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Annotated Checklist of Invertebrate Species Observed at the Gordon Natural Area (West Chester University, PA) 2007-2020. Version I

Nur Ritter

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Annotated Checklist of Invertebrate Species Observed at the Gordon Natural Area (West Chester University, PA) 2007-2020. Version I

Summary Data

Number of Taxa: 250 Species, in 170 Genera, 113 Families, and 33 Orders.

Description

As with some of the other biotic groups, the research pattern for invertebrates at the GNA might best be described as 'intermittent.' Former WCU professor Win Fairchild and his students conducted research on aquatic invertebrates in Plum Run, both inside and outside of the boundaries of the GNA. To date, the only data from that work that we've been able to obtain are from the 2007 MS thesis of Danielle DiFederico.

Since that time, the only 'directed' invertebrate research at the GNA has been the annual monitoring in Plum Run by the Stroud Water Research Center (SWRC). This research was initiated in 2017 and is ongoing. Additional data come from (the increasingly frequent) observations by GNA staff and from observations on iNaturalist.

Status/Threats

IUCN Status: Data are from the IUCN Red List of Threatened Species (IUCN 2020)

The GNA checklist was compared with the Pennsylvania Natural Heritage Species and Natural Features List (PNHP 2020). Of the 458 invertebrate species on the list, three are known to occur in the GNA. The state rankings from the PNHP list have been incorporated into the checklist.

Organization

Species are organized into eight 'types': Insects; Springtails; Arthropods; Crustaceans; Gastropods; Flatworms; Worms; and, Ribbon Worms. The checklist is sorted by 'Type', followed by Order, Family, and Scientific Name.

Insects

Order Blattodea

Ectobiidae (2 species)

Parcoblatta virginica (Virginia Wood Cockroach)

Identified By: hisserdude (iNaturalist); First Noted By: A. Rivellini

Year Observed: 2019

Plectoptera Indet. #1

Identified and First Noted By: D. DiFederico

Year Observed: 2007

Order Coleoptera

Cerambycidae (3 species)

Strangalia luteicornis (Yellow-horned Flower Longhorn Beetle)

Identified and First Noted By: N. Ritter

Year Observed: 2020

Tetraopes tetrophthalmus (Red Milkweed Beetle)

Identified and First Noted By: N. Ritter

Year Observed: 2020

Typocerus velutinus (Banded Longhorn Beetle)

Identified and First Noted By: N. Ritter

Year Observed: 2020

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:7/28/2020)

Cetoniinae (1 species)

Cotinus nitida (June Beetle)

Identified By: N. Ritter; First Noted By: P. Vermeulen

Year Observed: 2019

Chrysomelidae (2 species)

Altica Indet. #1 (Metallic Flea Beetle)

Identified and First Noted By: N. Ritter

Year Observed: 2020

Chrysochus auratus (Dogbane Leaf Beetle)

Identified and First Noted By: N. Ritter

Year Observed: 2020

Cleridae (1 species)

Enoclerus Indet. #1 (Checkered Beetle)

Identified and First Noted By: N. Ritter

Year Observed: 2019

Coccinellidae (3 species)

Coccinella septempunctata (Seven-spot Lady Bug)

Identified and First Noted By: N. Ritter

Year Observed: 2017

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Harmonia axyridis (Asian Lady Beetle)

Identified By: N. Ritter; First Noted By: P. Vermeulen

Year Observed: 2019

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:7/28/2020)

Hippodamia variegata (Variegated Lady Beetle)

Identified By: N. Ritter (from photo); First Noted By: W. Ricci

Year Observed: 2013

Curculionidae (2 species)

Larinus Indet. #1 (Thistle Weevil)

Identified and First Noted By: N. Ritter

Year Observed: 2020

Rhinoncomimus latipes (Mile-a-minute Weevil)

Identified and First Noted By: G. Hertel; Also Noted By: N. Ritter

Years Observed: 2009; 2019

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:7/28/2020)

Elmidae (8 species)

Elmidae Indet. #1

Identified By: Original Website; First Noted By: Not Known

Year Observed: 2013

Elmidae Indet. #2

Identified and First Noted By: Stroud Water Research Center

Optioservus Indet. #1 (No Common Name)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Optioservus ovalis (No Common Name)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Optioservus/Oulimnius Indet.

