

FILE



Mr. William Montgomery
PO Box 157172
Cincinnati, OH 45215-7172

3/24/2019

Ohio Power Siting Board
180 E. Broad St.
Columbus, OH 43215

16-0253-GA-BTX

r.e.: #16-253-GA-BTX; Duke Energy's Central Corridor Pipeline (Hamilton County)

POTENTIAL NEPA VIOLATIONS

Duke seems to be following NEPA in the Applications for this Project of 9/13/2016, and the 1/20/2017 and April, 2018 revisions. These give superficial appearances of Environmental Impact Statements. They've retained a firm of professional biologists-- CH2m. From their input into the above Applications, their surveys for State & Federally-listed Species have not been adequately done. They were unable to find anything! However if they have enumerated Listed species in some other documents, I hereby request these so that I can examine them. But from what I've seen, these biologists have not done well.

Numerous Federal Court rulings have rejected submissions of Environmental Impact Statements that they've judged to be inadequate.

On 10/31/2016, ODNR filed a letter in this case file identifying specific Listed species that had already been observed within 1,000 feet of this Project. The CH2m firm has not acknowledged any of these species as being there. Somehow-- they just can't find anything! Please examine Appendices I and IA to see what other biologists have found.

This is to certify that the images appearing are an accurate and complete reproduction of a case file document delivered in the regular course of business.
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2019 APR -3 AM 10:58
PUC

The source of this material is ODNR's Natural Heritage Database. And, as stated in the enclosed I-A, all properties in Ohio (and Hamilton County) have not been surveyed, to yield complete, comprehensive Listings.

OTHER ADDITIONAL SOURCES OF LOCAL SPECIES INFORMATION

For bat species, in addition to the Indiana bat (Endangered), there is also the Northern long-eared bat, which has recently been determined to be State & Federally-threatened. And still further-- all bat species in Ohio have now become State-listed, because of Whitenose Syndrome fungus.

For bird species seen locally, significant information on all of these can be found in The Second Atlas of Breeding Birds in Ohio, by Paul G. Rodewald, Matthew B. Shuman, Aaron T. Boone, David L. Stager, Jim McCormac, and 900 other named Ohio birders who contributed (Pennsylvania State University Press, 2016).

Using the State T & E List, a partial Listing of such moths that have been seen in Hamilton County can be viewed in Petersen's Field Guide to Moths of Northeastern North America by David Beadle and Seabrooke Leckie (Houghton Mifflin Harcourt, 2012). That work has some of these; but there are so many other moth species not covered therein that, to locate where those other moths can be found around here, another big field guide that contains those would be necessary.

To see where the Federally-endangered Rusty-patched bumble bee (*Bombus affinis*) has been seen in Hamilton County, see Bumble Bees of North America, by Paul H. Williams, Robbin W. Thorp, Lief L. Richardson, and Sheila R. Colla (Princeton University Press, 2014) P.122.

To see where Listed dragonflies and damselflies have been, see Dragonflies and Damselflies of the East, by Dennis Paulson (Princeton University Press, 2011)

To see where Listed butterflies have been seen in Ohio, see: Butterflies of Ohio Field Guide (Adventure Publications Inc., Cambridge, Mn, 2004)

ODNR's Rare Native Plant List has 254 Endangered, 157 Threatened, 111 Potentially-threatened, and 4 Unassigned on it. Appendix I-A mentions a few of these. The CH2m firm would conceivably have a lot of original research work to do this task conscientiously, correctly. There's so many of these Listed plants.

For fish species in Hamilton County, see Fishes of Ohio by Milton B. Trautman (Ohio State University Press; 1957, 1981). This large, thick book is quite comprehensive. It's surprising that there are so many different fish species in Ohio. Use this with the State T & E List and Appendix I-A.

Listed Mussel species of Hamilton County are found in Appendices I and I-A. To find these decisively when doing a mussel survey, divers must be employed to enter the water and dig along the bottom, to get mussels that have burrowed in.

Merely searching along the shores of waterways does not constitute a thorough search.

