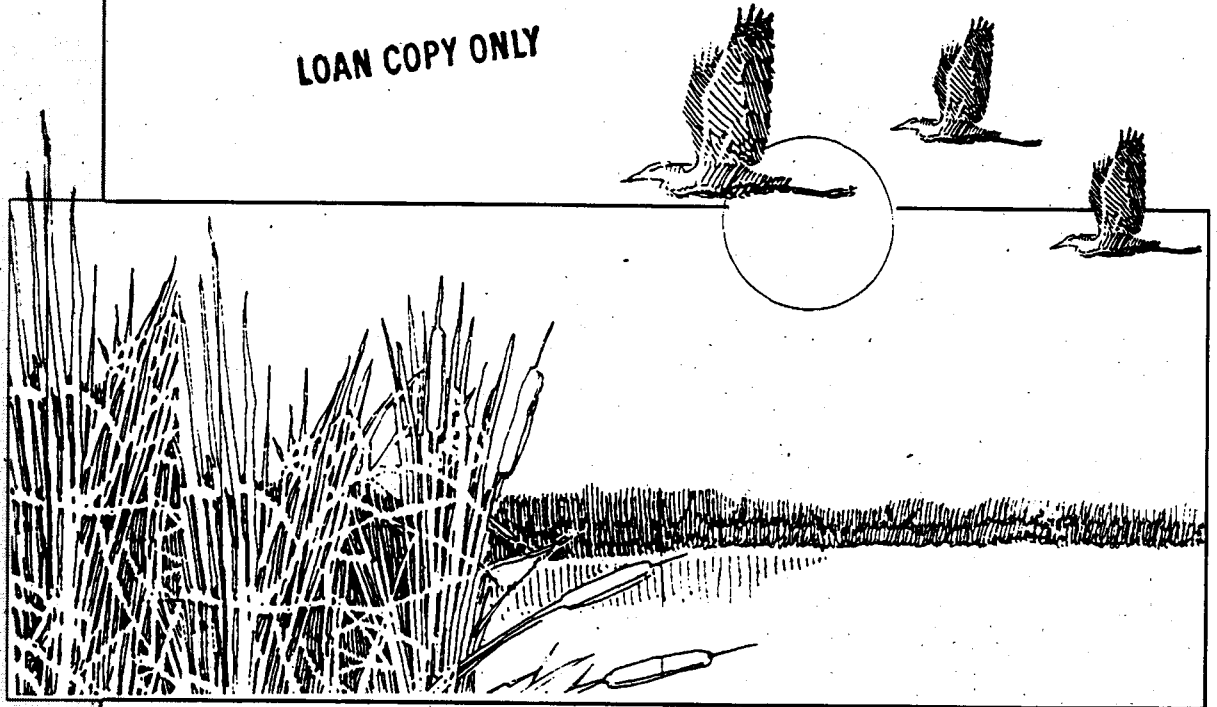


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Old Woman Creek National Estuarine Research Reserve
& State Nature Preserve

**TECHNICAL
REPORT
No. 11**

**Catalogue of the
Vertebrate Fauna of
Old Woman Creek Estuary,
Watershed, and Environs**



by
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Old Woman Creek Site Profile - Contribution No. 2

Catalogue of the Vertebrate Fauna of Old Woman Creek Estuary, Watershed, and Environs

**Old Woman Creek State Nature Preserve and
National Estuarine Research Reserve**

Technical Report No. 11

Old Woman Creek Site Profile – Contribution No. 2

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Catalogue of the Vertebrate Fauna of Old Woman Creek Estuary, Watershed, and Environs

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Catalogue of the Vertebrate Fauna of Old Woman Creek Estuary, Watershed, and Environs

INTRODUCTION

Although much of Ohio's Lake Erie shoreline is highly developed, a few areas with significant natural features remain relatively undisturbed. One of these is a freshwater estuary located at the mouth of Old Woman Creek, about 5 km east of the city of Huron, Ohio. On the south shore of Lake Erie, this estuary lies near the southernmost point of the Great Lakes system. The Ohio Department of Natural Resources began the process of acquiring the property surrounding the estuary in 1975 and applied to the National Oceanic and Atmospheric Administration for financial assistance to protect this unique natural area. In 1980 Old Woman Creek estuary received National Estuarine Research Reserve (NERR) designation. The NERR system is a network of federal, state, and community partnerships which serve to promote informed management of our nation's estuarine and coastal habitats through linked programs of scientific understanding, public education, and stewardship. The 230-hectare Old Woman Creek State Nature Preserve and National Estuarine Research Reserve (hereafter referred to as the Reserve) serves as a field laboratory where scientists can study naturally functioning systems and is a place where students and the public can learn about estuarine ecology in a natural setting.

This catalogue comprises Contribution No. 2 to the Reserve Site Profile and contains a listing of all the known vertebrate animals in the environs of Old Woman Creek estuary and in its watershed. The diversity of habitats present within the Reserve and Old Woman Creek watershed contribute to a variety of plant and animal communities, each comprised of a distinctive fauna. A total of 117 fish, 26 amphibian, 25 reptilian, 40 mammalian, and 370 avian species have been identified in the Reserve, watershed, and adjacent tributaries and waters of Lake Erie; over half of these taxa are found within the boundaries of the Reserve.

Vertebrates are all members of the animal phylum Chordata, subphylum Vertebrata. Of the seven classes in this subphylum, six are found in Old Woman Creek watershed and the adjacent region of Lake Erie: Agnatha (jawless fish), Osteichthyes (bony fish), Amphibia, Reptilia, Aves (birds), and Mammalia; only the class Chondrichthyes (cartilaginous fish – sharks and relatives) is absent. Members of this phylum possess the following characteristic features, at least during some stage of development: 1) a notochord (whence the name of the phylum is derived), a stout yet flexible rod-like structure running down the back of the trunk in the position occupied by the backbone in typical adult vertebrates, 2) a hollow dorsal nerve cord lying above the notochord, and 3) numerous gill slits, which open outward from the pharynx to the exterior. The notochord is prominent in the embryo in every vertebrate, but in the adult it is supplanted by the backbone-vertebral column to which the group owes its name.

As a transition zone between land and water, Old Woman Creek estuary and its immediate environs contain several distinct habitats, including woodlands, prairie remnant, creek valley, swamp forest, marshes, wooded coves, open waters of the estuary, an island, barrier beach, and nearshore Lake Erie (Figure 1). The estuary is the drowned mouth of a relatively small tributary to Lake Erie. Estuarine wetlands, consisting of 60 hectares, extend 2 km south of the Lake Erie shore. As the result of wave action and littoral drift, a barrier beach has formed at the mouth which bars off the estuary for extended periods. The barrier is periodically broken by storm flow from the watershed, but occasionally Lake Erie storm surges and seiches spill over the bar and into the estuary.

Old Woman Creek drains 69 km² of primarily agricultural land (Figure 2). The headwater tributaries of Old Woman Creek originate on the till plain surface at an elevation of approximately 270 m above sea level. The creek empties into Lake Erie 24 km downstream, dropping 96 m as it flows over the rolling till plain, through the high Berea escarpment, and down the gentle lake plain. Two main branches, east and west, originate in the till plain, cut independently through the sandstone escarpment, and join on the lake plain about 2 km south of the estuary. Floral habitats within the watershed include hardwood forests, meadows, ravines, sandstone hills, abandoned beach ridges, creek banks, floodplains, active and old agricultural fields, and rights-of-way margins.

This catalogue is comprised of 12 appendices: the first four deal with the fish fauna, the next four cover the amphibian, reptilian, and mammalian fauna, and the final four concern the avifauna of Old Woman Creek estuary and watershed, and adjacent tributaries and waters of Lake Erie (Figure 3). The data for these appendices were compiled from publications and reports prepared by some 35 scientists and naturalists who have conducted research in the Reserve, watershed, and environs. The individual source documents are cited at the ends of Appendix A (fish), Appendix E (amphibians, reptiles, and mammals) and Appendix I (birds).

Appendix A consists of a complete phylogenetic [evolutionary relationship] listing of all fish taxa identified in the study area. Elements of the list include: 1) taxonomic classification, 2) scientific name, 3) describer [author of scientific name], and 4) common name, as well as codes for 5) location, 6) data source, 7) habitat preference at various life stages, 8) spawning period, and 9) rarity status. Appendix B is a checklist of the fishes in the study area, also arranged phylogenetically by family, but abbreviated to include only the scientific name, common name, and general location (e.g. estuary, Old Woman Creek above the estuary, Lake Erie, and adjacent tributaries). Appendices C and D consist of an alphabetized list of fishes, by scientific name and common name, respectively; the family name of each fish species is also listed to facilitate locating more detailed information in Appendix A.

A similar pattern is followed for amphibians, reptiles, and mammals in Appendices E through H and also for birds in Appendices I through L. Specifically, Appendix E includes: 1) taxonomic classification, 2) scientific name, 3) describer, and 4) common name, as well as codes for 5) local and regional data sources, 6) location, 7) occurrence in the study area [relative abundance], 8) habitat preference, and 9) rarity status for amphibians, reptiles, and mammals; while Appendices F, G, and H contain the same elements as B, C, and D, respectively. Appendix I, in addition to the usual taxonomic information, lists: 1) seasonal abundance, 2) habitat preference, 3) resident characteristic, 4) local and regional data sources, and 5) rarity status for birds; while Appendices J, K, and L contain similar elements as B, C, and D, respectively, except location codes are replaced by relative abundance codes for each season: spring, summer, fall, and winter.

In general, arrangement of classes, orders, families, and subfamilies follows the classification synopsis of Parker (1982), Banks et al. (1987), Sibley and Monroe (1990), and Robins et al. (1991). Data sources, references, and keys for codes designations are given at the end of appropriate appendices.

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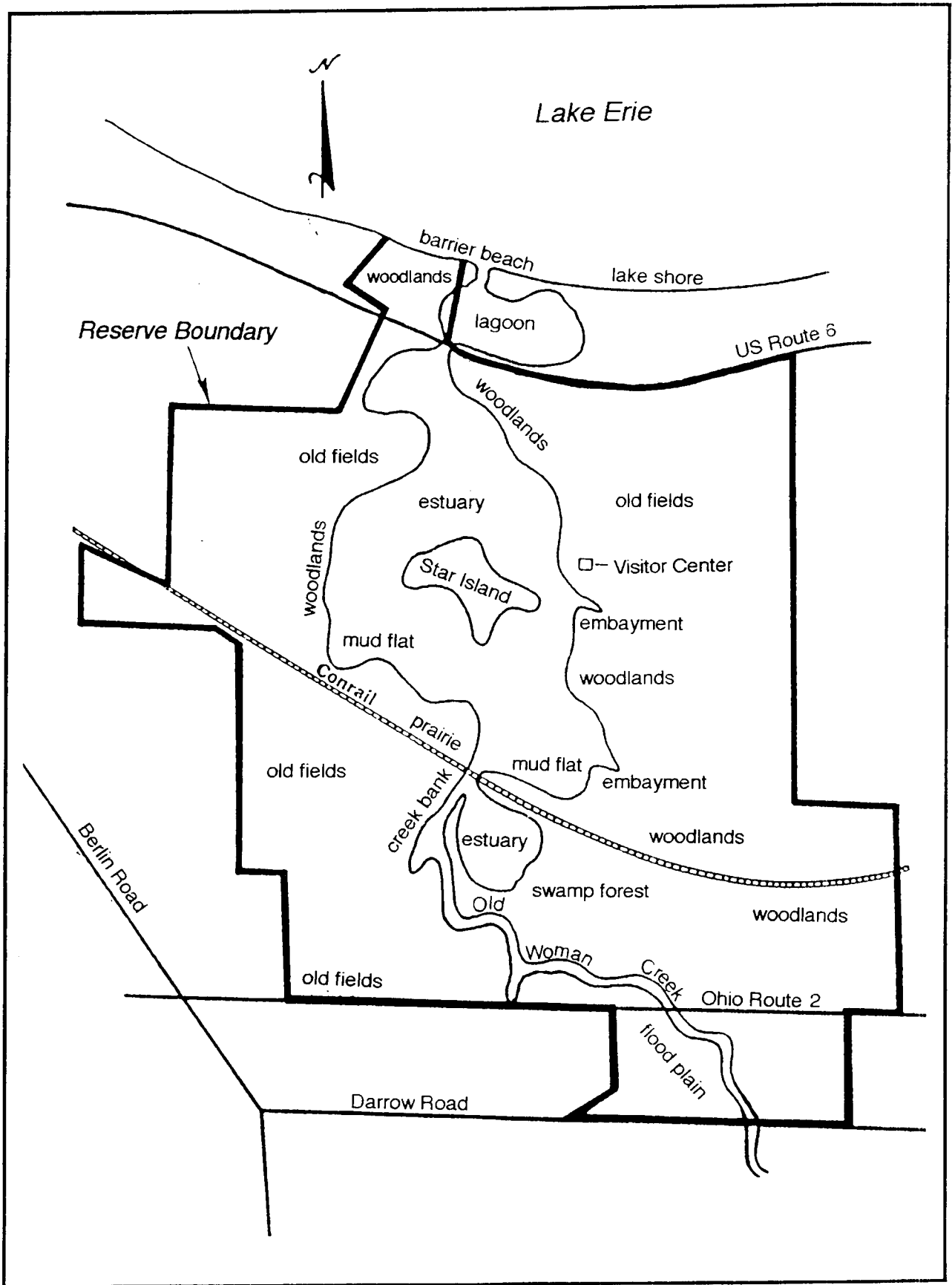


Figure 1. Old Woman Creek National Estuarine Research Reserve showing habitats

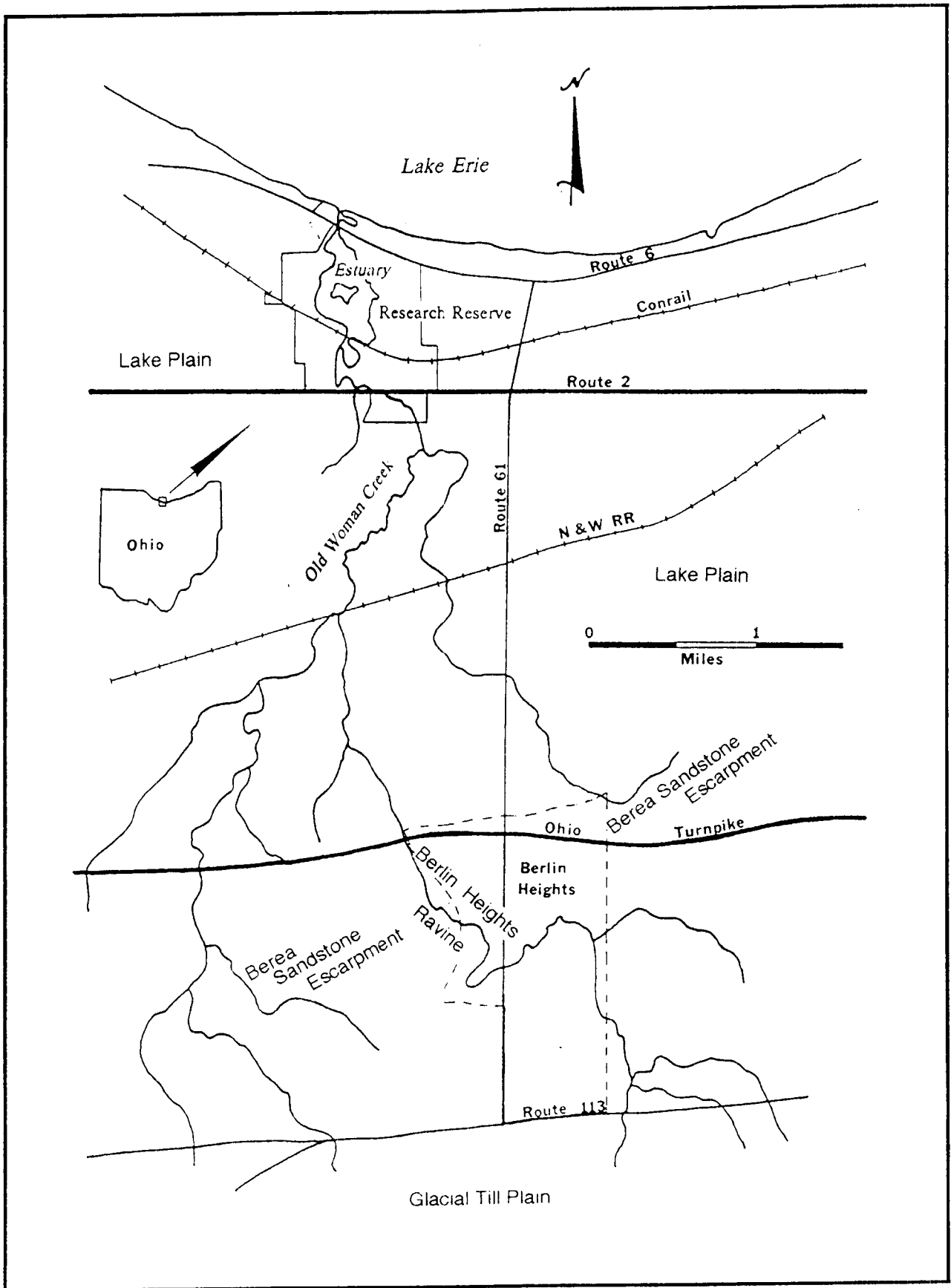


Figure 2. Old Woman Creek watershed showing tributary pattern

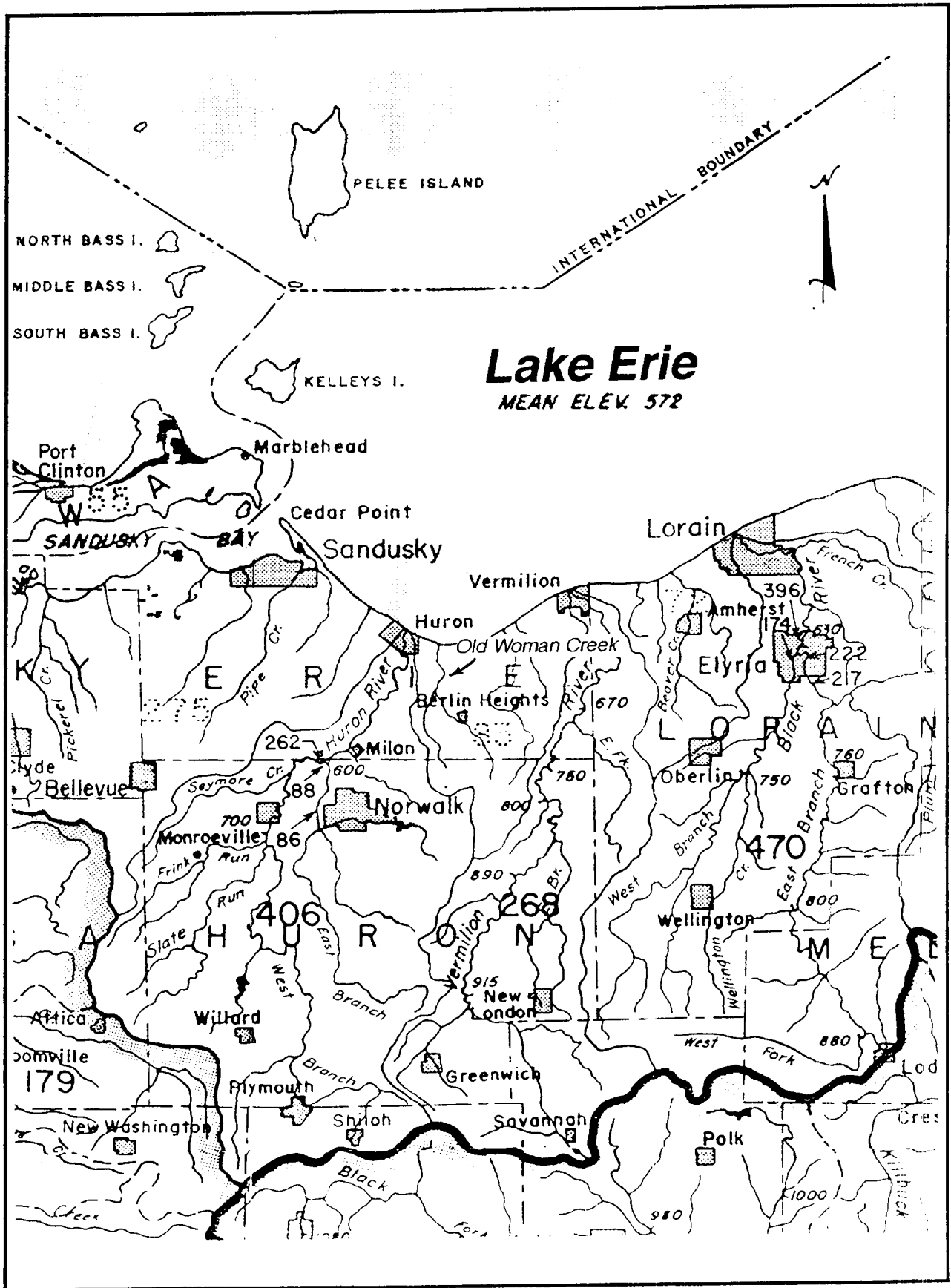


Figure 3. Lake Erie tributaries adjacent to Old Woman Creek estuary and watershed.

Appendix A

Fish Fauna of Old Woman Creek Estuary and Watershed, and Adjacent Tributaries and Waters of Lake Erie

FISH FAUNA OF OLD WOMAN CREEK ESTUARY AND WATERSHED AND ADJACENT TRIBUTARIES AND WATERS OF LAKE ERIE

PHYLUM CHORDATA CLASS AGNATHA (JAWLESS FISHES)

ORDER PETROMYZONTIFORMES

Family Petromyzontidae (lampreys)

- *Ichthyomyzon unicuspis* Hubbs & Trautman, 1937 * silver lamprey
- *Petromyzon marinus* Linnaeus, 1758 * sea lamprey

LOCATION	SOURCE	SPAWNING	HABITAT NURSERY	ADULT	SPAWN SEASON	STATUS
LE,TR	1	C,S,T	M,S,T	O/Fs	May-Jun	T
LE	1	C,S,T	M,S,T	Dm,O/Fs	Apr-Jul	

CLASS OSTEICHTHYES (BONY FISHES)

ORDER ACIPENSERIFORMES

Family Acipenseridae (sturgeons)

- *Acipenser fulvescens* Rafinesque, 1817 * lake sturgeon

Family Polyodontidae (paddlefishes)

- *Polyodon spathula* (Walbaum, 1792) * paddlefish

[Note: extirpated from western Lake Erie circa 1903]

LE	1	T	R,Mm	O,R,S/Bc	May-Jun	E
LE	1	N,S	N,S	M,N,S/Pz	Apr	T

ORDER SEMIONOTIFORMES

Family Lepisosteidae (gars)

- *Lepisosteus oculatus* (Winchell, 1864) * spotted gar
- *Lepisosteus osseus* (Linnaeus, 1758) * longnose gar

LE	1	N	V	V/Fp	May-Jun	E
ES,LE,TR	1,2,4-7,9	N	V	M,S,V/Fp	May-Jun	

ORDER AMIIFORMES

Family Ammiidae (bowfins)

- *Amita calva* Linnaeus, 1799 * bowfin

ES,LE,TR	1,2,4-7,9	V,N	V	V/Bc,Fp	Apr-Jun	
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ORDER ANGUILLIFORMES

Family Anguillidae (freshwater eels)

- *Anguilla rostrata* (Lesueur, 1817) * American eel

LE	1	?	?	N/Bc,Fp,Sc	?	
----	---	---	---	------------	---	--

ORDER CLUPEIFORMES

Family Clupeidae (herrings)

- *Alosa pseudoharengus* (Wilson, 1811) * alewife
- *Dorosoma cepedianum* (Lesueur, 1818) * gizzard shad

ES,LE,TR	1,4,5,7,10	S	S	O,S/Pz	Jun-Jul	
ES,LE,TR	1-10	S	V,N,O,S	N,T,V/PP	Jun-Jul	

ORDER OSTEOGLOSSIFORMES

Family Hiodontidae (mooneyes)

- *Hiodon tergisus* Lesueur, 1818 * mooneye

LE	1	T	T	Mm/Rc,Ov	Apr-May	S
----	---	---	---	----------	---------	---

ORDER SALMONIFORMES

Family Salmonidae (trouts)

Subfamily Coregoninae (whitefishes)

- *Coregonus artedii albus* Lesueur, 1818 * Lake Erie cisco
 - *Coregonus artedii artedii* Lesueur, 1818 * Great Lakes cisco
 - *Coregonus clupeaformis* (Mitchill, 1818) * lake whitefish
- Subfamily Salmoninae (salmons and trouts)**
- *Oncorhynchus kisutch* (Walbaum, 1792) * coho salmon
 - *Oncorhynchus tshawytscha* (Walbaum, 1792) * chinook salmon
 - *Salmo gairdneri* Richardson, 1836 * rainbow trout
 - *Salmo trutta* Linnaeus, 1758 * brown trout
 - *Salvelinus fontinalis* (Mitchill, 1815) * brook trout
 - *Salvelinus namaycush* (Walbaum, 1792) * lake trout

Family Osmeridae (smelts)

- *Osmerus mordax* (Mitchill, 1758) * rainbow smelt

Family Umbriidae (mudminnows)

- *Umbra limi* (Kirtland, 1841) * central mudminnow

Family Esocidae (pikes)

- *Esox americanus vermiculatus* Lesueur, 1846 * grass pickerel
- *Esox lucius* Linnaeus, 1758 * northern pike
- *Esox masquinongy* Mitchill, 1824 * muskellunge
- *Esox niger* Lesueur, 1818 * chain pickerel

ORDER CYPRINIFORMES

Family Cyprinidae (carps and minnows)

- *Campostoma anomalum anomalum* (Rafinesque, 1820)
* Ohio stoneroller minnow
- *Campostoma anomalum pullum* (Agassiz, 1854)
* central stoneroller minnow
- *Carassius auratus* (Linnaeus, 1758) * goldfish
- *Clinostomus elongatus* (Kirtland, 1838) * reidside dace
- *Cyprinella spiloptera* (Cope, 1868) * spottfin shiner
- *Cyprinus carpio* Linnaeus, 1758 * common carp
- *Hybopsis amblopius* (Rafinesque, 1820) * bigeye chub
- *Hybopsis storeriana* (Kirtland, 1844) * silver chub
- *Luxilus chrysocephalus* Rafinesque, 1820 * striped shiner
- *Luxilus cornutus* (Mitchill, 1817) * common shiner

LOCATION	SOURCE	SPAWNING	HABITAT NURSERY	ADULT	SPAWN SEASON	STATUS
LE	1	N,R,S	R,S	Mw/Pz	Nov-Dec	E
LE	1	N,R,S	R,S	Mw/Pz	Nov-Dec	E
LE	1	C,R,S	C,R	Dm,O/Bc	Oct-Nov	S
ES,LE,TR	1,4,5,7	R,S,T	R,S,T	O/Fp	Sep-Oct	
LE,TR	1	R,S,T	R,S,T	O/Fp	Aug-Sep	
ES,LE,TR	1,6-8	C,R,S,T	R,S,T	R/Bc,Fp,P	Jan-May	
TR	1,8	N,R,S,T	N,R,S,T	T/Bc,Fp	Nov-Dec	
TR	1	C,R,S,T	N,R,S,T	T/Bc,Fp	Oct-Nov	S
LE	1	N,R	N,R,S	O,Ds/Fp,P	Sep-Nov	S
LE	1,5,7	C,N,R,T	Ds,Mw	Mw/Bc,Pz	Mar	
ES,TR	1,5,7,8	V	V	V/Bc	Apr	
TR	1,7	V	V	V/Bc,Pz	Apr	
ES,LE,TR	1,2,4,7	V	V	O,V/Fp	Feb-Mar	
LE	1,7	V	V	N,V/Fp	Apr	S
TR	1	V	V	O,V/Bc,Ov	Apr-May	
TR	1	C,S,T	C,S,T	C,S,T/Bc	Apr-May	
CK,ES,TR	1-5,7,8,10	C,S,T	C,S,T	C,R,T/Bc,H	Apr-May	
ES,LE,TR	1-7,9,10	N,V	Mm,N,V	V/Bo,Pp	May-Jun	
LE,TR	1	T	T	T/I	May	
ES,LE,TR	1-5,7,8,10	N,V	N,R,S,V	M,O/Bc,I	Jun-Aug	
ES,LE,TR	1-10	N,V	Mm,N,V	V/Bo	May-Aug	
TR	1,7,8	R,S,T	R,S,T	R,S,T/Bc,I	Apr-Jun	
ES,LE,TR	1,5,7	Mw,O	Mw,O	Ds,O/Bc	May-Jun	
LE,TR	1,7,8	C,N,S,T	N,S,T	N,S,T/Bc,I	May-Jul	
CK,ES,TR	1,2,5,7,8	S,T	S,T	T/I,P	May-Jul	

Family Cyprinidae (continued)

- *Lythrurus umbratilis* (Girard, 1856) * redfin shiner
- *Nocomis biguttatus* (Kirtland, 1841) * hornyhead chub
- *Nocomis micropogon* (Cope, 1864) * river chub
- *Notemigonus crysoleucas* (Mitchill, 1814) * golden shiner
- *Notropis anogenus* Forbes, 1885 * pugnose shiner
[Note: extirpated from western Lake Erie embayments circa 1931]
- *Notropis atherinoides* Rafinesque, 1818 * emerald shiner
- *Notropis buccata* (Cope, 1865) * silverjaw minnow
- *Notropis buchmanii* Meek, 1896 * ghost shiner [new record]
- *Notropis dorsalis* (Agassiz, 1854) * bigmouth shiner
- *Notropis emiliae* (Hay, 1881) * pugnose minnow
- *Notropis heterodon* (Cope, 1865) * blackchin shiner
[Note: extirpated from western Lake Erie circa 1940]
- *Notropus heterolepis* Eigenmann & Eigenmann, 1893
* blacknose shiner
- *Notropis hudsonius* (Clinton, 1824) * spottail shiner
- *Notropis photogenis* (Cope, 1865) * silver shiner
- *Notropis rubellus* (Agassiz, 1850) * rosyface shiner
- *Notropis stramineus* (Cope, 1865) * sand shiner
- *Notropis volucellus* (Cope, 1865) * mimic shiner
- *Phoxinus erythrogaster* (Rafinesque, 1820)
* southern redbelly dace
- *Pimephales notatus* (Rafinesque, 1820) * bluntnose minnow
- *Pimephales promelas* Rafinesque, 1820 * northern fathead minnow
- *Rhinichthys atratulus meleagris* Agassiz, 1848 * w. blacknose dace
- *Rhinichthys cataractae* (Valenciennes, 1842) * longnose dace
- *Semotilus atromaculatus* (Mitchill, 1818) * northern creek chub

Family Catostomidae (suckers)

- *Carpoides cyprinus cyprinus* (Lesueur, 1817)
* eastern quillback carpsucker
- *Carpoides cyprinus hineitraitman* (Trautman, 1956)
* central quillback carpsucker
- *Catostomus catostomus* (Forster, 1773) * longnose sucker
- *Catostomus commersoni* (Lacepede, 1803) * white sucker
- *Erimyzon succetta* (Lacepede, 1803) * lake chubsucker
- *Hypentelium nigricans* (Lesueur, 1817) * northern hog sucker

	LOCATION	SOURCE	SPAWNING	HABITAT NURSERY	ADULT	SPAWN SEASON	STATUS
	TR	1,7,8	S,T,V	S,T,V	S,T,VI	Jun-Aug	
	TR	1,8	S,T	S,T	S,T/Bc,I	May-Jun	
	TR	1,7,8	R,S,T	R,S,T	R,S,T/I,P	Apr-May	
	ES,LE,TR	1,3,5-9	V	V	M,V/Pz	May-Aug	
	LE	1	S,V	S,V	S,V/P	Jun	X
	CK,ES,LE,TR	1,3-8,10	Mw	Mw	Mw/P	Jun-Aug	
	LE,TR	1,7,8	S,T	S,T	S,T/I	Apr-Jul	
	LE,TR	7	S,V	S,V	S,VI,Ov	May-Aug	
	TR	1	Mw,S,T	S,T	S,T/Bc,I	May-Jul	T
	TR	1	T,V	T,V	T,VI,H,Ov	Jun-Jul	E
	LE	1	V	V	V/Bc,I	Jul	E
	LE	1	V	V	V/Bc	Jul	E
	ES,LE,TR	1,3-5,7,9,10	N,S	N,S	Ds,O/Bc,Ov	Jun-Jul	
	TR	1,7,8	S,T	S,T	C,S,T/Bc,I	?	
	ES,TR	1,4,7,8	C,S,T	M,S,T	C,S,T/I	Jun	
	ES,LE,TR	1,5,7,8	S,T	S,T	S,T/H,Ov	May-Aug	
	LE,TR	1,7,8	V	V	VI,Ov	Jun-Jul	
	TR	1	R,S,T	R,S,T	R,S,T/Pp	May-Jul	
	CK,ES,LE,TR	1-8,10	N,R,V	N,V	M,V/Bc,Bo	May-Jul	
	ES,TR	1,2,5,7,8	N,R,V	N,V	N,V/Bo,Pz	May-Aug	
	CK,TR	1,3-5,7-8,10	S,T	S,T	R,S,T/I	May-Jun	
	LE	1,7	C,R,S,T	S,T	C,N,R/Bc,I	Apr-Jun	
	CK,ES,TR	1-5,7-10	R,S,T	N,T	N,VI,P	Apr-May	
	ES,LE,TR	1-10	M,S,T	M,T	M,T/Bo	Apr-Jun	
	TR	1	M,S,T	M,T	M,T/Bo	May-Aug	
	LE	1	S,T	M,S	Mm,C,S/Bc	Apr-May	E
	CK,ES,LE,TR	1-10	R,S,T	S,T	M,S/R,O,P	Mar-Apr	
	LE	1	S,V	S,V	S,V/Bo	Mar-Jun	T
	LE,TR	1,7,8	R,S,T	S,T	R,S,T/Bc,I	Apr-May	