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Oulimnius latiusculus (No Common Name)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Status IUCN: Species has not been reviewed (Website checked:2/10/2020)

Stenelmis crenata (No Common Name)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Stenelmis Indet. #1

Identified and First Noted By: Stroud Water Research Center

Endomychidae (1 species)

Aphorista vittata (Handsome Fungus Beetle)

Identified By: N. Ritter (from photo); First Noted By: A. Rivellini

Year Observed: 2020

Erotylidae (1 species)

Megalodacne Indet. #1 (Pleasing Fungus Beetle)

Identified and First Noted By: N. Ritter

Years Observed: 2018; 2019

Lampyridae (1 species)

Pyractomena borealis (Lightning Bug)

Identified and First Noted By: N. Ritter

Year Observed: 2019

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:7/28/2020)

Lucanidae (1 species)

Lucanus capreolus (Reddish-brown Stag Beetle)

Identified and First Noted By: N. Ritter

Year Observed: 2020

Lycidae (2 species)

Calopteron discrepans (Banded Net-winged Beetle)

Identified By: G. Hertel; First Noted By: K. McMillin

Dictyoptera aurora (Golden Net-winged Beetle)

Identified and First Noted By: N. Ritter

Year Observed: 2020

Meloidae (1 species)

Meloe americanus (American Oil Beetle)

Identified and First Noted By: N. Ritter

Year Observed: 2019

Passalidae (1 species)

Odontotaenius disjunctus (Horned Passalus Beetle)

Identified By: N. Ritter; First Noted By: G. Hertel; Also Noted By: N. Ritter

Years Observed: 2015; 2019

Psephenidae (2 species)

Ectopria Indet. #1

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Psephenus herricki (No Common Name)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Scarabaeidae (1 species)

Popillia japonica (Japanese Beetle)

Identified and First Noted By: N. Ritter

Silphidae (2 species)

Necrophila americana (American Carrion Beetle)

Identified and First Noted By: N. Ritter

Year Observed: 2020

Oiceoptoma noveboracense (Margined Carrion Beetle)

Identified and First Noted By: N. Ritter

Year Observed: 2019

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Tenebrionidae (1 species)

Alobates pensylvanicus (False Mealworm Beetle)

Identified and First Noted By: N. Ritter

Year Observed: 2020

Order Diptera

Asilidae (2 species)

Eudioctria Indet. #1 (No Common Name)

Identified and First Noted By: N. Ritter

Year Observed: 2020

Laphria canis Complex (Bee-mimic Robber Flies)

Identified and First Noted By: N. Ritter

Cecidomyiidae (3 species)

Ampelomyia vitiscoryloides (Gall Midge)

Identified and First Noted By: N. Ritter

Year Observed: 2019

Caryomyia Indet. #1 (Hickory Gall Midge)

Identified and First Noted By: G. Hertel

Year Observed: 2013

Resseliella liriodendri (Gall Midge)

Identified and First Noted By: N. Ritter

Year Observed: 2020

Ceratopogonidae (1 species)

Probezzia Indet. #1

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Chironomidae (41 species)

Brillia Indet. #1

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Chironomidae Indet. #1

Identified and First Noted By: D. DiFederico

Chironomidae Indet. #2 (Non-biting Midge)

Identified and First Noted By: N. Ritter

Year Observed: 2019

Corynoneura Indet. #1

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Cricotopus Indet. #1

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Cricotopus/Orthocladius Indet.

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Diamesa Indet. #1

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Diamesinae Indet. #1

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Diplocladius Indet. #1

Identified and First Noted By: Stroud Water Research Center

Eukiefferiella coerulescens Group

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Hydrobaenus Indet. #1

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Krenosmittia Indet. #1

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Micropsectra polita (No Common Name)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Status IUCN: Species has not been reviewed (Website checked:2/10/2020)

Nilotanypus fimbriatus

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Orthocladiinae Indet. #1

Identified and First Noted By: Stroud Water Research Center

Orthocladius clarkei

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Orthocladius clarkei/obumbratus

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Orthocladius dentifer

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Orthocladius dentifer/dorenus

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Orthocladius dorenus

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Orthocladius dorenus/obumbratus

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Orthocladius Indet. #1

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Orthocladius obumbratus

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Orthocladius obumbratus/robacki

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Orthocladius rivicola (No Common Name)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Parametriocnemus Indet. #1

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Polypedilum aviceps (No Common Name)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Polypedilum convictum Group (No Common Name)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:7/28/2020)

Potthastia/Sympotthastia Indet.