Latter Appendices also mention other Listed Species found near Duke's two designated routes.

ABSOLUTELY NO STATE OR FEDERALLY-LISTED SPECIES ALONG THOSE ROUTES? ???

So unless I see further documentation, this does suggest that Duke has failed to meet the basic requirements of NEPA.

Wm A Montgomery



APPENDIX I-A

155 East Broad Street
20th Floor
Columbus, Ohio, 43215
o: 614-222-1334
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October 31, 2016

VIA ELECTRONIC FILING

Barcy McNeal
Ohio Power Siting Board Docketing Division
180 East Broad Street, 11th Floor
Columbus, OH 43215-3716

RECEIVED-DOCKETING DIV
2019 APR -3 AM 10:58
PUCO

Re: Duke Energy Ohio C314V Central Corridor Pipeline Extension Project Case No. 16-253-GA-BTX-58

Dear Ms. McNeal:

Please find attached a letter from the Ohio Department of Natural Resources (ODNR) addressing the plant and animal life that may be affected by the project. This letter, dated October 31, 2016, had not been received at the time the Application was filed on September 13, 2016.

Sincerely,

Jeanne W. Kingery
Jeanne W. Kingery
Associate General Counsel



Ohio Department of Natural Resources

JOHN R. KASICH, GOVERNOR

JAMES ZEHRINGER, DIRECTOR

Office of Real Estate
Paul R. Baldridge, Chief
2045 Morse Road – Bldg. E-2
Columbus, OH 43229
Phone: (614) 265-6649
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October 31, 2016

Nathan Zink
CH2M
400 E. Business Way, Suite 400,
Cincinnati, OH 45241

Re: 16-692; OPSB No. 16-253-GA-BTX -Duke Energy C314V Central Corridor Pipeline Extension Project, Informal Consultation Request - State-Listed Threatened and Endangered Species

Project: The proposed project involves the installation of approximately 13 miles of new 20-inch natural gas pipeline from Duke's WW Feed Station to the existing Line V pipeline.

Location: The proposed project is located near Cincinnati, Hamilton County, Ohio.

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced project. These comments were generated by an inter-disciplinary review within the Department. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR's experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

Natural Heritage Database: The Natural Heritage Database has the following records at or within a one mile radius of the project area:

In addition to the rare species reported in the project documentation (pdf page 3) that were provided via a data request, the following data were also reported in the data request but not included in the project documentation:

Oak-maple forest plant community
Stream gorge (geologic feature)
Cliffs (geologic feature)
Fossil deposit (geologic feature)
Little Miami State Scenic River
Sharon Woods Gorge State Nature Preserve – Hamilton Co. Park District
Sharon Woods – Hamilton Co. Park District
French Park – City of Cincinnati Parks
Ault Park – City of Cincinnati Parks
Lindner Park – City of Norwood

Mill Creek Conservancy – Mill Creek Conservancy
Hazelwood Botanical Preserve – University of Cincinnati

The review was performed on the project area you specified in your request as well as an additional one mile radius. Records searched date from 1980. This information is provided to inform you of features present within your project area and vicinity. Additional comments on some of the features may be found in pertinent sections below.

Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area. Although all types of plant communities have been surveyed, we only maintain records on the highest quality areas.

Fish and Wildlife: The Division of Wildlife (DOW) has the following comments.

The DOW recommends that impacts to streams, wetlands and other water resources be avoided and minimized to the fullest extent possible, and that best management practices be utilized to minimize erosion and sedimentation.