	LOCATION	SOURCE	SPAWNING	HABITAT NURSERY	ADULT	SPAWN SEASON	STATUS
Family Catostomidae (continued)							
• <i>Ictiobus bubalus</i> (Rafinesque, 1820) * smallmouth buffalo	ES,LE,TR	1,2,4,7,9	S,T,V	S,T	Mn,S,Ov,Pz	Apr-Jun	
• <i>Ictiobus cyprinellus</i> (Valenciennes, 1844) * bigmouth buffalo	LE,TR	1,7	V	Mm,V	Mm/Bo,Pz	Apr-May	
• <i>Minytrema melanops</i> (Rafinesque, 1820) * spotted sucker	ES,LE,TR	1-6,7,9	R,S,T	S,T	S,V/Pz	Apr-May	
• <i>Moxostoma anisurum</i> (Rafinesque, 1820) * silver redhorse	LE,TR	1,7	R,S,T	S,T	R,S/Bo,l	Apr-May	
• <i>Moxostoma duquesnei</i> (Lesueur, 1817) * black redhorse	ES,LE,TR	1,4,7,8	S,T	T,V	R,Sl	Apr	
• <i>Moxostoma erythrurum</i> (Rafinesque, 1818) * golden redhorse	ES,LE,TR	1,5,7-9	R,S,T	S,T	R,Sl	May	
• <i>Moxostoma macrolepidotum</i> (Lesueur, 1817) * shorthead redhorse	ES,LE,TR	1,7,9	S,T	S,T	M,S/Bo,l	Apr-May	
ORDER SILURIFORMES							
Family Ictaluridae (bullhead catfishes)							
• <i>Ameiurus catus</i> (Linnaeus, 1758) * white catfish	LE	1	S,T	S	S/Fp,l	Jun-Jul	
• <i>Ameiurus melas</i> (Rafinesque, 1820) * black bullhead	ES,TR	1-8	N,V	N,V	N,V/Bo,Sc	May-Jun	
• <i>Ameiurus natalis</i> (Lesueur, 1819) * yellow bullhead	ES,LE,TR	1,2,4-9	N,V	N,V	V/Bc,Ov	May-Jun	
• <i>Ameiurus nebulosus</i> (Lesueur, 1819) * brown bullhead	ES,LE,TR	1-10	N,V	N,V	V/Bo,l	May-Jun	
• <i>Ictalurus punctatus</i> (Rafinesque, 1818) * channel catfish	ES,LE,TR	1-5,7-9	N,R	Mm,N,V	M/Bc,Bo,Sc	Apr-Jul	
• <i>Noturus flavus</i> Rafinesque, 1818 * stonecat madtom	ES,LE,TR	1,5,7,8	R,S	C,R,S	R,S/Bo,l	Jun-Jul	
• <i>Noturus gyrinus</i> (Mitchill, 1817) * tadpole madtom	ES,TR	1,6,7	N,T	N,T,V	N/Bc	Jun-Jul	
• <i>Noturus miurus</i> Jordan, 1877 * brindled madtom	LE,TR	1	T,V	T,V	M,V/?	Jul-Aug	
• <i>Pygodiclis olivaris</i> (Rafinesque, 1820) * flathead catfish	LE,TR	1,7	R,S,T	R,S,T	C,R,S/Fp	Jun-Jul	
ORDER PERCOPSIFORMES							
Family Percopsidae (trout-perches)							
• <i>Percopsis omincomaycus</i> (Walbaum, 1792) * trout-perch	LE,TR	1,7	R,S,T	Mm,S	Mm,Sl,Pz	Apr-Jun	
Family Gadidae (codfishes)							
• <i>Lota lota</i> (Linnaeus, 1758) * burbot	LE	1,11	C,R,V	R,S	Ds,N/Bc,Fp	Dec-Apr	
ORDER ATHERINIFORMES							
Family Cyprinodontidae (killifishes)							
• <i>Fundulus diaphanus menona</i> (Jordan & Copeland, 1877) * western banded killifish	TR	1	S,T,V	T,V	S,T/Bc,Pz	Jun-Aug	E
Family Poeciliidae (livebearers)							
• <i>Gambusia affinis</i> (Baird & Girard, 1853) * mosquitofish	TR	1	T,V	T,V	T,V,l,Pz	May-Sep	
Family Atherinidae (silversides)							
• <i>Labidesthes sicculus</i> (Cope, 1865) * brook silverside	ES,LE,TR	1,3,5,7	N,V	Mm,N	N,Sl,Pz	May-Jul	
ORDER GASTEROSTEIFORMES							
Family Gasterosteidae (sticklebacks)							
• <i>Culaea inconstans</i> (Kirtland, 1840) * brook stickleback	TR	1	S,T,V	S,T,V	S,T,V/Bc,l	Apr-Jun	

ORDER PERCIFORMES

Family Percichthyidae (temperate basses)

- *Morone americana* (Gmelin, 1789) * white perch
- *Morone chrysops* (Rafinesque, 1820) * white bass

Family Centrarchidae (sunfishes)

- *Ambloplites rupestris* (Rafinesque, 1817) * rock bass
- *Lepomis cyanellus* Rafinesque, 1819 * green sunfish
- *Lepomis gibbosus* (Linnaeus, 1758) * pumpkinseed
- *Lepomis humilis* (Girard, 1856) * orangespotted sunfish
- *Lepomis macrochirus* (Rafinesque, 1818) * bluegill sunfish
- *Lepomis megalotis peltastes* (Cope, 1870) * n. longear sunfish
- *Micropterus dolomieu* Lacepede, 1802 * smallmouth bass
- *Micropterus salmoides* (Lacepede, 1802) * largemouth bass
- *Pomoxis annularis* Rafinesque, 1818 * white crappie
- *Pomoxis nigromaculatus* (Lesueur, 1829) * black crappie

Family Percidae (perches)

- *Ammocrypta pellucida* (Putnam, 1863) * eastern sand darter
- *Etheostoma blennioides blennioides* Rafinesque, 1819 * eastern greenside darter
- *Etheostoma blennioides pholidotum* Miller, 1968 * central greenside darter
- *Etheostoma caeruleum* Storer, 1845 * rainbow darter
- *Etheostoma exile* (Girard, 1860) * lowa darter
- *Etheostoma flabellare* Rafinesque, 1819 * fantail darter
- *Etheostoma microperca* Jordan & Gilbert, 1888 * least darter
- *Etheostoma nigrum nigrum* Rafinesque, 1820 * central johnny darter
- *Etheostoma nigrum eulepis* Hubbs & Greene, 1935 * scaly johnny darter
- *Perca flavescens* (Mitchill, 1814) * yellow perch
- *Percina caprodes caprodes* (Rafinesque, 1818) * Ohio logperch darter
- *Percina caprodes semifasciata* (DeKay, 1842) * northern logperch darter
- *Percina copelandi* (Jordan, 1877) * channel darter
- *Percina maculata* (Girard, 1860) * blackside darter

LOCATION	SOURCE	SPAWNING	HABITAT NURSERY	ADULT	SPAWN SEASON	STATUS
ES,LE,TR	1-7,9,10	S,T	S	O,S/Fp,Pz	May-Jun	
ES,LE,TR	1-7,9,10	C,R,S,T	Mm,R,S	O,S/Fp,I	Apr-May	
LE,TR	1,7,8	R,S,V	R,S,V	R,S/Bc,I	May-Jun	
CK,ES,LE,TR	1-9	N,S,V	N,V	N,V/I,Pz	May-Jul	
CK,ES,LE,TR	1-9	N,V	N,V	N,V/Bc	Apr-May	
ES,TR	3-7,9,10	N,V	N,V	M,V/Bc,I	May-Jul	
ES,LE,TR	1-10	N,V	N,V	N,V/Bc,I	May-Aug	
TR	1,7	S,T,V	S,T,V	S,T,V/I,Pz	Jun-Jul	
ES,LE,TR	1,4,7,8	C,N,R	N,R	C,N,R/Fp,I	May-Jul	
CK,ES,LE,TR	1-10	N,V	N,V	S,V/Bc,Fp,I	May-Jul	
ES,LE,TR	1-9	N,S	Mm,N	N,S/Bc,I	May-Jun	
ES,LE,TR	1-9	V	V	V/Fp,I	May-Jun	
LE,TR	1,7	S,T	S,T	C,S,T/Bc	Jun	S
TR	1,7,8	S,T,V	N,T	S/Bc,I	Apr-Jun	
LE,TR	1	S,T,V	N,T	S/Bc,I	Apr-Jun	
CK,LE,TR	1,5,7,8,10	C,R,S,T	R,S	R,S,T/Bc,I	Mar-Apr	
LE,TR	1	S,T,V	T,V	M,T,V/Bc,I	Mar-Apr	S
LE,TR	1,7,8	C,R,S	S	R,S/Bc	Apr-Jun	
TR	1	T,V	T,V	S,T,V/I,Pz	Apr-Jun	
ES,TR	1-5,7,8,10	R,S	S	S/Bc,I	Apr-Jun	
TR	1	R,T	S,T	S,T/Bc,I	Apr-Jun	
ES,LE,TR	1-10	C,R,S,V	R,S	Ds,V/B,Fp	Apr-May	
TR	1	S,T	S,V	S,T/Bc,Ov	Apr-Jun	
ES,LE,TR	1,5,7	S	S,V	S/Bc,I	Apr-Jun	
LE,TR	1,7	S,T	S	S/Bc,I	Jun-Jul	E
TR	1,7,8	C,S,T	S,T,V	S,T,V/Bc,I	Apr-Jun	

Family Percidae (continued)

- *Percina shumardi* (Girard, 1860) * river darter
- *Stizostedion canadense* (Smith, 1834) * sauger
- *Stizostedion vitreum vitreum* (Mitchill, 1818) * walleye
- *Stizostedion vitreum glaucum* Hubbs, 1926 * blue pike
Note: extirpated from Lake Erie & extinct circa 1970

Family Sciaenidae (drums)

- *Aplodinotus grunniens* Rafinesque, 1819 * freshwater drum

Family Cottidae (sculpins)

- *Cottus bairdi bairdi* Girard, 1850 * northern mottled sculpin
- *Cottus bairdi kumlieni* (Hoy in Nelson, 1876)
* Great Lakes mottled sculpin
- *Cottus ricei* (Nelson, 1876) * spoonhead sculpin

LOCATION CODES:

- CK – Old Woman Creek upstream of the estuary
- ES – Old Woman Creek estuary
- LE – Lake Erie, principally nearshore waters of eastern Erie County and western Lorain County, Ohio
- TR – Tributary waters to Lake Erie other than Old Woman Creek, principally of eastern Erie County and western Lorain County, Ohio

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LOCATION	SOURCE	SPAWNING	HABITAT NURSERY	ADULT	SPAWN SEASON	STATUS
TR	1	C,R,S	S	S,T/Bc,I	Apr-Jun	T
LE	1	C,R	S	Ds,N,O/Fp	Apr-May	
ES,LE,TR	1,3-7,9	C,R	S	Ds,O/Fp	Mar-May	
LE	1	R	S	Ds,O/Fp	Apr-May	Z
ES,LE,TR	1-7,9	C,Mw,R,S	Dm,Mm,S	Mm,N/B,Fp	Apr-Jun	
LE,TR	1,7,8	N,S	S	R,S/Bc	Apr-May	
LE	1	N,S	S	R,S/Bc	Apr-May	
LE	1	Dm	Dm	Dm/Bc,Fp,I	Aug-Sep	S

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SPAWNING AND NURSERY HABITAT CODES:

- C - Current over gravel or rock rubble
- Dm - Deep (>10 m) over mud bottom
- Ds - Deep (>10 m) over sand and gravel bottom
- M - Shallow (<5 m), mud bottom
- Mm - Medium depth (5-10 m) over mud bottom
- Mw - Mid-waters
- N - Non-vegetated, shallow (<5 m), protected areas (embayments, lagoons, harbors, etc.) with sand or mud bottom
- O - Open waters of Lake Erie
- R - Shallow (<5 m), exposed areas with rock or rubble bottom
- S - Shallow (<5 m), exposed areas with sand or gravel bottom
- T - Tributary and estuarine environments
- V - Vegetated, shallow (<5 m), protected areas (embayments, lagoons, harbors, etc.) with sand or mud bottom

ADULT HABITAT/FEEDING NICHE CODES: (Adult Habitat Codes same as Spawning and Nursery Habitat Codes)

- B - Benthic (bottom feeder)
- Bc - Benthic carnivore
- Bo - Benthic omnivore
- Fp - Piscivore (fish predator)
- Fs - Parasitic (fish blood & other body fluids sucker)
- H - Herbivore
- I - Insectivore
- Ov - Omnivore
- P - Planktivore
- Pp - Planktivore (phytoplankton)
- Pz - Planktivore (zooplankton)
- Sc - Scavenger (carrion feeder)

STATUS CODES: (Ohio Division of Wildlife 1992; amended 1996)

- E - Endangered
- T - Threatened
- S - Special Interest
- X - Extirpated
- Z - Extinct

HABITAT, NOMENCLATURE, STATUS, AND TAXONOMY REFERENCES:

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Appendix B

Checklist of the Fish Fauna for Old Woman Creek Estuary and Watershed, and Adjacent Tributaries and Waters of Lake Erie

CHECKLIST OF THE FISH FAUNA FOR OLD WOMAN CREEK ESTUARY, WATERSHED, AND ADJACENT TRIBUTARIES AND WATERS OF LAKE ERIE

	COMMON NAME	LOCATION
LAMPREYS (Petromyzontidae)		
<input type="checkbox"/> <i>Ichthyomyzon unicuspis</i>	silver lamprey	LE,TR
<input type="checkbox"/> <i>Petromyzon marinus</i>	sea lamprey	LE
STURGEONS (Acipenseridae)		
<input type="checkbox"/> <i>Acipenser fulvescens</i>	lake sturgeon	LE
GARS (Lepisosteidae)		
<input type="checkbox"/> <i>Lepisosteus osseus</i>	longnose gar	ES,LE,TR
BOWFINS (Ammidae)		
<input type="checkbox"/> <i>Amia calva</i>	bowfin	ES,LE,TR
HERRINGS (Clupeidae)		
<input type="checkbox"/> <i>Alosa pseudoharengus</i>	alewife	ES,LE,TR
<input type="checkbox"/> <i>Dorosoma cepedianum</i>	gizzard shad	ES,LE,TR
WHITEFISHES (Coregoninae)		
<input type="checkbox"/> <i>Coregonus clupeaformis</i>	lake whitefish	LE
MOONEYES (Hiodontidae)		
<input type="checkbox"/> <i>Hiodon tergisus</i>	mooneye	LE
SALMONS AND TROUTS (Salmoninae)		
<input type="checkbox"/> <i>Oncorhynchus kisutch</i>	coho salmon	ES,LE,TR
<input type="checkbox"/> <i>Oncorhynchus tshawytscha</i>	chinook salmon	LE,TR
<input type="checkbox"/> <i>Salmo gairdneri</i>	rainbow trout	ES,LE,TR
<input type="checkbox"/> <i>Salvelinus fontinalis</i>	brook trout	TR
<input type="checkbox"/> <i>Salmo trutta</i>	brown trout	TR
SMELTS (Osmeridae)		
<input type="checkbox"/> <i>Osmerus mordax</i>	rainbow smelt	LE
MUDMINNOWS (Umbridae)		
<input type="checkbox"/> <i>Umbra limi</i>	central mudminnow	ES,TR
PIKES (Esocidae)		
<input type="checkbox"/> <i>Esox americanus</i>	grass pickerel	TR
<input type="checkbox"/> <i>Esox lucius</i>	northern pike	ES,LE,TR
<input type="checkbox"/> <i>Esox masquinongy</i>	muskellunge	LES
<input type="checkbox"/> <i>Esox niger</i>	chain pickerel	TR
CARPS AND MINNOWS (Cyprinidae)		
<input type="checkbox"/> <i>Campostoma anomalum</i>	stoneroller minnow	CK,ES,TR
<input type="checkbox"/> <i>Carassius auratus</i>	goldfish	ES,LE,TR
<input type="checkbox"/> <i>Clinostomus elongatus</i>	reidside dace	LE,TR
<input type="checkbox"/> <i>Cyprinella spiloptera</i>	spotfin shiner	ES,LE,TR
<input type="checkbox"/> <i>Cyprinus carpio</i>	common carp	ES,LE,TR
<input type="checkbox"/> <i>Hybopsis amblops</i>	bigeye chub	TR
<input type="checkbox"/> <i>Hybopsis storeriana</i>	silver chub	ES,LE,TR
<input type="checkbox"/> <i>Luxilus chrysocephalus</i>	striped shiner	LE,TR
<input type="checkbox"/> <i>Luxilus cornutus</i>	common shiner	CK,ES,TR
<input type="checkbox"/> <i>Lythrurus umbratilis</i>	redfin shiner	TR
<input type="checkbox"/> <i>Nocomis biguttatus</i>	hornyhead chub	TR
<input type="checkbox"/> <i>Nocomis micropogon</i>	river chub	TR
<input type="checkbox"/> <i>Notemigonus crysoleucas</i>	golden shiner	ES,LE,TR

CARPS AND MINNOWS (continued)

- Notropis atherinoides*
- Notropis buccata*
- Notropis buchanani*
- Notropis dorsalis*
- Notropis emiliae*
- Notropus heterolepis*
- Notropis hudsonius*
- Notropis photogenis*
- Notropis rubellus*
- Notropis stramineus*
- Notropis volucellus*
- Phoxinus erythrogaster*
- Pimephales notatus*
- Pimephales promelas*
- Rhinichthys atratulus*
- Rhinichthys cataractae*
- Semotilus atromaculatus*

SUCKERS (Catostomidae)

- Carpionodes cyprinus*
- Catostomus commersoni*
- Hypentelium nigricans*
- Ictiobus bubalus*
- Ictiobus cyprinellus*
- Minytrema melanops*
- Moxostoma anisurum*
- Moxostoma duquesnei*
- Moxostoma erythrurum*
- Moxostoma macrolepidotum*

BULLHEAD CATFISHES (Ictaluridae)

- Ameiurus melas*
- Ameiurus natalis*
- Ameiurus nebulosus*
- Ictalurus punctatus*
- Noturus flavus*
- Noturus gyrinus*
- Noturus miurus*
- Pylodictis olivaris*

TROUT-PERCHES (Percopsidae)

- Percopsis olincomaycus*

CODFISHES (Gadidae)

- Lota lota*

KILLIFISHES (Cyprinodontidae)

- Fundulus diaphanus menona*

SILVERSIDES (Poecillidae)

- Labidesthes sicculus*

TEMPERATE BASSES (Percichthyidae)

- Morone americana*
- Morone chrysops*

COMMON NAME

emerald shiner
 silverjaw minnow
 ghost shiner
 bigmouth shiner
 pugnose minnow
 blacknose shiner
 spottail shiner
 silver shiner
 rosyface shiner
 sand shiner
 mimic shiner
 southern redbelly dace
 bluntnose minnow
 northern fathead minnow
 blacknose dace
 longnose dace
 northern creek chub

quillback carpsucker
 white sucker
 northern hog sucker
 smallmouth buffalo
 bigmouth buffalo
 spotted sucker
 silver redhorse
 black redhorse
 golden redhorse
 shorthead redhorse

black bullhead
 yellow bullhead
 brown bullhead
 channel catfish
 stonecat madtom
 tadpole madtom
 brindled madtom
 flathead catfish

trout-perch

burbot

western banded killifish

brook silverside

white perch
 white bass

LOCATION

OK,ES,LE,TR
 LE,TR
 LE,TR
 TR
 TR
 LE
 ES,LE,TR
 TR
 ES,TR
 ES,LE,TR
 LE,TR
 TR
 CK,ES,LE,TR
 ES,TR
 CK,TR
 LE
 ES,CK,TR

ES,LE,TR
 CK,ES,LE,TR
 LE,TR
 ES,LE,TR
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 ES,LE,TR
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 ES,LE,TR

SUNFISHES (Centrarchidae)

- Ambloplites rupestris*
- Lepomis cyanellus*
- Lepomis gibbosus*
- Lepomis humilis*
- Lepomis macrochirus*
- Lepomis megalotis peltastes*
- Micropterus dolomieu*
- Micropterus salmoides*
- Pomoxis annularis*
- Pomoxis nigromaculatus*

PERCHES (Percidae)

- Ammocrypta pellucida*
- Etheostoma blennioides*
- Etheostoma caeruleum*
- Etheostoma exile*
- Etheostoma flabellare*
- Etheostoma nigrum*
- Perca flavescens*
- Percina caprodes*
- Percina copelandi*
- Percina maculata*
- Stizostedion canadense*
- Stizostedion vitreum vitreum*

DRUMS (Sclaeinidae)

- Aplodinotus grunniens*

SCULPINS (Cottidae)

- Cottus bairdi*

COMMON NAME

rock bass
green sunfish
pumpkinseed
orangespotted sunfish
bluegill sunfish
northern longear sunfish
smallmouth bass
largemouth bass
white crappie
black crappie

eastern sand darter
greenside darter
rainbow darter
iowa darter
fantail darter
johnny darter
yellow perch
logperch darter
channel darter
blackside darter
sauger
walleye

freshwater drum

mottled sculpin

LOCATION

LE,TR
CK,ES,LE,TR
CK,ES,LE,TR
ES,TR
ES,LE,TF
TR
ES,LE,TF
CK,ES,LE,TR
ES,LE,TF
ES,LE,TF

LE,TR
TR
CK,LE,TF
LE,TR
LE,TR
ES,TR
ES,LE,TF
ES,LE,TF
LE,TR
TR
LE
ES,LE,TF

ES,LE,TF

LE,TR

LOCATION CODES:

CK - Old Woman Creek upstream of the estuary

ES - Old Woman Creek estuary

LE - Lake Erie, principally nearshore waters of eastern Erie County and western Lorain County, Ohio

TR - Tributary waters to Lake Erie other than Old Woman Creek, principally of eastern Erie County and western Lorain County, Ohio

Appendix C

Alphabetized List of the Fish Fauna for Old Woman Creek Estuary and Watershed, and Adjacent Tributaries and Waters of Lake Erie by Scientific Name

**ALPHABETIZED LIST OF FISH FAUNA FOR OLD WOMAN CREEK ESTUARY,
WATERSHED, AND ADJACENT TRIBUTARIES AND WATERS OF LAKE ERIE
by Scientific Name**

SCIENTIFIC NAME	COMMON NAME	FAMILY	LOCATION
<i>Acipenser fulvescens</i>	lake sturgeon	Acipenseridae	LE
<i>Alosa pseudoharengus</i>	alewife	Clupeidae	ES,LE,TR
<i>Ambloplites rupestris</i>	rock bass	Centrarchidae	LE,TR
<i>Ameiurus catus</i>	white catfish	Ictaluridae	LE
<i>Ameiurus melas</i>	black bullhead	Ictaluridae	ES,TR
<i>Ameiurus natalis</i>	yellow bullhead	Ictaluridae	ES,LE,TR
<i>Ameiurus nebulosus</i>	brown bullhead	Ictaluridae	ES,LE,TR
<i>Amia calva</i>	bowfin	Amniidae	ES,LE,TR
<i>Ammocrypta pellucida</i>	eastern sand darter	Percidae	LE,TR
<i>Anguilla rostrata</i>	American eel	Anguillidae	LE
<i>Aplodinotus grunniens</i>	freshwater drum	Sciaenidae	ES,LE,TR
<i>Campostoma anomalum anomalum</i>	Ohio stoneroller minnow	Cyprinidae	TR
<i>Campostoma anomalum pullum</i>	central stoneroller minnow	Cyprinidae	OK,ES,TR
<i>Carassius auratus</i>	goldfish	Cyprinidae	ES,LE,TR
<i>Carpionodes cyprinus cyprinus</i>	eastern quillback carpsucker	Catostomidae	ES,LE,TR
<i>Carpionodes cyprinus hineittrautman</i>	central quillback carpsucker	Catostomidae	TR
<i>Catostomus catostomus</i>	longnose sucker	Catostomidae	LE
<i>Catostomus commersoni</i>	white sucker	Catostomidae	OK,ES,LE,TR
<i>Clinostomus elongatus</i>	reidside dace	Cyprinidae	LE,TR
<i>Coregonus artedii albus</i>	Lake Erie cisco	Salmonidae	LE
<i>Coregonus artedii artedii</i>	Great Lakes cisco	Salmonidae	LE
<i>Coregonus clupeaformis</i>	lake whitefish	Salmonidae	LE
<i>Cottus bairdi bairdi</i>	northern mottled sculpin	Cottidae	LE,TR
<i>Cottus bairdi kumlieni</i>	Great Lakes mottled sculpin	Cottidae	LE
<i>Cottus ricei</i>	spoonhead sculpin	Cottidae	LE
<i>Culaea inconstans</i>	brook stickleback	Gasterosteidae	TR
<i>Cyprinellaspilopterus</i>	spotfin shiner	Cyprinidae	ES,LE,TR
<i>Cyprinus carpio</i>	common carp	Cyprinidae	ES,LE,TR
<i>Dorosoma cepedianum</i>	gizzard shad	Clupeidae	ES,LE,TR
<i>Erimyzon sucetta</i>	lake chubsucker	Catostomidae	LE
<i>Esox americanus vermiculatus</i>	grass pickerel	Esocidae	TR
<i>Esox lucius</i>	northern pike	Esocidae	ES,LE,TR
<i>Esox masquinongy</i>	muskellunge	Esocidae	LE
<i>Esox niger</i>	chain pickerel	Esocidae	TR
<i>Etheostoma blennioides blennioides</i>	eastern greenside darter	Percidae	TR
<i>Etheostoma blennioides pholidotum</i>	central greenside darter	Percidae	LE,TR
<i>Etheostoma caeruleum</i>	rainbow darter	Percidae	OK,LE,TR
<i>Etheostoma exile</i>	Iowa darter	Percidae	TR
<i>Etheostoma flabellare</i>	fantail darter	Percidae	LE,TR
<i>Etheostoma microperca</i>	least darter	Percidae	TR
<i>Etheostoma nigrum eulepis</i>	scaly johnny darter	Percidae	TR
<i>Etheostoma nigrum nigrum</i>	central johnny darter	Percidae	ES,TR
<i>Fundulus diaphanus menona</i>	western banded killifish	Cyprinodontidae	TR
<i>Gambusia affinis</i>	mosquitofish	Poeciliidae	TR
<i>Hiodon tergisus</i>	mooneye	Hiodontidae	LE
<i>Hybopsis amblops</i>	bigeye chub	Cyprinidae	TR
<i>Hybopsis storeriana</i>	silver chub	Cyprinidae	ES,LE,TR
<i>Hypentelium nigricans</i>	northern hog sucker	Catostomidae	LE,TR
<i>Ichthyomyzon unicuspis</i>	silver lamprey	Petromyzontidae	LE,TR
<i>Ictalurus punctatus</i>	channel catfish	Ictaluridae	ES,LE,TR
<i>Ictiobus bubalus</i>	smallmouth buffalo	Catostomidae	ES,LE,TR
<i>Ictiobus cyprinellus</i>	bigmouth buffalo	Catostomidae	LE,TR
<i>Labidesthes sicculus</i>	brook silverside	Atherinidae	ES,LE,TR
<i>Lepisosteus oculatus</i>	spotted gar	Lepisosteidae	LE
<i>Lepisosteus osseus</i>	longnose gar	Lepisosteidae	ES,LE,TR
<i>Lepomis cyanellus</i>	green sunfish	Centrarchidae	OK,ES,LE,TR
<i>Lepomis gibbosus</i>	pumpkinseed	Centrarchidae	OK,ES,LE,TR
<i>Lepomis humilis</i>	orangespotted sunfish	Centrarchidae	ES,TR
<i>Lepomis macrochirus</i>	bluegill sunfish	Centrarchidae	ES,LE,TR
<i>Lepomis megalotis peltastes</i>	northern longear sunfish	Centrarchidae	TR
<i>Lota lota</i>	burbot	Gadidae	LE
<i>Luxilus chrysocephalus</i>	striped shiner	Cyprinidae	LE,TR

SCIENTIFIC NAME	COMMON NAME	FAMILY	LOCATION
<i>Luxilus cornutus</i>	common shiner	Cyprinidae	CK,ES,TR
<i>Lythrurus umbratilis</i>	redfin shiner	Cyprinidae	TR
<i>Micropterus dolomieu</i>	smallmouth bass	Centrarchidae	ES,LE,TR
<i>Micropterus salmoides</i>	largemouth bass	Centrarchidae	CK,ES,LE,TR
<i>Minytrema melanops</i>	spotted sucker	Catostomidae	ES,LE,TR
<i>Morone americana</i>	white perch	Percichthyidae	ES,LE,TR
<i>Morone chrysops</i>	white bass	Percichthyidae	ES,LE,TR
<i>Moxostoma anisurum</i>	silver redhorse	Catostomidae	LE,TR
<i>Moxostoma duquesnei</i>	black redhorse	Catostomidae	ES,LE,TR
<i>Moxostoma erythrurum</i>	golden redhorse	Catostomidae	ES,LE,TR
<i>Moxostoma macrolepidotum</i>	shorthead redhorse	Catostomidae	ES,LE,TR
<i>Nocomis biguttatus</i>	hornyhead chub	Cyprinidae	TR
<i>Nocomis micropogon</i>	river chub	Cyprinidae	TR
<i>Notemigonus crysoleucas</i>	golden shiner	Cyprinidae	ES,LE,TR
<i>Notropis anogenus</i>	pugnose shiner	Cyprinidae	LE
<i>Notropis atherinoides</i>	emerald shiner	Cyprinidae	CK,ES,LE,TR
<i>Notropis buccata</i>	silverjaw minnow	Cyprinidae	LE,TR
<i>Notropis buchanani</i>	ghost shiner	Cyprinidae	LE,TR
<i>Notropis dorsalis</i>	bigmouth shiner	Cyprinidae	TR
<i>Notropis emiliae</i>	pugnose minnow	Cyprinidae	TR
<i>Notropis heterodon</i>	blackchin shiner	Cyprinidae	LE
<i>Notropis hudsonius</i>	spottail shiner	Cyprinidae	ES,LE,TR
<i>Notropis photogenis</i>	silver shiner	Cyprinidae	TR
<i>Notropis rubellus</i>	rosyface shiner	Cyprinidae	ES,TR
<i>Notropis stramineus</i>	sand shiner	Cyprinidae	ES,LE,TR
<i>Notropis volucellus</i>	mimic shiner	Cyprinidae	LE,TR
<i>Notropus heterolepis</i>	blacknose shiner	Cyprinidae	LE
<i>Noturus flavus</i>	stonecat madtom	Ictaluridae	ES,LE,TR
<i>Noturus gyrinus</i>	tadpole madtom	Ictaluridae	ES,TR
<i>Noturus miurus</i>	brindled madtom	Ictaluridae	LE,TR
<i>Oncorhynchus kisutch</i>	coho salmon	Salmonidae	ES,LE,TR
<i>Oncorhynchus tshawytscha</i>	chinook salmon	Salmonidae	LE,TR
<i>Osmerus mordax</i>	rainbow smelt	Osmeridae	LE
<i>Perca flavescens</i>	yellow perch	Percidae	ES,LE,TR
<i>Percina caprodes caprodes</i>	Ohio logperch darter	Percidae	TR
<i>Percina caprodes semifasciata</i>	northern logperch darter	Percidae	ES,LE,TR
<i>Percina copelandi</i>	channel darter	Percidae	LE,TR
<i>Percina maculata</i>	blackside darter	Percidae	TR
<i>Percina shumardi</i>	river darter	Percidae	TR
<i>Percopsis olincomaycus</i>	trout-perch	Percopsidae	LE,TR
<i>Petromyzon marinus</i>	sea lamprey	Petromyzontidae	LE
<i>Phoxinus erythrogaster</i>	southern redbelly dace	Cyprinidae	TR
<i>Pimephales notatus</i>	bluntnose minnow	Cyprinidae	CK,ES,LE,TR
<i>Pimephales promelas</i>	northern fathead minnow	Cyprinidae	ES,TR
<i>Polyodon spathula</i>	paddlefish	Polyodontidae	LE
<i>Pomoxis annularis</i>	white crappie	Centrarchidae	ES,LE,TR
<i>Pomoxis nigromaculatus</i>	black crappie	Centrarchidae	ES,LE,TR
<i>Pylodictis olivaris</i>	flathead catfish	Ictaluridae	LE,TR
<i>Rhinichthys atratulus meleagris</i>	western blacknose dace	Cyprinidae	CK,TR
<i>Rhinichthys cataractae</i>	longnose dace	Cyprinidae	LE
<i>Salmo gairdneri</i>	rainbow trout	Salmonidae	ES,LE,TR
<i>Salmo trutta</i>	brown trout	Salmonidae	TR
<i>Salvelinus fontinalis</i>	brook trout	Salmonidae	TR
<i>Salvelinus namaycush</i>	lake trout	Salmonidae	LE
<i>Semotilus atromaculatus</i>	northern creek chub	Cyprinidae	ES,CK TR
<i>Stizostedion canadense</i>	sauger	Percidae	LE
<i>Stizostedion vitreum glaucum</i>	blue pike	Percidae	LE
<i>Stizostedion vitreum vitreum</i>	walleye	Percidae	ES,LE,TR
<i>Umbra limi</i>	central mudminnow	Umbridae	ES,TR