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Rheotanytarsus exiguus Group (No Common Name)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Status IUCN: Species has not been reviewed (Website checked:2/10/2020)

Rheotanytarsus Indet. #1

Identified and First Noted By: Stroud Water Research Center

Sympotthastia Indet. #1

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Tanytarsus glabrescens Group (No Common Name)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Tanytarsus guerlus Group

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Thienemanniella cf. xena (No Common Name)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Thienemanniella Indet. #1

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Thienemanniella Indet. #2

Identified and First Noted By: Stroud Water Research Center

Thienemanniella taurocapita

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Thienemannimyia Group

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Tvetenia Indet. #1

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Tvetenia paucunca (No Common Name)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Dolichopodidae (1 species)

Condylostylus patibulatus

Identified and First Noted By: N. Ritter

Year Observed: 2020

Drosophilidae (1 species)

Drosophila melanogaster (Common Fruit Fly)

Identified and First Noted By: N. Ritter

Empididae (3 species)

Chelifera Indet. #1

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Clinocera Indet. #1

Identified and First Noted By: D. DiFederico; Also Noted By: Stroud Water Research Center - 2017

Years Observed: 2007; 2017

Empididae Indet. #1

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Limoniidae (2 species)

Antocha Indet. #1

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Helius Indet. #1

Identified and First Noted By: D. DiFederico

Year Observed: 2007

Muscidae (1 species)

Muscidae Indet. #1 (Fly)

Identified and First Noted By: N. Ritter

Pediciidae (1 species)

Dicranota Indet. #1

Identified and First Noted By: D. DiFederico

Year Observed: 2007

Simuliidae (4 species)

Prosimulium Indet. #1 (Black Flies)

Identified and First Noted By: D. DiFederico

Year Observed: 2007

Simuliidae Indet. #1

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Simulium Indet. #1

Identified and First Noted By: D. DiFederico

Year Observed: 2007

Stegopterna Indet. #1

Identified and First Noted By: D. DiFederico

Year Observed: 2007

Syrphidae (1 species)

Toxomerus geminatus (Eastern Calligrapher)

Identified and First Noted By: N. Ritter

Tipulidae (2 species)

Tipula Indet. #1

Identified and First Noted By: D. DiFederico; Also Noted By: Stroud Water Research Center - 2017

Years Observed: 2007; 2017

Tipulidae Indet. #1

Identified By: Original Website; First Noted By: Not Known

Family Unknown

Tipuloidea Indet. #1 (Crane Fly)

Identified and First Noted By: N. Ritter

Year Observed: 2020

Order Ephemeroptera

Ameletidae (1 species)

Ameletus Indet. #1 (Mayfly)

Identified and First Noted By: D. DiFederico

Year Observed: 2007

Baetidae (1 species)

Baetidae Indet. #1 (Mayfly)

Identified and First Noted By: D. DiFederico

Heptageniidae (2 species)

Maccaffertium modestum (Flat-headed Mayfly)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Status IUCN: Species has not been reviewed (Website checked:2/10/2020)

Stenonema Indet. #1 (Mayfly)

Identified and First Noted By: D. DiFederico

Year Observed: 2007

Isonychiidae (1 species)

Isonychia Indet. #1

Identified By: Original Website; First Noted By: Not Known

Family Unknown

Ephemeroptera Indet. #1 (Mayfly)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Order Hemiptera

Acanaloniidae (1 species)

Acanalonia bivittata (Two-striped Planthopper)

Identified By: N. Ritter; First Noted By: P. Vermeulen; Also Noted By: N. Ritter

Years Observed: 2018; 2020

Aphalaridae (1 species)

Pachypsylla celtidismamma (Hackberry Nipplegall Psylla)

Identified and First Noted By: N. Ritter

Year Observed: 2020

Aphididae (5 species)

Aphis nerii (Milkweed Aphid)

Identified By: N. Ritter; First Noted By: G. Hertel; Also Noted By: N. Ritter

Years Observed: 2014; 2020

Capitophorous Indet. #1 (Aphid)

Identified and First Noted By: N. Ritter

Year Observed: 2020

Grylloprociphilus imbricator (Beech Blight Aphid)

Identified By: N. Ritter; First Noted By: G. Hertel; Also Noted By: P. Vermeulen; N. Ritter

Years Observed: 2014; 2018; 2019

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Hormaphis hamamelidis (Witch-hazel Cone Gall Aphid)

Identified and First Noted By: N. Ritter; Also Noted By: K. Johnson

Year Observed: 2019

Macrosiphum rosae (Rose Aphid)

Identified and First Noted By: N. Ritter

Year Observed: 2020

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:7/28/2020)

Cicadidae (2 species)

Cicadidae Indet. #1 (Cicada)

Identified and First Noted By: N. Ritter

Year Observed: 2018

Neotibicen Indet. #1 (Translucent Cicada)

Identified and First Noted By: N. Ritter

Year Observed: 2019

Coreidae (1 species)

Acanthocephala terminalis (Leaf-footed Bug)

Identified and First Noted By: N. Ritter; Also Noted By: P. Vermeulen

Year Observed: 2019

Status IUCN: Species has not been reviewed (Website checked:7/28/2020)

Diaspididae (1 species)

Diaspididae Indet. #1 (Armored Scale Insects)