The project is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species. The following species of trees have relatively high value as potential Indiana bat roost trees: shagbark hickory (*Carya ovata*), shellbark hickory (*Carya laciniosa*), bitternut hickory (*Carya cordiformis*), black ash (*Fraxinus nigra*), green ash (*Fraxinus pennsylvanica*), white ash (*Fraxinus americana*), shingle oak (*Quercus imbricaria*), northern red oak (*Quercus rubra*), slippery elm (*Ulmus rubra*), American elm (*Ulmus americana*), eastern cottonwood (*Populus deltoides*), silver maple (*Acer saccharinum*), sassafras (*Sassafras albidum*), post oak (*Quercus stellata*), and white oak (*Quercus alba*). Indiana bat roost trees consists of trees that include dead and dying trees with exfoliating bark, crevices, or cavities in upland areas or riparian corridors and living trees with exfoliating bark, cavities, or hollow areas formed from broken branches or tops. However, Indiana bats are also dependent on the forest structure surrounding roost trees. If suitable habitat occurs within the project area, the DOW recommends trees be conserved. If suitable habitat occurs within the project area and trees must be cut, the DOW recommends cutting occur between October 1 and March 31. If suitable trees must be cut during the summer months, the DOW recommends a net survey be conducted between June 1 and August 15, prior to any cutting. Net surveys should incorporate either nine net nights per square 0.5 kilometer of project area, or four net nights per kilometer for linear projects. If no tree removal is proposed, this project is not likely to impact this species.

The project is within the range of the sheepsfoot (*Pleurobema cyphyus*), a state endangered and federally endangered mussel, the fanshell (*Cyprogenia stegaria*), a state endangered and federally endangered mussel, the pink mucket (*Lampsilis orbiculata*), a state endangered and federally endangered mussel, the rayed bean (*Villosa fabalis*), a state endangered and federally endangered mussel, the snuffbox (*Epioblasma triquetra*), a state endangered and federally endangered mussel, the ebonyshell (*Fusconaia ebena*), a state endangered mussel, the long-solid (*Fusconaia maculata maculata*), a state endangered mussel, the butterfly (*Ellipsaria lineolata*), a state endangered mussel, the washboard (*Megaloniais nervosa*), a state endangered mussel, the elephant-ear (*Elliptio crassidens crassidens*), a state endangered mussel, the Ohio pigtoe (*Pleurobema cordatum*), a state endangered mussel, the monkeyface (*Quadrula metanevra*), a state endangered mussel, the wartyback (*Quadrula nodulata*), a state endangered mussel, the black sandshell (*Ligumia recta*), a state threatened mussel, the fawnsfoot (*Truncilla*

donaciformis), a state threatened mussel, and the threehorn wartyback (*Obliquaria reflexa*), a state threatened mussel.

This project must not have an impact on freshwater native mussels at the project site. This applies to both listed and non-listed species. Per the Ohio Mussel Survey Protocol (2016), all Group 2, 3, and 4 streams (Appendix A) require a mussel survey. Per the Ohio Mussel Survey Protocol, Group 1 streams (Appendix A) and unlisted streams with a watershed of 10 square miles or larger above the point of impact should be assessed using the Reconnaissance Survey for Unionid Mussels (Appendix B) to determine if mussels are present. Mussel surveys may be recommended for these streams as well. This is further explained within the Ohio Mussel Survey Protocol. Therefore, if in-water work is planned in any stream that meets any of the above criteria, the DOW recommends the applicant provide information to indicate no mussel impacts will occur. If this is not possible, the DOW recommends a professional malacologist conduct a mussel survey in the project area. If mussels that cannot be avoided are found in the project area, as a last resort, the DOW recommends a professional malacologist collect and relocate the mussels to suitable and similar habitat upstream of the project site. Mussel surveys and any subsequent mussel relocation should be done in accordance with the Ohio Mussel Survey Protocol. The Ohio Mussel Survey Protocol (2016) can be found at: <http://wildlife.ohiodnr.gov/portals/wildlife/pdfs/licenses%20&%20permits/OH%20Mussel%20Survey%20Protocol.pdf>

The project is within the range of the shortnose gar (*Lepisosteus platostomus*), a state endangered fish, the shoal chub (*Macrhybopsis hyostoma*), a state endangered fish, the shovelnose sturgeon (*Scaphirhynchus platyrhynchus*), a state endangered fish, the lake sturgeon (*Acipenser fulvescens*), a state endangered fish, the northern madtom (*Noturus stigmosus*), a state endangered fish, the bigeye shiner (*Notropis boops*) a state threatened fish, the mountain madtom (*Noturus eleutherus*), a state threatened fish, the river darter (*Percina shumardi*) a state threatened fish, the channel darter (*Percina copelandi*), a state threatened fish, the blue sucker (*Cycleptus elongatus*), a state threatened fish, and the paddlefish (*Polyodon spathula*) a state threatened fish. The DOW recommends no in-water work in perennial streams from April 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed, this project is not likely to impact this species.