LOCATION CODES:

CK – Old Woman Creek upstream of the estuary

ES – Old Woman Creek estuary

LE – Lake Erie, principally nearshore waters of eastern Erie County and western Lorain County, Ohio

TR – Tributary waters to Lake Erie other than Old Woman Creek, principally of eastern Erie County and western Lorain County, Ohio

Appendix D

Alphabetized List of the Fish Fauna for Old Woman Creek Estuary and Watershed, and Adjacent Tributaries and Waters of Lake Erie by Common Name

**ALPHABETIZED LIST OF FISH FAUNA FOR OLD WOMAN CREEK ESTUARY,
WATERSHED, AND ADJACENT TRIBUTARIES AND WATERS OF LAKE ERIE
by Common Name**

COMMON NAME	SCIENTIFIC NAME	FAMILY	LOCATION
alewife	<i>Alosa pseudoharengus</i>	Clupeidae	ES,LE,TR
bass, largemouth	<i>Micropterus salmoides</i>	Centrarchidae	OK,ES,LE,TR
bass, rock	<i>Ambloplites rupestris</i>	Centrarchidae	LE,TR
bass, smallmouth	<i>Micropterus dolomieu</i>	Centrarchidae	ES,LE,TR
bass, white	<i>Morone chrysops</i>	Percichthyidae	ES,LE,TR
bowfin	<i>Amia calva</i>	Amiidae	ES,LE,TR
buffalo, bigmouth	<i>Ictiobus cyprinellus</i>	Catostomidae	LE,TR
buffalo, smallmouth	<i>Ictiobus bubalus</i>	Catostomidae	ES,LE,TR
bullhead, black	<i>Ameiurus melas</i>	Ictaluridae	ES,TR
bullhead, brown	<i>Ameiurus nebulosus</i>	Ictaluridae	ES,LE,TR
bullhead, yellow	<i>Ameiurus natalis</i>	Ictaluridae	ES,LE,TR
burbot	<i>Lota lota</i>	Gadidae	LE
carp, common	<i>Cyprinus carpio</i>	Cyprinidae	ES,LE,TR
carpsucker, central quillback	<i>Carpiodes cyprinus hineitraitman</i>	Catostomidae	TR
carpsucker, eastern quillback	<i>Carpiodes cyprinus cyprinus</i>	Catostomidae	ES,LE,TR
catfish, channel	<i>Ictalurus punctatus</i>	Ictaluridae	ES,LE,TR
catfish, flathead	<i>Pylodictis olivaris</i>	Ictaluridae	LE,TR
catfish, white	<i>Ameiurus catus</i>	Ictaluridae	LE
chub, bigeye	<i>Hybopsis amblops</i>	Cyprinidae	TR
chub, hornyhead	<i>Nocomis biguttatus</i>	Cyprinidae	TR
chub, northern creek	<i>Semotilus atromaculatus</i>	Cyprinidae	ES,OK,TR
chub, river	<i>Nocomis micropogon</i>	Cyprinidae	TR
chub, silver	<i>Hybopsis storeriana</i>	Cyprinidae	ES,LE,TR
chubsucker, lake	<i>Erimyzon sucetta</i>	Catostomidae	LE
cisco, Great Lakes	<i>Coregonus artedii artedii</i>	Salmonidae	LE
cisco, Lake Erie	<i>Coregonus artedii albus</i>	Salmonidae	LE
crappie, black	<i>Pomoxis nigromaculatus</i>	Centrarchidae	ES,LE,TR
crappie, white	<i>Pomoxis annularis</i>	Centrarchidae	ES,LE,TR
dace, longnose	<i>Rhinichthys cataractae</i>	Cyprinidae	LE
dace, redbelly	<i>Clinostomus elongatus</i>	Cyprinidae	LE,TR
dace, southern redbelly	<i>Phoxinus erythrogaster</i>	Cyprinidae	TR
dace, western blacknose	<i>Rhinichthys atratulus meleagris</i>	Cyprinidae	OK,TR
darler, blackside	<i>Percina maculata</i>	Percidae	TR
darler, central greenside	<i>Etheostoma blennioides pholidotum</i>	Percidae	LE,TR
darler, central johnny	<i>Etheostoma nigrum nigrum</i>	Percidae	ES,TR
darler, channel	<i>Percina copelandi</i>	Percidae	LE,TR
darler, eastern greenside	<i>Etheostoma blennioides blennioides</i>	Percidae	TR
darler, eastern sand	<i>Ammocrypta pellucida</i>	Percidae	LE,TR
darler, fantail	<i>Etheostoma flabellare</i>	Percidae	LE,TR
darler, iowa	<i>Etheostoma exile</i>	Percidae	TR
darler, least	<i>Etheostoma microperca</i>	Percidae	TR
darler, northern logperch	<i>Percina caprodes semifasciata</i>	Percidae	ES,LE,TR
darler, Ohio logperch	<i>Percina caprodes caprodes</i>	Percidae	TR
darler, rainbow	<i>Etheostoma caeruleum</i>	Percidae	OK,LE,TR
darler, river	<i>Percina shumardi</i>	Percidae	TR
darler, scaly johnny	<i>Etheostoma nigrum eulepis</i>	Percidae	TR
drum, freshwater	<i>Aplodinotus grunniens</i>	Sciaenidae	ES,LE,TR
eel, American	<i>Anguilla rostrata</i>	Anguillidae	LE
gar, longnose	<i>Lepisosteus osseus</i>	Lepisosteidae	ES,LE,TR
gar, spotted	<i>Lepisosteus oculatus</i>	Lepisosteidae	LE
goldfish	<i>Carassius auratus</i>	Cyprinidae	ES,LE,TR
killifish, western banded	<i>Fundulus diaphanus menona</i>	Cyprinodontidae	TR
lamprey, sea	<i>Petromyzon marinus</i>	Petromyzontidae	LE
lamprey, silver	<i>Ichthyomyzon unicuspis</i>	Petromyzontidae	LE,TR
madtom, brindled	<i>Noturus miurus</i>	Ictaluridae	LE,TR
madtom, stonecat	<i>Noturus flavus</i>	Ictaluridae	ES,LE,TR
madtom, tadpole	<i>Noturus gyrinus</i>	Ictaluridae	ES,TR
minnow, bluntnose	<i>Pimephales notatus</i>	Cyprinidae	OK,ES,LE,TR
minnow, northern fathead	<i>Pimephales promelas</i>	Cyprinidae	ES,TR
minnow, pugnose	<i>Notropis emiliae</i>	Cyprinidae	TR
minnow, silverjaw	<i>Notropis buccata</i>	Cyprinidae	LE,TR
mooneye	<i>Hiodon tergisus</i>	Hiodontidae	LE

COMMON NAME	SCIENTIFIC NAME	FAMILY	LOCATION
mosquitofish	<i>Gambusia affinis</i>	Poeciliidae	TR
mudminnow, central	<i>Umbra limi</i>	Umbridae	ES,TR
muskellunge	<i>Esox masquinongy</i>	Esocidae	LE
paddlefish	<i>Polyodon spathula</i>	Polyodontidae	LE
perch, white	<i>Morone americana</i>	Percichthyidae	ES,LE,TR
perch, yellow	<i>Perca flavescens</i>	Percidae	ES,LE,TR
pickerel, chain	<i>Esox niger</i>	Esocidae	TR
pickerel, grass	<i>Esox americanus vermiculatus</i>	Esocidae	TR
pike, blue	<i>Stizostedion vitreum glaucum</i>	Percidae	LE
pike, northern	<i>Esox lucius</i>	Esocidae	ES,LE,TR
pumpkinseed	<i>Lepomis gibbosus</i>	Centrarchidae	CK,ES,LE,TR
redhorse, black	<i>Moxostoma duquesnei</i>	Catostomidae	ES,LE,TR
redhorse, golden	<i>Moxostoma erythrurum</i>	Catostomidae	ES,LE,TR
redhorse, shorthead	<i>Moxostoma macrolepidotum</i>	Catostomidae	ES,LE,TR
redhorse, silver	<i>Moxostoma anisurum</i>	Catostomidae	LE,TR
salmon, chinook	<i>Oncorhynchus tshawytscha</i>	Salmonidae	LE,TR
salmon, coho	<i>Oncorhynchus kisutch</i>	Salmonidae	ES,LE,TR
sauger	<i>Stizostedion canadense</i>	Percidae	LE
sculpin, Great Lakes mottled	<i>Cottus bairdi kumlieni</i>	Cottidae	LE
sculpin, northern mottled	<i>Cottus bairdi bairdi</i>	Cottidae	LE,TR
sculpin, spoonhead	<i>Cottus ricei</i>	Cottidae	LE
shad, gizzard	<i>Dorosoma cepedianum</i>	Clupeidae	ES,LE,TR
shiner, bigmouth	<i>Notropis dorsalis</i>	Cyprinidae	TR
shiner, blackchin	<i>Notropis heterodon</i>	Cyprinidae	LE
shiner, blacknose	<i>Notropus heterolepis</i>	Cyprinidae	LE
shiner, common	<i>Luxilus cornutus</i>	Cyprinidae	CK,ES,TR
shiner, emerald	<i>Notropis atherinoides</i>	Cyprinidae	CK,ES,LE,TR
shiner, ghost	<i>Notropis buchanani</i>	Cyprinidae	LE,TR
shiner, golden	<i>Notemigonus crysoleucas</i>	Cyprinidae	ES,LE,TR
shiner, mimic	<i>Notropis volucellus</i>	Cyprinidae	LE,TR
shiner, pugnose	<i>Notropis anogenus</i>	Cyprinidae	LE
shiner, redfin	<i>Lythrurus umbratilis</i>	Cyprinidae	TR
shiner, rosyface	<i>Notropis rubellus</i>	Cyprinidae	ES,TR
shiner, sand	<i>Notropis stramineus</i>	Cyprinidae	ES,LE,TR
shiner, silver	<i>Notropis photogenis</i>	Cyprinidae	TR
shiner, spottin	<i>Cyprinellaspilopterus</i>	Cyprinidae	ES,LE,TR
shiner, spottail	<i>Notropis hudsonius</i>	Cyprinidae	ES,LE,TR
shiner, striped	<i>Luxilus chrysocephalus</i>	Cyprinidae	LE,TR
silverside, brook	<i>Labidesthes sicculus</i>	Atherinidae	ES,LE,TR
smelt, rainbow	<i>Osmerus mordax</i>	Osmeridae	LE
stickleback, brook	<i>Culaea inconstans</i>	Gasterosteidae	TR
stoneroller minnow, central	<i>Campostoma anomalum pullum</i>	Cyprinidae	CK,ES,TR
stoneroller minnow, Ohio	<i>Campostoma anomalum anomalum</i>	Cyprinidae	TR
sturgeon, lake	<i>Acipenser fulvescens</i>	Acipenseridae	LE
sucker, longnose	<i>Catostomus catostomus</i>	Catostomidae	LE
sucker, northern hog	<i>Hypentelium nigricans</i>	Catostomidae	LE,TR
sucker, spotted	<i>Minytrema melanops</i>	Catostomidae	ES,LE,TR
sucker, white	<i>Catostomus commersoni</i>	Catostomidae	CK,ES,LE,TR
sunfish, bluegill	<i>Lepomis macrochirus</i>	Centrarchidae	ES,LE,TR
sunfish, green	<i>Lepomis cyanellus</i>	Centrarchidae	CK,ES,LE,TR
sunfish, northern longear	<i>Lepomis megalotis peltastes</i>	Centrarchidae	TR
sunfish, orangespotted	<i>Lepomis humilis</i>	Centrarchidae	ES,TR
trout, brook	<i>Salvelinus fontinalis</i>	Salmonidae	TR
trout, brown	<i>Salmo trutta</i>	Salmonidae	TR
trout, lake	<i>Salvelinus namaycush</i>	Salmonidae	LE
trout, rainbow	<i>Salmo gairdneri</i>	Salmonidae	ES,LE,TR
trout-perch	<i>Percopsis olincomaycus</i>	Percopsidae	LE,TR
walleye	<i>Stizostedion vitreum vitreum</i>	Percidae	ES,LE,TR
whitefish, lake	<i>Coregonus clupeaformis</i>	Salmonidae	LE

LOCATION CODES:

CK – Old Woman Creek upstream of the estuary

ES – Old Woman Creek estuary

LE – Lake Erie, principally nearshore waters of eastern Erie County and western Lorain County, Ohio

TR – Tributary waters to Lake Erie other than Old Woman Creek, principally of eastern Erie County and western Lorain County, Ohio

Appendix E

Amphibian, Reptilian, and Mammalian Fauna of Old Woman Creek Estuary and Watershed, and Adjacent Tributaries and Waters of Lake Erie

**AMPHIBIAN, REPTILIAN, AND MAMMALIAN FAUNA OF OLD WOMAN CREEK
ESTUARY AND WATERSHED,
AND ADJACENT TRIBUTARIES AND WATERS OF LAKE ERIE**

**PHYLUM CHORDATA
CLASS AMPHIBIA (amphibians)**

	---SOURCE---		LOCATION	LOCAL OCCUR	HABITAT	STATUS
	LOCAL	REGION				
ORDER CAUDATA (salamanders)						
Family Salamandridae (newts)						
• <i>Notophthalmus viridescens</i> (Rafinesque, 1820) * eastern newt		1,5	TR		SPD,STM	
Family Proteidae (mudpuppies)						
• <i>Necturus maculosus</i> (Rafinesque, 1818) * mudpuppy	6	1,5	LE,TR		LEE,LER	
Family Ambystomatidae (mole salamanders)						
• <i>Ambystoma jeffersonianum</i> (Green, 1827) * Jefferson's salamander		1,5	TR		WLW,SPD	
• <i>Ambystoma maculatum</i> (Shaw, 1802) * spotted salamander	4,5	1,5	CK,TR	O	FOR,DUP	
• <i>Ambystoma opacum</i> (Gravenhorst, 1807) * marbled salamander		1,5	TR		SWF	
• <i>Ambystoma platineum</i> (Cope, 1868) * silvery salamander		1,5	TR		WLW,SPD	
• <i>Ambystoma texanum</i> (Matthes, 1855) * small-mouthed salamander		1,5	TR		SWF,FLP	
• <i>Ambystoma tigrinum</i> (Green, 1825) * tiger salamander		1,5	TR		WLW,PAR	
• <i>Ambystoma hybrid</i> [<i>A. texanum</i> x <i>A. laterale</i> ?]	4,5	1,5	CK,ES,TR	C	WLW,FLP	
Family Plethodontidae (lungless salamanders)						
• <i>Desmognathus fuscus</i> (Green, 1818) * dusky salamander	4,5	1,5	CK,TR	R	SBK,STM	
• <i>Eurycea bislineata</i> (Green, 1818) * two-lined salamander	4,5	1,5	CK,TR	C	SBK,WLW	
• <i>Hemidactylium scutatum</i> (Temminck and Schlegel, 1838) * 4-toed salamander		1,5	TR		WLW	S
• <i>Plethodon cinereus</i> (Green, 1818) * eastern redback salamander	4,5	1,5	CK,ES,TR	C	FOR,RAV	
• <i>Plethodon glutinosus</i> (Green, 1818) * slimy salamander	4,5	1,5	CK,ES,TR	U	FOR,RAV	
• <i>Plethodon richmondi</i> Netting and Mittleman, 1938) * ravine salamander	4,5	1,5	CK,ES,TR	U	RAV,SBK	
• <i>Pseudotriton ruber</i> (Latreille, 1801) * red salamander	4		CK	R	SPR,RAV	
ORDER ANURA (frogs and toads)						
Family Bufonidae (bufonid toads)						
• <i>Bufo americanus</i> Holbrook, 1836 * American toad	4	1,2	CK,ES,TR	A	DUP,OGS	
• <i>Bufo woodhousii fowleri</i> Garard, 1854 * Fowler's toad	4	1,2	ES,TR	U	DUP,OGS	
Family Hylidae (cricket frogs and treefrogs)						
• <i>Acris crepitans</i> Baird, 1854 * northern cricket frog		1,2	TR		SPD,STM	
• <i>Hyla versicolor</i> Le Conte, 1825 * gray treefrog		1,2	TR		SWF,WLW	
• <i>Pseudacris crucifer crucifer</i> (Wied-Neuwied, 1838) * northern spring peeper	4	1,2	CK,ES,TR	A	WLW	
• <i>Pseudacris triseriata</i> (Wied-Neuwied, 1838) * western chorus frog	4	1,2	ES,TR	A	WET,MDW	

---SOURCE---		REGION	LOCATION	LOCAL OCCUR	HABITAT	STATUS
LOCAL						
4		1,2	CK,ES,TR	O	LEE,STM	
4		1,2	CK,ES,TR	C	SBK,WET	
4		1	TR	U	MDW,WLW	
		1,2	ES,TR		MDW,OGS	
		1,2	TR		WLW,FOR	

Family Ranidae (ranid frogs)

- *Rana catesbeiana* Shaw, 1802 * bullfrog
- *Rana clamitans melanota* Latreille, 1801 * green frog
- *Rana palustris* Le Conte, 1825 * pickerel frog
- *Rana pipiens* Schreber, 1782 * northern leopard frog
- *Rana sylvatica* Le Conte, 1825 * wood frog

CLASS REPTILIA (reptiles)

ORDER TESTUDINES (turtles)

Family Kinosternidae (mud and musk turtles)

- *Sternotherus odoratus* (Latreille, 1801) * common musk turtle

Family Chelydridae (snapping turtles)

- *Chelydra serpentina* (Linnaeus, 1759) * snapping turtle

Family Emydidae (box and water turtles)

- *Chrysemys picta marginata* (Schneider, 1783) * midland painted turtle
- *Clemmys guttata* (Schneider, 1801) * spotted turtle
- *Emydoidea blandingii* (Holbrook, 1838) * Blanding's turtle
- *Graptemys geographica* (Le Sueur, 1817) * common map turtle
- *Terrapene carolina carolina* (Linnaeus, 1758) * eastern box turtle

Family Trionychidae (softshell turtles)

- *Apalone spiniferus* (Le Sueur, 1827) * spiny softshell turtle

ORDER SQUAMATA: SUBORDER SERPENTES (snakes)

Family Colubridae (colubrid snakes)

- *Clonophis kirtlandii* (Kennicott, 1856) * Kirtland's snake
- *Coluber constrictor foxii* Linnaeus, 1758 * blue racer
- *Diadophis punctatus edwardsii* (Linnaeus, 1766) * northern ring-neck snake
- *Elapha obsoleta obsoleta* Say, 1823 * black rat snake
- *Elapha vulpina gloydi* (Baird and Girard, 1853) * eastern fox snake
- *Heterodon platyrhinos* Latreille, 1801 * eastern hog-nosed snake
- *Lampropeltis triangulum triangulum* (Lacépède, 1788) * eastern milk snake
- *Nerodia sipedon sipedon* (Linnaeus, 1758) * northern water snake
- *Ophiodrys vernalis* (Harlan, 1827) * smooth green snake
- *Regina septemvittata* (Say, 1825) * queen snake
- *Storeria dekayi dekayi* (Holbrook, 1839) * northern brown snake
- *Storeria dekayi wrightorum* (Holbrook, 1839) * midland brown snake
- *Thamnophis butleri* (Cope, 1889) * Butler's garter snake

1			TR		LEB	
4		1	ES,TR	C	LEE,SPD	
4		1	CK,ES,TR	A	LEE,LEB	
4		1	ES,TR	R	LEB,SBK	S
4		1	ES,TR	O	LEB,WET	S
4		1	ES,TR	R	STM,LEE	
4,6		1	CK,ES,TR	R	VSL,OGS	
6a		1	ES,TR	R	STM,LEE	
1,4		1	TR		MDW,WET	T
1,4		1	CK,TR	R	OGS,QUY	
4		1	CK,TR	R	FOR,ROK	
4		1	CK,TR	U	FLP,ROK	
4		1	ES,TR	U	WET,LEE	S
4		1	TR		LKS	
4		1	ES,TR	R	FOR,ROK	
1,4		1	CK,ES,TR	A	LEE,LKS	
4		1	TR		DUP,ROK	
4		1	CK,TR	R	SBK,LEE	
1,4		1	ES,TR	C	OGS,PRA	
1,4		1	ES,TR	C	OGS,PRA	
4		1	ES,TR	R	WET,MDW	

---SOURCE---		REGION	LOCATION	LOCAL OCCUR	HABITAT	STATUS
LOCAL						
	1		TR		WET,LKS	
1,4	1		CK,ES,TR	A	OGS,MDW	
4	1		ES,TR	O	SWP,MDW	S
	1		TR		SWF,WET	E

Family Colubridae (continued)

- *Thamnophis sauritus* (Linnaeus, 1766) * eastern ribbon snake
 - *Thamnophis sirtalis sirtalis* (Linnaeus, 1758) * eastern garter snake
 - *Thamnophis sirtalis sirtalis* (Linnaeus, 1758) * e. garter snake (melanistic)
- ### Family Viperidae (vipers)
- *Sistrurus catenatus* (Rafinesque, 1818) * Massasauga rattlesnake

CLASS MAMMALIA (mammals)

ORDER MARSUPIALIA (marsupials)

Family Didelphidae (opossums)

- *Didelphis virginiana* Kerr, 1792 * Virginia opossum

ORDER INSECTIVORA (insectivores)

Family Soricidae (shrews)

- *Blarina brevicauda* (Say, 1823) * northern short-tailed shrew
- *Cryptotis parva* (Say, 1823) * least shrew
- *Sorex cinereus* Kerr, 1792 * masked shrew
- *Sorex hoyi* Baird, 1858 * pygmy shrew

Family Talpidae (moles, desmans, and shrew-moles)

- *Parascalops breweri* (Bachman, 1842) * hairy-tailed mole
- *Scalopus aquaticus* (Linnaeus, 1758) * eastern mole

ORDER CHIROPTERA (bats)

Family Vespertilionidae (vespertilionid bats)

- *Eptesicus fuscus* (Palisot de Beauvois, 1796) * big brown bat
- *Lasiurus noctivagus* (Le Conte, 1831) * silver-haired bat
- *Lasiurus borealis* (Muller, 1776) * red bat
- *Lasiurus cinereus* (Palisot de Beauvois, 1796) * hoary bat
- *Myotis keenii* (Merriam, 1895) * Keen's myotis or Keen's bat
- *Myotis leibii* (Audubon & Bachman, 1842) * small-footed myotis
- *Myotis lucifugus* (Le Conte, 1831) * little brown bat
- *Pipistrellus subflavus* (Curier, 1832) * eastern pipistrelle or Georgian bat

4	3	CK,ES,TR	U	WLW	
4	3	ES,TR	A	UGS,WLW	
4	3	TR		OGS	
4	3	ES,TR	C	WLW,OGS	
4	3,6	ES,TR	R	WLW,OGS	
4	3	ES,TR	O	VSL	
4	3	CK,ES,TR	C	UGB	
	3	TR		HLT,CAV	
	3	TR		WLW	
	3	TR		WLW	
	3	TR		WLW	
	3	TR		WLW	
	3	TR		CAV	
4	3	ES,TR	R	CAV,HLT	
	3	TR		CAV,HLT	

- ORDER CARNIVORA (carnivores)**
Family Canidae (dogs, wolves, coyotes, jackals, & foxes)
 • *Canis latrans* Say, 1823 * coyote or brush wolf
 • *Canis lupus* Linnaeus, 1758 * gray wolf or timber wolf
 Note: extirpated western Lake Erie region circa 1860 (Mayfield 1962)
 • *Urocyon cinereoargenteus* (Schreber, 1775) * gray fox
 • *Vulpes vulpes* (Linnaeus, 1758) * red fox
Family Ursidae (bears)
 • *Ursus americanus* Pallas, 1780 * black bear
 Note: extirpated western Lake Erie region circa 1860 (Mayfield 1962)
Family Procyonidae (procyonids)
 • *Procyon lotor* (Linnaeus, 1758) * raccoon
Family Mustelidae (mustelids)
 Subfamily Mustelinae (wolverines, martens, & weasels)
 • *Gulo gulo* (Linnaeus, 1758) * wolverine
 Note: extirpated western Lake Erie region circa 1842 (Mayfield 1962)
 • *Mustela frenata* Lichtenstein, 1831 * long-tailed weasel
 • *Mustela nivalis* Linnaeus, 1766 * least weasel
 • *Mustela vison* Schreber, 1777 * mink
 Subfamily Melinae (badgers)
 • *Taxidea taxus* (Schreber, 1778) * badger
 Subfamily Mephitinae (skunks)
 • *Mephitis mephitis* (Schreber, 1776) * striped skunk
 Subfamily Lutrinae (otters)
 • *Lutra canadensis* (Schreber, 1776) * river otter
 Note: extirpated western Lake Erie region circa 1900 (Mayfield 1962)
Family Felidae (cats)
 • *Felis concolor* Linnaeus, 1771 * mountain lion or panther
 Note: extirpated western Lake Erie region circa 1845 (Mayfield 1962)
 • *Lynx canadensis* Kerr, 1792 * lynx
 Note: extirpated western Lake Erie region circa 1848 (Mayfield 1962)
 • *Lynx rufus* (Schreber, 1776) * bobcat
 Note: extirpated western Lake Erie region circa 1878 (Mayfield 1962)
- ORDER LAGOMORPHA (lagomorphs)**
Family Leporidae (hares & rabbits)
 • *Sylvilagus floridanus* (Allen, 1890) * eastern cottontail rabbit

---SOURCE---		LOCAL	REGION	LOCATION	LOCAL	HABITAT	STATUS
LOCAL	REGION				OCCUR		
4	3		ES,TR		R	OGS WLW,BKW	X
4	3		ES,TR		R	OGS,WLW	
4,6	3		ES,TR		R	OGS,BKW	
4	3		CK,ES,TR		O	WLW	E
4	3		ES,TR		R	FOR	X
4	3		TR			OGS,WLW	
4	3		TR			WET,SBK	
4	3		TR			OGS	S
4	3		ES,TR		U	OGS,WLW	
						STM,LSH	E
						FOR	X
						FOR	X
						FOR,BKW	E
4	3		CK,ES,TR		A	OGS,BKW	

ORDER RODENTIA (rodents)

Family Sciuridae (squirrels)

- *Glaucomys volans* (Linnaeus, 1758) * southern flying squirrel
- *Marmota monax* (Linnaeus, 1758) * woodchuck or groundhog
- *Sciurus carolinensis* Gmelin, 1788 * gray squirrel
- *Sciurus niger* Linnaeus, 1758 * fox squirrel
- *Sciurus striatus* (Linnaeus, 1758) * eastern chipmunk
- *Tamiasciurus hudsonicus* (Erleben, 1777) * red squirrel

Family Castoridae (beavers)

- *Castor canadensis canadensis* Kuhl, 1820 * beaver
Note: extirpated circa 1837 (Mayfield 1962); observed in estuary 1999

Family Muridae (rats, mice & voles)

Subfamily Sigmodontinae (New World rats & mice)

- *Peromyscus leucopus* (Rafinesque, 1818) * white-footed mouse
 - *Peromyscus maniculatus* (Wagner, 1845) * deer mouse
- Subfamily Arvicolinae (arvicoline rodents)
- *Microtus pennsylvanicus* (Ord, 1815) * meadow vole or field mouse
 - *Ondatra zibethicus* (Linnaeus, 1766) * muskrat

Subfamily Murinae (Old World rats & mice)

- *Mus musculus* Linnaeus, 1758 * house mouse
 - *Rattus norvegicus* (Berkenhout, 1769) * Norway rat or common rat
- Family Dipodidae (birch mice, jumping mice, & jerboas)**
- Subfamily Zapodinae (jumping mice)
- *Zapus hudsonius* (Zimmermann, 1780) * meadow jumping mouse
- Family Erethizontidae (New World porcupines)**
- *Erethizon dorsatum* (Linnaeus, 1758) * porcupine

Note: extirpated western Lake Erie region circa 1884 (Mayfield 1962)

ORDER ARTIODACTYLA (even-toed ungulates)

Family Cervidae (deer, moose, wapiti & caribou)

- *Cervus elaphus* Linnaeus, 1758 * wapiti or American elk
Note: extirpated western Lake Erie region circa 1822 (Mayfield 1962)
- *Odocoileus virginianus* (Zimmermann, 1780) * white-tailed deer

Family Bovidae (bovids)

- *Bison bison* (Linnaeus, 1758) * bison
Note: extirpated western Lake Erie region circa 1812 (Mayfield 1962); domesticated bison introduced to watershed in 1960s

---SOURCE---		REGION	LOCATION	LOCAL OCCUR	HABITAT	STATUS
LOCAL						
	3		TR		FOR	
4	3		CK,ES,TR	A	FOR,UGB	
	3		TR		FOR	
4	3		CK,ES,TR	C	WLW	
4	3		CK,ES,TR	C	WLW,OGS	
4	3		CK,ES,TR	U	FOR	
6			ES	R	WLW,STM	X
4	3		ES,TR	A	FOR,OGS	
4	3		ES,TR	U	OGS,DUP	
4	3		ES,TR	A	MDW,WET	
4	3		ES,TR	O	WET,LEE	
	3		TR		MDW	
4	3		ES,TR	O	RUL,URB	
	3		TR		URB,RUL	
4	3		ES,TR	U	MDW	
						X
4	3		CK,ES,TR	C	OGS,FOR	X
6			CK	D	OGS,PRA	X,D

LOCATION CODES:

CK – Old Woman Creek watershed upstream of the estuary
ES – Old Woman Creek estuary and contiguous uplands within State Nature Preserve
LE – Lake Erie, principally nearshore waters of eastern Erie County and western Lorain County, Ohio
TR – Tributary watersheds to Lake Erie other than Old Woman Creek, principally of eastern Erie County and western Lorain County, Ohio

OCCURRENCE (RELATIVE ABUNDANCE) CODES:

A – Abundant Several to many individuals at many sites (Frequent).
C – Common Several to many individuals at several sites.
O – Occasional Several individuals at more than one site (Infrequent; Local).
U – Uncommon Few individuals at few sites (Scarce).
R – Rare One to few individuals at one site.