Identified and First Noted By: N. Ritter

Year Observed: 2019

Flatidae (1 species)

Metcalfa pruinosa (Citrus Flatid Planthopper)

Identified and First Noted By: N. Ritter; Also Noted By: P. Vermeulen

Years Observed: 2018; 2020

Fulgoridae (1 species)

Lycorma delicatula (Spotted Lanternfly)

Identified and First Noted By: M. Beatty; Also Noted By: C. Catranis; J. Chandler; N. Ritter; P. Vermeulen; countless visitors to the Gordon

Years Observed: 2018; 2019; 2020

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:7/28/2020)

Lygaeidae (1 species)

Oncopeltus fasciatus (Large Milkweed Bug)

Identified and First Noted By: N. Ritter

Years Observed: 2014; 2017; 2019; 2020

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Monophlebidae (1 species)

Icerya purchasi (Cottony Cushion Scale)

Identified and First Noted By: N. Ritter

Year Observed: 2019

Phylloxeridae (1 species)

Phylloxera Indet. #1 (Gall Aphid)

Identified and First Noted By: N. Ritter

Year Observed: 2020

Family Unknown

Coccoidea Indet. #1 (Scale Insect)

Identified and First Noted By: N. Ritter

Order Hymenoptera

Apidae (2 species)

Apis mellifera (Western Honey Bee)

Identified By: Ty Sharrow (iNaturalist); First Noted By: N. Ritter

Year Observed: 2018

Bombus vagans (Half-black Bumble Bee)

Identified By: N. Ritter; First Noted By: W. Ricci; Also Noted By: N. Ritter

Years Observed: 2013; 2017; 2020

Status IUCN: Redlist Global Status: Least Concern; Global Population: Stable

Cynipidae (1 species)

Amphibolips quercusjuglans (Oak Acorn Plum Gall Wasp)

Identified By: N. Ritter; First Noted By: G. Hertel; Also Noted By: J. Schedlbauer; P. Vermeulen; M. Beatty; A. Rivellini; N. Long; G. Turner; N. Ritter

Years Observed: 2011; 2016; 2017; 2018; 2019; 2020

Diprionidae (1 species)

Neodiprion lecontei (Redheaded Pine Sawfly)

Identified and First Noted By: G. Hertel

Year Observed: 2012

Status IUCN: Species has not been reviewed (Website checked:2/10/2020)

Formicidae (4 species)

Camponotus chromaiodes (Ferruginous Carpenter Ant)

Identified and First Noted By: N. Ritter

Camponotus pennsylvanicus (Eastern Black Carpenter Ant)

Identified By: N. Ritter; First Noted By: P. Vermeulen

Year Observed: 2020

Nylanderia Indet. #1 (Crazy Ant)

Identified By: ferox_formicae (iNaturalist); First Noted By: N. Ritter

Year Observed: 2020

Prenolepis Indet. #1 (False Honey Ant)

Identified and First Noted By: N. Ritter

Year Observed: 2020

Halictidae (1 species)

Augochlora pura (Pure Green Sweat Bee)

Identified and First Noted By: N. Ritter

Year Observed: 2020

Vespidae (5 species)

Dolichovespula maculata (Bald-faced Hornet)

Identified and First Noted By: N. Ritter

Years Observed: 2017; 2018

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Polistes cf. fuscatus (Northern Paper Wasp)

Identified and First Noted By: N. Ritter

Vespidae Indet. #1 (Wasp)

Identified By: N. Ritter; First Noted By: G. Hertel; Also Noted By: N. Ritter

Years Observed: 2007; 2020

Vespula maculifrons (Eastern Yellowjacket)

Identified and First Noted By: N. Ritter; Also Noted By: M. Beatty

Years Observed: 2016; 2017; 2018; 2019

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Vespula squamosa (Southern Yellowjacket)

Identified and First Noted By: N. Ritter

Year Observed: 2019

Order Isopoda

Asellidae (1 species)

Caecidotea Indet. #1 (Isopod)

Identified and First Noted By: D. DiFederico

Year Observed: 2007

Order Lepidoptera

Erebidae (7 species)

Cycnia tenera (Delicate Cycnia Moth)

Identified By: N. Ritter; First Noted By: A. Rivellini; Also Noted By: M. Beatty

Euchaetes egle (Milkweed Tussock Moth)

Identified and First Noted By: N. Ritter

Year Observed: 2019

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:7/28/2020)

Halysidota tessellaris (Banded Tussock Moth)

Identified By: dsnaturalist21 (iNaturalist); First Noted By: dsnaturalist21

Year Observed: 2019

Hyphantria cunea (Fall Webworm)

Identified and First Noted By: N. Ritter; Also Noted By: J. Kline

Years Observed: 2018; 2019

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:7/28/2020)