The project is within the range of the Kirtland's snake (*Clonophis kirtlandii*), a state threatened species. This secretive species prefers wet meadows and other wetlands. Due to the location, the type of habitat present at the project site and within the vicinity of the project area, this project is not likely to impact this species.

The project is within the range of the cave salamander (*Eurycea lucifuga*), a state endangered species. Due to the location, this project is not likely to impact this species.

The project is within the range of the American bittern (*Botaurus lentiginosus*), a state endangered bird. Nesting bitterns prefer large undisturbed wetlands that have scattered small pools amongst dense vegetation. They occasionally occupy bogs, large wet meadows, and dense shrubby swamps. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 to July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the lark sparrow (*Chondestes grammacus*), a state endangered bird. This sparrow nests in grassland habitats with scattered shrub layers, disturbed open areas, as well as patches of bare soil. In the Oak Openings area west of Toledo, lark sparrows occupy open

grass and shrubby fields along sandy beach ridges. These summer residents normally migrate out of Ohio shortly after their young fledge or leave the nest. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 to June 30. If this habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the Sloan's crayfish (*Orconectes sloanii*), a state threatened species. Any in-water work should be conducted in a manner that will provide any Sloan's crayfish that are present an opportunity to relocate out of the area prior to construction.

The project is within the range of the Kramer's cave beetle *Pseudanophthalmus krameri*), a state endangered species, and the Ohio cave beetle (*Pseudanophthalmus ohioensis*), a state endangered species. These species are found only in caves. The Ohio Cave Protection Law, Section 1517.21 of the Ohio Revised Code, protects caves from impacts, in turn, protecting the habitat of these species. Therefore, this project is not likely to impact these species.

Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the U.S. Fish & Wildlife Service.

Water Resources: The Division of Water Resources has the following comment.

The local floodplain administrator should be contacted concerning the possible need for any floodplain permits or approvals for this project. Your local floodplain administrator contact information can be found at the website below.

<http://water.ohiodnr.gov/water-use-planning/floodplain-management#PUB>

ODNR appreciates the opportunity to provide these comments. Please contact John Kessler at (614) 265-6621 if you have questions about these comments or need additional information.

John Kessler
ODNR Office of Real Estate
2045 Morse Road, Building E-2
Columbus, Ohio 43229-6693
John.Kessler@dnr.state.oh.us