HABITAT CODES:

BKW – Broken & uneven terrains, near water
CAV – Caves & rock overhangs
DUP – Dry uplands
FLP – Floodplains
FOR – Forests, dry
HLT – Hollow trees
LEB – Lake Erie embayments, benthic habitats
LEE – Lake Erie estuaries & river mouths
LEP – Lake Erie, pelagic habitats
LER – Lake Erie reefs
LKS – Lakeshore
MDW – Meadows, wet
OGS – Open grass & shrub fields
PRA – Prairies
QUY – Quarry sites
RAV – Ravines
ROK – Rocky terrains
RUL – Rural dwellings
SBK – Stream banks
SPD – Shallow ponds
SPR – Springs
STM – Streams
SWF – Swamp forests
UBR – Urban dwellings
UGB – Underground burrows
VSL – Vegetated sandy loam
WET – Wetlands
WLW – Woodlands, near water

STATUS CODES: (Ohio Div. Wildlife 1992;1996)

E – Endangered
T – Threatened
S – Special Interest
X – Extirpated
Z – Extinct
D – Domesticated

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Appendix F

Checklist of the Amphibian, Reptilian, and Mammalian Fauna for Old Woman Creek Estuary and Watershed, and Adjacent Tributaries and Waters of Lake Erie

CHECKLIST OF THE AMPHIBIAN, REPTILIAN, AND MAMMALIAN FAUNA FOR OLD WOMAN CREEK ESTUARY AND WATERSHED, AND ADJACENT TRIBUTARIES AND WATERS OF LAKE ERIE

AMPHIBIANS

	COMMON NAME	LOCATION
NEWTS (Salamandridae)		
<input type="checkbox"/> <i>Notophthalmus viridescens</i>	eastern newt	TR
MUDPUPIES (Proteidae)		
<input type="checkbox"/> <i>Necturus maculosus</i>	mudpuppy	LE,TR
MOLE SALAMANDERS (Ambystomatidae)		
<input type="checkbox"/> <i>Ambystoma jeffersonianum</i>	Jefferson's salamander	TR
<input type="checkbox"/> <i>Ambystoma maculatum</i>	spotted salamander	CK,TR
<input type="checkbox"/> <i>Ambystoma opacum</i>	marbled salamander	TR
<input type="checkbox"/> <i>Ambystoma platineum</i>	silvery salamander	TR
<input type="checkbox"/> <i>Ambystoma texanum</i>	small-mouthed salamander	TR
<input type="checkbox"/> <i>Ambystoma tigrinum</i>	tiger salamander	TR
<input type="checkbox"/> <i>Ambystoma</i>	hybrid mole salamander	CK,ES,TR
LUNGLESS SALAMANDERS (Plethodontidae)		
<input type="checkbox"/> <i>Desmognathus fuscus</i>	dusky salamander	CK,TR
<input type="checkbox"/> <i>Eurycea bislineata</i>	two-lined salamander	CK,TR
<input type="checkbox"/> <i>Hemidactylium scutatum</i>	4-toed salamander	TR
<input type="checkbox"/> <i>Plethodon cinereus</i>	eastern redback salamander	CK,ES,TR
<input type="checkbox"/> <i>Plethodon glutinosus</i>	slimy salamander	CK,ES,TR
<input type="checkbox"/> <i>Plethodon richmondi</i>	ravine salamander	CK,ES,TR
<input type="checkbox"/> <i>Pseudotriton ruber</i>	red salamander	CK
BUFONID TOADS (Bufonidae)		
<input type="checkbox"/> <i>Bufo americanus</i>	American toad	CK,ES,TR
<input type="checkbox"/> <i>Bufo woodhousii fowleri</i>	Fowler's toad	ES,TR
CRICKET FROGS AND TREEFROGS (Hylidae)		
<input type="checkbox"/> <i>Acris crepitans</i>	northern cricket frog	TR
<input type="checkbox"/> <i>Hyla versicolor</i>	gray treefrog	TR
<input type="checkbox"/> <i>Pseudacris crucifer crucifer</i>	northern spring peeper	CK,ES,TR
<input type="checkbox"/> <i>Pseudacris triseriata</i>	western chorus frog	ES,TR
RANID FROGS (Ranidae)		
<input type="checkbox"/> <i>Rana catesbeiana</i>	bullfrog	CK,ES,TR
<input type="checkbox"/> <i>Rana clamitans melanota</i>	green frog	CK,ES,TR
<input type="checkbox"/> <i>Rana palustris</i>	pickereel frog	TR
<input type="checkbox"/> <i>Rana pipiens</i>	northern leopard frog	ES,TR
<input type="checkbox"/> <i>Rana sylvatica</i>	wood frog	TR

REPTILES

	COMMON NAME	LOCATION
MUD AND MUSK TURTLES (Kinosternidae)		
<input type="checkbox"/> <i>Sternotherus odoratus</i>	common musk turtle	TR
SNAPPING TURTLES (Chelydridae)		
<input type="checkbox"/> <i>Chelydra serpentina</i>	snapping turtle	ES,TR
BOX AND WATER TURTLES (Emydidae)		
<input type="checkbox"/> <i>Chrysems picta marginata</i>	midland painted turtle	CK,ES,TR
<input type="checkbox"/> <i>Clemmys guttata</i>	spotted turtle	ES,TR
<input type="checkbox"/> <i>Emydoidea blandingii</i>	Blanding's turtle	ES,TR
<input type="checkbox"/> <i>Graptemys geographica</i>	common map turtle	ES,TR
<input type="checkbox"/> <i>Terrapene carolina carolina</i>	eastern box turtle	CK,ES,TR

SOFTSHELL TURTLES (Trionychidae)

- Apalone spiniferus*

COLUBRID SNAKES (Colubridae)

- Clonophis kirtlandii*
 Coluber constrictor foxii
 Diadophis punctatus edwardsii
 Elapha obsoleta obsoleta
 Elapha vulpina gloydi
 Heterodon platyrhinos
 Lampropeltis triangulum triangulum
 Nerodia sipedon sipedon
 Opheodrys vernalis
 Regina septemvittata
 Storeria dekayi dekayi
 Storeria dekayi wrightorum
 Thamnophis butleri
 Thamnophis sauritus
 Thamnophis sirtalis sirtalis
 Thamnophis sirtalis sirtalis

VIPERS (Viperidae)

- Sistrurus catenatus*

COMMON NAME

spiny softshell turtle

 Kirtland's snake
 blue racer
 northern ring-neck snake
 black rat snake
 eastern fox snake
 eastern hog-nosed snake
 eastern milk snake
 northern water snake
 smooth green snake
 queen snake
 northern brown snake
 midland brown snake
 Butler's garter snake
 eastern ribbon snake
 eastern garter snake
 e. garter snake (melanistic)

LOCATION

ES,TR

 TR
 CK,TR
 CK,TR
 CK,TR
 ES,TR
 TR
 ES,TR
 CK,ES,TR
 TR
 CK,TR
 ES,TR
 ES,TR
 ES,TR
 TR
 CK,ES,TR
 ES,TR

Massasauga rattlesnake

TR

MAMMALS**OPOSSUMS (Didelphidae)**

- Didelphis virginiana*

SHREWS (Soricidae)

- Blarina brevicauda*
 Cryptotis parva
 Sorex cinereus
 Sorex hoyi

MOLES (Talpidae)

- Parascalops breweri*
 Scalopus aquaticus

VESPERTILIONID BATS (Vespertilionidae)

- Eptesicus fuscus*
 Lsionycteris noctivagans
 Lasiurus borealis
 Lasiurus cinereus
 Myotis keenii
 Myotis leibii
 Myotis lucifugus
 Pipistrellus subflavus

WOLVES & FOXES (Canidae)

- Canis latrans*
 Urocyon cinereoargenteus
 Vulpes vulpes

PROCYONIDS (Procyonidae)

- Procyon lotor*

COMMON NAME

Virginia opossum

 northern short-tailed shrew
 least shrew
 masked shrew
 pygmy shrew

 hairy-tailed mole
 eastern mole

 big brown bat
 silver-haired bat
 red bat
 hoary bat
 Keen's myotis or Keen's bat
 small-footed myotis
 little brown bat
 e. pipistrelle or Georgian bat

 coyote or brush wolf
 gray fox
 red fox

 raccoon

LOCATION

CK,ES,TR

 ES,TR
 TR
 ES,TR
 ES,TR

 ES,TR
 CK,ES,TR

 TR
 TR
 TR
 TR
 TR
 TR
 ES,TR
 TR

 ES,TR
 ES,TR
 ES,TR

 CK,ES,TR

	COMMON NAME	LOCATION
MUSTELIDS (Mustelidae)		
<input type="checkbox"/> <i>Mustela frenata</i>	long-tailed weasel	ES,TR
<input type="checkbox"/> <i>Mustela nivalis</i>	least weasel	TR
<input type="checkbox"/> <i>Mustela vison</i>	mink	TR
<input type="checkbox"/> <i>Taxidea taxus</i>	badger	TR
<input type="checkbox"/> <i>Mephitis mephitis</i>	striped skunk	ES,TR
HARES & RABBITS (Leporidae)		
<input type="checkbox"/> <i>Sylvilagus floridanus</i>	eastern cottontail rabbit	CK,ES,TR
SQUIRRELS (Sciuridae)		
<input type="checkbox"/> <i>Glaucomys volans</i>	southern flying squirrel	TR
<input type="checkbox"/> <i>Marmota monax</i>	woodchuck or groundhog	CK,ES,TR
<input type="checkbox"/> <i>Sciurus carolinensis</i>	gray squirrel	TR
<input type="checkbox"/> <i>Sciurus niger</i>	fox squirrel	CK,ES,TR
<input type="checkbox"/> <i>Tamias striatus</i>	eastern chipmunk	CK,ES,TR
<input type="checkbox"/> <i>Tamiasciurus hudsonicus</i>	red squirrel	CK,ES,TR
BEAVERS (Castoridae)		
<input type="checkbox"/> <i>Castor canadensis</i>	beaver	ES
RATS, MICE & VOLES (Muridae)		
<input type="checkbox"/> <i>Peromyscus leucopus</i>	white-footed mouse	ES,TR
<input type="checkbox"/> <i>Peromyscus maniculatus</i>	deer mouse	ES,TR
<input type="checkbox"/> <i>Microtus pennsylvanicus</i>	meadow vole or field mouse	ES,TR
<input type="checkbox"/> <i>Ondatra zibethicus</i>	muskrat	ES,TR
<input type="checkbox"/> <i>Synaptomys cooperi</i>	southern bog lemming	TR
<input type="checkbox"/> <i>Mus musculus</i>	house mouse	ES,TR
<input type="checkbox"/> <i>Rattus norvegicus</i>	Norway rat or common rat	TR
JUMPING MICE (Dipodidae)		
<input type="checkbox"/> <i>Zapus hudsonius</i>	meadow jumping mouse	ES,TR
DEER (Cervidae)		
<input type="checkbox"/> <i>Odocoileus virginianus</i>	white-tailed deer	CK,ES,TR
BOVIDS (Bovidae)		
<input type="checkbox"/> <i>Bison bison</i>	bison	CK

LOCATION CODES:

CK – Old Woman Creek watershed upstream of the estuary

ES – Old Woman Creek estuary and contiguous uplands within State Nature Preserve

LE – Lake Erie, principally nearshore waters of eastern Erie County and western Lorain County, Ohio

TR – Tributary watersheds to Lake Erie other than Old Woman Creek, principally of eastern Erie County and western Lorain County, Ohio

Appendix G

**Alphabetized List of the Amphibian, Reptilian,
and Mammalian Fauna
for Old Woman Creek Estuary and Watershed,
and Adjacent Tributaries and Waters of Lake Erie
by Scientific Name**

**ALPHABETIZED LIST OF THE AMPHIBIAN, REPTILIAN, AND MAMMALIAN
FAUNA FOR OLD WOMAN CREEK ESTUARY AND WATERSHED,
AND ADJACENT TRIBUTARIES AND WATERS OF LAKE ERIE
by Scientific Name**

AMPHIBIANS

SCIENTIFIC NAME	COMMON NAME	FAMILY	LOCATION
<i>Acris crepitans</i>	northern cricket frog	Hylidae	TR
<i>Ambystoma</i>	hybrid mole salamander	Ambystomatidae	CK,ES,TR
<i>Ambystoma jeffersonianum</i>	Jefferson's salamander	Ambystomatidae	TR
<i>Ambystoma maculatum</i>	spotted salamander	Ambystomatidae	CK,TR
<i>Ambystoma opacum</i>	marbled salamander	Ambystomatidae	TR
<i>Ambystoma platineum</i>	silvery salamander	Ambystomatidae	TR
<i>Ambystoma texanum</i>	small-mouthed salamander	Ambystomatidae	TR
<i>Ambystoma tigrinum</i>	tiger salamander	Ambystomatidae	TR
<i>Bufo americanus</i>	American toad	Bufo	CK,ES,TR
<i>Bufo woodhousii fowleri</i>	Fowler's toad	Bufo	ES,TR
<i>Desmognathus fuscus</i>	dusky salamander	Plethodontidae	CK,TR
<i>Eurycea bislineata</i>	two-lined salamander	Plethodontidae	CK,TR
<i>Hemidactylium scutatum</i>	4-toed salamander	Plethodontidae	TR
<i>Hyla versicolor</i>	gray treefrog	Hylidae	TR
<i>Necturus maculosus</i>	mudpuppy	Proteidae	LE,TR
<i>Notophthalmus viridescens</i>	eastern newt	Salamandridae	TR
<i>Plethodon cinereus</i>	eastern redback salamander	Plethodontidae	CK,ES,TR
<i>Plethodon glutinosus</i>	slimy salamander	Plethodontidae	CK,ES,TR
<i>Plethodon richmondi</i>	ravine salamander	Plethodontidae	CK,ES,TR
<i>Pseudacris crucifer crucifer</i>	northern spring peeper	Hylidae	CK,ES,TR
<i>Pseudacris triseriata</i>	western chorus frog	Hylidae	ES,TR
<i>Pseudotriton ruber</i>	red salamander	Plethodontidae	CK
<i>Rana catesbeiana</i>	bullfrog	Ranidae	CK,ES,TR
<i>Rana clamitans melanota</i>	green frog	Ranidae	CK,ES,TR
<i>Rana palustris</i>	pickerel frog	Ranidae	TR
<i>Rana pipiens</i>	northern leopard frog	Ranidae	ES,TR
<i>Rana sylvatica</i>	wood frog	Ranidae	TR

REPTILES

SCIENTIFIC NAME	COMMON NAME	FAMILY	LOCATION
<i>Apalone spiniferus</i>	spiny softshell turtle	Trionychidae	ES,TR
<i>Chelydra serpentina</i>	snapping turtle	Chelydridae	ES,TR
<i>Chrysemys picta marginata</i>	midland painted turtle	Emydidae	CK,ES,TR
<i>Clemmys guttata</i>	spotted turtle	Emydidae	ES,TR
<i>Clonophis kirtlandii</i>	Kirtland's snake	Colubridae	TR
<i>Coluber constrictor foxii</i>	blue racer	Colubridae	CK,TR
<i>Diadophis punctatus edwardsii</i>	northern ring-neck snake	Colubridae	CK,TR
<i>Elapha obsoleta obsoleta</i>	black rat snake	Colubridae	CK,TR
<i>Elapha vulpina gloydi</i>	eastern fox snake	Colubridae	ES,TR
<i>Emydoidea blandingii</i>	Blanding's turtle	Emydidae	ES,TR
<i>Graptemys geographica</i>	common map turtle	Emydidae	ES,TR
<i>Heterodon platyrhinos</i>	eastern hog-nosed snake	Colubridae	TR
<i>Lampropeltis triangulum triangulum</i>	eastern milk snake	Colubridae	ES,TR
<i>Nerodia sipedon sipedon</i>	northern water snake	Colubridae	CK,ES,TR
<i>Ophedryx vernalis</i>	smooth green snake	Colubridae	TR
<i>Regina septemvittata</i>	queen snake	Colubridae	CK,TR
<i>Sistrurus catenatus</i>	Massasauga rattlesnake	Viperidae	TR
<i>Sternotherus odoratus</i>	common musk turtle	Kinosternidae	TR
<i>Storeria dekayi dekayi</i>	northern brown snake	Colubridae	ES,TR
<i>Storeria dekayi wrightorum</i>	midland brown snake	Colubridae	ES,TR
<i>Terrapene carolina carolina</i>	eastern box turtle	Emydidae	CK,ES,TR
<i>Thamnophis butleri</i>	Butler's garter snake	Colubridae	ES,TR
<i>Thamnophis sauritus</i>	eastern ribbon snake	Colubridae	TR
<i>Thamnophis sirtalis sirtalis</i>	eastern garter snake (melanistic)	Colubridae	ES,TR
<i>Thamnophis sirtalis sirtalis</i>	eastern garter snake	Colubridae	CK,ES,TR

MAMMALS

SCIENTIFIC NAME	COMMON NAME	FAMILY	LOCATION
<i>Bison bison</i>	bison	Bovidae	CK
<i>Blarina brevicauda</i>	northern short-tailed shrew	Soricidae	ES,TR
<i>Canis latrans</i>	coyote or brush wolf	Canidae	ES,TR
<i>Castor canadensis</i>	beaver	Castoridae	ES
<i>Cryptotis parva</i>	least shrew	Soricidae	TR
<i>Didelphis virginiana</i>	Virginia opossum	Didelphidae	CK,ES,TR
<i>Eptesicus fuscus</i>	big brown bat	Vespertilionidae	TR
<i>Glaucomys volans</i>	southern flying squirrel	Sciuridae	TR
<i>Lasiurus borealis</i>	red bat	Vespertilionidae	TR
<i>Lasiurus cinereus</i>	hoary bat	Vespertilionidae	TR
<i>Lsionycteris noctivagans</i>	silver-haired bat	Vespertilionidae	TR
<i>Marmota monax</i>	woodchuck or groundhog	Sciuridae	CK,ES,TR
<i>Mephitis mephitis</i>	striped skunk	Mustelidae	ES,TR
<i>Microtus pennsylvanicus</i>	meadow vole or field mouse	Muridae	ES,TR
<i>Mus musculus</i>	house mouse	Muridae	ES,TR
<i>Mustela frenata</i>	long-tailed weasel	Mustelidae	ES,TR
<i>Mustela nivalis</i>	least weasel	Mustelidae	TR
<i>Mustela vison</i>	mink	Mustelidae	TR
<i>Myotis keenii</i>	Keen's myotis or Keen's bat	Vespertilionidae	TR
<i>Myotis leibii</i>	small-footed myotis	Vespertilionidae	TR
<i>Myotis lucifugus</i>	little brown bat	Vespertilionidae	ES,TR
<i>Odocoileus virginianus</i>	white-tailed deer	Cervidae	CK,ES,TR
<i>Ondatra zibethicus</i>	muskrat	Muridae	ES,TR
<i>Parascalops breweri</i>	hairy-tailed mole	Talpidae	ES,TR
<i>Peromyscus leucopus</i>	white-footed mouse	Muridae	ES,TR
<i>Peromyscus maniculatus</i>	deer mouse	Muridae	ES,TR
<i>Pipistrellus subflavus</i>	eastern pipistrelle or Georgian bat	Vespertilionidae	TR
<i>Procyon lotor</i>	raccoon	Procyonidae	CK,ES,TR
<i>Rattus norvegicus</i>	Norway rat or common rat	Muridae	TR
<i>Scalopus aquaticus</i>	eastern mole	Talpidae	CK,ES,TR
<i>Sciurus carolinensis</i>	gray squirrel	Sciuridae	TR
<i>Sciurus niger</i>	fox squirrel	Sciuridae	CK,ES,TR
<i>Sorex cinereus</i>	masked shrew	Soricidae	ES,TR
<i>Sorex hoyi</i>	pygmy shrew	Soricidae	ES,TR
<i>Sylvilagus floridanus</i>	eastern cottontail rabbit	Leporidae	CK,ES,TR
<i>Synaptomys cooperi</i>	southern bog lemming	Muridae	TR
<i>Tamias striatus</i>	eastern chipmunk	Sciuridae	CK,ES,TR
<i>Tamiasciurus hudsonicus</i>	red squirrel	Sciuridae	CK,ES,TR
<i>Taxidea tasux</i>	badger	Mustelidae	TR
<i>Urocyon cinereoargenteus</i>	gray fox	Canidae	ES,TR
<i>Vulpes vulpes</i>	red fox	Canidae	ES,TR
<i>Zapus hudsonius</i>	meadow jumping mouse	Dipodidae	ES,TR

LOCATION CODES:

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Appendix H

**Alphabetized List of the Amphibian, Reptilian,
and Mammalian Fauna
for Old Woman Creek Estuary and Watershed,
and Adjacent Tributaries and Waters of Lake Erie
by Common Name**

**ALPHABETIZED LIST OF THE AMPHIBIAN, REPTILIAN, AND MAMMALIAN
FAUNA FOR OLD WOMAN CREEK ESTUARY AND WATERSHED,
AND ADJACENT TRIBUTARIES AND WATERS OF LAKE ERIE
by Common Name**

AMPHIBIANS

COMMON NAME	SCIENTIFIC NAME	FAMILY	LOCATION
bullfrog	<i>Rana catesbeiana</i>	Ranidae	CK,ES,TR
frog, green	<i>Rana clamitans melanota</i>	Ranidae	CK,ES,TR
frog, northern cricket	<i>Acris crepitans</i>	Hylidae	TR
frog, northern leopard	<i>Rana pipiens</i>	Ranidae	ES,TR
frog, pickerel	<i>Rana palustris</i>	Ranidae	TR
frog, western chorus	<i>Pseudacris triseriata</i>	Hylidae	ES,TR
frog, wood	<i>Rana sylvatica</i>	Ranidae	TR
mudpuppy	<i>Necturus maculosus</i>	Proteidae	LE,TR
newt, eastern	<i>Notophthalmus viridescens</i>	Salamandridae	TR
peeper, northern spring	<i>Pseudacris crucifer crucifer</i>	Hylidae	CK,ES,TR
salamander, 4-toed	<i>Hemidactylium scutatum</i>	Plethodontidae	TR
salamander, dusky	<i>Desmognathus fuscus</i>	Plethodontidae	CK,TR
salamander, eastern redback	<i>Plethodon cinereus</i>	Plethodontidae	CK,ES,TR
salamander, hybrid mole	<i>Ambystoma</i>	Ambystomatidae	CK,ES,TR
salamander, Jefferson's	<i>Ambystoma jeffersonianum</i>	Ambystomatidae	TR
salamander, marbled	<i>Ambystoma opacum</i>	Ambystomatidae	TR
salamander, ravine	<i>Plethodon richmondi</i>	Plethodontidae	CK,ES,TR
salamander, red	<i>Pseudotriton ruber</i>	Plethodontidae	CK
salamander, silvery	<i>Ambystoma platineum</i>	Ambystomatidae	TR
salamander, slimy	<i>Plethodon glutinosus</i>	Plethodontidae	CK,ES,TR
salamander, small-mouthed	<i>Ambystoma texanum</i>	Ambystomatidae	TR
salamander, spotted	<i>Ambystoma maculatum</i>	Ambystomatidae	CK,TR
salamander, tiger	<i>Ambystoma tigrinum</i>	Ambystomatidae	TR
salamander, two-lined	<i>Eurycea bislineata</i>	Plethodontidae	CK,TR
toad, American	<i>Bufo americanus</i>	Bufoidea	CK,ES,TR
toad, Fowler's	<i>Bufo woodhousii fowleri</i>	Bufoidea	ES,TR
treefrog, gray	<i>Hyla versicolor</i>	Hylidae	TR

REPTILES

COMMON NAME	SCIENTIFIC NAME	FAMILY	LOCATION
racer, blue	<i>Coluber constrictor foxii</i>	Colubridae	CK,TR
rattlesnake, Massasauga	<i>Sistrurus catenatus</i>	Viperidae	TR
snake, black rat	<i>Elapha obsoleta obsoleta</i>	Colubridae	CK,TR
snake, Butler's garter	<i>Thamnophis butleri</i>	Colubridae	ES,TR
snake, eastern fox	<i>Elapha vulpina gloydi</i>	Colubridae	ES,TR
snake, eastern garter	<i>Thamnophis sirtalis sirtalis</i>	Colubridae	CK,ES,TR
snake, eastern garter (melanistic)	<i>Thamnophis sirtalis sirtalis</i>	Colubridae	ES,TR
snake, eastern hog-nosed	<i>Heterodon platyrhinos</i>	Colubridae	TR
snake, eastern milk	<i>Lampropeltis triangulum triangulum</i>	Colubridae	ES,TR
snake, eastern ribbon	<i>Thamnophis sauritus</i>	Colubridae	TR
snake, Kirtland's	<i>Clonophis kirtlandii</i>	Colubridae	TR
snake, midland brown	<i>Storeria dekayi wrightorum</i>	Colubridae	ES,TR
snake, northern brown	<i>Storeria dekayi dekayi</i>	Colubridae	ES,TR
snake, northern ring-neck	<i>Diadophis punctatus edwardsii</i>	Colubridae	CK,TR
snake, northern water	<i>Nerodia sipedon sipedon</i>	Colubridae	CK,ES,TR
snake, queen	<i>Regina septemvittata</i>	Colubridae	CK,TR
snake, smooth green	<i>Opheodrys vernalis</i>	Colubridae	TR
softshell turtle, spiny	<i>Apalone spiniferus</i>	Trionychidae	ES,TR
turtle, Blanding's	<i>Emydoidea blandingii</i>	Emydidae	ES,TR
turtle, common map	<i>Graptemys geographica</i>	Emydidae	ES,TR
turtle, common musk	<i>Sternotherus odoratus</i>	Kinosternidae	TR
turtle, eastern box	<i>Terrapene carolina carolina</i>	Emydidae	CK,ES,TR
turtle, midland painted	<i>Chrysemys picta marginata</i>	Emydidae	CK,ES,TR
turtle, snapping	<i>Chelydra serpentina</i>	Chelydridae	ES,TR
turtle, spotted	<i>Clemmys guttata</i>	Emydidae	ES,TR

MAMMALS

COMMON NAME	SCIENTIFIC NAME	FAMILY	LOCATION
badger	<i>Taxidea taxus</i>	Mustelidae	TR
bat, big brown	<i>Eptesicus fuscus</i>	Vespertilionidae	TR
bat, hoary	<i>Lasiurus cinereus</i>	Vespertilionidae	TR
bat, little brown	<i>Myotis lucifugus</i>	Vespertilionidae	ES,TR
bat, red	<i>Lasiurus borealis</i>	Vespertilionidae	TR
bat, silver-haired	<i>Lsionycteris noctivagans</i>	Vespertilionidae	TR
beaver	<i>Castor canadensis</i>	Castoridae	ES
bison	<i>Bison bison</i>	Bovidae	CK
chipmunk, eastern	<i>Tamias striatus</i>	Sciuridae	CK,ES,TR
coyote or brush wolf	<i>Canis latrans</i>	Canidae	ES,TR
deer, white-tailed	<i>Odocoileus virginianus</i>	Cervidae	CK,ES,TR
fox, gray	<i>Urocyon cinereoargenteus</i>	Canidae	ES,TR
fox, red	<i>Vulpes vulpes</i>	Canidae	ES,TR
jumping mouse, meadow	<i>Zapus hudsonius</i>	Dipodidae	ES,TR
lemming, southern bog	<i>Synaptomys cooperi</i>	Muridae	TR
mink	<i>Mustela vison</i>	Mustelidae	TR
mole, eastern	<i>Scalopus aquaticus</i>	Talpidae	CK,ES,TR
mole, hairy-tailed	<i>Parascalops breweri</i>	Talpidae	ES,TR
mouse, deer	<i>Peromyscus maniculatus</i>	Muridae	ES,TR
mouse, house	<i>Mus musculus</i>	Muridae	ES,TR
mouse, white-footed	<i>Peromyscus leucopus</i>	Muridae	ES,TR
muskrat	<i>Ondatra zibethicus</i>	Muridae	ES,TR
myotis, Keen's or Keen's bat	<i>Myotis keenii</i>	Vespertilionidae	TR
myotis, small-footed	<i>Myotis leibii</i>	Vespertilionidae	TR
opossum, Virginia	<i>Didelphis virginiana</i>	Didelphidae	CK,ES,TR
pipistrelle, eastern or Georgian bat	<i>Pipistrellus subflavus</i>	Vespertilionidae	TR
rabbit, eastern cottontail	<i>Sylvilagus floridanus</i>	Leporidae	CK,ES,TR
raccoon	<i>Procyon lotor</i>	Procyonidae	CK,ES,TR
rat, Norway or common	<i>Rattus norvegicus</i>	Muridae	TR
shrew, least	<i>Cryptotis parva</i>	Soricidae	TR
shrew, masked	<i>Sorex cinereus</i>	Soricidae	ES,TR
shrew, northern short-tailed	<i>Blarina brevicauda</i>	Soricidae	ES,TR
shrew, pygmy	<i>Sorex hoyi</i>	Soricidae	ES,TR
skunk, striped	<i>Mephitis mephitis</i>	Mustelidae	ES,TR
squirrel, fox	<i>Sciurus niger</i>	Sciuridae	CK,ES,TR
squirrel, gray	<i>Sciurus carolinensis</i>	Sciuridae	TR
squirrel, red	<i>Tamiasciurus hudsonicus</i>	Sciuridae	CK,ES,TR
squirrel, southern flying	<i>Glaucomys volans</i>	Sciuridae	TR
vole, meadow or field mouse	<i>Microtus pennsylvanicus</i>	Muridae	ES,TR
weasel, least	<i>Mustela nivalis</i>	Mustelidae	TR
weasel, long-tailed	<i>Mustela frenata</i>	Mustelidae	ES,TR
woodchuck or groundhog	<i>Marmota monax</i>	Sciuridae	CK,ES,TR

LOCATION CODES:

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Appendix I

Avifauna of Old Woman Creek Estuary and Watershed, and Adjacent Tributaries and Waters of Lake Erie

AVIFAUNA OF OLD WOMAN CREEK ESTUARY AND WATERSHED AND ADJACENT TRIBUTARIES AND WATERS OF LAKE ERIE

PHYLUM CHORDATA CLASS AVES (BIRDS)

	---ABUNDANCE---				HABITAT	RESIDENT	---SOURCE---		STATUS
	Sp	Su	F	W			LOCAL	REGION	
ORDER GAVIIFORMES (loons)									
Family Gaviidae (loons)									
• <i>Gavia immer</i> (Brunnich, 1764) * common loon	U	R	U	O	LE,SR,UM	MG	1,2		
• <i>Gavia pacifica</i> (Lawrence, 1758) * Pacific loon					LE	AC		6	
• <i>Gavia stellata</i> (Pontoppidan, 1763) * red-throated loon	O		O	R	LE	MG	2		
ORDER PODICIPEDIFORMES (grebes)									
Family Podicipedidae (typical grebes)									
• <i>Aechmophorus occidentalis</i> (Lawrence, 1858) * western grebe					LE	AC		6	
• <i>Podiceps auritus</i> (Linnaeus, 1758) * horned grebe	U		U	O	LE,SR,WM	MG	1,2		
• <i>Podiceps grisegena</i> (Boddaert, 1783) * red-necked grebe	R		R	R	LE,SR,WM	MG	2		
• <i>Podiceps nigricollis</i> Brehm, 1831 * eared grebe	R		R	R	LE,WM	MG	2		
• <i>Podilymbus podiceps</i> (Linnaeus, 1758) * pied-billed grebe	C	U	C	O	LE,WM	BR,MG	1,2	7	
ORDER PELECANIFORMES (totipalmate swimmers)									
Family Sulidae (boobies & gannets)									
• <i>Morus bassanus</i> (Linnaeus, 1758) * northern gannet			R	R	LE,WM	MG	2		
Family Pelecanidae (pelicans)									
• <i>Pelecanus erythrorhynchos</i> Gmelin, 1789 * American white pelican					LE,WM	AC,MG	2		
• <i>Pelecanus occidentalis</i> Linnaeus, 1766 * brown pelican					LE	AC	2		
Family Phalacrocoracidae (cormorants)									
• <i>Phalacrocorax auritus</i> (Lesson, 1831) * double-crested cormorant	C	C	C	R	LE,SR,WM	BR,MG	1,2,3	7	S
ORDER CICONIIFORMES (herons, ibises, & storks)									
Family Ardeidae (herons, egrets, & bitterns)									
• <i>Ardea albus</i> (Linnaeus, 1758) * great egret [=common egret]	U	U	O	O	LE,OF,SW,UM	BR,MG	1,2	7	
• <i>Ardea herodias</i> Linnaeus, 1758 * great blue heron	C	C	C	O	LE,OF,SW,WM	BR,MG,YR	1,2	7	
• <i>Botaurus lentiginosus</i> (Rackett, 1813) * American bittern	R	R	R	R	LE,OF,SW,UM	BR,MG	1,2	7	E
• <i>Bubulcus ibis</i> (Linnaeus, 1758) * cattle egret	R	R	R	R	OF,SW,UM	BR,MG	2	7	S
• <i>Butorides striatus</i> (Linnaeus, 1758) * striated heron [=green heron]	U	U	U	U	LE,OF,SW,WM	BR,MG	1,2	7	
• <i>Egretta caerulea</i> (Linnaeus, 1758) * little blue heron	R	R	R	R	LE,SW,WM	BR,MG	2,2	7	S
• <i>Egretta thula</i> (Molina, 1782) * snowy egret	R	R	R	R	LE,SR,SW,UM	BR,MG	2,2	7	S