Pyrrharctia isabella (Isabella Tiger Moth)

Identified By: N. Ritter; First Noted By: M. Beatty

Year Observed: 2019

Status IUCN: Species has not been reviewed (Website checked:7/28/2020)

Renia Indet. #1 (Litter Moths)

Identified and First Noted By: N. Ritter

Spilosoma virginica (Virginia Tiger Moth)

Identified and First Noted By: N. Ritter

Year Observed: 2018

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Gelechiidae (1 species)

Fascista cercerisella (Redbud Leaffolder Moth)

Identified and First Noted By: N. Ritter

Year Observed: 2020

Geometridae (2 species)

Geometridae Indet. #1 (No Common Name)

Identified By: k8thegr8 (from photos on iNaturalist); First Noted By: N. Ritter

Year Observed: 2019

Melanolophia Indet. #1 (Melanolophia Moth)

Identified and First Noted By: N. Ritter

Year Observed: 2020

Hesperiidae (3 species)

Atalopedes campestris (Sachem)

Identified By: Doug Bruce (iNaturalist); First Noted By: N. Ritter

Year Observed: 2020

Epargyreus clarus (Silver-spotted Skipper)

Identified and First Noted By: N. Ritter

Years Observed: 2019; 2020

Polites themistocles (Tawny-edged Skipper)

Identified and First Noted By: N. Ritter

Year Observed: 2019

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:7/28/2020)

Limacodidae (1 species)

Acharia stimulea (Saddleback Caterpillar Moth)

Identified By: N. Ritter; First Noted By: G. Hertel & K. McMillin

Year Observed: 2014

Lycaenidae (1 species)

Cupido comyntas (Eastern Tailed-Blue)

Identified and First Noted By: N. Ritter

Year Observed: 2020

Noctuidae (2 species)

Acronicta americana (American Dagger Moth)

Identified By: N. Ritter; First Noted By: P. Vermeulen

Year Observed: 2019

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:7/28/2020)

Lithophane Indet. #1 (Dart Moth)

Identified and First Noted By: A. Rivellini

Notodontidae (1 species)

Schizura concinna (Red-humped Caterpillar)

Identified By: N. Ritter; First Noted By: G. Hertel

Year Observed: 2011

Status IUCN: Species has not been reviewed (Website checked:2/10/2020)

Nymphalidae (5 species)

Danaus plexippus (Monarch Butterfly)

Identified and First Noted By: G. Hertel; Also Noted By: N. Ritter

Years Observed: 2014; 2020

Junonia coenia (Common Buckeye)

Identified and First Noted By: N. Ritter

Year Observed: 2019

Limenitis arthemis (Red-spotted Admiral)

Identified and First Noted By: G. Hertel; Also Noted By: N. Ritter

Years Observed: 2014; 2020

Vanessa atalanta (Red Admiral)

Identified and First Noted By: G. Hertel

Year Observed: 2012

<u>Status</u> IUCN: Species has not been reviewed (Website checked:7/28/2020)

Vanessa virginiensis (American Painted Lady)

Identified and First Noted By: N. Ritter

Papilionidae (2 species)

Papilio glaucus (Eastern Tiger Swallowtail)

Identified and First Noted By: G. Hertel; Also Noted By: N. Ritter

Years Observed: 2012; 2020

<u>Status</u> IUCN: Species has not been reviewed (Website checked:2/10/2020)

Papilio troilus (Spicebush Swallowtail)

Identified and First Noted By: G. Hertel; Also Noted By: M. Beatty

Years Observed: 2012; 2013; 2019

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Saturniidae (3 species)

Antheraea polyphemus (Polyphemus Moth)

Identified and First Noted By: N. Ritter

Year Observed: 2019

Callosamia promethea (Promethea Silkmoth)

Identified By: G. Hertel; First Noted By: K. McMillen

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Citheronia regalis (Regal Moth)

Identified and First Noted By: G. Hertel

Year Observed: 2014

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020) PA Natural Heritage List: Conservation status: SU (Status Unknown)

Sphingidae (1 species)

Eumorpha pandorus (Pandora Sphinx Moth)

Identified and First Noted By: M. Beatty

Year Observed: 2018

Status IUCN: Species has not been reviewed (Website checked:2/10/2020)

Order Mantodea

Mantidae (1 species)

Tenodera sinensis (Chinese Mantid)

Identified and First Noted By: N. Ritter; Also Noted By: A. Rivellini

Years Observed: 2015; 2016; 2017; 2019

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Order Megaloptera

Sialidae (1 species)

Sialis Indet. #1

Identified and First Noted By: D. DiFederico

Year Observed: 2007

Order Neuroptera

Chrysopidae (1 species)