APPENDIX I

HAMILTON COUNTY

State Status	Federal Status	County	Category	Species	CommonName	Sensitive Species	Most Recent Record	FWS
Endangered		Hamilton	Amphibian - Salamander	<i>Cryptobranchus alleganiensis alleganiensis</i>	Eastern Hellbender	Yes	1861	
Endangered		Hamilton	Amphibian - Salamander	<i>Eurycea lucifuga</i>	Cave Salamander	No	2013	
Endangered		Hamilton	Fish	<i>Lepisosteus platostomus</i>	Shortnose Gar	No	2009	
Endangered		Hamilton	Fish	<i>Macrhybopsis hyostoma</i>	Shoal Chub	No	2012	
Endangered		Hamilton	Fish	<i>Noturus stigmosus</i>	Northern Madtom	No	2008	
Endangered		Hamilton	Insect - butterfly	<i>Lycaena helioides</i>	Purplish Copper	No	1917	
Endangered		Hamilton	Insect - butterfly	<i>Speyeria idalia</i>	Regal Fritillary	No	1946	
Endangered		Hamilton	Insect - odonate	<i>Gomphus externus</i>	Plain Clubtail	No	1995	
Endangered		Hamilton	Insect - odonate	<i>Nannothemis bella</i>	Elfin Skimmer	No	2002	
Endangered	Endangered	Hamilton	Invert. - fw bivalve	<i>Cyprogenia stegaria</i>	Fanshell	No	1887	
Endangered		Hamilton	Invert. - fw bivalve	<i>Elkipsana inaeolata</i>	Butterfly	No	1997	
Endangered		Hamilton	Invert. - fw bivalve	<i>Elkiple crassidens crassidens</i>	Elephant-ear	No	1987	
Endangered	Endangered	Hamilton	Invert. - fw bivalve	<i>Epioblasma obliquata obliquata</i>	Purple Cat's Paw	No	1850	
Endangered	Endangered	Hamilton	Invert. - fw bivalve	<i>Epioblasma torulosa rangiana</i>	Northern Riffleshell	No	1850	
Endangered	Endangered	Hamilton	Invert. - fw bivalve	<i>Epioblasma triquetra</i>	Snuffbox	No	1850	
Endangered		Hamilton	Invert. - fw bivalve	<i>Fusconaia ebena</i>	Ebonyshell	No	1997	
Endangered		Hamilton	Invert. - fw bivalve	<i>Fusconaia maculata maculata</i>	Long-rod	No	1997	
Endangered		Hamilton	Invert. - fw bivalve	<i>Lampsilis ovalis</i>	Sharp-ridged Pocketbook	No	1850	
Endangered		Hamilton	Invert. - fw bivalve	<i>Lampsilis teres</i>	Yellow Sandshell	No	1943	
Endangered	Endangered	Hamilton	Invert. - fw bivalve	<i>Lampsilis abrupta</i>	Pink Mucket	No		
Endangered		Hamilton	Invert. - fw bivalve	<i>Megalania nervosa</i>	Washboard	No	2013	
Endangered	Endangered	Hamilton	Invert. - fw bivalve	<i>Plethobasus cyphus</i>	Sheepnose	No	1997	
Endangered	Endangered	Hamilton	Invert. - fw bivalve	<i>Pleurobema clava</i>	Clushell	No	1850	
Endangered		Hamilton	Invert. - fw bivalve	<i>Pleurobema cordatum</i>	Ohio Pigtoe	No	1997	
Endangered		Hamilton	Invert. - fw bivalve	<i>Pleurobema rubrum</i>	Pyramid Pigtoe	No	1879	
Endangered	Threatened	Hamilton	Invert. - fw bivalve	<i>Quadrula cylindrica cylindrica</i>	Rabbitfoot	No	1850	
Endangered		Hamilton	Invert. - fw bivalve	<i>Quadrula metanevra</i>	Monkeyface	No	1997	
Endangered		Hamilton	Invert. - fw bivalve	<i>Quadrula nodulata</i>	Wartyback	No	2013	
Endangered	Endangered	Hamilton	Invert. - fw bivalve	<i>Villosa fabalis</i>	Rayed Bean	No		
Endangered	Endangered	Hamilton	Mammal	<i>Myotis sodalis</i>	Indiana Myotis	Yes		
Threatened		Hamilton	Fish	<i>Cyprinella elongatus</i>	Blue Sucker	No	2010	
Threatened		Hamilton	Fish	<i>Notropis boops</i>	Blgeye Shiner	No	2012	
Threatened		Hamilton	Fish	<i>Noturus eleutherus</i>	Mountain Madtom	No	2013	
Threatened		Hamilton	Fish	<i>Percina copelandi</i>	Cannel Darter	No	1996	
Threatened		Hamilton	Fish	<i>Percina shumardi</i>	River Darter	No	2009	
Threatened		Hamilton	Fish	<i>Polyodon spathula</i>	Paddlefish	No	1992	
Threatened		Hamilton	Invert. - decapod	<i>Orconectes (Rhoadesius) sloanii</i>	Sloan's Crayfish	No	1995	
Threatened		Hamilton	Invert. - fw bivalve	<i>Ligumia recta</i>	Black Sandshell	No	2013	
Threatened		Hamilton	Invert. - fw bivalve	<i>Obiquaria reflexa</i>	Threehorn Wartyback	No	2013	
Threatened		Hamilton	Invert. - fw bivalve	<i>Truncilla donaciformis</i>	Fawnsfoot	No	2012	
Threatened		Hamilton	Invert. - fw bivalve	<i>Unioemus tetralasmus</i>	Pondhorn	No	1850	
Threatened		Hamilton	Mammal	<i>Reithrodontomys humulis</i>	Eastern Harvest Mouse	No	1945	
Threatened		Hamilton	Reptile - Snake	<i>Colaptes auratus</i>	Kirtland's Snake	No	1937	