Sp	---ABUNDANCE---			W	HABITAT	RESIDENT	---SOURCE---		STATUS
	S	F	W				LOCAL	REGION	
	R	R	R		LE,SW,UM	AC,MG	2		
	U	U	U	R	LE,OF,SR,WM	BR,MG	2	7	E
	R	R	R		LE,SR,SW,UM	BR,MG	1,2	7	
	R	R	R		LE,SR,SW,UM	BR,MG	2	7	E
					SW	AC		6	
					LE,SR,WM	AC,MG		4	
					LE,SW,WM	AC,MG	2		
	C	C	C		OF,SR,UW,WM	BR,MG	1,2	7	
					LE,WM	AC,EX	4		
	C	C	C	R	LE,OF,SW,WM	BR,MG	1,2	7	
	O	O	O	O	LE,OF,WM	AC,EX		4	
	O	O	O	O	LE,OF,SR,WM	BR,MG	1,2	7	
	O	O	O	O	LE,OF,SR,WM	BR,MG	1,2	7	
	O	O	O	R	LE,OF,SR,WM	MG	2	7	
	U	U	U	R	LE	AC		6	
	A	A	A	R	LE,OF,SR,WM	BR,MG	1,2	7	
	A	A	A	A	LE,WM	AC,EX,MG	2		
	C	C	C	C	LE,OF,SR,WM	BR,MG,YR	1,2	7	
	U	U	U	O	LE,OF,SR,WM	BR,MG	1,2	7	S
	R	R	R	R	OF	AC,MG		4	
					LE,WM	MG	1,2		
	C	C	C	C	WM AC,EX	AC,EX	4		
	U	U	U	O	LE,OF,WM	MG	1,2		
	U	U	U	O	LE,OF,SR,WM	BR,MG	1,2		

Family Ardeidae (continued)

- *Egretta tricolor* (Muller, 1776) * tricolored heron [= Louisiana heron]
 - *Ixobrychus exilis* (Gmelin, 1789) * least bittern
 - *Nycticorax nycticorax* (Linnaeus, 1758) * black-crowned night-heron
 - *Nyctanassa violacea* (Linnaeus, 1758) * yellow-crowned night-heron
- ### Family Threskiornithidae (ibises & spoonbills)
- *Plegadis chihi* (Vieillot, 1817) * white-faced ibis
 - *Plegadis falcinellus* (Linnaeus, 1766) * glossy ibis
- ### Family Ciconiidae (storks)
- *Mycteria americana* Linnaeus, 1758 * wood stork
- ### Family Cathartidae (American vultures)
- *Cathartes aura* (Linnaeus, 1758) * turkey vulture

ORDER PHOENICOPTERIFORMES (flamingos)

Family Phoenicopteridae (flamingos)

- *Phoenicopterus ruber* Linnaeus, 1758 * greater flamingo

ORDER ANSERIFORMES (waterfowl)

Family Anatidae (swans, geese, & ducks)

- *Aix sponsa* (Linnaeus, 1758) * wood duck
- *Alopochen aegyptiacus* (Linnaeus, 1766) * Egyptian goose
- *Anas acuta* Linnaeus, 1758 * northern pintail
- *Anas americana* Gmelin, 1879 * American wigeon
- *Anas clypeata* Linnaeus, 1758 * northern shoveler
- *Anas crecca* Linnaeus, 1758 * green-winged teal
- *Anas cyanoptera* Vieillot, 1816 * cinnamon teal
- *Anas discors* Linnaeus, 1766 * blue-winged teal
- *Anas penelope* Linnaeus, 1758 * Eurasian wigeon
- *Anas platyrhynchos* Linnaeus, 1758 * mallard
- *Anas rubripes* Brewster, 1902 * American black duck
- *Anas strepera* Linnaeus, 1758 * gadwall
- *Anser anser* (Linnaeus, 1758) * graylag goose
- *Anser albifrons* (Scopoli, 1769) * greater white-fronted goose
- *Anser erythropus* (Linnaeus, 1758) * lesser white-fronted goose
- *Anser indicus* Latham, 1790 * bar-headed goose
- *Aythya affinis* (Eyton, 1838) * lesser scaup
- *Aythya americana* (Eyton, 1838) * redhead

Family Anatidae (continued)

- *Aythya collaris* (Donovan, 1809) * ring-necked duck
- *Aythya fuligula* (Linnaeus, 1758) * tufted duck
- *Aythya marila* (Linnaeus, 1758) * greater scaup
- *Aythya valisineria* (Wilson, 1814) * canvasback
- *Branta bernicla* (Linnaeus, 1758) * brant
- *Branta canadensis* (Linnaeus, 1758) * Canada goose
- *Branta leucopsis* (Bechstein, 1803) * barnacle goose
- *Bucephala albeola* (Linnaeus, 1758) * bufflehead
- *Bucephala clangula* (Linnaeus, 1758) * common goldeneye
- *Bucephala islandica* (Gmelin, 1789) * Barrow's goldeneye
- *Chen caerulescens* (Linnaeus, 1758) * snow goose
- *Chen rossii* (Cassin, 1861) * Ross's goose
- *Clangula hyemalis* (Linnaeus, 1758) * oldsquaw
- *Cygnus atratus* (Latham, 1790) * black swan
- *Cygnus buccinator* Richardson, 1832 * trumpeter swan
- *Cygnus columbianus* (Ord, 1815) * tundra swan [= whistling swan]
- *Cygnus olor* (Gmelin, 1789) * mute swan
- *Dendrocygna bicolor* (Vieillot, 1816) * fulvous whistling-duck
- *Histrionicus histrionicus* (Linnaeus, 1758) * harlequin duck
- *Lophodytes cucullatus* (Linnaeus, 1758) * hooded merganser
- *Melanitta fusca* (Linnaeus, 1758) * white-winged scoter
- *Melanitta nigra* (Linnaeus, 1758) * black scoter
- *Melanitta perspicillata* (Linnaeus, 1758) * surf scoter
- *Mergus merganser* Linnaeus, 1758 * common merganser
- *Mergus serrator* Linnaeus, 1758 * red-breasted merganser
- *Oxyura jamaicensis* (Gmelin, 1789) * ruddy duck
- *Somateria spectabilis* (Linnaeus, 1758) * king eider
- *Tadorna ferruginea* (Pallas, 1764) * ruddy shelduck
- *Tadorna tadorna* (Linnaeus, 1758) * common shelduck

ORDER FALCONIFORMES (diurnal birds of prey)

Family Accipitridae (hawks, kites, & eagles)

Subfamily Pandioninae (ospreys)

- *Pandion haliaetus* (Linnaeus, 1758) * osprey

---ABUNDANCE---			---SOURCE---			RESIDENT	HABITAT	STATUS
Sp	Su	F	W	LOCAL	REGION			
U	R	U	O	1,2		MG	LE,OF,SR,WM	
U	U	U	U	1,2	6	AC	LE	
U	U	U	O	1,2		MG	LE,WM	
U	U	O	O	2,3		MG	LE,WM	
C	C	A	C	1,2	7	BR,MG,YR	LE,OF,SR,WM	
C	C	C	U	1,2	4	AC,EX	LE,OF,WM	
C	C	C	C	1,2		MG	LE,OF,SR,WM	
R	O	O	R	1,2	5,6	AC	LE	
R	O	O	R	1,2		MG	LE,OF,SR,UM	
O	O	O	O	2	6	AC	LE	
O	O	R	O	2		MG	LE,WM	
U	R	R	R	2	4	AC,EX,MG	LE,UM	
R	U	U	R	2	4	AC,MG	LE,WM	E
R	U	R	R	1,2		MG	LE,OF,SR,UM	
R	U	R	R	2	7	BR,MG	LE,SR,WM	
R	U	R	R	2	4	AC,EX,MG	LE,WM	
R	U	R	R	2		AC,MG	LE,WM	
U	R	U	U	1,2	7	BR,MG	LE,OF,SW,WM	
O	O	O	U	2		MG	LE,WM	
R	O	O	R	2		MG	LE,WM	
R	O	O	R	2		MG	LE,WM	
O	R	A	C	1,2		MG	LE,SR,WM	
C	R	C	R	1,2	7	BR,MG	LE,SR,WM	
C	R	R	R	2		AC,MG	LE,WM	
U	R	U	U	1,2	4	AC,EX	LE,WM	
U	R	U	U	1,2	4	AC,EX	LE,WM	
U	R	U	U	1,2		MG	LE,OF,SW,WM	E

Sp	---ABUNDANCE---			HABITAT	RESIDENT	---SOURCE---		STATUS
	Su	F	W			LOCAL	REGION	
U	U	U	U	OF,UW,WM	BR,MG	1,2	7	
R	R	R	R	OF,UW,WM	AC,MG	2		
U	R	U	R	OF,SR,UW,WM	BR,MG	1,2	7	S
R	R	R	R	OF,UW	AC,MG	2,3		
C	C	C	C	OF,SR,UW,WM	BR,MG,YR	1,2	7	
O	O	O	C	OF,SR,UW,WM	MG	1,2		
U	R	U	R	OF,UW,WM	BR,MG	2	7	S
U	R	U	U	OF,SR,UW,WM	BR,MG	2	7	
U	R	U	U	UW	AC		6	
U	R	U	U	LE,OF,SR,WM	BR,MG	1,2	7	E
C	C	C	C	UW	AC	6		X
C	C	C	C	OF,SR,UW,WM	BR,MG	1,2,3	7	E
C	C	C	C	UW	AC		4	
O	O	O	O	OF,SR,UW,WM	MG	2		
O	R	O	R	OF,SR,UW,WM	MG	2		E
C	C	C	C	OF,SR	AC,MG		4	
C	C	C	C	OF,UW,WM	BR,MG,YR	1,2	7	
				OF	IN		4,5	
				OF,WM	AC		4	
R	R	R	R	OF,UW,WM	BR,YR	1,2	7	
				OF	AC		4,5	X
				OF,UW,WM	AC,MG		4,5	
O	O	O	O	OF,UW,WM	AC,IN		4,8	
R	R	R	R	OF,WM	BR	2	7	

Family Accipitridae (continued)

Subfamily Accipitrinae

- *Accipiter cooperii* (Bonaparte, 1828) * Cooper's hawk
- *Accipiter gentilis* (Linnaeus, 1758) * northern goshawk
- *Accipiter striatus* Vieillot, 1807 * sharp-shinned hawk
- *Aquila chrysaetos* (Linnaeus, 1758) * golden eagle
- *Buteo jamaicensis* (Gmelin, 1788) * red-tailed hawk
- *Buteo lagopus* (Pontoppidan, 1763) * rough-legged hawk
- *Buteo lineatus* (Gmelin, 1788) * red-shouldered hawk
- *Buteo platyterus* (Vieillot, 1823) * broad-winged hawk
- *Buteo swainsoni* Bonaparte, 1838 * Swainson's hawk
- *Circus cyaneus* (Linnaeus, 1766) * northern harrier [= marsh hawk]
- *Elanoides forficatus* (Linnaeus, 1758) * swallow-tailed kite
- *Haliaeetus leucocephalus* (Linnaeus, 1766) * bald eagle
- *Ictinia mississippiensis* (Wilson, 1811) * Mississippi kite

Family Falconidae (falcons & caracaras)

- *Falco columbarius* Linnaeus, 1758 * merlin
- *Falco peregrinus* Tunstall, 1771 * peregrine falcon
- *Falco rusticolus* Linnaeus, 1758 * gyrfalcon
- *Falco sparverius* Linnaeus, 1758 * American kestrel [sparrow hawk]

ORDER GALLIFORMES (gallinaceous birds)

Family Phasianidae (pheasants, grouse, & quail)

Subfamily Phasianinae (partridges, francolins, & pheasants)

- *Alectoris chukar* (Gray, 1830) * chukar
- *Perdix perdix* (Linnaeus, 1758) * gray partridge
- *Phasianus colchicus* Linnaeus, 1758 * ring-necked pheasant

Subfamily Tetraoninae (grouse)

- *Bonasa umbellus* (Linnaeus, 1766) * ruffed grouse
- *Tympanuchus cupido* (Linnaeus, 1758) * greater prairie-chicken

Subfamily Meleagridinae (turkeys)

- *Meleagris gallopavo* Linnaeus, 1758 * wild turkey

Subfamily Odontophorinae (new world quails)

- *Colinus virginianus* (Linnaeus, 1758) * northern bobwhite

---ABUNDANCE---			---SOURCE---		RESIDENT	HABITAT	STATUS
Sp	Su	F	LOCAL	REGION			
U	U	U		4,5	AC, MG	OF, WM	
O	O	O	1,2	7	BR, MG	LE, SR, WM	
U	O	O	2	7	BR, MG	LE, OF, WM	
U	O	O		4	AC	WM	
U	O	U		4	AC, MG	WM	
R	R	R	2	7	BR, MG	OF, SR, WM	S
O	O	O	2	7	AC, BR, MG	OF, WM	E
R	O	O	2	7	BR, MG	OF, WM	S
R			2		MG	OF, WM	E
R	R	R			MG	SR	
U	U	U	2		MG	OF, SR, WM	E
C	C	C	1,2	7	BR, MG	OF, SR, WM	
U	O	U	2	4	AC, MG	SR	
U	O	U			MG	OF, SR, WM	
U	O	U			MG	SR, WM	
R				6	AC	LE, SR	
C	C	C	2		MG	OF, SR, WM	
U	O	U	1,2	7	BR, MG	LE, OF, SR, WM	
R	R	R	2		MG	OF, SR, WM	
U	O	O	2		BR, MG	OF, WM	T
U	O	U			AC	SR	
A	O	C	2		MG	LE, OF, SR, WM	
O	O	O	2		MG	OF, SR, WM	
O	O	O	2		MG	OF, SR, WM	
O	O	O	2		MG	OF, SR, WM	

ORDER GRUIFORMES (rails, cranes, & allies)

Family Rallidae (rails, gallinules, & coots)

- *Coturnicops noveboracensis* (Gmelin, 1789) * yellow rail
- *Fulica americana* Gmelin, 1789 * American coot
- *Gallinula chloropus* (Linnaeus, 1758) * common moorhen
- *Laterallus jamaicensis* (Gmelin, 1789) * black rail
- *Porphyryula martinica* (Linnaeus, 1766) * purple gallinule
- *Porzana carolina* (Linnaeus, 1758) * sora
- *Rallus elegans* Audubon, 1834 * king rail
- *Rallus limicola* Vieillot, 1819 * Virginia rail

Family Gruidae (cranes)

- *Grus canadensis* (Linnaeus, 1758) * sandhill crane

ORDER CHARADRIIFORMES (shorebirds, gulls, & alcids)

Family Charadriidae (plovers)

- *Charadrius melodus* Ord, 1824 * piping plover
- *Charadrius semipalmatus* Bonaparte, 1825 * semipalmated plover
- *Charadrius vociferus* Linnaeus, 1758 * killdeer
- *Charadrius wilsonia* Ord, 1814 * Wilson's plover
- *Pluvialis dominica* (Muller, 1776) * American golden-plover
- *Pluvialis squatarola* (Linnaeus, 1758) * black-bellied plover

Family Recurvirostridae (avocets & stilts)

- *Himantopus mexicanus* (Muller, 1776) * black-necked stilt
- *Recurvirostra americana* Gmelin, 1789 * American avocet

Family Scolopacidae (sandpipers & allies)

Subfamily Scolopacinae (sandpipers, turnstones, & snipes)

- *Actitis macularia* (Linnaeus, 1766) * spotted sandpiper
- *Arenaria interpres* (Linnaeus, 1758) * ruddy turnstone
- *Bartramia longicauda* (Bechstein, 1812) * upland sandpiper
- *Calidris acuminata* (Horsfield, 1821) * sharp-tailed sandpiper
- *Calidris alba* (Pallas, 1764) * sanderling
- *Calidris alpina* (Linnaeus, 1758) * dunlin
- *Calidris bairdii* (Coues, 1861) * Baird's sandpiper
- *Calidris canutus* (Linnaeus, 1758) * red knot
- *Calidris fuscicollis* (Vieillot, 1819) * white-rumped sandpiper

- Family Scolopacidae**
- Subfamily Scolopacinae (continued)**
- *Calidris himantopus* (Bonaparte, 1826) * stilt sandpiper
 - *Calidris maritima* (Brunnich, 1764) * purple sandpiper
 - *Calidris mauri* (Cabanis, 1857) * western sandpiper
 - *Calidris melanotos* (Vieillot, 1819) * pectoral sandpiper
 - *Calidris minutilla* (Vieillot, 1819) * least sandpiper
 - *Calidris pusilla* (Linnaeus, 1766) * semipalmated sandpiper
 - *Catoptrophorus semipalmatus* (Gmelin, 1789) * willet
 - *Gallinago gallinago* (Linnaeus, 1758) * common snipe
 - *Limnodrolus scolopaceus* (Say, 1823) * long-billed dowitcher
 - *Limnodromus griseus* (Gmelin, 1789) * short-billed dowitcher
 - *Limosa fedoa* (Linnaeus, 1758) * marbled godwit
 - *Limosa haemastica* (Linnaeus, 1758) * Hudsonian godwit
 - *Numenius borealis* (Forster, 1772) * Eskimo curlew
 - *Numenius phaeopus* (Linnaeus, 1758) * whimbrel
 - *Philomachus pugnax* (Linnaeus, 1758) * ruff
 - *Scolopax minor* Gmelin, 1789 * American woodcock
 - *Tringa erythropus* (Pallas, 1764) * spotted redshank
 - *Tringa flavipes* (Gmelin, 1789) * lesser yellowlegs
 - *Tringa melanoleuca* (Gmelin, 1789) * greater yellowlegs
 - *Tringa solitaria* Wilson, 1813 * solitary sandpiper
 - *Tryngites subruficollis* (Vieillot, 1819) * buff-breasted sandpiper
- Subfamily Phalaropodinae (phalaropes)**
- *Phalaropus fulicaria* (Linnaeus, 1758) * red phalarope
 - *Phalaropus lobatus* (Linnaeus, 1758) * red-necked phalarope
 - *Phalaropus tricolor* (Vieillot, 1819) * Wilson's phalarope
- Family Laridae (gulls, terns, & allies)**
- Subfamily Stercorariinae (jaegers & skuas)**
- *Stercorarius parasiticus* (Linnaeus, 1758) * parasitic jaeger
 - *Stercorarius pomarinus* (Temminik, 1815) * Pomarine jaeger
- Subfamily Larinae (gulls)**
- *Larus argentatus* Pontoppidan, 1763 * herring gull
 - *Larus atricilla* Linnaeus, 1758 * laughing gull
 - *Larus californicus* Lawrence, 1854 * California gull
 - *Larus canus* Linnaeus, (1858) * mew gull

---ABUNDANCE---			---SOURCE---		RESIDENT	LOCAL	REGION	STATUS
Sp	Su	F	W	HABITAT				
O	O	O	O	O	MG	2		
					MG, WR	2		
O	U	U	O	OF, SR, WM	MG	2		
C	U	C	C	OF, SR, WM	MG	2		
C	U	C	C	OF, SR, WM	MG	2		
C	U	C	C	OF, SR, WM	MG	2		
O	R	O	O	SR, WM	MG	2		
U	O	U	U	OF, SR, WM	BR, MG	2	7	S
R	R	U	U	OF, SR, WM	MG	2		
R	R	R	R	OF, SR, WM	MG	2		
R	R	U	U	OF, SR, WM	MG	2		
R	R	R	R	OF, SR, WM	AC, MG	2	4,5	
R	R	R	R	OF, SR, WM	MG	2		
R	R	R	R	OF, SR, WM	MG	2		
U	U	U	U	OF, WM	BR, MG	2	7	
				SR	AC	2		
U	O	U	U	OF, SR, WM	MG	2		
U	O	U	U	OF, SR, WM	MG	2		
U	U	U	O	OF, SR, WM	MG	2		
					MG	2		
O	R	O	R	LE, SR, WM	MG	2		
O	R	O	O	LE, SR, WM	MG	2		
O	R	O	O	LE, SR, WM	MG	2		
					MG, WR	2		
					MG	2		
A	C	A	A	LE, OF, SR, WM	BR, MG, YR	1,2	7	
R	O	O	R	LE, OF, SR, WM	AC, MG	2		
R	R	R	R	LE, SR	MG, WR	2	4	
				SR	AC	2	6	

Family Laridae

Subfamily Larinae (continued)

- *Larus delawarensis* (Ord, 1815) * ring-billed gull
- *Larus fuscus* Linnaeus, 1758 * lesser black-backed gull
- *Larus glaucooides* Meyer, 1822 * Iceland gull
- *Larus heermanni* Cassin, 1852 * Heermann's gull
- *Larus hyperboreus* Gunnerus, 1767 * glaucous gull
- *Larus marinus* Linnaeus, 1758 * great black-backed gull
- *Larus minutus* Pallas, 1776 * little gull
- *Larus philadelphia* (Ord, 1815) * Bonaparte's gull
- *Larus pipixcan* Wagler, 1831 * Franklin's gull
- *Larus ridibundus* Linnaeus, 1766 * black-headed gull
- *Larus thayeri* Brooks, 1915 * Thayer's gull
- *Rissa tridactyla* (Linnaeus, 1758) * black-legged kittiwake
- *Xema sabini* (Sabine, 1819) * Sabine's gull

Subfamily Sterninae (terns)

- *Chlidonias niger* (Linnaeus, 1758) * black tern
- *Sterna antillarum* (Lesson, 1847) * least tern
- *Sterna caspia* Pallas, 1770 * Caspian tern
- *Sterna forsteri* Nuttall, 1834 * Forster's tern
- *Sterna hirundo* Linnaeus, 1758 * common tern
- *Sterna paradisaea* Pontoppidan, 1763) * Arctic tern

Family Alcidae (auks, murres, puffins, & guillemots)

- *Fratercula arctica* (Linnaeus, 1758) * Atlantic puffin
- *Synthliboramphus antiquus* (Gmelin, 1789) * ancient murrelet
- *Uria lomvia* (Linnaeus, 1758) * thick-billed murre

ORDER COLUMBIFORMES (pigeons & allies)

Family Columbidae (pigeons & doves)

- *Columba livia* Gmelin, 1789 * rock dove
- *Ectopistes migratorius* (Linnaeus, 1766) * passenger pigeon
- *Zenaidura macroura* (Linnaeus, 1758) * mourning dove

---ABUNDANCE---			HABITAT		RESIDENT	LOCAL	---SOURCE---	STATUS
Sp	Su	F	W				REGION	
A	A	A	A	A	LE,OF,SR,WM	BR,MG,YR	7	
O	U	O	O	LE,SR	MG,WR		4	
O	O	O	U	LE,SR	AC,MG		6	
O	O	O	U	SR	AC			
O	O	O	U	LE,SR	MG			
O	R	O	C	LE,SR	MG			
O	R	O	R	LE,SR,WM	AC,MG			
C	O	A	O	LE,OF,SR,WM	MG,YR			
R	R	O	R	LE,OF,SR,WM	MG			
R	R	R	R	LE,SR	MG,WR			
O	O	O	U	LE,SR	MG			
R	O	O	O	LE,SR,WM	AC,MG			
R	R	R	R	LE,SR,WM	AC,MG			
O	O	O	O	LE,OF,SR,WM	BR,MG		7	E
R	R	R	R	LE,OF,SR,WM	MG			
C	O	C	C	LE,OF,SR,WM	MG			
C	O	C	R	LE,SR,WM	MG			
C	O	C	R	LE,OF,SR,WM	BR,MG		7	E
				SR	AC		6	
				SR	AC		5	
				LE	AC		4	
				LE,SR	AC,MG		4	
A	A	A	A	OF,SR,UW,WM	BR,MG,YR		7	
				OF,UW	EXTINCT		4	Z
A	A	A	A	OF,SR,UW,WM	BR,MG,YR		7	

- ORDER CUCULIFORMES (cuckoos & allies)**
- Family Cuculidae (cuckoos, roadrunners, & anis)**
- *Coccyzus americanus* (Linnaeus, 1758) * yellow-billed cuckoo
- *Coccyzus erythrophthalmus* (Wilson, 1811) * black-billed cuckoo
- *Crotophaga sulcirostris* Swainson, 1827 * groove-billed ani

- ORDER STRIGIFORMES (owls)**
- Family Tytonidae (barn-owls)**
- *Tyto alba* (Scopoli, 1769) * barn-owl
- Family Strigidae (typical owls)**
- *Aegolius acadicus* (Gmelin, 1788) * northern saw-whet owl
- *Asio flammeus* (Pontoppidan, 1763) * short-eared owl
- *Asio otus* (Linnaeus, 1758) * long-eared owl
- *Athene cucularia* (Molina, 1782) * burrowing owl
- *Bubo virginianus* (Gmelin, 1788) * great horned owl
- *Nyctea scandiaca* (Linnaeus, 1758) * snowy owl
- *Otus asio* (Linnaeus, 1758) * eastern screech-owl
- *Strix nebulosa* Forster, 1772 * great gray owl
- *Strix varia* Barton, 1799 * barred owl
- *Surnia ulula* (Linnaeus, 1758) * northern hawk owl

- ORDER CAPRIMULGIFORMES (goatsuckers & allies)**
- Family Caprimulgidae (goatsuckers & nightjars)**
- *Caprimulgus vociferus* Wilson, 1812 * whip-poor-will
- *Chordeiles minor* (Forster, 1771) * common nighthawk

- ORDER APODIFORMES (swifts & hummingbirds)**
- Family Apodidae (swifts)**
- *Chaetura pelagica* (Linnaeus, 1758) * chimney swift
- Family Trochilidae (hummingbirds)**
- *Archilochus colubris* (Linnaeus, 1758) * ruby-throated hummingbird

- ORDER CORACIFORMES (rollers, kingfishers, & allies)**
- Family Alcedinidae (kingfishers)**
- *Ceryle alcyon* (Linnaeus, 1758) * belted kingfisher

---ABUNDANCE---			---SOURCE---			RESIDENT	HABITAT	W	F	Su	Sp
LOCAL	REGION	STATUS	LOCAL	REGION	STATUS						
2	7		BR, MG	OF, SR, UW, WM					U	U	
2	7		BR, MG	OF, UW, WM					O	O	
	4		AC	SR							
2	7	E	BR	OF, UW				R	R	R	
2	7	S	BR, MG	OF, UW, WM				R	R	R	
2	7	S	BR, MG	OF, UW, WM				O	O	O	
2	7	S	BR, MG	OF, UW				O	R	R	
	5		AC	OF							
1,2	7		BR, MG, YR	OF, UW, WM				C	C	C	
2			MG, WR	OF, SR, UW, WM				O	R	R	
2	7		BR, YR	OF, UW, WM				C	C	C	
	4		AC, MG	SR, UW							
2	7		BR, MG	OF, UW, WM				R	R	R	
	4		AC	SR, UW, WM							
2	7		BR, MG	OF, UW, WM					R	R	
2	7		BR, MG	OF, UW, WM				C	C	C	
	7		BR, MG	OF, UW, WM							
1,2	7		BR, MG	OF, SR, UW, WM				C	C	C	
1,2	7		BR, MG	OF, SR, UW, WM				C	C	C	
1,2	7		BR, MG	OF, SR, UW, WM				C	C	C	
1,2	7		BR, MG	LE, SR, ST, SW				U	C	C	

	---ABUNDANCE---			HABITAT		RESIDENT	---SOURCE---		STATUS
	Sp	Su	F	W	LOCAL		REGION		
ORDER PICIFORMES (woodpeckers & allies)									
Family Picidae (woodpeckers & wrynecks)									
• <i>Colaptes auratus</i> (Linnaeus, 1758) * northern flicker	C	C	C	O	OF,SR,UW,WM	BR,MG,YR	1,2	7	
• <i>Dryocopus pileatus</i> (Linnaeus, 1758) * pileated woodpecker	R	R	R	R	OF,SW,UW	BR	2	7	
• <i>Melanerpes carolinus</i> (Linnaeus, 1758) * red-bellied woodpecker	U	U	U	U	OF,UW,WM	BR,MG	1,2	7	
• <i>Melanerpes erythrocephalus</i> (Linnaeus, 1758) * red-headed woodpecker	U	U	U	R	OF,UW	BR,MG	1,2	7	
• <i>Picoides arcticus</i> (Swainson, 1832) * black-backed woodpecker					UW	AC,MG		4,5	
• <i>Picoides pubescens</i> (Linnaeus, 1766) * downy woodpecker	C	C	C	C	OF,UW,WM	BR,MG,YR	1,2	7	
• <i>Picoides villosus</i> (Linnaeus, 1766) * hairy woodpecker	C	C	C	C	OF,UW	BR,MG,YR	2	7	
• <i>Sphyrapicus varius</i> (Linnaeus, 1766) * yellow-bellied sapsucker	U	R	U	R	OF,UW	MG	1,2		E
ORDER PASSERIFORMES (perching birds)									
Family Tyrannidae (tyrant flycatchers)									
Subfamily Fluvicolinae (fluvicoline flycatchers)									
• <i>Contopus cooperi</i> (Swainson, 1832) * olive-sided flycatcher	U	R	O		OF,SR,UW,WM	MG	2		
• <i>Contopus virens</i> (Linnaeus, 1766) * eastern wood-pewee	C	C	C		OF,SR,UW,WM	BR,MG	2	7	
• <i>Empidonax alorum</i> Brewster, 1895 * alder flycatcher	O	R	O		SW,WM	BR	2	7	
• <i>Empidonax flaviventris</i> (Baird & Baird, 1843) * yellow-bellied flycatcher	U	R	U		OF,SR,UW,WM	MG	2		
• <i>Empidonax minimus</i> (Baird & Baird, 1843) * least flycatcher	C	U	U		OF,SR,UW,WM	BR,MG	2	7	
• <i>Empidonax traillii</i> (Audubon, 1828) * willow flycatcher	C	C	O		OF,SR,UW,WM	BR,MG	2	7	
• <i>Empidonax virescens</i> (Vieillot, 1818) * Acadian flycatcher	C	C	U		OF,SR,UW,WM	BR,MG	2	7	
• <i>Pyrocephalus rubinus</i> (Boddaert 1783) * vermilion flycatcher	R				OF,SW	AC	2	6	
• <i>Sayornis phoebe</i> (Latham, 1790) * eastern phoebe	C	U	O	R	OF,SR,UW,WM	BR,MG	2	7	
Subfamily Tyranninae (kingbirds & allies)									
• <i>Myiarchus crinitus</i> (Linnaeus, 1758) * great crested flycatcher	C	C	U		OF,SR,UW,WM	BR,MG	2	7	
• <i>Tyrannus verticalis</i> Say, 1823 * western kingbird	C	C	C		UW	AC,MG	1,2	4,5	
Family Alaudidae (larks)									
• <i>Eremophila alpestris</i> (Linnaeus, 1758) * horned lark	C	C	C	C	OF,SR,WM	BR,MG,YR	1,2	7	
Family Hirundinidae (swallows)									
• <i>Hirundo rustica</i> Linnaeus, 1758 * barn swallow	C	C	C		OF,SR,UW,WM	BR,MG	1,2	7	
• <i>Petrochelidon pyrrhonota</i> (Vieillot, 1817) * cliff swallow	O	R	O		OF,SR,UW,WM	BR,MG	2	7	
• <i>Progne subis</i> (Linnaeus, 1758) * purple martin	C	C	C		OF,SR,UW,WM	BR,MG	2	7	
• <i>Ripariariaria</i> (Linnaeus, 1758) * bank swallow	O	O	O		OF,SR,UW,WM	BR,MG	1,2	7,8	S
• <i>Stelgidopteryx serripennis</i> (Audubon, 1838) * northern rough-winged swallow	C	C	C		OF,SR,UW,WM	BR,MG	1,2	7	
• <i>Tachycineta bicolor</i> (Vieillot, 1808) * tree swallow	C	C	C	R	LE,OF,UW,WM	BR,MG	1,2	7	