Leucochrysa pavida (Lichen-carrying Green Lacewing)

Identified By: Jonathan Hoskins (iNaturalist); First Noted By: W. Ricci; Also Noted By: A. Rivellini

Years Observed: 2013; 2019

Order Odonata

Calopterygidae (1 species)

Calopteryx maculata (Ebony Jewelwing)

Identified and First Noted By: N. Ritter

Years Observed: 2018; 2020

<u>Status</u>

IUCN: Redlist Global Status: Least Concern; Global Population: Stable

Gomphidae (1 species)

Gomphidae Indet. #1

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Libellulidae (1 species)

Libellula luctuosa (Widow Skimmer)

Identified and First Noted By: G. Hertel

Year Observed: 2012

Order Orthoptera

Rhaphidophoridae (1 species)

Tachycines asynamorus (Camel Cricket)

Identified and First Noted By: N. Ritter

Year Observed: 2019

Order Plecoptera

Nemouridae (4 species)

Amphinemura delosa (Eastern Forestfly) Identified and First Noted By: Stroud Water Research Center Year Observed: 2017 Status IUCN: Species has not been reviewed (Website checked:2/10/2020) Amphinemura Indet. #1 Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Nemouridae Indet. #1

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Prostoia Indet. #1

Identified and First Noted By: D. DiFederico

Year Observed: 2007

Perlidae (2 species)

Eccoptura Indet. #1

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Eccoptura xanthenes (No Common Name)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Family Unknown

Capniidae/Leuctridae Indet. (Stonefly)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Perlidae/Perlodidae Indet. (Stonefly)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Plecoptera Indet. #1 (Stonefly)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Order Thysanoptera

Phlaeothripidae (1 species)

Phlaeothripidae Indet. #1 (Tube-tailed Thrip)

Identified By: Michael Pirrello (iNaturalist); First Noted By: A. Rivellini; Also Noted By: N. Ritter

Year Observed: 2019

Order Trichoptera

Glossosomatidae (1 species)

Glossosomatidae Indet. #1

Identified and First Noted By: Stroud Water Research Center

Hydropsychidae (8 species)

Cheumatopsyche Indet. #1

Identified and First Noted By: D. DiFederico; Also Noted By: Stroud Water Research Center - 2017

Years Observed: 2007; 2017

Diplectrona Indet. #1

Identified and First Noted By: D. DiFederico

Year Observed: 2007

Diplectrona modesta (No Common Name)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Hydropsyche betteni (No Common Name)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Hydropsyche Indet. #1

Identified and First Noted By: D. DiFederico; Also Noted By: Stroud Water Research Center - 2017

Years Observed: 2007; 2017

Hydropsyche slossonae (No Common Name)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

<u>Status</u>

Hydropsyche sparna (No Common Name)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Hydropsychidae Indet. #1

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Hydroptilidae (1 species)

Hydroptilidae Indet. #1 (Microcaddisfly)

Identified and First Noted By: N. Ritter

Year Observed: 2020

Limnephilidae (1 species)

Pycnopsyche Indet. #1

Identified and First Noted By: D. DiFederico

Year Observed: 2007

Philopotamidae (4 species)

Chimarra aterrima (No Common Name)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

<u>Status</u>

Chimarra Indet. #1

Identified and First Noted By: D. DiFederico; Also Noted By: Stroud Water Research Center - 2017

Years Observed: 2007; 2017

Dolophilodes Indet. #1

Identified and First Noted By: D. DiFederico

Year Observed: 2007

Philopotamidae Indet. #1

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Rhyacophilidae (1 species)

Rhyacophila Indet. #1

Identified and First Noted By: D. DiFederico

Year Observed: 2007

Thremmatidae (2 species)

Neophylax Indet. #1

Identified and First Noted By: D. DiFederico

Year Observed: 2007

Neophylax oligius (No Common Name)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

<u>Status</u>

Family Unknown

Trichoptera Indet. #1 (Caddisfly)

Identified and First Noted By: Stroud Water Research Center

<u>Springtails</u>	
Order Entomobryomorpha	
Entomobryidae (1 species)	
Entomobrya atrocincta (Slender Springtail)	
Identified and First Noted By: N. Ritter	
Year Observed: 2020	
Order Tomoceridae	
Tomoceridae (1 species)	
Tomoceridae Indet. #1 (Elongate-bodied Springtails)	
Identified and First Noted By: N. Ritter	
Year Observed: 2020	

<u>Arthropods</u>

Order Araneae

Anyphaenidae (1 species)

Anyphaenidae Indet. #1 (Ghost Spider)

Identified and First Noted By: K. Johnson

Year Observed: 2020

Araneidae (4 species)