Species of Concern		Hamilton	Amphibian - Frog / Toad	<i>Acris crepitans crepitans</i>	Eastern Cricket Frog	No	2011	
Species of Concern		Hamilton	Bird	<i>Dendroica cerulea</i>	Cerulean Warbler	No	2006	
Species of Concern		Hamilton	Fish	<i>Ammocrypta pellucida</i>	Eastern Sand Darter	No	2013	
Species of Concern		Hamilton	Fish	<i>Esox masquinongy</i>	Muskellunge	No	2009	
Species of Concern		Hamilton	Fish	<i>Ictalurus furcatus</i>	Blue Catfish	No	2010	
Species of Concern		Hamilton	Fish	<i>Moxostoma carinatum</i>	River Herring	No	2010	
Species of Concern		Hamilton	Invert. - fw bivalve	<i>Alasmidonta marginata</i>	Elktoe	No	2007	
Species of Concern		Hamilton	Invert. - fw bivalve	<i>Cyclonaias tuberculata</i>	Purple Wartyback	No	1987	
Species of Concern		Hamilton	Invert. - fw bivalve	<i>Lampsilis fasciola</i>	Wavy-rayed Lampmussel	No	1850	
Species of Concern		Hamilton	Invert. - fw bivalve	<i>Lasmigona compressa</i>	Creek Heelsplitter	No	1850	
Species of Concern		Hamilton	Invert. - fw bivalve	<i>Pleurobema alintoxia</i>	Round Pigtoe	No	1987	
Species of Concern		Hamilton	Invert. - fw bivalve	<i>Ptychobranthus fasciolaris</i>	Kidneyshell	No	1850	
Species of Concern		Hamilton	Invert. - fw bivalve	<i>Truncilla truncata</i>	Deertoe	No	2012	
Species of Concern		Hamilton	Mammal	<i>Eptesicus fuscus</i>	Big Brown Bat	No	2011	
Species of Concern		Hamilton	Mammal	<i>Lasiurus noctivagans</i>	Silver-haired Bat	No	1994	
Species of Concern		Hamilton	Mammal	<i>Lasiurus borealis</i>	Red Bat	No	2010	
Species of Concern		Hamilton	Mammal	<i>Lasiurus cinereus</i>	Hoary Bat	No	2010	
Species of Concern		Hamilton	Mammal	<i>Microtus ochrogaster</i>	Prairie Vole	No	1974	
Species of Concern		Hamilton	Mammal	<i>Microtus pinetorum</i>	Woodland Vole	No	1974	
Species of Concern		Hamilton	Mammal	<i>Myotis lucifugus</i>	Little Brown Bat	No	2010	
Species of Concern	Threatened	Hamilton	Mammal	<i>Myotis septentrionalis</i>	Northern Long-eared Bat	No	2009	
Species of Concern		Hamilton	Mammal	<i>Peromyscus subflavus</i>	Tri-colored Bat	No	2011	
Species of Concern		Hamilton	Mammal	<i>Peromyscus maniculatus</i>	Deer Mouse	No	2013	
Species of Concern		Hamilton	Mammal	<i>Synaptomys cooperi</i>	Southern Bog Lemming	No	1958	
Species of Concern		Hamilton	Mammal	<i>Taxidea taxus</i>	Badger	No	2005	
Species of Concern		Hamilton	Reptile - Snake	<i>Ophedrys aestivus aestivus</i>	Northern Rough Greensnake	No	1973	
Special Interest		Hamilton	Bird	<i>Regulus satrapa</i>	Golden-crowned Kinglet	No	2013	
Special Interest		Hamilton	Insect - moth	<i>Catocala maestosa</i>		No	1924	
Extirpated		Hamilton	Invert. - fw bivalve	<i>Actinonaias ligamentina ligamentina</i>	Mucket	No	1987	
Extirpated		Hamilton	Invert. - fw bivalve	<i>Cumberlandia monodonta</i>	Spectaclecase	No	1909	
Extirpated		Hamilton	Invert. - fw bivalve	<i>Hemistena lata</i>	Cracking Pearly Mussel	No	1850	
Extirpated		Hamilton	Invert. - fw bivalve	<i>Leptodea leptodon</i>	Scaleshell	No	1850	
Extirpated		Hamilton	Invert. - fw bivalve	<i>Obovaria olivaria</i>	Hickorynut	No	1965	
Extirpated		Hamilton	Invert. - fw bivalve	<i>Obovaria retusa</i>	Ring Pink	No	1987	
Extirpated		Hamilton	Invert. - fw bivalve	<i>Plethobasus cinctus</i>	White Wartyback	No	1850	
Extirpated		Hamilton	Invert. - fw bivalve	<i>Plethobasus cooperianus</i>	Orange-footed Pearly Mussel	No	1876	
Extirpated		Hamilton	Invert. - fw bivalve	<i>Pleurobema plenum</i>	Rough Pigtoe	No	1850	
Extirpated		Hamilton	Invert. - fw bivalve	<i>Quadrula fragosa</i>	Winged Mapleleaf	No	1850	
Extinct		Hamilton	Invert. - fw bivalve	<i>Epioblasma flexuosa</i>	Leafshell	No	1850	
Extinct		Hamilton	Invert. - fw bivalve	<i>Epioblasma lewisii</i>	Forkshell	No	1850	
Extinct		Hamilton	Invert. - fw bivalve	<i>Epioblasma personata</i>	Round Snuffbox	No	1850	
Extinct		Hamilton	Invert. - fw bivalve	<i>Epioblasma philipsi</i>	Cincinnati Riffleshell	No	1850	
Extinct		Hamilton	Invert. - fw bivalve	<i>Epioblasma torulosa torulosa</i>	Tubercled Blossom	No	1850	



