

Invertebrates of Shiawassee National Wildlife Refuge

rev.01/09

An incomplete list, representing only those species that have been documented.

Arthropoda

Coleoptera

Tiger Beetles

Cicindelidae:

Bronzed Tiger Beetle - *Cicindela repanda*

Six-Spotted Tiger Beetle - *Cicindela sexgutatta*

Ground Beetles

Carabidae:

Predaceous Diving Beetles

Dytiscidae:

Whirligig Beetles

Gyrinidae:

Stag Beetles

Lucanidae:

Scarab Beetles

Scarabaeidae:

Spotted Pelidnota - *Pelidnota punctata*

Japanese Beetle - *Popillia japonica*

Click Beetles

Elateridae:

Eyed Elator - *Alaus oculatus*

Soldier Beetles

Cantharidae:

Goldenrod Soldier Beetle - *Chauliognathus pennsylvanicus*

Lightningbugs

Lampyridae:

Day Flying Firefly - *Ellychnia sp.*

Flat Bark Beetles

Cucujidae:

Red Flat Bark Beetle - *Cucujus clavipes*

Lady Beetles

Coccinellidae:

Darkling Beetles

Tenebrionidae:

Forked Fungus Beetle - *Bolitotherus cornutus*

Blister Beetles

Meloidae:

Blister Beetle - *Meloe sp*

Long-Horned Beetles

Cerambycidae:

Red Milkweed Beetle - *Oberea tetrophthalmus*

Snout Beetles

Curculionidae:

Dictyoptera

Mantids

Mantidae:

European Mantis - *Mantis religiosa*

Diptera

Crane Flies

Tipulidae:

Mosquitoes

Culicidae:

Mosquito - *Aedes abserratus*

Mosquito - *Aedes aurifer*

Woodland Pool Mosquito - *Aedes canadensis*

Pale Marsh Mosquito - *Aedes dorsalis*

Mosquito - *Aedes excrucians*

Mosquito - *Aedes fitchii*

Mosquito - *Aedes grossbecki*

Mosquito - *Aedes implicatus*

Mosquito - *Aedes intrudens*

Rockpool Mosquito - *Aedes japonicus*

Mosquito - *Aedes provocans*

Mosquito - *Aedes punctor*

Woodland Mosquito - *Aedes stimulans*

Mosquito - *Aedes sticticus*

Eastern Tree Hole Mosquito - *Aedes triseriatus*

Mosquito - *Aedes trivittatus*

Inland Floodwater Mosquito - *Aedes vexans*

Mosquito - *Anopheles perplexens*

Mosquito - *Anopheles punctipennis*

Common Malaria Mosquito - *Anopheles quadrimaculatus*

Mosquito - *Anopheles walkeri*

Cattail Mosquito - *Coquillettidia perturbans*

Northern House Mosquito - *Culex pipiens*

Mosquito - *Culex restuans*

Mosquito - *Culex territans*

Mosquito - *Culiseta inornata*

Mosquito - *Orthopodomyia signifera*

Shaggy-legged Gallinipper - *Psorophora ciliata*
Mosquito - *Uranotaenia sapphirina*

Horse and Deer Flies

Tabanidae:

Bee Flies

Bombyliidae:

Blow Flies

Calliphoridae:

Hemiptera

Water Striders

Gerridae:

Backswimmers

Notonectidae:

Hymenoptera

Ichneumons

Ichneumonidae:

Ants

Formicidae:

Vespid Wasps

Vespidae:

Leafcutter Bees

Megachilidae:

Bumble, Carpenter, Mason, and Honey Bees

Apidae:

Homoptera

Cicadas

Cicadidae:

Linne's Cicada - *Tibicen linnei*

Treehoppers

Membracidae:

Froghoppers and Spittlebugs

Cercopidae:

Leafhoppers

Cicadellidae:

Lepidoptera

Butterflies

Papilionidae:

- Black Swallowtail - *Papilio polyxenes*
- Giant Swallowtail - *Papilio cresphontes*
- Eastern Tiger Swallowtail - *Papilio glaucus*

Pieridae:

- Cabbage White - *Pieris rapae*
- Clouded Sulphur - *Colias philodice*
- Orange Sulphur - *Colias eurytheme*
- Dainty Sulphur - *Nathalis iole*

Lycaenidae:

- Bronze Copper - *Lycaena hyllus*
- Acadian Hairstreak - *Satyrimum acadia*
- Banded Hairstreak - *Satyrimum calanus*
- Hickory Hairstreak - *Satyrimum caryaevorum*
- Striped Hairstreak - *Satyrimum liparops*
- Eastern Tailed Blue - *Everes comyntas*
- Spring Azure - *Celastrina ladon*

Nymphalidae:

- American Snout - *Libytheana carinenta*
- Great Spangled Fritillary - *Speyeria cybele*
- Meadow Fritillary - *Boloria bellona*
- Pearl Crescent - *Phyciodes tharos*
- Question Mark - *Polygonia interrogationis*
- Eastern Comma - *Polygonia comma*
- Gray Comma - *Polygonia progne*
- Milbert's Tortoiseshell - *Nymphalis milberti*
- Mourning Cloak - *Nymphalis antiopa*
- Baltimore Checkerspot - *Euphydryas phaeton*
- American Lady - *Vanessa virginiensis*
- Painted Lady - *Vanessa cardui*
- Red Admiral - *Vanessa atalanta rubria*
- Common Buckeye - *Junonia coenia*
- Red-Spotted Purple - *Limenitis arthemis astyanax*
- Viceroy - *Limenitis archippus*
- Hackberry Emperor - *Asterocampa celtis*
- Tawny Emperor - *Asterocampa clyton*
- Northern Pearly Eye - *Enodia anthedon*
- Eyed Brown - *Satyrodes eurydice*
- Appalachian Brown - *Satyrodes appalachia*
- Little Wood Satyr - *Megisto cymela*
- Common Ringlet - *Coenonympha tullia*
- Common Wood Nymph - *Cerlyonis pegala*
- Monarch - *Danaus plexippus*

Hesperiidae:

Silver-Spotted Skipper - *Epargyreus clarus*
Juvenal's Duskywing - *Erynnis juvenalis*
Common Sooty Wing - *Pholisora catullus*
Least Skipper - *Ancyloxypha numitor*
European Skipper - *Thymelicus lineola*
Peck's Skipper - *Polites peckius*
Northern Broken-Dash - *Wallengrenia egerement*
Little Glassywing - *Pompeius verna*
Delaware Skipper - *Atrytone logan*
Dun Skipper - *Euphyes vestris*

Moths

Sphingidae:

Hermit Sphinx - *Sphinx eremitus*
Twin-spotted Sphinx - *Smerinthus jamaicensis*
Modest Sphinx - *Pachysphinx modesta*
Snowberry Clearwing - *Hemaris diffinis*
Pandorus Sphinx - *Eumorpha pandorus*
White-Lined Sphinx - *Hyles lineata*
Lettered Sphinx - *Deidamia inscripta*

Saturniidae:

Polyphemus Moth - *Antheraea polyphemus*
Cercropia Moth - *Hyalophora cecropia*

Arctiidae:

Painted Lichen Moth - *Hypoprepia fucosa*
LeConte's Haploa - *Haploa lecontei*
Isabella Tiger Moth - *Pyrrharctia isabella*
Salt Marsh Moth - *Estigmene acrea*
Fall Webworm Moth - *Hyphantria cunea*
Virginian Tiger Moth - *Spilosoma dubia*
Virgin Tiger Moth - *Grammia virgo*
Banded Tussock Moth - *Halysidota tessellaris*
Delicate Cynia - *Cynia tenera*
Oregon Cynia - *Cynia oregonensis*
Milkweed Tussock Moth - *Euchaetes egle*
Virginia Ctenucha - *Ctenucha virginica*
Yellow-Collared Scape Moth - *Cisseps fulvicollis*

Noctuidae:

Fingered Dagger Moth - *Acronicta dactylina*
Nondescript Dagger Moth - *Acronicta spinigera*
Old Man Dart - *Agrotis vetusta*
Venerable Dart - *Agrotis venerabilis*
Ipsilon Dart - *Agrotis ipsilon*
Dingy Cutworm Moth - *Feltia jaculifera*
Master's Dart - *Feltia herilis*
Rubbed Dart - *Euxoa detersa*
Clandestine Dart - *Spaelotis clandestina*
Greater/Lesser Black-Letter Dart - *Xestia dolosa/adela*
Catocaline Dart - *Cryptocala acadensis*
Armyworm Moth - *Pseudaletia unipuncta*
Bicolored Sallow Moth - *Sunira bicolorago*
The Asteroid - *Cucullia asteroides*
Yellow Three-Spot - *Agroperina helva*
Northern Burdock Borer - *Papaipema arctivorens*
Copper Underwing - *Amphipyra pyramidoides*
Yellow-Striped Armyworm Moth - *Spodoptera ornithogalli*
Pearly Wood-Nymph - *Eudryas unio*
Grapevine Epimenis - *Psychomorpha epimenis*
Eight-Spotted Forester - *Alypia octomaculata*
Eyed Paectes - *Paectes oculatrix*
Common Looper Moth - *Autographa precatationis*
Celery Looper Moth - *Anagrapha falcifera*
Forage Looper Moth - *Caenurgina erechtea*
The Herald - *Scoliopteryx libatrix*
Red-lined Panopoda - *Panopoda rufimargo*
Lunate Zale - *Zale lunata*
Maple Zale - *Zale galbanata*
Black Zale - *Zale undularis*
Horrid Zale - *Zale horrida*
Maple Looper Moth - *Parallelia bistriaris*
Darling Underwing - *Calocala cara*
Hawthorn Underwing - *Catocala crataegi*
Flowing-Line Bomolocha - *Bomolocha manalis*
Green Cloverworm Moth - *Plathypena scabra*
Spotted Grass Moth - *Rivula propinqualis*
Smoky Idia - *Idia scobalis*
Yellowish Zanclognatha - *Zanclognatha jacchusalis*
Wavy-Lined Zanclognatha - *Zanclognatha ochreipennis*