Araneus diadematus (Cross Orbweaver)

Identified By: P. Vermeulen; First Noted By: N. Ritter

Year Observed: 2018

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:7/28/2020)

Araneus marmoreus (Marbled Orbweaver)

Identified and First Noted By: P. Vermeulen; Also Noted By: S. Bernasconi

Year Observed: 2018

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Micrathena gracilis (Spined Micrathena)

Identified and First Noted By: P. Vermeulen; Also Noted By: N. Ritter

Years Observed: 2018; 2020

<u>Status</u>

Neoscona crucifera (Hentz Orbweaver)

Identified and First Noted By: P. Vermeulen

Year Observed: 2018

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Lycosidae (1 species)

Schizocosa Indet. #1 (Brush Legged Spider)

Identified By: chuuuuung (iNaturalist); First Noted By: N. Ritter

Year Observed: 2020

Pisauridae (2 species)

Dolomedes albineus (White-banded Fishing Spider)

Identified and First Noted By: N. Ritter

Year Observed: 2020

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:7/28/2020)

Dolomedes tenebrosus (Dark Fishing Spider)

Identified By: chuuuuung (from photo on iNaturalist); First Noted By: P. Vermeulen; Also Noted By: N. Ritter

Years Observed: 2018; 2020

Tetragnathidae (1 species)

Leucauge venusta (Orchard Orbweaver)

Identified and First Noted By: P. Vermeulen; Also Noted By: N. Ritter

Years Observed: 2018; 2020

<u>Status</u>

Theridiidae (1 species)

Enoplognatha ovata (Common Candy-striped Spider)

Identified and First Noted By: N. Ritter

Year Observed: 2020

Order Endeostigmata

Eriophyidae (1 species)

Aceria negundi (Box Elder Pouch Gall Mite)

Identified and First Noted By: N. Ritter

Year Observed: 2020

Order Geophilomorpha

Geophilidae (1 species)

Strigamia bothriopus (Soil Centipede)

Identified By: N. Ritter; First Noted By: C. Kraynak; Also Noted By: N. Ritter

Years Observed: 2019; 2020

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:7/28/2020)

Order Ixodida

Ixodidae (2 species)

Dermacentor variabilis (American Dog Tick)

Identified and First Noted By: N. Ritter; Also Noted By: M. Beatty; P. Vermeulen; A. Rivellini; B. Flamm

Years Observed: 2014; 2016; 2017; 2018; 2019; 2020

<u>Status</u>

Ixodes scapularis (Deer Tick)

Identified and First Noted By: N. Ritter

Years Observed: 2016; 2017; 2018; 2019

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Order Julida

Julidae (1 species)

Cylindroiulus Indet. #1 (No Common Name)

Identified and First Noted By: N. Ritter

Year Observed: 2020

Order Opiliones

Sclerosomatidae (1 species)

Leiobunum vittatum Group (Eastern Harvestman)

Identified and First Noted By: N. Ritter; Also Noted By: dsnaturalist21 (iNaturalist)

Years Observed: 2018; 2020

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Order Polydesmida

Xystodesmidae (1 species)

Apheloria virginiensis (Black and Gold Flat Millipede)

Identified By: N. Ritter; First Noted By: G. Hertel; Also Noted By: K. McMillin; P. Vermeulen; M. Beatty; J. Kline; A. Rivellini; N. Long; N. Ritter

Years Observed: 2013; 2014; 2016; 2017; 2018; 2019

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Family Unknown

Polydesmida Indet. #1 (Flat-backed Millipedes)

Identified and First Noted By: N. Ritter

Years Observed: 2019; 2020

Order Trombidiformes

Trombidiaceae (1 species)

Trombidium Indet. #1 (Red Velvet Mite)

Identified and First Noted By: N. Ritter; Also Noted By: P. Vermeulen

Years Observed: 2018; 2019; 2020

Order Unknown

Scutigerellidae (1 species)

Hanseniella Indet. #1 (No Common Name)

Identified By: Nikola Szucsich (iNaturalist); First Noted By: N. Ritter & A. Rivellini

Family Unknown

Acari Indet. #1 (Mite)

Identified and First Noted By: Stroud Water Research Center

<u>Crustaceans</u>

Order Amphipoda

Family Unknown

Amphipoda Indet. #1 (Amphipod)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Order Decapoda

Cambaridae (3 species)

Cambarus acuminatus (Acuminate Crayfish)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2019

Status IUCN: Redlist Global Status: Least Concern; Global Population: Unkown PA Natural Heritage List: Conservation status: S1 (Critically Imperiled)

Cambarus Indet. #1 (Cambarus Crayfish)

Identified By: Stroud Water Research Center; First Noted By: G. Hertel; Also Noted By: Stroud Water Research Center