Hamilton County

Scientific Name	Common Name	Last Observed	State Status	Federal Status
<i>Accipiter striatus</i>	Sharp-shinned Hawk	1978-05	SC	
<i>Acipenser fulvescens</i>	Lake Sturgeon	1971	E	
<i>Alasmidonta marginata</i>	Elktoe	2007-10-09	SC	
<i>Ammocrypta pellucida</i>	Eastern Sand Darter	1996-08-23	SC	
<i>Botaurus lentiginosus</i>	American Bittern	1997-02-09	E	
<i>Chondestes grammacus</i>	Lark Sparrow	1988-06-01	E	
<i>Cicindela marginipennis</i>	Cobblestone Tiger Beetle	1995-07-20	E	
<i>Cistothorus platensis</i>	Sedge Wren	1975	SC	
<i>Clonophis kirtlandii</i>	Kirtland's Snake	1985	T	
<i>Corallorhiza wisteriana</i>	Spring Coral-root	2006-06-26	P	
<i>Cycleptus elongatus</i>	Blue Sucker	1995-09-13	T	
<i>Cyclonaias tuberculata</i>	Purple Wartyback	1965-08-09	SC	
<i>Cyperus acuminatus</i>	Pale Umbrella-sedge	2011-09-05	P	
<i>Descurainia pinnata</i>	Tansy Mustard	2006-04-23	T	
<i>Echinodorus berteroi</i>	Burhead	2007-07-17	P	
<i>Ellipsaria lineolata</i>	Butterfly <i>for Birchalne</i>	1965-08-09	E	
<i>Elliptio crassidens</i>	Elephant-ear	1965-08-09	E	
<i>Eurycea lucifuga</i>	Cave Salamander	2011-06-24	E	
<i>Fusconaia ebenus</i>	Ebonyshell	1965-08-09	E	
<i>Heterodon platirhinos</i>	Eastern Hognose Snake	1991-10-23	SC	
<i>Lanius ludovicianus</i>	Loggerhead Shrike	1984-06	E	
<i>Lipocarpa micrantha</i>	Dwarf Bulrush	2007-07-17	T	
<i>Lota lota</i>	Burbot	1963-08-07	SC	
<i>Lynx rufus</i>	Bobcat	2002-01-28	T	
<i>Megalania nervosa</i>	Washboard	1965-08-09	E	
<i>Moxostoma carinatum</i>	River Redhorse	1993-09-28	SC	
<i>Myotis sodalis</i>	Indiana Bat	1999-08-10	E	FE
<i>Notropis boops</i>	Bigeye Shiner	1973-07-23	T	
<i>Noturus stigmosus</i>	Northern Madtom	1998-07-25	E	
<i>Nyctanassa violacea</i>	Yellow-crowned Night-heron	1954-06	SI	
<i>Nycticorax nycticorax</i>	Black-crowned Night-heron	1997-07-30	T	