	---ABUNDANCE---				HABITAT	RESIDENT	---SOURCE---		STATUS
	Sp	Su	F	W			LOCAL	REGION	
Family Corvidae (jays, magpies & crows)	C	C	C	C	OF,SR,UW,WM	BR,MG,YR	1,2	7	
• <i>Corvus brachyrhynchos</i> Brehm, 1822 * American crow									
• <i>Corvus corax</i> Linnaeus, 1758 * common raven					LE,SR,UW	AC,MG	1,2	4	X
• <i>Cyanocitta cristata</i> (Linnaeus, 1758) * blue jay	A	A	A	A	OF,SR,UW,WM	BR,MG,YR		7	
• <i>Pica pica</i> (Linnaeus, 1758) * black-billed magpie					LE,SW,WM	AC		4	
Family Paridae (chickadees & titmice)	C	C	C	C	OF,UW,WM	BR,MG,YR	1,2	7	
• <i>Baeolophus bicolor</i> (Linnaeus, 1766) * tufted titmouse					OF,SR,UW,WM	BR,MG,YR		7	
• <i>Poecile atricapillus</i> (Linnaeus, 1766) * black-capped chickadee	C	C	C	C	OF,SR,UW,WM	BR,MG,YR	1,2	7	
• <i>Poecile hudsonicus</i> (Forster, 1772) * boreal chickadee					OF,SR,UW,WM	MG		4	
Family Sittidae (nuthatches)	U		U	U	OF,SR,UW	BR,MG	2	7	
• <i>Sitta canadensis</i> Linnaeus, 1766 * red-breasted nuthatch					OF,UW,WM	BR,MG,YR	2	7	
• <i>Sitta carolinensis</i> Latham, 1790 * white-breasted nuthatch	C	C	C	C	OF,SR,UW,WM	BR,MG	1,2	7	
Family Certhiidae (creepers)	U	R	U	O	OF,SR,UW,WM	BR,MG	2	7	
• <i>Certhia americana</i> Bonaparte, 1838 * brown creeper									
Family Troglodytidae (wrens)	U	U	U	R	SR,WM	BR,MG	2	7	S
• <i>Cistothorus palustris</i> (Wilson, 1810) * marsh wren					OF,WM	BR	2	7	E
• <i>Cistothorus platensis</i> (Latham, 1790) * sedge wren	R	R	R	R	OF	AC		6	E
• <i>Salpinctes obsoletus</i> (Say, 1823) * rock wren					OF,UW	MG	2	7	E
• <i>Thryomanes bewickii</i> (Audubon, 1827) * Bewick's wren	O	O	O	O	OF,SR,UW,WM	BR,MG,YR	2	7	
• <i>Thryothorus ludovicianus</i> (Latham, 1790) * Carolina wren	C	C	C	C	OF,SR,UW,WM	BR,MG	1,2	7	
• <i>Troglodytes aedon</i> Vieillot, 1808 * house wren	C		O	O	OF,UW	MG,WR	1,2		E
• <i>Troglodytes troglodytes</i> (Linnaeus, 1758) * winter wren	C	C	C	C	OF,UW,WM	BR,MG	2	7	
Family Sylviidae (gnatcatchers)	C	C	C	C	OF,UW,WM	BR,MG	2	7	
• <i>Polioptila caerulea</i> (Linnaeus, 1766) * blue-gray gnatcatcher									
Family Regulidae (kinglets)	C	C	C	C	OF,UW,WM	MG	2		
• <i>Regulus calendula</i> (Linnaeus, 1766) * ruby-crowned kinglet									
• <i>Regulus satrapa</i> Lichtenstein, 1823 * golden-crowned kinglet									
Family Turdidae (thrushes)	U	O	U	R	OF,UW,WM	BR,MG	1,2	7	E
• <i>Catharus fuscescens</i> (Stephens, 1817) * veery					OF,UW,WM	BR,MG	2	7	
• <i>Catharus guttatus</i> (Pallas, 1811) * hermit thrush	U	U	U	U	OF,UW,WM	MG	2		
• <i>Catharus minimus</i> (Lafresnaye, 1848) * gray-cheeked thrush	U	U	U	U	OF,SR,UW,WM	MG	2		
• <i>Catharus ustulatus</i> (Nuttall, 1840) * Swainson's thrush	C	C	C	C	OF,UW,WM	BR,MG	1,2	7	
• <i>Hylocichla mustelina</i> (Gmelin, 1789) * wood thrush					UW	WR		5	
• <i>Ixoreus naevius</i> (Gmelin, 1789) * varied thrush					SR,UW,WM	AC		4	
• <i>Myadestes townsendi</i> (Audubon, 1838) * Townsend's solitaire					WM AC		6		
• <i>Oenanthe oenanthe</i> (Linnaeus, 1758) * northern wheatear									

- *Corvus brachyrhynchos* Brehm, 1822 * American crow
 - *Corvus corax* Linnaeus, 1758 * common raven
 - *Cyanocitta cristata* (Linnaeus, 1758) * blue jay
 - *Pica pica* (Linnaeus, 1758) * black-billed magpie
- Family Paridae (chickadees & titmice)**
- *Baeolophus bicolor* (Linnaeus, 1766) * tufted titmouse
 - *Poecile atricapillus* (Linnaeus, 1766) * black-capped chickadee
 - *Poecile hudsonicus* (Forster, 1772) * boreal chickadee
- Family Sittidae (nuthatches)**
- *Sitta canadensis* Linnaeus, 1766 * red-breasted nuthatch
 - *Sitta carolinensis* Latham, 1790 * white-breasted nuthatch
- Family Certhiidae (creepers)**
- *Certhia americana* Bonaparte, 1838 * brown creeper
- Family Troglodytidae (wrens)**
- *Cistothorus palustris* (Wilson, 1810) * marsh wren
 - *Cistothorus platensis* (Latham, 1790) * sedge wren
 - *Salpinctes obsoletus* (Say, 1823) * rock wren
 - *Thryomanes bewickii* (Audubon, 1827) * Bewick's wren
 - *Thryothorus ludovicianus* (Latham, 1790) * Carolina wren
 - *Troglodytes aedon* Vieillot, 1808 * house wren
 - *Troglodytes troglodytes* (Linnaeus, 1758) * winter wren
- Family Sylviidae (gnatcatchers)**
- *Polioptila caerulea* (Linnaeus, 1766) * blue-gray gnatcatcher
- Family Regulidae (kinglets)**
- *Regulus calendula* (Linnaeus, 1766) * ruby-crowned kinglet
 - *Regulus satrapa* Lichtenstein, 1823 * golden-crowned kinglet
- Family Turdidae (thrushes)**
- *Catharus fuscescens* (Stephens, 1817) * veery
 - *Catharus guttatus* (Pallas, 1811) * hermit thrush
 - *Catharus minimus* (Lafresnaye, 1848) * gray-cheeked thrush
 - *Catharus ustulatus* (Nuttall, 1840) * Swainson's thrush
 - *Hylocichla mustelina* (Gmelin, 1789) * wood thrush
 - *Ixoreus naevius* (Gmelin, 1789) * varied thrush
 - *Myadestes townsendi* (Audubon, 1838) * Townsend's solitaire
 - *Oenanthe oenanthe* (Linnaeus, 1758) * northern wheatear

---ABUNDANCE---			---SOURCE---			RESIDENT			LOCAL			REGION			STATUS		
Sp	Su	F	W	HABITAT	RESIDENT	LOCAL	REGION	STATUS	LOCAL	REGION	STATUS	LOCAL	REGION	STATUS	LOCAL	REGION	STATUS
U	U	U	O	OF,SR,UW,WM	BR,MG	2	7		2	7							
A	A	A	U	OF,SR,UW,WM	BR,MG	1,2	7		1,2	7							
C	C	C	R	OF,SR,UW,WM	BR,MG	1,2	7		1,2	7							
R	R	R	R	OF,SR,UW,WM	BR,MG	2	7		2	7							
U	U	U	R	OF,SR,UW,WM	BR,MG	1,2	7		1,2	7							
U	U	U	U	OF,SR,WM	MG	2			2								
C	C	C	U	OF,UW,WM	BR,MG	1,2	7		1,2	7							
R	R	R	R	UW	AC,MG	4											
R	R	R	O	OF,SR,UW,WM	MG	2			2								
R	R	R	R	OF,SR,UW,WM	BR,MG	2			2								
A	A	A	A	OF,SR,UW,WM	BR,MG,YR	1,2	7		1,2	7							
U	U	U	R	OF,UW	BR	2			2								
C	C	C	U	OF,UW,WM	BR,MG	2			2								
O	O	O	C	OF,SR,UW,WM	BR,MG	2			2								
C	C	C	O	OF,UW,WM	BR,MG	1,2	7,8		1,2	7							
O	O	O	O	OF,SR,UW,WM	MG	2			2								
U	U	U	U	OF,UW,WM	BR,MG	2			2								
U	U	U	U	OF,UW,WM	MG	2			2								
C	C	C	C	OF,UW,WM	MG	1,2			1,2								
U	U	U	U	UW,WM	BR,MG	2			2								
C	C	C	O	OF,SR,UW,WM	MG	1,2			1,2								
R	R	R	R	OF,UW	MG	2			2								
O	O	O	U	OF,UW	BR,MG	1,2			1,2								
U	U	U	U	OF,SR,UW,WM	MG	1,2			1,2								
R	R	R	R	OF,UW	MG	2			2								
U	U	U	U	OF,SR,UW,WM	MG	1,2			1,2								
R	R	R	R	OF,UW	MG	2			2								

Family Turdidae (continued)

- *Sialia sialis* (Linnaeus, 1758) * eastern bluebird
- *Turdus migratorius* Linnaeus, 1766 * American robin
- Family Mimidae (mockingbirds & thrashers)**
- *Dumetella carolinensis* (Linnaeus, 1766) * gray catbird
- *Mimus polyglottos* (Linnaeus, 1758) * northern mockingbird
- *Toxostoma rufum* (Linnaeus, 1758) * brown thrasher
- Family Motacillidae (wagtails & pipits)**
- *Anthus spinoletta* (Linnaeus, 1758) * water pipit
- Family Bombycillidae (waxwings)**
- *Bombycilla cedrorum* (Vieillot, 1808) * cedar waxwing
- *Bombycilla garrulus* (Linnaeus, 1758) * Bohemian waxwing
- Family Laniidae (shrikes)**
- *Lanius excubitor* Linnaeus, 1758 * northern shrike
- *Lanius ludovicianus* Linnaeus, 1766 * loggerhead shrike
- Family Sturnidae (starlings)**
- *Sturnus vulgaris* Linnaeus, 1758 * European starling
- Family Vireonidae (vireos)**
- *Vireo bellii* Audubon, 1844 * Bell's vireo
- *Vireo flavifrons* Vieillot, 1808 * yellow-throated vireo
- *Vireo gilvus* (Vieillot, 1808) * warbling vireo
- *Vireo griseus* (Boddaert, 1783) * white-eyed vireo
- *Vireo olivaceus* (Linnaeus, 1766) * red-eyed vireo
- *Vireo philadelphicus* (Cassin, 1851) * Philadelphia vireo
- *Vireo solitarius* (Wilson, 1810) * blue-headed vireo [=solitary vireo]
- Family Parulidae (wood-warblers)**
- *Dendroica caerulescens* (Gmelin, 1789) * black-throated blue warbler
- *Dendroica castanea* (Wilson, 1810) * bay-breasted warbler
- *Dendroica cerulea* (Wilson, 1810) * cerulean warbler
- *Dendroica coronata* (Linnaeus, 1766) * yellow-rumped warbler
- *Dendroica discolor* (Vieillot, 1808) * prairie warbler
- *Dendroica dominica* (Linnaeus, 1766) * yellow-throated warbler
- *Dendroica fusca* (Muller, 1776) * Blackburnian warbler
- *Dendroica kirtlandii* (Baird, 1852) * Kirtland's warbler

Subfamily Parulidae (continued)

- *Dendroica magnolia* (Wilson, 1811) * magnolia warbler
- *Dendroica nigrescens* (Townsend, 1811) * black-throated gray warbler
- *Dendroica palmarum* (Gmelin, 1789) * palm warbler
- *Dendroica pensylvanica* (Linnaeus, 1766) * chestnut-sided warbler
- *Dendroica petechia* (Linnaeus, 1766) * yellow warbler
- *Dendroica pinus* (Wilson, 1811) * pine warbler
- *Dendroica striata* (Forster, 1772) * blackpoll warbler
- *Dendroica tigrina* (Gmelin, 1789) * Cape May warbler
- *Dendroica townsendi* (Townsend, 1837) * Townsend's warbler
- *Dendroica virens* (Gmelin, 1789) * black-throated green warbler
- *Geothlypis trichas* (Linnaeus, 1766) * common yellowthroat
- *Helminthos vermivorus* (Gmelin, 1789) * worm-eating warbler
- *Icteria virens* (Linnaeus, 1758) * yellow-breasted chat
- *Mniotilta varia* (Linnaeus, 1766) * black-and-white warbler
- *Oporornis agilis* (Wilson, 1812) * Connecticut warbler
- *Oporornis formosus* (Wilson, 1811) * Kentucky warbler
- *Oporornis philadelphia* (Wilson, 1810) * mourning warbler
- *Parula americana* (Linnaeus, 1758) * northern parula
- *Protonotaria citrea* (Boddaert, 1783) * prothonotary warbler
- *Seiurus aurocapillus* (Linnaeus, 1766) * ovenbird
- *Seiurus motacilla* (Vieillot, 1808) * Louisiana waterthrush
- *Seiurus noveboracensis* (Gmelin, 1789) * northern waterthrush
- *Setophaga ruticilla* (Linnaeus, 1758) * American redstart
- *Vermivora celata* (Say, 1823) * orange-crowned warbler
- *Vermivora chrysoptera* (Linnaeus, 1766) * golden-winged warbler
- *Vermivora chrysoptera x pinus* (dominant) * Brewster's warbler
- *Vermivora chrysoptera x pinus* (recessive) * Lawrence's warbler
- *Vermivora peregrina* (Wilson, 1811) * Tennessee warbler
- *Vermivora pinus* (Linnaeus, 1766) * blue-winged warbler
- *Vermivora ruficapilla* (Wilson, 1811) * Nashville warbler
- *Wilsonia canadensis* (Linnaeus, 1766) Canada warbler
- *Wilsonia citrina* (Boddaert, 1783) * hooded warbler
- *Wilsonia pusilla* (Wilson, 1811) * Wilson's warbler

---ABUNDANCE---			---SOURCE---			RESIDENT	HABITAT	W	R	LOCAL	REGION	STATUS
Sp	Su	F	LOCAL	REGION								
U		U	1,2	7	BR, MG	OF, SR, UW, WM					7	E
U		U	2	6	AC	OF, UW					6	
U	O	U	1,2	7	MG	OF, SR, UW, WM					7	
C	C	C	1,2	7	BR, MG	OF, UW, WM					7	
O		U			1,2	UW, MG						
O		C	2		MG	OF, UW, WM						
U		U	2	6	AC	UW					6	
U		U	2		MG	OF, SR, UW, WM						
C	C	C	1,2	7	BR, MG	OF, SR, UW, WM		R			7	
R	R	R	2		MG	UW, WM						
U	U	U	2		BR, MG	OF, UW, WM						
U	R	R	2		BR, MG	OF, SR, UW, WM						
R	R	R	2		MG	UW, WM						
R	R	R	1,2	7	BR, MG	OF, UW, WM					7	
O	R	O	2		BR, MG	UW, WM						
U	U	U	1,2	7	MG	OF, UW						
U	R	U	2		BR, MG	UW, WM						
U	R	U	2		MG	UW, WM						E
C	C	C	2		BR, MG	OF, UW, WM						
O	O	R	2		MG	OF, UW		R				
O	R	R	2		BR, MG	UW, WM						E
C		C	2		AC	OF, UW						
C		C	2		AC	OF, UW						
C	U	C	2		MG	LE, SR, UW, WM						
U	U	U	1,2	7	BR, MG	UW					7	
U	U	U	2		MG	LE, SR, UW, WM						
U	U	U	2		BR, MG	UW, WM						E
U	O	U	2		BR, MG	UW, WM						
U	U	U	2		BR, MG	UW, WM						
U	U	U	1,2	7	MG	UW, WM					7	

- Family Family Thraupidae (tanagers)**
- *Piranga ludoviciana* (Wilson, 1811) * western tanager
- *Piranga olivacea* (Gmelin, 1789) * scarlet tanager
- *Piranga rubra* (Linnaeus, 1758) * summer tanager
- Family Cardinalidae (cardinals)**
- *Cardinalis cardinalis* (Linnaeus, 1758) * northern cardinal
- *Guiraca caerulea* (Linnaeus, 1758) * blue grosbeak
- *Passerina cyanea* (Linnaeus, 1766) * indigo bunting
- *Pheucicus ludovicianus* (Linnaeus, 1766) * rose-breasted grosbeak
- *Spiza americana* (Gmelin, 1789) * dickcissel
- Family Emberizidae (American sparrows)**
- *Aimophila aestivalis* (Lichtenstein, 1823) * Bachman's sparrow
- *Ammodramus bairdii* (Audubon, 1844) * Baird's sparrow
- *Ammodramus caudacutus* (Gmelin, 1788) * saltmarsh sharp-tailed sparrow
- *Ammodramus henslowii* (Audubon, 1829) * Henslow's sparrow
- *Ammodramus leconteii* (Audubon, 1843) * Le Conte's sparrow
- *Ammodramus savannarum* (Gmelin, 1789) * grasshopper sparrow
- *Calcarius lapponicus* (Linnaeus, 1758) * Lapland longspur
- *Calcarius pictus* (Swainson, 1832) * Smith's longspur
- *Chondestes grammacus* (Say, 1823) * lark sparrow
- *Junco hyemalis* (Linnaeus, 1758) * dark-eyed junco
- *Melospiza georgiana* (Latham, 1790) * swamp sparrow
- *Melospiza lincolnhii* (Audubon, 1834) * Lincoln's sparrow
- *Melospiza melodia* (Wilson, 1810) * song sparrow
- *Passerculus sandwichensis* (Gmelin, 1789) * Savannah sparrow
- *Passerella iliaca* (Merrem, 1786) * fox sparrow
- *Pipilo erythrophthalmus* (Linnaeus, 1758) * eastern towhee
- *Plectrophenax nivalis* (Linnaeus, 1758) * snow bunting
- *Poocetes gramineus* (Gmelin, 1789) * vesper sparrow
- *Spizella arborea* (Wilson, 1810) * American tree sparrow
- *Spizella pallida* (Swainson, 1832) * clay-colored sparrow
- *Spizella passerina* (Bechstein, 1798) * chipping sparrow
- *Spizella pusilla* (Wilson, 1810) * field sparrow
- *Zonotrichia albicollis* (Gmelin, 1789) * white-throated sparrow

---ABUNDANCE---			---SOURCE---			---SOURCE---		
Sp	Su	F	W	HABITAT	RESIDENT	LOCAL	REGION	STATUS
				UW	AC		6	
U	U	U		UW	BR, MG	1,2	7	
R	R			UW, WM	MG	2		
C	C	C	C	OF, SR, UW, WM	BR, MG, YR	1,2	7	
				OF, UW	AC	2		
C	C	C		OF, SR, UW, WM	BR, MG	1,2	7	
U	U	U		OF, SR, UW, WM	BR, MG	1,2	7	
R	R	R		OF, UW, WM	BR, MG	1,2	7	
R		O		OF, SR	AC, MG	2	4	X
				OF, WM	AC		4	
				OF, WM	MG	2		
R	R	R	R	OF, WM	BR, MG	2	7	S
				WM	MG	2		
O	U	O		OF, WM	BR, MG	2	7	
O	O	O	O	OF, SR, WM	MG, WR	2		
				OF, WM	AC, MG		4	
				OF	MG		4,5	
C	C	C	C	OF, SR, UW, WM	MG	1,2		
U	O	U	O	OF, SR, SW, WM	BR, MG	2	7	
U	U	U	R	OF, UW, WM	MG	2		
C	C	C	C	OF, SR, UW, WM	BR, MG, YR	1,2	7	
U	C	U	R	OF, SR, WM	BR, MG	2	7	
U	U	U	R	OF, UW, WM	MG	2		
C	C	C	R	OF, SR, UW, WM	BR, MG	1,2	7	
O	C	U	U	OF, SR, WM	MG, WR	1,2		
U	U	U	U	OF, UW	BR, MG	2	7	
C	C	U	C	OF, SR, UW, WM	MG, WR	1,2		
R	U	U	U	OF	AC, MG	2		
U	C	U		OF, UW, WM	BR, MG	1,2	7	
C	C	C	R	OF, UW, WM	BR, MG	1,2	7	
C	R	C	U	OF, SR, UW, WM	MG	1,2		

Family Emberizidae (continued)

- *Zonotrichia leucophrys* (Forster, 1772) * white-crowned sparrow
- *Zonotrichia querula* (Nuttall, 1840) * Harris's sparrow

Family Icterinae (blackbirds)

- *Agelaius phoeniceus* (Linnaeus, 1766) * red-winged blackbird
- *Dolichonyx oryzivorus* (Linnaeus, 1758) * bobolink
- *Euphagus carolinus* (Muller, 1776) * rusty blackbird
- *Euphagus cyanocephalus* (Wagler, 1820) * Brewer's blackbird
- *Icterus galbula* (Linnaeus, 1758) * Baltimore oriole
- *Icterus spurius* (Linnaeus, 1766) * orchard oriole
- *Molothrus ater* (Boddaert, 1783) * brown-headed cowbird
- *Quiscalus mexicanus* (Gmelin, 1788) * great-tailed grackle
- *Quiscalus quiscula* (Linnaeus, 1758) * common grackle
- *Sturnella magna* (Linnaeus, 1758) * eastern meadowlark
- *Sturnella neglecta* Audubon, 1844 * western meadowlark
- *Xanthocephalus xanthocephalus* (Bonaparte, 1826) * yellow-headed blackbird

Family Fringillidae (finches & allies)

Subfamily Carduelinae (cardueline finches)

- *Carduelis flammea* (Linnaeus, 1758) * common redpoll
- *Carduelis hornemanni* (Holboll, 1843) * hoary redpoll
- *Carduelis pinus* (Wilson, 1810) * pine siskin
- *Carduelis tristis* (Linnaeus, 1758) * American goldfinch
- *Carpodacus mexicanus* (Muller, 1776) * house finch
- *Carpodacus purpureus* (Gmelin, 1789) * purple finch
- *Coccothraustes vespertinus* (Cooper, 1825) * evening grosbeak
- *Leucosticte arctoa* (Pallas, 1811) * rosy finch
- *Loxia curvirostra* Linnaeus, 1758 * red crossbill
- *Loxia leucoptera* Gmelin, 1789 * white-winged crossbill
- *Pinicola enucleator* (Linnaeus, 1758) * pine grosbeak

Family Passeridae (old world sparrows)

- *Passer domesticus* (Linnaeus, 1758) * house sparrow

Sp	Su	F	W	HABITAT	RESIDENT	LOCAL	REGION	STATUS
U		U	O	OF,UW,WM OF,UW	MG,WR AC,MG	1,2 2		
A	A	A	U	OF,SR,UW,WM	BR,MG	1,2	7	
U	C	U		OF,SR,WM	BR,MG	2	7	
U		U	O	OF,SR,UW,WM	MG	2		
R		R		OF,UW	MG	2		
C	C	C		OF,SR,UW,WM	BR,MG	1,2	7	
C		C	O	OF,UW,WM	BR,MG,YR	1,2	7	
A	A	A	O	OF,WM	AC	2	6	
C	C	C	O	LE,OF,UW,WM	BR,MG,YR	1,2	7	
R	R	R	O	OF,UW,WM	BR,MG,YR	1,2	7	
R		R		OF,UW,WM	BR,MG	2	7	
R		R		OF,SR,UW,WM	BR,MG	2	7	
O		R	O	OF,SR,UW,WM	MG,WR	1,2		
O		R	R	OF	MG,WR	2		
O	R	U	O	OF,UW,WM	MG,WR	1,2		
C	C	C	C	OF,SR,UW,WM	BR,MG,YR	1,2	7	
A	A	A	A	OF,UW	BR,MG,YR	2	7	
U	O	U	U	OF,SR,UW,WM	BR,MG	1,2	7	
O		O	O	OF,UW,WM	MG	1,2		
				OF	AC	2		
R	R	R	R	OF,UW	MG,WR	2		
R	R	R	R	UW	MG,WR	2		
R	R	R	R	OF,UW,WM	MG,WR	2		
A	A	A	A	OF,SR,UW,WM	BR,MG,YR	1,2	7	

SEASONAL DESIGNATIONS:

Sp - Spring (March-May)
Su - Summer (June-August)
F - Fall (September-November)
W - Winter (December-February)

ABUNDANCE CODES:

A - Abundant
C - Common
O - Occasional
U - Uncommon
R - Rare

HABITAT CODES:

BF - Bluffs
FP - Floodplain
LE - Open lake or estuary
OF - Open grass or shrub fields
SR - Shoreline
ST - Stream
SW - Swamp, wooded
LW - Upland woods
WM - Wetlands, marsh vegetation

RESIDENT CODES:

AC - Accidental
BR - Breeding Range
EX - Exotic or Escaped
IN - Introduced
MG - Migrant
WR - Winter Range
YR - Year-around Resident

STATUS CODES: (Ohio Division of Wildlife 1992; amended 1996)

E - Endangered
T - Threatened
S - Special Interest
X - Extirpated
Z - Extinct

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2. Old Woman Creek Reserve 1990 Birds of Old Woman Creek and Sheldon Marsh area: A checklist. Ohio Dept. Nat. Res., Div. Nat. Areas & Preserves, Columbus, Ohio. 10 pp.
3. Present Study (unpublished observations by the authors, 1960–1999).

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4. Trautman, M. B. and M. A. Trautman 1968 Annotated list of the birds of Ohio. *Ohio J. Sci.* 68(5): 57–332.
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6. Trautman, M. B. 1987 Birds of western Lake Erie. Ohio State University, Ohio Sea Grant Program Unpubl. Manuscript. 500 pp.
7. Peterjohn, B. G., R. L. Hannikman, J. M. Hoffman & E. J. Tramer 1987 *Abundance and distribution of the birds of Ohio*. Ohio Biol. Surv. Biol. Notes No. 19. 52 pp.
8. Peterjohn, B. G. 1989 *The Birds of Ohio*. Indiana University Press, Bloomington, Indiana. 237 pp.
9. Peterjohn, B. G. and D. L. Rice 1991 *The Ohio Breeding Bird Atlas*. Ohio Dept. Nat. Res., Div. Nat. Areas & Preserves, Columbus, Ohio. 416 pp.
10. Glen E. Bernhardt, U.S. Dept. Agriculture, National Wildlife Research Center, Sandusky, Ohio (personal communication, December 6, 1999).

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- American Ornithologists' Union 1983 *Check-list of North American Birds*, (6th Ed.). Allen Press. Lawrence, Kansas. 877 pp.
- American Ornithologists' Union 1985 Thirty-fifth supplement to the American Ornithologists' Union check-list of North American birds. *Auk* 102:680–686.
- American Ornithologists' Union 1998 *Check-list of North American Birds*, (7th Ed.). Allen Press. Lawrence, Kansas. 829 pp.
- Ohio Division of Wildlife 1992 Species of animals that are considered to be endangered, threatened, of special interest, extirpated, or extinct in Ohio. Ohio Dept. Nat. Res., Columbus, Ohio. 10 pp. [Amended July 1996]
- Sibley, C. G. and B. L. Monroe, Jr. 1990 *Distribution and taxonomy of the birds of the world*. Yale University Press, New Haven, Connecticut. 1111 pp.

Appendix J

Checklist of the Avifauna for Old Woman Creek Estuary and Watershed, and Adjacent Tributaries and Waters of Lake Erie

CHECKLIST OF THE AVIFAUNA FOR OLD WOMAN CREEK ESTUARY AND WATERSHED, AND ADJACENT TRIBUTARIES AND WATERS OF LAKE ERIE

		---ABUNDANCE---			
COMMON NAME		Sp	Su	F	W
LOONS (Gaviidae)					
<input type="checkbox"/>	<i>Gavia immer</i>	U	R	U	O
<input type="checkbox"/>	<i>Gavia stellata</i>	O		O	R
GREBES (Podicipedidae)					
<input type="checkbox"/>	<i>Podiceps auritus</i>	U		U	O
<input type="checkbox"/>	<i>Podiceps grisegena</i>	R		R	R
<input type="checkbox"/>	<i>Podiceps nigricollis</i>	R		R	R
<input type="checkbox"/>	<i>Podilymbus podiceps</i>	C	U	C	O
CORMORANTS (Phalacrocoracidae)					
<input type="checkbox"/>	<i>Phalacrocorax auritus</i>	C	C	C	R
HERONS (Ardeidae)					
<input type="checkbox"/>	<i>Ardea albus</i>	U	U	O	
<input type="checkbox"/>	<i>Ardea herodias</i>	C	C	C	O
<input type="checkbox"/>	<i>Botaurus lentiginosus</i>	R	R	R	
<input type="checkbox"/>	<i>Bubulcus ibis</i>	R	R	R	
<input type="checkbox"/>	<i>Butorides striatus</i>	U	U	U	
<input type="checkbox"/>	<i>Egretta thula</i>	R	R	R	
<input type="checkbox"/>	<i>Ixobrychus exilis</i>	R	R	R	
<input type="checkbox"/>	<i>Nyctanassa violacea</i>	R	R	R	
<input type="checkbox"/>	<i>Nycticorax nycticorax</i>	U	U	U	R
WATERFOWL: DUCKS, GEESE, & SWANS (Anatidae)					
<input type="checkbox"/>	<i>Aix sponsa</i>	C	C	C	R
<input type="checkbox"/>	<i>Anas acuta</i>	O	R	O	O
<input type="checkbox"/>	<i>Anas americana</i>	O	R	O	O
<input type="checkbox"/>	<i>Anas clypeata</i>	O	R	O	R
<input type="checkbox"/>	<i>Anas crecca</i>	O	R	O	R
<input type="checkbox"/>	<i>Anas discors</i>	U	U	U	R
<input type="checkbox"/>	<i>Anas platyrhynchos</i>	A	A	A	A
<input type="checkbox"/>	<i>Anas rubripes</i>	C	U	C	C
<input type="checkbox"/>	<i>Anas strepera</i>	U	R	U	O
<input type="checkbox"/>	<i>Aythya affinis</i>	C	R	C	C
<input type="checkbox"/>	<i>Aythya americana</i>	U	R	U	O
<input type="checkbox"/>	<i>Aythya collaris</i>	U	R	U	O
<input type="checkbox"/>	<i>Aythya marila</i>	U		U	U
<input type="checkbox"/>	<i>Aythya valisineria</i>	U		U	O
<input type="checkbox"/>	<i>Branta canadensis</i>	C	C	A	C
<input type="checkbox"/>	<i>Bucephala albeola</i>	C		C	U
<input type="checkbox"/>	<i>Bucephala clangula</i>	C		C	C
<input type="checkbox"/>	<i>Chen caerulescens</i>	R		O	R
<input type="checkbox"/>	<i>Clangula hyemalis</i>	O		O	O
<input type="checkbox"/>	<i>Cygnus columbianus</i>	U		U	R
<input type="checkbox"/>	<i>Cygnus olor</i>	R		R	R
<input type="checkbox"/>	<i>Lophodytes cucullatus</i>	U	R	U	U
<input type="checkbox"/>	<i>Melanitta fusca</i>	O		O	U
<input type="checkbox"/>	<i>Melanitta nigra</i>	R		O	R
<input type="checkbox"/>	<i>Melanitta perspicillata</i>	R		O	R
<input type="checkbox"/>	<i>Mergus merganser</i>	O		O	U
<input type="checkbox"/>	<i>Mergus serrator</i>	C	R	A	C
<input type="checkbox"/>	<i>Oxyura jamaicensis</i>	C	R	C	R