Years Observed: 2013; 2018; 2019

Orconectes (Orco Crayfish)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2018

Order Isopoda

Oniscidae (1 species)

Oniscus Indet. #1 (Sowbug)

Identified and First Noted By: N. Ritter

Year Observed: 2018

Trachelipodidae (1 species)

Trachelipus rathkii (Rathke's Woodlouse)

Identified By: Mark Apgar (inaturalist); First Noted By: N. Ritter

Gastropods

Order Stylommatophora

Philomycidae (1 species)

Megapallifera mutabilis (Changeable Mantleslug)

Identified and First Noted By: N. Ritter; Also Noted By: P. Vermeulen; dsnaturalist21 (iNaturalist)

Year Observed: 2020

<u>Status</u>

PA Natural Heritage List: Conservation status: S3 (Vulnerable)

Polygyridae (1 species)

Neohelix albolabris (Eastern Whitelip)

Identified and First Noted By: N. Ritter

Year Observed: 2018

Polygyridae Subfamily Triodopsinae (1 species)

Polygyridae Subfamily Triodopsinae Indet. #1 (Triodopsine Snails)

Identified By: T. Pearce (iNaturalist); First Noted By: N. Ritter

Year Observed: 2018

Succineidae (1 species)

Succineidae Indet. #1 (Amber Snails)

Identified and First Noted By: N. Ritter

Zonitidae (1 species)

Ventridens ligera (Globose Dome Snail)

Identified By: T. Pearce (iNaturalist); First Noted By: N. Ritter

Year Observed: 2018

Order Unknown

Arionidae (4 species)

Arion hortensis (Garden Slug)

Identified and First Noted By: N. Ritter

Year Observed: 2018

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:7/28/2020)

Arion Subgenus Mesarion Indet. #1 (Dusky Slug)

Identified By: T. Pearce (iNaturalist); First Noted By: N. Ritter

Year Observed: 2018

Arion Subgenus Mesarion Indet. #2 (Dusky Slug)

Identified By: T. Pearce (iNaturalist); First Noted By: N. Ritter

Year Observed: 2018

Arion Subgenus Mesarion Indet. #3 (Dusky Slug)

Identified By: T. Pearce (iNaturalist); First Noted By: N. Ritter

Limacidae (1 species)

Limax maximus (Leopard Slug)

Identified By: N. Ritter; First Noted By: G. Hertel; Also Noted By: P. Vermeulen; M. Beatty; A. Rivellini; N. Ritter

Years Observed: 2011; 2018; 2019

<u>Status</u> IUCN: Redlist Global Status: Least Concern; Global Population: Stable

Family Unknown

Gastropoda Indet. #1 (Snail)

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Order Unranked

Pleuroceridae (1 species)

Pleuroceridae Indet. #1 (Pleurocerid Snail)

Identified and First Noted By: N. Ritter

<u>Flatworms</u>

Order Tricladida

Geoplanidae (1 species)

Bipalium pennsylvanicum (Broadhead Flatworm)

Identified By: A. Hodowanec; First Noted By: N. Ritter; Also Noted By: A. Rivellini; P. Vermeulen; N. Ritter

Years Observed: 2017; 2019; 2020

<u>Status</u>

IUCN: Species has not been reviewed (Website checked:2/10/2020)

Planariidae (1 species)

Planariidae Indet. #1

Identified and First Noted By: Stroud Water Research Center

Year Observed: 2017

Order Unknown

Family Unknown

Turbellaria Indet. #1 (Flatworm)

Identified and First Noted By: D. DiFederico

<u>Worms</u>

Order Haplotaxida

Megascolecidae (1 species)

Amynthas agrestis (Crazy Snake Worm)

Identified and First Noted By: N. Ritter

Year Observed: 2018

<u>Status</u>

IUCN: Redlist Global Status: Least Concern; Global Population: Stable

Order Unknown

Family Unknown

Oligochaeta Indet. #1 (Worm)

Identified and First Noted By: D. DiFederico; Also Noted By: Stroud Water Research Center - 2017

Years Observed: 2007; 2017

Ribbon Worms

Order Unknown

Family Unknown

Nemertea Indet. #1 (Ribbon Worm)

Identified and First Noted By: Stroud Water Research Center

References

[IUCN] International Union for the Conservation of Species. 2020. The IUCN Red List of Threatened Species. Version 2020-2. https://www.iucnredlist.org. Date accessed: 6/30/2020.

[PNHP] Pennsylvania Natural Heritage Program. 2020. Pennsylvania Natural Heritage Species and Natural Features List (http://www.naturalheritage.state. pa.us/SpeciesFeatures.aspx); Date accessed: 3/27/2020.

Metadata

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