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Scientific Name	Common Name	Last Observed	State Status	Federal Status
<i>Obliquaria reflexa</i>	Threehorn Wartyback	1991-08	T	
<i>Obovaria olivaria</i>	Hickorynut	1965-08-09	X	
<i>Opheodrys aestivus</i>	Northern Rough Greensnake	1990-05-19	SC	
<i>Orconectes sloanii</i>	Sloan's Crayfish	1995-09-13	T	
<i>Orobanche riparia</i>	Louisiana Broom-rape	2010-09-06	E	
<i>Paspalum repens</i>	Riverbank Paspalum	1993-10-26	T	
<i>Passiflora incarnata</i>	Maypop	2010-07-01	T	
<i>Percina copelandi</i>	Channel Darter	1996-10-10	T	
<i>Percina shumardi</i>	River Darter	1994-09-26	T	
<i>Phacelia bipinnatifida</i>	Fern-leaved Scorpion-weed	2007-04-16	P	
<i>Plethobasus cyphus</i>	Sheepnose	1965-08-09	E	FE
<i>Pleurobema cordatum</i>	Ohio Pigtoe	1965-08-09	E	
<i>Polyodon spathula</i>	Paddlefish	1992-09-29	T	
<i>Porzana carolina</i>	Sora Rail	1976-07	SC	
<i>Protonotaria citrea</i>	Prothonotary Warbler	1979-06-13	SC	
<i>Quadrula metanevra</i>	Monkeyface	1965-08-09	E	
<i>Quadrula nodulata</i>	Wartyback	1991-08	E	
<i>Ribes missouriense</i>	Missouri Gooseberry	2010-04-06	T	
<i>Sida hermaphrodita</i>	Virginia-mallow	2005-08-23	P	
<i>Spermacoce glabra</i>	Smooth Buttonweed	2010-10-17	P	
<i>Terrapene carolina</i>	Eastern Box Turtle	2011-07-07	SC	
<i>Trifolium reflexum</i>	Buffalo Clover	2012-05	E	
<i>Trifolium stoloniferum</i>	Running Buffalo Clover	2013-05-25	E	FE
<i>Trillium recurvatum</i>	Prairie Wake-robin	2007-05-08	P	
<i>Triphora trianthophora</i>	Three-birds Orchid	2003-08-08	P	
<i>Truncilla truncata</i>	Deertoe	1965-08-09	SC	
<i>Viburnum rufidulum</i>	Southern Black-haw	1989-10-22	P	



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Ohio Division of Wildlife
Ohio Natural Heritage Database
Date Accessed: March 6, 2015
Status based on 2016 Rare Animal List
and 2014-15 Rare Plant List.

Status:

EX = Extinct

X = Extirpated

E = Endangered

T = Threatened

P = Potentially Threatened

SC = Species of Concern

SI = Special Interest

List Created: July 2016