		---ABUNDANCE---			
COMMON NAME		Sp	Su	F	W
AMERICAN VULTURES (Cathartidae)					
<input type="checkbox"/>	<i>Cathartes aura</i> turkey vulture	C	C	C	
BIRDS OF PREY: OSPREYS: (Accipitridae: Panioninae)					
<input type="checkbox"/>	<i>Pandion haliaetus</i> osprey	U	R	U	
BIRDS OF PREY: HAWKS & EAGLES (Accipitridae: Accipitrinae)					
<input type="checkbox"/>	<i>Accipiter cooperii</i> Cooper's hawk	U	U	U	U
<input type="checkbox"/>	<i>Accipiter gentilis</i> northern goshawk	R		R	R
<input type="checkbox"/>	<i>Accipiter striatus</i> sharp-shinned hawk	U	R	U	R
<input type="checkbox"/>	<i>Buteo jamaicensis</i> red-tailed hawk	C	C	C	C
<input type="checkbox"/>	<i>Buteo lagopus</i> rough-legged hawk	O		O	C
<input type="checkbox"/>	<i>Buteo lineatus</i> red-shouldered hawk	U	R	U	R
<input type="checkbox"/>	<i>Buteo platypterus</i> broad-winged hawk	U	R	U	
<input type="checkbox"/>	<i>Circus cyaneus</i> northern harrier [= marsh hawk]	U	R	U	U
<input type="checkbox"/>	<i>Falco columbarius</i> merlin	O		O	
<input type="checkbox"/>	<i>Falco peregrinus</i> peregrine falcon	O	R	O	R
<input type="checkbox"/>	<i>Falco sparverius</i> American kestrel [=sparrow hawk]	C	C	C	C
<input type="checkbox"/>	<i>Haliaeetus leucocephalus</i> bald eagle	C	C	C	C
GALLINACEOUS BIRDS: PHEASANTS & QUAILS (Phasianidae)					
<input type="checkbox"/>	<i>Colinus virginianus</i> northern bobwhite	R	R	R	R
<input type="checkbox"/>	<i>Meleagris gallopavo</i> wild turkey	O	O	O	O
<input type="checkbox"/>	<i>Phasianus colchicus</i> ring-necked pheasant	R	R	R	R
RAILS (Rallidae)					
<input type="checkbox"/>	<i>Fulica americana</i> American coot	U	U	U	U
<input type="checkbox"/>	<i>Gallinula chloropus</i> common moorhen	O	O	O	
<input type="checkbox"/>	<i>Porzana carolina</i> sora	U	O	U	
<input type="checkbox"/>	<i>Rallus elegans</i> king rail	R	R	R	
<input type="checkbox"/>	<i>Rallus limicola</i> Virginia rail	O	O	O	
SHOREBIRDS: PLOVERS (Charadriidae)					
<input type="checkbox"/>	<i>Charadrius melodus</i> piping plover	R	R	R	
<input type="checkbox"/>	<i>Charadrius semipalmatus</i> semipalmated plover	U	U	U	
<input type="checkbox"/>	<i>Charadrius vociferus</i> killdeer	C	C	C	R
<input type="checkbox"/>	<i>Pluvialis dominica</i> American golden-plover	U	R	U	
<input type="checkbox"/>	<i>Pluvialis squatarola</i> black-bellied plover	U	O	U	
SHOREBIRDS: SANDPIPERS & ALLIES (Scolopacidae)					
<input type="checkbox"/>	<i>Actitis macularia</i> spotted sandpiper	C	C	C	
<input type="checkbox"/>	<i>Arenaria interpres</i> ruddy turnstone	U	O	U	R
<input type="checkbox"/>	<i>Bartramia longicauda</i> upland sandpiper	R	R	R	
<input type="checkbox"/>	<i>Calidris alba</i> sanderling	U	O	U	
<input type="checkbox"/>	<i>Calidris alpina</i> dunlin	A	O	C	R
<input type="checkbox"/>	<i>Calidris canutus</i> red knot	O	O	O	
<input type="checkbox"/>	<i>Calidris fuscicollis</i> white-rumped sandpiper	O	O	O	
<input type="checkbox"/>	<i>Calidris himantopus</i> stilt sandpiper	O	O	O	
<input type="checkbox"/>	<i>Calidris maritima</i> purple sandpiper			O	O
<input type="checkbox"/>	<i>Calidris mauri</i> western sandpiper	O	U	U	
<input type="checkbox"/>	<i>Calidris melanotos</i> pectoral sandpiper	C	U	C	
<input type="checkbox"/>	<i>Calidris minutilla</i> least sandpiper	C	U	C	
<input type="checkbox"/>	<i>Calidris pusilla</i> semipalmated sandpiper	C	U	C	
<input type="checkbox"/>	<i>Catoptrophorus semipalmatus</i> willet	O	R	O	
<input type="checkbox"/>	<i>Gallinago gallinago</i> common snipe	U	O	U	
<input type="checkbox"/>	<i>Limnodrolus scolopaceus</i> long-billed dowitcher	R	R	U	
<input type="checkbox"/>	<i>Limnodromus griseus</i> short-billed dowitcher	C	U	U	
<input type="checkbox"/>	<i>Limosa fedoa</i> marbled godwit	R	R	O	

		---ABUNDANCE---			
COMMON NAME		Sp	Su	F	W
SHOREBIRDS: SANDPIPERS & ALLIES (continued)					
<input type="checkbox"/>	<i>Phalaropus lobatus</i>	O	R	O	
<input type="checkbox"/>	<i>Phalaropus tricolor</i>	O	R	O	
<input type="checkbox"/>	<i>Scolopax minor</i>	U	U	U	
<input type="checkbox"/>	<i>Tringa flavipes</i>	U	O	U	
<input type="checkbox"/>	<i>Tringa melanoleuca</i>	U	O	U	
<input type="checkbox"/>	<i>Tringa solitaria</i>	U	U	U	
TERNs (Laridae: Sterninae)					
<input type="checkbox"/>	<i>Chlidonias niger</i>	O	O	O	
<input type="checkbox"/>	<i>Sterna caspia</i>	C	O	C	
<input type="checkbox"/>	<i>Sterna forsteri</i>	C	O	C	R
<input type="checkbox"/>	<i>Sterna hirundo</i>	C	O	C	R
JAEGERS (Laridae: Stercorariinae)					
<input type="checkbox"/>	<i>Stercorarius parasiticus</i>			O	R
GULLS (Laridae: Larinae)					
<input type="checkbox"/>	<i>Larus argentatus</i>	A	C	A	A
<input type="checkbox"/>	<i>Larus atricilla</i>	R	O	O	R
<input type="checkbox"/>	<i>Larus delawarensis</i>	A	A	A	A
<input type="checkbox"/>	<i>Larus fuscus</i>	O		U	O
<input type="checkbox"/>	<i>Larus glaucooides</i>	O		O	U
<input type="checkbox"/>	<i>Larus hyperboreus</i>	O		O	U
<input type="checkbox"/>	<i>Larus marinus</i>	U	O	U	C
<input type="checkbox"/>	<i>Larus minutus</i>	O	R	O	R
<input type="checkbox"/>	<i>Larus philadelphia</i>	C	O	A	O
<input type="checkbox"/>	<i>Larus pipixcan</i>	R	R	O	R
<input type="checkbox"/>	<i>Larus ridibundus</i>	R		R	R
<input type="checkbox"/>	<i>Larus thayeri</i>	O		O	U
<input type="checkbox"/>	<i>Rissa tridactyla</i>	R		O	O
DOVES (Columbidae)					
<input type="checkbox"/>	<i>Columba livia</i>	A	A	A	A
<input type="checkbox"/>	<i>Zenaida macroura</i>	A	A	A	A
CUCKOOS (Cuculidae)					
<input type="checkbox"/>	<i>Coccyzus americanus</i>	U	U	U	
<input type="checkbox"/>	<i>Coccyzus erythrophthalmus</i>	O	O	O	
OWLS (Strigidae)					
<input type="checkbox"/>	<i>Aegolius acadicus</i>	R	R	R	R
<input type="checkbox"/>	<i>Asio flammeus</i>	R		O	O
<input type="checkbox"/>	<i>Asio otus</i>	R		R	O
<input type="checkbox"/>	<i>Bubo virginianus</i>	C	C	C	C
<input type="checkbox"/>	<i>Nyctea scandiaca</i>	R		R	O
<input type="checkbox"/>	<i>Otus asio</i>	C	C	C	C
<input type="checkbox"/>	<i>Strix varia</i>	R	R	R	R
BARN-OWLS (Tytonidae)					
<input type="checkbox"/>	<i>Tyto alba</i>	R	R	R	R
GOATSUCKERS & ALLIES (Caprimulgidae)					
<input type="checkbox"/>	<i>Caprimulgus vociferus</i>	O	R		
<input type="checkbox"/>	<i>Chordeiles minor</i>	C	C	C	
HUMMINGBIRDS (Trochilidae)					
<input type="checkbox"/>	<i>Archilochus colubris</i>	C	C	C	

		---ABUNDANCE---				
COMMON NAME		Sp	Su	F	W	
SWIFTS (Apodidae)						
<input type="checkbox"/>	<i>Chaetura pelagica</i>	chimney swift	C	C	C	
KINGFISHERS (Alcedinidae)						
<input type="checkbox"/>	<i>Ceryle alcyon</i>	belted kingfisher	C	C	C	U
WOODPECKERS (Picidae)						
<input type="checkbox"/>	<i>Colaptes auratus</i>	northern flicker	C	C	C	C
<input type="checkbox"/>	<i>Dryocopus pileatus</i>	pileated woodpecker	R	R	R	R
<input type="checkbox"/>	<i>Melanerpes carolinus</i>	red-bellied woodpecker	U	U	U	U
<input type="checkbox"/>	<i>Melanerpes erythrocephalus</i>	red-headed woodpecker	U	U	U	R
<input type="checkbox"/>	<i>Picoides pubescens</i>	downy woodpecker	C	C	C	C
<input type="checkbox"/>	<i>Picoides villosus</i>	hairy woodpecker	C	C	C	C
<input type="checkbox"/>	<i>Sphyrapicus varius</i>	yellow-bellied sapsucker	U	R	U	R
PERCHING BIRDS						
TYRANT FLYCATCHERS (Tyrannidae: Fluvicolinae)						
<input type="checkbox"/>	<i>Contopus cooperi</i>	olive-sided flycatcher	U	R	O	
<input type="checkbox"/>	<i>Contopus virens</i>	eastern wood-pewee	C	C	C	
<input type="checkbox"/>	<i>Empidonax alnorum</i>	alder flycatcher	O	R	O	
<input type="checkbox"/>	<i>Empidonax flaviventris</i>	yellow-bellied flycatcher	U	R	U	
<input type="checkbox"/>	<i>Empidonax minimus</i>	least flycatcher	C	U	U	
<input type="checkbox"/>	<i>Empidonax traillii</i>	willow flycatcher	C	C	O	
<input type="checkbox"/>	<i>Empidonax virescens</i>	Acadian flycatcher	C	C	U	
<input type="checkbox"/>	<i>Sayornis phoebe</i>	eastern phoebe	C	U	O	R
KINGBIRDS (Tyrannidae: Tyranninae)						
<input type="checkbox"/>	<i>Myiarchus crinitus</i>	great crested flycatcher	C	C	U	
<input type="checkbox"/>	<i>Tyrannus tyrannus</i>	eastern kingbird	C	C	C	
LARKS (Alaudidae)						
<input type="checkbox"/>	<i>Eremophila alpestris</i>	horned lark	C	C	C	C
SWALLOWS (Hirundinidae)						
<input type="checkbox"/>	<i>Petrochelidon pyrrhonota</i>	cliff swallow	O	R	O	
<input type="checkbox"/>	<i>Hirundo rustica</i>	barn swallow	C	C	C	
<input type="checkbox"/>	<i>Progne subis</i>	purple martin	C	C	C	
<input type="checkbox"/>	<i>Riparia riparia</i>	bank swallow	O	O	O	
<input type="checkbox"/>	<i>Stelgidopteryx serripennis</i>	northern rough-winged swallow	C	C	C	
<input type="checkbox"/>	<i>Tachycineta bicolor</i>	tree swallow	C	C	C	R
JAYS & CROWS (Corvidae)						
<input type="checkbox"/>	<i>Corvus brachyrhynchos</i>	American crow	C	C	C	C
<input type="checkbox"/>	<i>Cyanocitta cristata</i>	blue jay	A	A	A	A
CHICKADEES (Paridae)						
<input type="checkbox"/>	<i>Baeolophus bicolor</i>	tufted titmouse	C	C	C	C
<input type="checkbox"/>	<i>Poecile atricapillus</i>	black-capped chickadee	C	C	C	C
NUTHATCHES (Sittidae)						
<input type="checkbox"/>	<i>Sitta canadensis</i>	red-breasted nuthatch	U		U	U
<input type="checkbox"/>	<i>Sitta carolinensis</i>	white-breasted nuthatch	C	C	C	C
CREEPERS (Certhiidae)						
<input type="checkbox"/>	<i>Certhia americana</i>	brown creeper	U	R	U	O

			---ABUNDANCE---			
COMMON NAME			Sp	Su	F	W
WRENS (Troglodytidae)						
<input type="checkbox"/>	<i>Cistothorus palustris</i>	marsh wren	U	U	U	R
<input type="checkbox"/>	<i>Cistothorus platensis</i>	sedge wren	R	R	R	
<input type="checkbox"/>	<i>Thryothorus ludovicianus</i>	Carolina wren	O	O	O	O
<input type="checkbox"/>	<i>Troglodytes aedon</i>	house wren	C	C	C	
<input type="checkbox"/>	<i>Troglodytes troglodytes</i>	winter wren	C		O	O
GNATCATCHERS (Sylviidae)						
<input type="checkbox"/>	<i>Poliophtila caerulea</i>	blue-gray gnatcatcher	C	C	C	
KINGLETS (Regulidae)						
<input type="checkbox"/>	<i>Regulus calendula</i>	ruby-crowned kinglet	C		C	O
<input type="checkbox"/>	<i>Regulus satrapa</i>	golden-crowned kinglet	C		C	O
THRUSHES (Turdidae)						
<input type="checkbox"/>	<i>Catharus fuscescens</i>	veery	U	O	U	
<input type="checkbox"/>	<i>Catharus guttatus</i>	hermit thrush	U	R	U	R
<input type="checkbox"/>	<i>Catharus minimus</i>	gray-cheeked thrush	U		U	
<input type="checkbox"/>	<i>Catharus ustulatus</i>	Swainson's thrush	U	R	U	
<input type="checkbox"/>	<i>Hylocichla mustelina</i>	wood thrush	C	C	C	
<input type="checkbox"/>	<i>Sialia sialis</i>	eastern bluebird	U	U	U	O
<input type="checkbox"/>	<i>Turdus migratorius</i>	American robin	A	A	A	U
MOCKINGBIRDS (Mimidae)						
<input type="checkbox"/>	<i>Dumetella carolinensis</i>	gray catbird	C	C	C	
<input type="checkbox"/>	<i>Mimus polyglottos</i>	northern mockingbird	R	R	R	R
<input type="checkbox"/>	<i>Toxostoma rufum</i>	brown thrasher	U	U	U	R
PIPITS (Motacillidae)						
<input type="checkbox"/>	<i>Anthus spinoletta</i>	water pipit	U		U	
WAXWINGS (Bombycillidae)						
<input type="checkbox"/>	<i>Bombycilla cedrorum</i>	cedar waxwing	C	C	C	U
SHRIKES (Laniidae)						
<input type="checkbox"/>	<i>Lanius excubitor</i>	northern shrike	R		R	O
<input type="checkbox"/>	<i>Lanius ludovicianus</i>	loggerhead shrike	R	R	R	
STARLINGS (Sturnidae)						
<input type="checkbox"/>	<i>Sturnus vulgaris</i>	European starling	A	A	A	A
VIREOS (Vireonidae)						
<input type="checkbox"/>	<i>Vireo flavifrons</i>	yellow-throated vireo	U	U	U	
<input type="checkbox"/>	<i>Vireo gilvus</i>	warbling vireo	C	C	C	
<input type="checkbox"/>	<i>Vireo griseus</i>	white-eyed vireo	O	O	O	
<input type="checkbox"/>	<i>Vireo olivaceus</i>	red-eyed vireo	C	C	C	
<input type="checkbox"/>	<i>Vireo philadelphicus</i>	Philadelphia vireo	O		O	
<input type="checkbox"/>	<i>Vireo solitarius</i>	blue-headed vireo [=solitary vireo]	U	O	U	
WOOD-WARBLERS (Parulidae)						
<input type="checkbox"/>	<i>Dendroica caerulescens</i>	black-throated blue warbler	U		U	
<input type="checkbox"/>	<i>Dendroica castanea</i>	bay-breasted warbler	C		C	
<input type="checkbox"/>	<i>Dendroica cerulea</i>	cerulean warbler	U	U	U	
<input type="checkbox"/>	<i>Dendroica coronata</i>	yellow-rumped warbler	C		C	O
<input type="checkbox"/>	<i>Dendroica discolor</i>	prairie warbler	R	R	R	
<input type="checkbox"/>	<i>Dendroica dominica</i>	yellow-throated warbler	O			
<input type="checkbox"/>	<i>Dendroica fusca</i>	Blackburnian warbler	U		U	
<input type="checkbox"/>	<i>Dendroica magnolia</i>	magnolia warbler	U		U	
<input type="checkbox"/>	<i>Dendroica palmarum</i>	palm warbler	U		U	
<input type="checkbox"/>	<i>Dendroica pensylvanica</i>	chestnut-sided warbler	U	O	U	

		---ABUNDANCE---				
COMMON NAME		Sp	Su	F	W	
WOOD-WARBLERS (continued)						
<input type="checkbox"/>	<i>Dendroica petechia</i>	yellow warbler	C	C	C	
<input type="checkbox"/>	<i>Dendroica pinus</i>	pine warbler	O		U	
<input type="checkbox"/>	<i>Dendroica striata</i>	blackpoll warbler	O		C	
<input type="checkbox"/>	<i>Dendroica tigrina</i>	Cape May warbler	U		U	
<input type="checkbox"/>	<i>Dendroica virens</i>	black-throated green warbler	U		U	
<input type="checkbox"/>	<i>Geothlypis trichas</i>	common yellowthroat	C	C	C	R
<input type="checkbox"/>	<i>Icteria virens</i>	yellow-breasted chat	U	U	U	
<input type="checkbox"/>	<i>Mniotilta varia</i>	black-and-white warbler	U	R	U	
<input type="checkbox"/>	<i>Oporornis philadelphia</i>	mourning warbler	O		R	
<input type="checkbox"/>	<i>Parula americana</i>	northern parula	U	R	O	
<input type="checkbox"/>	<i>Protonotaria citrea</i>	prothonotary warbler	O	O	O	
<input type="checkbox"/>	<i>Seiurus aurocapillus</i>	ovenbird	U	U	U	
<input type="checkbox"/>	<i>Seiurus motacilla</i>	Louisiana waterthrush	U	R	U	
<input type="checkbox"/>	<i>Seiurus noveboracensis</i>	northern waterthrush	U	R	U	
<input type="checkbox"/>	<i>Setophaga ruticilla</i>	American redstart	C	C	C	
<input type="checkbox"/>	<i>Vermivora celata</i>	orange-crowned warbler	O		O	R
<input type="checkbox"/>	<i>Vermivora chrysoptera</i>	golden-winged warbler	O	R	R	
<input type="checkbox"/>	<i>Vermivora peregrina</i>	Tennessee warbler	C		C	
<input type="checkbox"/>	<i>Vermivora pinus</i>	blue-winged warbler	U	U	U	
<input type="checkbox"/>	<i>Vermivora ruficapilla</i>	Nashville warbler	U		U	
<input type="checkbox"/>	<i>Wilsonia canadensis</i>	Canada warbler	U		U	
<input type="checkbox"/>	<i>Wilsonia citrina</i>	hooded warbler	U	O	U	
<input type="checkbox"/>	<i>Wilsonia pusill</i>	Wilson's warbler	U		U	
TANAGERS (Thraupidae)						
<input type="checkbox"/>	<i>Piranga olivacea</i>	scarlet tanager	U	U	U	
CARDINALS (Cardinalidae)						
<input type="checkbox"/>	<i>Cardinalis cardinalis</i>	northern cardinal	C	C	C	C
<input type="checkbox"/>	<i>Passerina cyanea</i>	indigo bunting	C	C	C	
<input type="checkbox"/>	<i>Pheucticus ludovicianus</i>	rose-breasted grosbeak	U	U	U	
<input type="checkbox"/>	<i>Spiza americana</i>	dickcissel	R	R	R	
AMERICAN SPARROWS (Emberizidae)						
<input type="checkbox"/>	<i>Ammodramus caudacutus</i>	saltmarsh sharp-tailed sparrow	R		O	
<input type="checkbox"/>	<i>Ammodramus henslowii</i>	Henslow's sparrow	R	R	O	
<input type="checkbox"/>	<i>Ammodramus savannarum</i>	grasshopper sparrow	O	U	O	
<input type="checkbox"/>	<i>Calcarius lapponicus</i>	Lapland longspur	O		O	O
<input type="checkbox"/>	<i>Junco hyemalis</i>	dark-eyed junco	C		C	C
<input type="checkbox"/>	<i>Melospiza georgiana</i>	swamp sparrow	U	O	U	O
<input type="checkbox"/>	<i>Melospiza lincolni</i>	Lincoln's sparrow	U		U	R
<input type="checkbox"/>	<i>Melospiza melodia</i>	song sparrow	C	C	C	C
<input type="checkbox"/>	<i>Passerculus sandwichensis</i>	Savannah sparrow	U	C	U	R
<input type="checkbox"/>	<i>Passerella iliaca</i>	fox sparrow	U		U	R
<input type="checkbox"/>	<i>Pipilo erythrophthalmus</i>	eastern towhee [=rufous-sided towhee]	C	C	C	R
<input type="checkbox"/>	<i>Plectrophenax nivalis</i>	snow bunting	O		C	U
<input type="checkbox"/>	<i>Pooecetes gramineus</i>	vesper sparrow	U	U	U	
<input type="checkbox"/>	<i>Spizella arborea</i>	American tree sparrow	C		U	C
<input type="checkbox"/>	<i>Spizella passerina</i>	chipping sparrow	U	C	U	
<input type="checkbox"/>	<i>Spizella pusilla</i>	field sparrow	C	C	C	R
<input type="checkbox"/>	<i>Zonotrichia albicollis</i>	white-throated sparrow	C	R	C	U
<input type="checkbox"/>	<i>Zonotrichia leucophrys</i>	white-crowned sparrow	U		U	O

			---ABUNDANCE---			
COMMON NAME			Sp	Su	F	W
BLACKBIRDS & ORIOLES (Icteridae)						
<input type="checkbox"/>	<i>Agelaius phoeniceus</i>	red-winged blackbird	A	A	A	U
<input type="checkbox"/>	<i>Dolichonyx oryzivorus</i>	bobolink	U	C	U	
<input type="checkbox"/>	<i>Euphagus carolinus</i>	rusty blackbird	U		U	O
<input type="checkbox"/>	<i>Icterus galbula</i>	Baltimore oriole [=northern oriole]	C	C	C	
<input type="checkbox"/>	<i>Icterus spurius</i>	orchard oriole	U	U	O	
<input type="checkbox"/>	<i>Molothrus ater</i>	brown-headed cowbird	C	C	C	O
<input type="checkbox"/>	<i>Quiscalus quiscula</i>	common grackle	A	A	A	O
<input type="checkbox"/>	<i>Sturnella magna</i>	eastern meadowlark	C	C	C	O
<input type="checkbox"/>	<i>Sturnella neglecta</i>	western meadowlark	R	R	R	
FINCHES & ALLIES (Fringillidae)						
<input type="checkbox"/>	<i>Carduelis flammea</i>	common redpoll	O		R	O
<input type="checkbox"/>	<i>Carduelis pinus</i>	pine siskin	O	R	U	O
<input type="checkbox"/>	<i>Carduelis tristis</i>	American goldfinch	C	C	C	C
<input type="checkbox"/>	<i>Carpodacus mexicanus</i>	house finch	A	A	A	A
<input type="checkbox"/>	<i>Carpodacus purpureus</i>	purple finch	U	O	U	U
<input type="checkbox"/>	<i>Coccothraustes vespertinus</i>	evening grosbeak	O		O	O
<input type="checkbox"/>	<i>Loxia curvirostra</i>	red crossbill	R		R	R
<input type="checkbox"/>	<i>Loxia leucoptera</i>	white-winged crossbill	R		R	R
<input type="checkbox"/>	<i>Pinicola enucleator</i>	pine grosbeak	R		R	R
OLD WORLD SPARROWS (Passeridae)						
<input type="checkbox"/>	<i>Passer domesticus</i>	house sparrow	A	A	A	A

SEASONAL DESIGNATIONS:

- Sp – Spring (March-May)
- Su – Summer (June-August)
- F – Fall (September-November)
- W – Winter (December-February)

ABUNDANCE CODES:

- A – Abundant
- C – Common
- O – Occasional
- U – Uncommon
- R – Rare

Appendix K

Alphabetized List of the Avifauna for Old Woman Creek Estuary and Watershed, and Adjacent Tributaries and Waters of Lake Erie by Scientific Name

ALPHABETIZED LIST OF THE AVIFAUNA FOR OLD WOMAN CREEK ESTUARY AND WATERSHED, AND ADJACENT TRIBUTARIES AND WATERS OF LAKE ERIE by Scientific Name

SCIENTIFIC NAME	COMMON NAME	---ABUNDANCE---			
		Sp	Su	F	W
<i>Accipiter cooperii</i>	Cooper's hawk	U	U	U	U
<i>Accipiter gentilis</i>	northern goshawk	R		R	R
<i>Accipiter striatus</i>	sharp-shinned hawk	U	R	U	R
<i>Actitis macularia</i>	spotted sandpiper	C	C	C	
<i>Aegolius acadicus</i>	northern saw-whet owl	R	R	R	R
<i>Agelaius phoeniceus</i>	red-winged blackbird	A	A	A	U
<i>Aix sponsa</i>	wood duck	C	C	C	R
<i>Ammodramus caudacutus</i>	saltmarsh sharp-tailed sparrow	R		O	
<i>Ammodramus henslowii</i>	Henslow's sparrow	R	R	R	
<i>Ammodramus savannarum</i>	grasshopper sparrow	O	U	O	O
<i>Anas acuta</i>	northern pintail	O	R	O	O
<i>Anas americana</i>	American wigeon	O	R	O	R
<i>Anas clypeata</i>	northern shoveler	O	R	O	R
<i>Anas crecca</i>	green-winged teal	O	R	O	R
<i>Anas discors</i>	blue-winged teal	U	U	U	R
<i>Anas platyrhynchos</i>	mallard	A	A	A	A
<i>Anas rubripes</i>	American black duck	C	U	C	C
<i>Anas strepera</i>	gadwall	U	R	U	O
<i>Anthus spinoletta</i>	water pipit	U		U	
<i>Archilochus colubris</i>	ruby-throated hummingbird	C	C	C	
<i>Ardea albus</i>	great egret [=common egret]	U	U	O	
<i>Ardea herodias</i>	great blue heron	C	C	C	O
<i>Arenaria interpres</i>	ruddy turnstone	U	O	U	R
<i>Asio flammeus</i>	short-eared owl	R		O	O
<i>Asio otus</i>	long-eared owl	R		R	O
<i>Aythya affinis</i>	lesser scaup	C	R	C	O
<i>Aythya americana</i>	redhead	U	R	U	O
<i>Aythya collaris</i>	ring-necked duck	U	R	U	O
<i>Aythya marila</i>	greater scaup	U		U	U
<i>Aythya valisineria</i>	canvasback	U		U	O
<i>Baeolophus bicolor</i>	tufted titmouse	C	C	C	O
<i>Bartramia longicauda</i>	upland sandpiper	R	R	R	U
<i>Bombycilla cedrorum</i>	cedar waxwing	C	C	C	
<i>Botaurus lentiginosus</i>	American bittern	R	R	R	C
<i>Branta canadensis</i>	Canada goose	C	C	A	C
<i>Bubo virginianus</i>	great horned owl	C	C	C	C
<i>Bubulcus ibis</i>	cattle egret	R	R	R	
<i>Bucephala albeola</i>	bufflehead	C		C	U
<i>Bucephala clangula</i>	common goldeneye	C		C	O
<i>Buteo jamaicensis</i>	red-tailed hawk	C	C	C	O
<i>Buteo lagopus</i>	rough-legged hawk	O		O	O
<i>Buteo lineatus</i>	red-shouldered hawk	U	R	U	R
<i>Buteo platypterus</i>	broad-winged hawk	U	R	U	
<i>Butorides striatus</i>	striated heron [=green-backed heron]	U	U	U	
<i>Calcarius lapponicus</i>	Lapland longspur	O		O	O
<i>Calidris alba</i>	sanderling	U	O	U	
<i>Calidris alpina</i>	dunlin	A	O	C	R
<i>Calidris canutus</i>	red knot	O	O	O	
<i>Calidris fuscicollis</i>	white-rumped sandpiper	O	O	O	
<i>Calidris himantopus</i>	stilt sandpiper	O	O	O	
<i>Calidris maritima</i>	purple sandpiper			O	O
<i>Calidris mauri</i>	western sandpiper	O	U	U	O
<i>Calidris melanotos</i>	pectoral sandpiper	C	U	C	
<i>Calidris minutilla</i>	least sandpiper	C	U	C	
<i>Calidris pusilla</i>	semipalmated sandpiper	C	U	C	
<i>Caprimulgus vociferus</i>	whip-poor-will	O	R		
<i>Cardinalis cardinalis</i>	northern cardinal	C	C		C
<i>Carduelis flammea</i>	common redpoll	O		R	O
<i>Carduelis pinus</i>	pine siskin	O	R	U	O
<i>Carduelis tristis</i>	American goldfinch	C	C	C	C
<i>Carpodacus mexicanus</i>	house finch	A	A	A	A

SCIENTIFIC NAME	COMMON NAME	---ABUNDANCE---			
		Sp	Su	F	W
<i>Carpodacus purpureus</i>	purple finch	U	O	U	U
<i>Cathartes aura</i>	turkey vulture	C	O	U	
<i>Catharus fuscescens</i>	veery	U	O	U	
<i>Catharus guttatus</i>	hermit thrush	U	R	U	R
<i>Catharus minimus</i>	gray-cheeked thrush	U		U	
<i>Catharus ustulatus</i>	Swainson's thrush	U	R	U	
<i>Catoptrophorus semipalmatus</i>	willet	O	R	O	
<i>Certhia americana</i>	brown creeper	U	R	U	O
<i>Ceryle alcyon</i>	belted kingfisher	U	C	U	U
<i>Chaetura pelagica</i>	chimney swift	C	C	C	
<i>Charadrius melodus</i>	piping plover	R	R	R	
<i>Charadrius semipalmatus</i>	semipalmated plover	U	U	U	
<i>Charadrius vociferus</i>	killdeer	C	C	C	R
<i>Chen caerulescens</i>	snow goose	R		O	R
<i>Chlidonias niger</i>	black tern	O		O	
<i>Chordeiles minor</i>	common nighthawk	C	O	C	
<i>Circus cyaneus</i>	northern harrier [= marsh hawk]	U	C	R	U
<i>Cistothorus palustris</i>	marsh wren	U	R	U	R
<i>Cistothorus platensis</i>	sedge wren	R	R	U	
<i>Clangula hyemalis</i>	oldsquaw	O		O	O
<i>Coccothraustes vespertinus</i>	evening grosbeak	O		O	O
<i>Coccyzus americanus</i>	yellow-billed cuckoo	O	U	O	
<i>Coccyzus erythrophthalmus</i>	black-billed cuckoo	O	O	C	
<i>Colaptes auratus</i>	northern flicker	C	C	C	O
<i>Colinus virginianus</i>	northern bobwhite	R	R	R	R
<i>Columba livia</i>	rock dove	A	A	A	A
<i>Contopus virens</i>	eastern wood-pewee	C	C	C	
<i>Contopus cooperi</i>	olive-sided flycatcher	U	C	R	
<i>Corvus brachyrhynchos</i>	American crow	C	C	C	C
<i>Cyanocitta cristata</i>	blue jay	A	A	A	R
<i>Cygnus columbianus</i>	tundra swan [= whistling swan]	U		U	R
<i>Cygnus olor</i>	mute swan	R		U	R
<i>Dendroica caerulescens</i>	black-throated blue warbler	U		U	
<i>Dendroica castanea</i>	bay-breasted warbler	U		U	
<i>Dendroica cerulea</i>	cerulean warbler	U	U		
<i>Dendroica coronata</i>	yellow-rumped warbler	C		R	O
<i>Dendroica discolor</i>	prairie warbler	R	R		
<i>Dendroica dominica</i>	yellow-throated warbler	O			
<i>Dendroica fusca</i>	Blackburnian warbler	U		U	
<i>Dendroica magnolia</i>	magnolia warbler	U		U	
<i>Dendroica palmarum</i>	palm warbler	U		U	
<i>Dendroica pensylvanica</i>	chestnut-sided warbler	U	O	U	
<i>Dendroica petechia</i>	yellow warbler	C	C	U	
<i>Dendroica pinus</i>	pine warbler	O		U	
<i>Dendroica striata</i>	blackpoll warbler	O		U	
<i>Dendroica tigrina</i>	Cape May warbler	U		U	
<i>Dendroica virens</i>	black-throated green warbler	U		U	
<i>Dolichonyx oryzivorus</i>	bobolink	U		U	
<i>Dryocopus pileatus</i>	pileated woodpecker	R	C	R	R
<i>Dumetella carolinensis</i>	gray catbird	C	C	C	
<i>Egretta thula</i>	snowy egret	R	R	R	
<i>Empidonax alnorum</i>	alder flycatcher	O	R	R	
<i>Empidonax flaviventris</i>	yellow-bellied flycatcher	U	R	U	
<i>Empidonax minimus</i>	least flycatcher	C	U	U	
<i>Empidonax traillii</i>	willow flycatcher	C	C	U	
<i>Empidonax virescens</i>	Acadian flycatcher	C	C	U	
<i>Eremophila alpestris</i>	horned lark	C	C	U	C
<i>Euphagus carolinus</i>	rusty blackbird	U		U	O
<i>Falco columbarius</i>	merlin	O		O	
<i>Falco peregrinus</i>	peregrine falcon	O	R	O	R
<i>Falco sparverius</i>	American kestrel [sparrow hawk]	C	C	U	C
<i>Fulica americana</i>	American coot	U	U	U	U
<i>Gallinago gallinago</i>	common snipe	U	O	U	
<i>Gallinula chloropus</i>	common moorhen	O	O	O	
<i>Gavia immer</i>	common loon	U	R	U	O
<i>Gavia stellata</i>	red-throated loon	O		O	R