Notodontidae:

Double-toothed Prominent - *Nerice bidentata*

Common Gluphisia - *Gluphisia septentrionis*

Geometridae:

Lesser Maple Spanworm Moth - *Itame pustularia*

Common Angle - *Semiothisa aemulateraria*

Porcelain Gray - *Protoarmia porcelaria*

The Half-Wing - *Phigalia titea*

Linden Looper Moth - *Erannis tiliaria*

False Crocus Geometer - *Xanthotype urticaria*

Crocus Geometer - *Xanthotype sospeta*

Pale Beauty - *Campaea perlata*

Elm Spanworm Moth - *Ennomos magnaria*

Common Metarranthis - *Metarranthis angularia*

Confused Eusarca - *Eusarca confusaria*

Yellow Slant-Line - *Tetracis crocallata*

White Slant-Line - *Tetracis cachexiata*

Large Maple Spanworm Moth - *Prochoerodes transversata*

Horned Spanworm Moth - *Nematocampa limbata*

Wavy-Lined Emerald - *Synchlora aerata albolineata*

Red-Bordered Wave - *Idaea demissaria*

Chickweed Geometer - *Haematopsis grataria*

Large Lace-Border - *Scopula limboundata* f. *relevata*

Large Lace-Border - *Scopula limboundata* f. *enucleata*

Soft-Lined Wave - *Scopula inductata*

Lesser Grapevine Looper Moth - *Eulithis diversilineata*

Barberry Geometer - *Coryphista meadii*

White-Banded Toothed Carpet - *Epirrhoe alternata*

Bent-Line Carpet - *Orthonama centrostrigaria*

The Beggar - *Eubaphe mendica*

Three-Patched Bigwing - *Heterophelps refusaria*

Three-Spotted Phillip - *Heterophelps triguttaria*

The Bad-Wing - *Dyspteris abortivaria*

Pterophoridae:

Plume Moth - *Platyptilia carduidactyla*

Plume Moth - *Emmelina monodactyla*

Pyralidae:

European Corn Borer Moth - *Ostrinia nubilalis*

Pyralid Moth - *Anania funebris glomerata*

Celery Leaf-tier Moth - *Udea rubigalis*

Bog Lygropia Moth - *Lygropia rivulalis*

Meal Moth - *Pyralis farinalis*

Sooty-Winged Chalcoela Moth - *Chalcoela iphitalis*

Tortricidae:

Oblique-Banded Leafroller Moth - *Choristoneura rosaceana*

Sparganothis Fruitworm Moth - *Sparganothis sulfureana*

Oecophoridae:

Gold-Striped Leaf-tier Moth - *Machimia tentoriferella*

Neuroptera

Dobsonflies

Corydalidae:

Green Lacewings

Chrysopidae:

Odonata

Damselflies

Calopterygidae:

Ebony Jewelwing - *Calopteryx maculata*

American Rubyspot - *Hetaerina americana*

Lestidae:

Emerald Spreadwing - *Lestes dryas*

Slender Spreadwing - *Lestes rectangularis*

Coenagrionidae:

Blue-fronted Dancer - *Argia apicalis*

Powdered Dancer - *Argia moesta*

Blue-tipped Dancer - *Argia tibialis*

Rainbow Bluet - *Enallagma antennatum*

Familiar Bluet - *Enallagma civile*

Marsh Bluet - *Enallagma ebrium*

Stream Bluet - *Enallagma exsulans*

Skimming Bluet - *Enallagma geminatum*

Orange Bluet - *Enallagma signatum*

Eastern Forktail - *Ischnura verticalis*

Sedge Sprite - *Nehalennia irene*

Dragonflies

Aeshnidae:

Lance-tailed Darner - *Aeshna constricta*

Common Green Darner - *Anax junius*

Cyran Darner - *Nasiaeschna pentacantha*

Gomphidae:

Midland Clubtail - *Gomphus fraternus*

Unicorn Clubtail - *Arigomphus villosipes*

Corduliidae:

Common Baskettail - *Epitheca cynosura*

Libellulidae:

Calico Pennant - *Celithemis elisa*
Halloween Pennant - *Celithemis eponina*
Eastern Pondhawk - *Erythemis simplicicollis*
Dot-tailed Whiteface - *Luecorrhinia intacta*
Widow Skimmer - *Libellula luctuosa*
Common Whitetail - *Libellula /Plathemis lydia*
Twelve-spotted Skimmer - *Libellula pulchella*
Blue Dasher - *Pachydiplax longipennis*
Wandering Glider - *Pantala flavescens*
Eastern Amberwing - *Perithemis tenera*
White-faced Meadowhawk - *Sympetrum obtrusum*
Ruby Meadowhawk - *Sympetrum rubicundulum*
Band-winged Meadowhawk - *Sympetrum semicinctum*
Yellow-legged Meadowhawk - *Sympetrum vicinum*
Carolina Saddlebags - *Tamea carolina*
Black Saddlebags - *Tamea lacerate*

Orthoptera

Grasshoppers

Acrididae:

Marsh Meadow Grasshopper - *Chorthippus curtipennis*
Green-striped Grasshopper - *Chortophaga viridifasciata*
Carolina Grasshopper - *Dissosteira Carolina*
Two-striped Grasshopper - *Melanoplus bivittatus*
Differential Grasshopper - *Melanoplus differentialis*
Red-legged Grasshopper - *Melanoplus femurrubrum*

Tetrigidae:

Pygmy Grasshopper - *Tettigidea sp.*
Pygmy Grasshopper - *Tetrix sp.*

Katydids

Tettigoniidae:

Long-tailed Meadow Katydid - *Conocephalus attenuatus*
Slender Meadow Katydid - *Conocephalus fasciatus*
Black-sided Meadow Katydid - *Conocephalus nigropleurum*
Straight-lanced Meadow Katydid - *Conocephalus strictus*
Sword-bearing Conehead - *Neoconocephalus ensiger*
Gladiator Meadow Katydid - *Orchelimum gladiator*
Black-legged Meadow Katydid - *Orchelimum nigripes*
Common Meadow Katydid - *Orchelimum vulgare*
Oblong-winged Katydid - *Amblycorypha oblongifolia*
Fork-tailed Bush Katydid - *Scudderia furcata*
Texas Bush Katydid - *Scudderia texensis*
Northern True Katydid - *Pterophylla camellifolia*

Crickets

Rhaphidophoridae:

Striped Camel Cricket - *Ceuthophilus meridionalis*

Gryllinae:

Fall Field Cricket - *Gryllus pennsylvanicus*

Spring Field Cricket - *Gryllus veletis*

Nemobiinae:

Striped Ground Cricket - *Allonemobius fasciatus*

Oecanthinae:

Narrow-winged Tree Cricket - *Oecanthus niveus*

Four-spotted Tree Cricket - *Oecanthus quadripunctatus*

Black-horned Tree Cricket - *Oecanthus nigricornus*

Trigonidiinae:

Say's Bush Cricket - *Anaxipha exigua*

Mollusca

Bivalvia

Freshwater Mussels

Unionidae:

Mucket* - *Actinonaias ligamentina*

Threeridge* - *Amblema plicata*

Spike* - *Elliptio dilatata*

Wabash Pigtoe* - *Fusconaia flava*

Plain Pocketbook - *Lampsilis cardium*

Fatmucket* - *Lampsilis siliquoidea*

White Heelsplitter - *Lasmigona complanata*

Fluted-shell* - *Lasmigona costata*

Fragile Papershell - *Leptodea fragilis*

Black Sandshell* - *Ligumia recta*

Pondmussel* - *Ligumia subrostrata*

Pink Heelsplitter - *Potamilus alatus*

Pink Papershell - *Potamilus ohensis*

Giant Floater - *Pyganodon grandis*

Pimpleback* - *Quadrula pustulosa*

Mapleleaf - *Quadrula quadrula*

Lilliput - *Toxolasma parvus*

Deertoe - *Truncilla truncata*

Paper Pondshell - *Utterbackia imbecillis*

Ellipse* - *Venustaconcha ellipsiformis*

Rainbow* - *Villosa iris*

Sphaeriidae:

Fingernailclam sp.*

Corbiculidae:

Asian clam - *Corbicula fluminea*

Dreissenidae

zebra mussel - *Dreissena polymorpha*

* empty shell(s) / shell remnants only

Gastropoda

Land Snails

Succineidae:

Amber Snail - *Succinea* or *Oxyloma* sp.

Freshwater Snails

Slugs