SCIENTIFIC NAME	COMMON NAME	---ABUNDANCE---			
		Sp	Su	F	W
<i>Geothlypis trichas</i>	common yellowthroat	C	C	C	R
<i>Haliaeetus leucocephalus</i>	bald eagle	C	C	C	C
<i>Hirundo rustica</i>	barn swallow	C	C	C	
<i>Hylocichla mustelina</i>	wood thrush	C	C	C	
<i>Icteria virens</i>	yellow-breasted chat	U	U	U	
<i>Icterus galbula</i>	Baltimore oriole [=northern oriole]	C	C	C	
<i>Icterus spurius</i>	orchard oriole	U	U	O	
<i>Ixobrychus exilis</i>	least bittern	R	R	R	
<i>Junco hyemalis</i>	dark-eyed junco	C		C	C
<i>Lanius excubitor</i>	northern shrike	R		R	O
<i>Lanius ludovicianus</i>	loggerhead shrike	R	R	R	
<i>Larus argentatus</i>	herring gull	A	C	A	A
<i>Larus atricilla</i>	laughing gull	A	O	A	A
<i>Larus delawarensis</i>	ring-billed gull	A	A	A	A
<i>Larus fuscus</i>	lesser black-backed gull	O		U	O
<i>Larus glaucoides</i>	Iceland gull	O		U	U
<i>Larus hyperboreus</i>	glaucous gull	O		O	U
<i>Larus marinus</i>	great black-backed gull	U	O	U	C
<i>Larus minutus</i>	little gull	O	O	O	R
<i>Larus philadelphia</i>	Bonaparte's gull	C	O	A	R
<i>Larus pipixcan</i>	Franklin's gull	R	R	O	R
<i>Larus ridibundus</i>	black-headed gull	R		O	R
<i>Larus thayeri</i>	Thayer's gull	O		U	U
<i>Limnodrolus scolopaceus</i>	long-billed dowitcher	R	R	U	
<i>Limnodromus griseus</i>	short-billed dowitcher	C	R	U	
<i>Limosa fedoa</i>	marbled godwit	R	R	O	
<i>Lophodytes cucullatus</i>	hooded merganser	U	R	U	U
<i>Loxia curvirostra</i>	red crossbill	R		R	R
<i>Loxia leucoptera</i>	white-winged crossbill	R		R	R
<i>Melanerpes carolinus</i>	red-bellied woodpecker	U	U	U	U
<i>Melanerpes erythrocephalus</i>	red-headed woodpecker	U	U	U	U
<i>Melanitta fusca</i>	white-winged scoter	O		O	U
<i>Melannita nigra</i>	black scoter	R		O	R
<i>Melannita perspicillata</i>	surf scoter	R		O	R
<i>Meleagris gallopavo</i>	wild turkey	O	O	O	R
<i>Melospiza georgiana</i>	swamp sparrow	U	O	U	O
<i>Melospiza lincolni</i>	Lincoln's sparrow	U		U	R
<i>Melospiza melodia</i>	song sparrow	C	C	C	C
<i>Mergus merganser</i>	common merganser	O		O	U
<i>Mergus serrator</i>	red-breasted merganser	C	R	A	O
<i>Mimus polyglottos</i>	northern mockingbird	R	R	A	R
<i>Mniotilta varia</i>	black-and-white warbler	U	R	U	
<i>Molothrus ater</i>	brown-headed cowbird	C	C	C	O
<i>Myiarchus crinitus</i>	great crested flycatcher	C	C	U	
<i>Nyctanassa violacea</i>	yellow-crowned night-heron	R	R	R	
<i>Nyctea scandiaca</i>	snowy owl	U		U	O
<i>Nycticorax nycticorax</i>	black-crowned night-heron	U	U	U	R
<i>Oporornis philadelphia</i>	mourning warbler	O		R	C
<i>Otus asio</i>	eastern screech-owl	C	C	C	C
<i>Oxyura jamaicensis</i>	ruddy duck	C	R	C	R
<i>Pandion haliaetus</i>	osprey	U	R	U	
<i>Parula americana</i>	northern parula	U	R	O	
<i>Passer domesticus</i>	house sparrow	A	A	A	A
<i>Passerculus sandwichensis</i>	Savannah sparrow	U	C	U	R
<i>Passerella iliaca</i>	fox sparrow	U		U	
<i>Passerina cyanea</i>	indigo bunting	C	C	C	
<i>Petrochelidon pyrrhonota</i>	cliff swallow	O	R	O	
<i>Phalacrocorax auritus</i>	double-crested cormorant	C	C	C	R
<i>Phalaropus lobatus</i>	red-necked phalarope	O	R	O	
<i>Phalaropus tricolor</i>	Wilson's phalarope	O	R	O	
<i>Phasianus colchicus</i>	ring-necked pheasant	R	R	R	R
<i>Pheucticus ludovicianus</i>	rose-breasted grosbeak	U	U	U	
<i>Picoides pubescens</i>	downy woodpecker	C	C	C	C
<i>Picoides villosus</i>	hairy woodpecker	C	C	C	C
<i>Pinicola enucleator</i>	pine grosbeak	R		R	R
<i>Pipilo erythrophthalmus</i>	eastern towhee [=rufous-sided towhee]	C	C	C	R

SCIENTIFIC NAME	COMMON NAME	---ABUNDANCE---			
		Sp	Su	F	W
<i>Piranga olivacea</i>	scarlet tanager	U	U	U	
<i>Plectrophenax nivalis</i>	snow bunting	O		C	U
<i>Pluvialis dominica</i>	American golden-plover	U	R	U	
<i>Pluvialis squatarola</i>	black-bellied plover	U	O	U	
<i>Podiceps auritus</i>	horned grebe	U		U	O
<i>Podiceps grisegena</i>	red-necked grebe	R		R	R
<i>Podiceps nigricollis</i>	eared grebe	R		R	R
<i>Podilymbus podiceps</i>	pieb-billed grebe	C	U	C	O
<i>Poecile atricapillus</i>	black-capped chickadee	C	C	C	C
<i>Polioptila caerulea</i>	blue-gray gnatcatcher	C	C	C	
<i>Poocetes gramineus</i>	vesper sparrow	U	U	U	
<i>Porzana carolina</i>	sora	U	O	U	
<i>Progne subis</i>	purple martin	C	O	C	
<i>Protonotaria citrea</i>	prothonotary warbler	O	O	O	
<i>Quiscalus quiscula</i>	common grackle	A	A	A	O
<i>Rallus elegans</i>	king rail	A	R	A	
<i>Rallus limicola</i>	Virginia rail	O	O	O	
<i>Regulus calendula</i>	ruby-crowned kinglet	C		C	O
<i>Regulus satrapa</i>	golden-crowned kinglet	C		C	O
<i>Riparia riparia</i>	bank swallow	O	O	O	
<i>Rissa tridactyla</i>	black-legged kittiwake	R		O	O
<i>Sayornis phoebe</i>	eastern phoebe	C	U	O	R
<i>Scolopax minor</i>	American woodcock	U	U	U	
<i>Seiurus aurocapillus</i>	ovenbird	U	U	U	
<i>Seiurus motacilla</i>	Louisiana waterthrush	U	R	U	
<i>Seiurus noveboracensis</i>	northern waterthrush	U	R	U	
<i>Setophaga ruticilla</i>	American redstart	U	C	U	
<i>Sialia sialis</i>	eastern bluebird	U	U	U	O
<i>Sitta canadensis</i>	red-breasted nuthatch	U		U	U
<i>Sitta carolinensis</i>	white-breasted nuthatch	C	C	C	C
<i>Sphyrapicus varius</i>	yellow-bellied sapsucker	U	R	U	R
<i>Spiza americana</i>	dickcissel	R	R	R	
<i>Spizella arborea</i>	American tree sparrow	C		U	C
<i>Spizella passerina</i>	chipping sparrow	U	C	U	
<i>Spizella pusilla</i>	field sparrow	C	C	C	R
<i>Stelgidopteryx serripennis</i>	northern rough-winged swallow	C	C	C	
<i>Stercorarius parasiticus</i>	parasitic jaeger			O	R
<i>Sterna caspia</i>	Caspian tern	C	O	C	R
<i>Sterna forsteri</i>	Forster's tern	C	O	C	R
<i>Sterna hirundo</i>	common tern	C	O	C	R
<i>Strix varia</i>	barred owl	R	R	R	R
<i>Sturnella magna</i>	eastern meadowlark	C	C	C	O
<i>Sturnella neglecta</i>	western meadowlark	R	R	R	
<i>Sturnus vulgaris</i>	European starling	A	A	A	A
<i>Tachycineta bicolor</i>	tree swallow	C	C	C	R
<i>Thryothorus ludovicianus</i>	Carolina wren	O	O	O	R
<i>Toxostoma rufum</i>	brown thrasher	U	U	U	
<i>Tringa flavipes</i>	lesser yellowlegs	U	O	U	
<i>Tringa melanoleuca</i>	greater yellowlegs	U	O	U	
<i>Tringa solitaria</i>	solitary sandpiper	U	U	U	
<i>Troglodytes aedon</i>	house wren	C	C	C	
<i>Troglodytes troglodytes</i>	winter wren	C		O	O
<i>Turdus migratorius</i>	American robin	A	A	A	U
<i>Tyrannus tyrannus</i>	eastern kingbird	C	C	C	R
<i>Tyto alba</i>	barn-owl	R	R	R	R
<i>Vermivora celata</i>	orange-crowned warbler	O		O	
<i>Vermivora chrysoptera</i>	golden-winged warbler	O	R	R	
<i>Vermivora peregrina</i>	Tennessee warbler	C		C	
<i>Vermivora pinus</i>	blue-winged warbler	U	U	U	
<i>Vermivora ruficapilla</i>	Nashville warbler	U		U	
<i>Vireo flavifrons</i>	yellow-throated vireo	U	U	U	
<i>Vireo gilvus</i>	warbling vireo	C	C	C	
<i>Vireo griseus</i>	white-eyed vireo	O	O	O	
<i>Vireo olivaceus</i>	red-eyed vireo	C	C	C	
<i>Vireo philadelphicus</i>	Philadelphia vireo	O		O	
<i>Vireo solitarius</i>	blue-headed vireo [=solitary vireo]	U	O	U	

SCIENTIFIC NAME	COMMON NAME	---ABUNDANCE---			
		Sp	Su	F	W
<i>Wilsonia canadensis</i>	Canada warbler	U		U	
<i>Wilsonia citrina</i>	hooded warbler	U	O	U	
<i>Wilsonia pusill</i>	Wilson's warbler	U		U	
<i>Zenaida macroura</i>	mourning dove	A	A	A	A
<i>Zonotrichia albicollis</i>	white-throated sparrow	C	R	C	U
<i>Zonotrichia leucophrys</i>	white-crowned sparrow	U		U	O

SEASONAL DESIGNATIONS:

- Sp - Spring (March-May)
- Su - Summer (June-August)
- F - Fall (September-November)
- W - Winter (December-February)

ABUNDANCE CODES:

- A - Abundant
- C - Common
- O - Occasional
- U - Uncommon
- R - Rare

Appendix L

Alphabetized List of the Avifauna for Old Woman Creek Estuary and Watershed, and Adjacent Tributaries and Waters of Lake Erie by Common Name

ALPHABETIZED LIST OF THE AVIFAUNA FOR OLD WOMAN CREEK ESTUARY AND WATERSHED, AND ADJACENT TRIBUTARIES AND WATERS OF LAKE ERIE

by Common Name

COMMON NAME	SCIENTIFIC NAME	---ABUNDANCE---			
		Sp	Su	F	W
barn-owl	<i>Tyto alba</i>	R	R	R	R
bittern, American	<i>Botaurus lentiginosus</i>	R	R	R	R
bittern, least	<i>Ixobrychus exilis</i>	R	R	R	R
blackbird, red-winged	<i>Agelaius phoeniceus</i>	A	A	A	U
blackbird, rusty	<i>Euphagus carolinus</i>	U	U	U	O
bluebird, eastern	<i>Sialia sialis</i>	U	U	U	O
bobolink	<i>Dolichonyx oryzivorus</i>	U	C	U	R
bobwhite, northern	<i>Colinus virginianus</i>	R	R	R	R
bufflehead	<i>Bucephala albeola</i>	C	C	C	U
bunting, indigo	<i>Passerina cyanea</i>	C	C	C	U
bunting, snow	<i>Plectrophenax nivalis</i>	C	C	C	U
canvasback	<i>Aythya valisineria</i>	U	U	U	O
cardinal, northern	<i>Cardinalis cardinalis</i>	C	C	C	C
catbird, gray	<i>Dumetella carolinensis</i>	C	C	C	C
chat, yellow-breasted	<i>Icteria virens</i>	U	U	U	C
chickadee, black-capped	<i>Poecile atricapillus</i>	C	C	U	C
coot, American	<i>Fulica americana</i>	U	U	U	R
cormorant, double-crested	<i>Phalacrocorax auritus</i>	C	C	C	C
cowbird, brown-headed	<i>Molothrus ater</i>	C	C	C	R
creeper, brown	<i>Certhia americana</i>	U	R	U	R
crossbill, red	<i>Loxia curvirostra</i>	R	R	R	R
crossbill, white-winged	<i>Loxia leucoptera</i>	R	R	R	R
crow, American	<i>Corvus brachyrhynchos</i>	C	C	C	C
cuckoo, black-billed	<i>Coccyzus erythrophthalmus</i>	O	O	O	U
cuckoo, yellow-billed	<i>Coccyzus americanus</i>	U	U	U	U
dickcissel	<i>Spiza americana</i>	R	R	R	A
dove, mourning	<i>Zenaidura macroura</i>	A	A	A	A
dove, rock	<i>Columba livia</i>	A	A	A	A
dowitcher, long-billed	<i>Limnodrolus scolopaceus</i>	R	R	U	U
dowitcher, short-billed	<i>Limnodromus griseus</i>	C	U	U	U
duck, American black	<i>Anas rubripes</i>	C	U	U	C
duck, ring-necked	<i>Aythya collaris</i>	U	R	U	C
duck, ruddy	<i>Oxyura jamaicensis</i>	C	R	C	C
duck, wood	<i>Aix sponsa</i>	C	C	C	C
dunlin	<i>Calidris alpina</i>	A	C	C	R
eagle, bald	<i>Haliaeetus leucocephalus</i>	C	C	C	C
egret, cattle	<i>Bubulcus ibis</i>	R	R	R	R
egret, great	<i>Ardea albus</i>	R	R	R	R
egret, snowy	<i>Egretta thula</i>	R	R	R	R
falcon, peregrine	<i>Falco peregrinus</i>	O	R	O	R
finch, house	<i>Carpodacus mexicanus</i>	A	A	A	U
finch, purple	<i>Carpodacus purpureus</i>	U	O	U	O
flicker, northern	<i>Colaptes auratus</i>	C	C	U	O
flycatcher, Acadian	<i>Empidonax vireescens</i>	C	C	U	O
flycatcher, alder	<i>Empidonax alnorum</i>	O	C	U	O
flycatcher, great crested	<i>Myiarchus crinitus</i>	C	C	U	U
flycatcher, least	<i>Empidonax minimus</i>	C	U	U	U
flycatcher, olive-sided	<i>Contopus cooperi</i>	U	R	O	O
flycatcher, willow	<i>Empidonax traillii</i>	C	C	O	O
flycatcher, yellow-bellied	<i>Empidonax flaviventris</i>	U	R	U	O
gadwall	<i>Anas strepera</i>	U	C	U	O
gnatcatcher, blue-gray	<i>Poliophtila caerulea</i>	C	R	C	O
godwit, marbled	<i>Limosa fedoa</i>	R	R	O	O
golden-plover, American	<i>Pluvialis dominica</i>	U	R	U	C
goldeneye, common	<i>Bucephala clangula</i>	C	C	C	C
goldfinch, American	<i>Carduelis tristis</i>	C	C	C	C
goose, Canada	<i>Branta canadensis</i>	C	C	A	O
goose, snow	<i>Chen caerulescens</i>	R	R	O	R
goshawk, northern	<i>Accipiter gentilis</i>	R	A	R	R
grackle, common	<i>Quiscalus quiscula</i>	A	A	A	O

COMMON NAME	SCIENTIFIC NAME	---ABUNDANCE---			
		Sp	Su	F	W
grebe, eared	<i>Podiceps nigricollis</i>	R		R	R
grebe, horned	<i>Podiceps auritus</i>	U		U	O
grebe, pied-billed	<i>Podilymbus podiceps</i>	C	U	C	O
grebe, red-necked	<i>Podiceps grisegena</i>	R		R	R
grosbeak, evening	<i>Coccothraustes vespertinus</i>	O		O	O
grosbeak, pine	<i>Pinicola enucleator</i>	R		R	R
grosbeak, rose-breasted	<i>Pheucticus ludovicianus</i>	U	U	U	
gull, black-headed	<i>Larus ridibundus</i>	R		R	
gull, Bonaparte's	<i>Larus philadelphia</i>	C	O	A	R
gull, Franklin's	<i>Larus pipixcan</i>	R	O	O	R
gull, glaucous	<i>Larus hyperboreus</i>	O		O	U
gull, great black-backed	<i>Larus marinus</i>	U	O	U	C
gull, herring	<i>Larus argentatus</i>	A	C	A	A
gull, Iceland	<i>Larus glaucoides</i>	O		O	U
gull, laughing	<i>Larus atricilla</i>	R	O	O	R
gull, lesser black-backed	<i>Larus fuscus</i>	O		O	O
gull, little	<i>Larus minutus</i>	O	R	O	R
gull, ring-billed	<i>Larus delawarensis</i>	A	A	A	A
gull, Thayer's	<i>Larus thayeri</i>	O		O	U
harrier, northern or marsh hawk	<i>Circus cyaneus</i>	U	R	U	U
hawk, broad-winged	<i>Buteo platypterus</i>	U	R	U	
hawk, Cooper's	<i>Accipiter cooperii</i>	U		U	
hawk, red-shouldered	<i>Buteo lineatus</i>	U	R	U	U
hawk, red-tailed	<i>Buteo jamaicensis</i>	C	C	C	R
hawk, rough-legged	<i>Buteo lagopus</i>	O		O	C
hawk, sharp-shinned	<i>Accipiter striatus</i>	U	R	U	C
heron, great blue	<i>Ardea herodias</i>	C	C	C	O
heron, striated	<i>Butorides striatus</i>	U	U	U	
hummingbird, ruby-throated	<i>Archilochus colubris</i>	C		C	
jaeger, parasitic	<i>Stercorarius parasiticus</i>			O	
jay, blue	<i>Cyanocitta cristata</i>	A	A	A	A
junco, dark-eyed	<i>Junco hyemalis</i>	C		C	C
kestrel, American	<i>Falco sparverius</i>	C	C	C	C
killdeer	<i>Charadrius vociferus</i>	C	C	C	R
kingbird, eastern	<i>Tyrannus tyrannus</i>	C		C	
kingfisher, belted	<i>Ceryle alcyon</i>	C	C	C	U
kinglet, golden-crowned	<i>Regulus satrapa</i>	C		C	O
kinglet, ruby-crowned	<i>Regulus calendula</i>	C		C	O
kittiwake, black-legged	<i>Rissa tridactyla</i>	R		O	O
knot, red	<i>Calidris canutus</i>	O	O	O	
lark, horned	<i>Eremophila alpestris</i>	C	C	C	C
longspur, Lapland	<i>Calcarius lapponicus</i>	O		O	O
loon, common	<i>Gavia immer</i>	U	R	U	O
loon, red-throated	<i>Gavia stellata</i>	O		O	R
mallard	<i>Anas platyrhynchos</i>	A	A	A	A
martin, purple	<i>Progne subis</i>	C	C	C	
meadowlark, eastern	<i>Sturnella magna</i>	C	C	C	O
meadowlark, western	<i>Sturnella neglecta</i>	R	R	R	
merganser, common	<i>Mergus merganser</i>	O		O	U
merganser, hooded	<i>Lophodytes cucullatus</i>	U	R	U	U
merganser, red-breasted	<i>Mergus serrator</i>	C	R	A	C
merlin	<i>Falco columbarius</i>	O		O	
mockingbird, northern	<i>Mimus polyglottos</i>	R	R	R	R
moorhen, common	<i>Gallinula chloropus</i>	O	O	O	
night-heron, black-crowned	<i>Nycticorax nycticorax</i>	U	U	U	
night-heron, yellow-crowned	<i>Nyctanassa violacea</i>	R	R	R	R
nighthawk, common	<i>Chordeiles minor</i>	C	C	C	
nuthatch, red-breasted	<i>Sitta canadensis</i>	U		U	U
nuthatch, white-breasted	<i>Sitta carolinensis</i>	C	C	C	C
oldsquaw	<i>Clangula hyemalis</i>	O		O	O
oriole, Baltimore	<i>Icterus galbula</i>	C	C	C	
oriole, orchard	<i>Icterus spurius</i>	U	U	U	
osprey	<i>Pandion haliaetus</i>	U	U	U	
ovenbird	<i>Seiurus aurocapillus</i>	U	U	U	
owl, barred	<i>Strix varia</i>	R	R	R	R
owl, great horned	<i>Bubo virginianus</i>	C	C	C	C

COMMON NAME	SCIENTIFIC NAME	---ABUNDANCE---			
		Sp	Su	F	W
owl, long-eared	<i>Asio otus</i>	R		R	O
owl, northern saw-whet	<i>Aegolius acadicus</i>	R	R	R	R
owl, short-eared	<i>Asio flammeus</i>	R		R	O
owl, snowy	<i>Nyctea scandiaca</i>	R		R	O
parula, northern	<i>Parula americana</i>	U	R	O	
phalarope, red-necked	<i>Phalaropus lobatus</i>	O	R	O	
phalarope, Wilson's	<i>Phalaropus tricolor</i>	O	R	O	
pheasant, ring-necked	<i>Phasianus colchicus</i>	R	R	R	R
phoebe, eastern	<i>Sayornis phoebe</i>	C	U	R	
pintail, northern	<i>Anas acuta</i>	O	U	O	O
pipit, water	<i>Anthus spinoletta</i>	U		U	
plover, black-bellied	<i>Pluvialis squatarola</i>	U	O	U	
plover, piping	<i>Charadrius melodus</i>	R	R	U	
plover, semipalmated	<i>Charadrius semipalmatus</i>	U	U	U	
rail, king	<i>Rallus elegans</i>	U	R	R	
rail, Virginia	<i>Rallus limicola</i>	R	O	R	
redhead	<i>Aythya americana</i>	U	R	U	O
redpoll, common	<i>Carduelis flammea</i>	O		R	O
redstart, American	<i>Setophaga ruticilla</i>	C	C	C	
robin, American	<i>Turdus migratorius</i>	A	A	A	U
sanderling	<i>Calidris alba</i>	U	O	U	
sandpiper, least	<i>Calidris minutilla</i>	C	U	C	
sandpiper, pectoral	<i>Calidris melanotos</i>	C	U	C	
sandpiper, purple	<i>Calidris maritima</i>			O	O
sandpiper, semipalmated	<i>Calidris pusilla</i>	C	U	C	
sandpiper, solitary	<i>Tringa solitaria</i>	U	U	U	
sandpiper, spotted	<i>Actitis macularia</i>	C	C	C	
sandpiper, stilt	<i>Calidris himantopus</i>	O	R	O	
sandpiper, upland	<i>Bartramia longicauda</i>	R	O	R	
sandpiper, western	<i>Calidris mauri</i>	O	U	O	
sandpiper, white-rumped	<i>Calidris fuscicollis</i>	O	O	O	
sapsucker, yellow-bellied	<i>Sphyrapicus varius</i>	U	R	U	R
scaup, greater	<i>Aythya marila</i>	U		U	U
scaup, lesser	<i>Aythya affinis</i>	C	R	C	R
scoter, black	<i>Melannita nigra</i>	R		O	R
scoter, surf	<i>Melannita perspicillata</i>	R		O	R
scoter, white-winged	<i>Melannita fusca</i>	O		O	U
screech-owl, eastern	<i>Otus asio</i>	C	C	C	C
shoveler, northern	<i>Anas clypeata</i>	O	R	O	R
shrike, loggerhead	<i>Lanius ludovicianus</i>	R	R	R	
shrike, northern	<i>Lanius excubitor</i>	R		R	O
siskin, pine	<i>Carduelis pinus</i>	O	R	U	O
snipe, common	<i>Gallinago gallinago</i>	U	O	U	
sora	<i>Porzana carolina</i>	U	O	U	
sparrow, American tree	<i>Spizella arborea</i>	C		U	C
sparrow, chipping	<i>Spizella passerina</i>	U	C	U	
sparrow, field	<i>Spizella pusilla</i>	C	C	C	R
sparrow, fox	<i>Passerella iliaca</i>	U		U	R
sparrow, grasshopper	<i>Ammodramus savannarum</i>	O	U	O	
sparrow, Henslow's	<i>Ammodramus henslowii</i>	R	R	R	
sparrow, house	<i>Passer domesticus</i>	A	A	A	A
sparrow, Lincoln's	<i>Melospiza lincolnii</i>	U		U	R
sparrow, saltmarsh sharp-tailed	<i>Ammodramus caudacutus</i>	R		O	
sparrow, Savannah	<i>Passerculus sandwichensis</i>	U	C	U	R
sparrow, song	<i>Melospiza melodia</i>	C	C	C	O
sparrow, swamp	<i>Melospiza georgiana</i>	U	O	U	O
sparrow, vesper	<i>Poocetes gramineus</i>	U	U	U	
sparrow, white-crowned	<i>Zonotrichia leucophrys</i>	U		U	O
sparrow, white-throated	<i>Zonotrichia albicollis</i>	C	R	C	U
starling, European	<i>Sturnus vulgaris</i>	A	A	A	A
swallow, bank	<i>Riparia riparia</i>	O	O	O	
swallow, barn	<i>Hirundo rustica</i>	C	C	C	
swallow, cliff	<i>Petrochelidon pyrrhonota</i>	O	R	O	
swallow, northern rough-winged	<i>Stelgidopteryx serripennis</i>	C	C	C	
swallow, tree	<i>Tachycineta bicolor</i>	C	C	C	R

COMMON NAME	SCIENTIFIC NAME	---ABUNDANCE---			
		Sp	Su	F	W
swan, mute	<i>Cygnus olor</i>	R		R	R
swan, tundra or whistling	<i>Cygnus columbianus</i>	U		U	R
swift, chimney	<i>Chaetura pelagica</i>	U		U	
anager, scarlet	<i>Piranga olivacea</i>	U	C	U	
teal, blue-winged	<i>Anas discors</i>	U	U	U	R
teal, green-winged	<i>Anas crecca</i>	U	U	U	R
tern, black	<i>Chlidonias niger</i>	O		O	
tern, Caspian	<i>Sterna caspia</i>	O		O	
tern, common	<i>Sterna hirundo</i>	O		O	R
tern, Forster's	<i>Sterna forsteri</i>	O		O	R
thrasher, brown	<i>Toxostoma rufum</i>	U	U	U	R
thrush, gray-cheeked	<i>Catharus minimus</i>	U		U	
thrush, hermit	<i>Catharus guttatus</i>	U	R	U	R
thrush, Swainson's	<i>Catharus ustulatus</i>	U	R	U	
thrush, wood	<i>Hylocichla mustelina</i>	O	R	O	
titmouse, tufted	<i>Baeolophus bicolor</i>	O	C	O	O
towhee, eastern	<i>Pipilo erythrophthalmus</i>	O	O	O	R
turkey, wild	<i>Meleagris gallopava</i>	O	O	O	O
turnstone, ruddy	<i>Arenaria interpres</i>	U	O	U	R
veery	<i>Catharus fuscescens</i>	U	O	U	
vireo, blue-headed	<i>Vireo solitarius</i>	U	O	U	
vireo, Philadelphia	<i>Vireo philadelphicus</i>	O		O	
vireo, red-eyed	<i>Vireo olivaceus</i>	O	C	O	
vireo, warbling	<i>Vireo gilvus</i>	O	C	O	
vireo, white-eyed	<i>Vireo griseus</i>	O	C	O	
vireo, yellow-throated	<i>Vireo flavifrons</i>	U	U	U	
vulture, turkey	<i>Cathartes aura</i>	O	C	O	
warbler, bay-breasted	<i>Dendroica castanea</i>	O		O	
warbler, black-and-white	<i>Mniotilta varia</i>	U	R	U	
warbler, black-throated blue	<i>Dendroica caerulescens</i>	U		U	
warbler, black-throated green	<i>Dendroica virens</i>	U		U	
warbler, Blackburnian	<i>Dendroica fusca</i>	U		U	
warbler, blackpoll	<i>Dendroica striata</i>	O		O	
warbler, blue-winged	<i>Vermivora pinus</i>	U	U	U	
warbler, Canada	<i>Wilsonia canadensis</i>	U		U	
warbler, Cape May	<i>Dendroica tigrina</i>	U		U	
warbler, cerulean	<i>Dendroica cerulea</i>	U	U	U	
warbler, chestnut-sided	<i>Dendroica pensylvanica</i>	U	O	U	
warbler, golden-winged	<i>Vermivora chrysoptera</i>	O	O	R	
warbler, hooded	<i>Wilsonia citrina</i>	U	O	U	
warbler, magnolia	<i>Dendroica magnolia</i>	U		U	
warbler, mourning	<i>Oporornis philadelphia</i>	U		U	
warbler, Nashville	<i>Vermivora ruficapilla</i>	U		U	
warbler, orange-crowned	<i>Vermivora celata</i>	O		O	R
warbler, palm	<i>Dendroica palmarum</i>	U		U	
warbler, pine	<i>Dendroica pinus</i>	O		U	
warbler, prairie	<i>Dendroica discolor</i>	R		R	
warbler, prothonotary	<i>Protonotaria citrea</i>	O	O	O	
warbler, Tennessee	<i>Vermivora peregrina</i>	U		U	
warbler, Wilson's	<i>Wilsonia pusill</i>	U		U	
warbler, yellow	<i>Dendroica petechia</i>	C	C	C	
warbler, yellow-rumped	<i>Dendroica coronata</i>	O		O	O
warbler, yellow-throated	<i>Dendroica dominica</i>	O		O	
waterthrush, Louisiana	<i>Seiurus motacilla</i>	U	R	U	
waterthrush, northern	<i>Seiurus noveboracensis</i>	U	R	U	
waxwing, cedar	<i>Bombycilla cedrorum</i>	O	R	O	U
whip-poor-will	<i>Caprimulgus vociferus</i>	O	R	O	
wigeon, American	<i>Anas americana</i>	O	R	O	O
willet	<i>Catoptrophorus semipalmatus</i>	O	R	O	
wood-pewee, eastern	<i>Contopus virens</i>	U		U	
woodcock, American	<i>Scolopax minor</i>	U		U	
woodpecker, downy	<i>Picoides pubescens</i>	C		C	O
woodpecker, hairy	<i>Picoides villosus</i>	C		C	O
woodpecker, pileated	<i>Dryocopus pileatus</i>	R	R	R	R
woodpecker, red-bellied	<i>Melanerpes carolinus</i>	U		U	U
woodpecker, red-headed	<i>Melanerpes erythrocephalus</i>	U		U	R

COMMON NAME	SCIENTIFIC NAME	---ABUNDANCE---			
		Sp	Su	F	W
wren, Carolina	<i>Thryothorus ludovicianus</i>	O	O	O	O
wren, house	<i>Troglodytes aedon</i>	C	C	C	
wren, marsh	<i>Cistothorus palustris</i>	U	U	U	R
wren, sedge	<i>Cistothorus platensis</i>	R	R	R	
wren, winter	<i>Troglodytes troglodytes</i>	C		O	O
yellowlegs, greater	<i>Tringa melanoleuca</i>	U	O	U	
yellowlegs, lesser	<i>Tringa flavipes</i>	U	O	U	
yellowthroat, common	<i>Geothlypis trichas</i>	C	C	C	R

SEASONAL DESIGNATIONS:

Sp – Spring (March-May)
 Su – Summer (June-August)
 F – Fall (September-November)
 W – Winter (December-February)

ABUNDANCE CODES:

A – Abundant
 C – Common
 O – Occasional
 U – Uncommon
 R – Rare

