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INVENTORY OF THE AQUATIC AND SEMIAQUATIC COLEOPTERA AND HETEROPTERA OF THE HUYCK PRESERVE, ALBANY COUNTY, NEW YORK

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Abstract.—A list is provided of species of aquatic and semiaquatic Coleoptera and Heteroptera observed at the Huyck Preserve in Albany County, New York, United States during the summer of 2022. A total of 54 species of Heteroptera were recorded from 13 families, while 127 species of Coleoptera were recorded from 13 families. Two species of Dytiscidae are new state records for New York: *Heterosternuta allegheniana* (Matta & Wolfe) and *Neoscutopterus hornii* (Crotch). The occurrence of *Hygrotus picatus* (Kirby) and *Merragata brunnea* Drake in the state are clarified. The first specific records of four species of Corixidae previously reported to occur in New York are provided.

Key Words: aquatic insects, Dytiscidae, Gerromorpha, Hydrophilidae, Nepomorpha

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The Edward Niles Huyck Preserve and Biological Research Station is situated on the western edge of the Helderberg Plateau in east-central New York, United States (Fig. 1). Since its founding in 1931, the preserve has expanded to cover nearly 1000 ha of the Tenmile Creek watershed and adjacent lands. The elevation ranges from just under 400 m on Tenmile Creek at the preserve's southern boundary to nearly 650 m on hills in the northwestern sections. The preserve is located within the Glacial Low Allegheny Plateau level IV ecoregion, at the northeastern corner of the larger Northern Allegheny Plateau level III ecoregion where it converges with the Eastern Great Lakes Lowlands, Northeastern Coastal Zone, and Northeastern Highlands ecoregions (Omernik 1987; Omernik and Griffith 2014). Much of the land is covered in secondary mixed hardwood and eastern

hemlock forests (Figs. 2–5) that were previously logged or abandoned as pasture since around 1900 (Odum 1943; Russell 1958).

Two impoundments on Tenmile Creek, Lake Myosotis (40 ha) and Lincoln Pond (4 ha; Fig. 2), are the largest lentic water bodies on the preserve. The nearly 1 km of Tenmile Creek downstream of Lake Myosotis has two small impoundments and a 36 meter waterfall; the remaining 3.5 km stretch of Tenmile Creek within or along the preserve's boundary downstream of Rensselaerville is a permanent, free-flowing stream. All of the other smaller streams in the preserve may either partially or completely dry seasonally (Fig. 5), as occurred during the summer of 2022. These streams are bisected by a network of beaver dams, and the associated ponds and wetlands (Fig. 3) form the greatest spatial extent of complex lentic

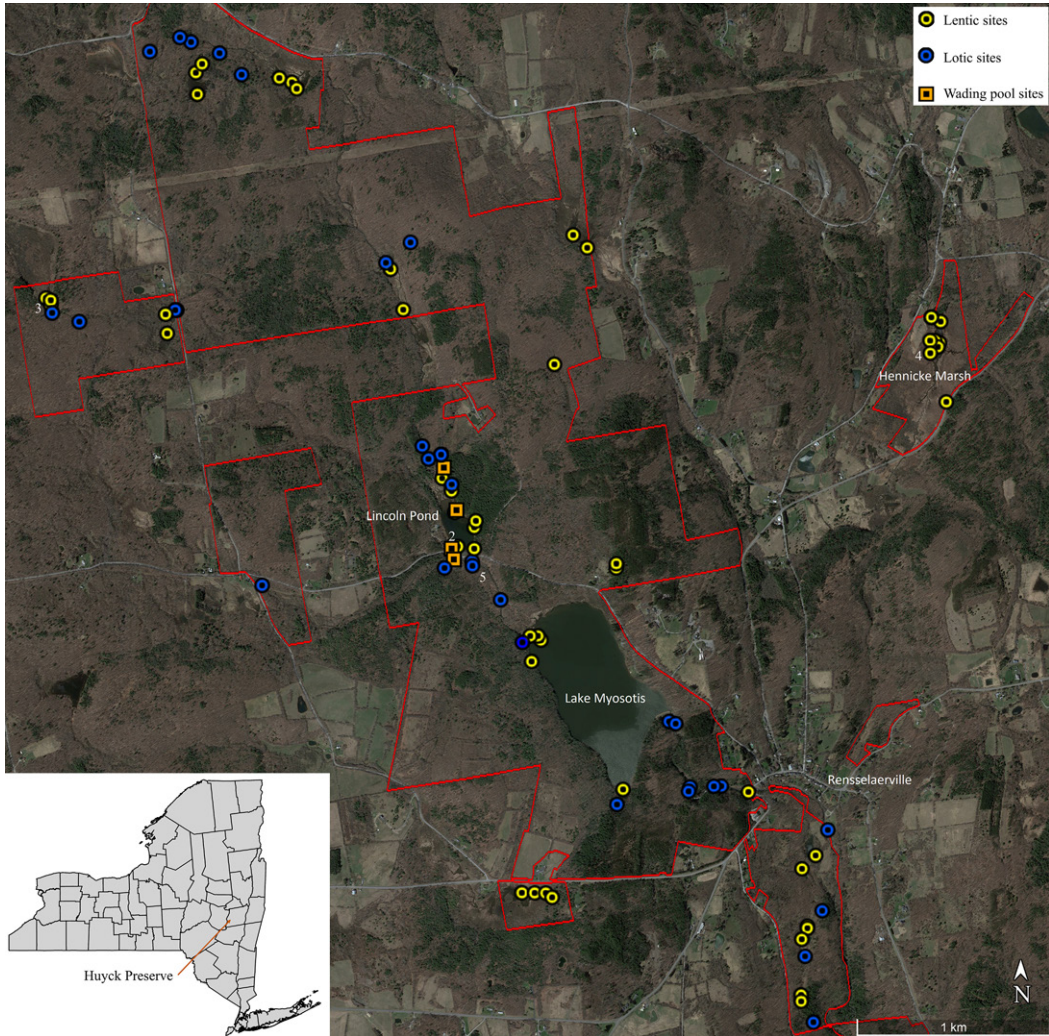


Fig. 1. Map of Huyck Preserve (property enclosed in red polygons), sites sampled for aquatic insects during the summer of 2022, and the preserve's location within New York. Imagery date is 28 April 2022. Numbers indicate sites where images in Figs. 2–5 were taken.

habitats in the preserve. At least five small ponds are remnant farm ponds; some of the farm ponds and beaver ponds may seasonally dry. Most other non-beaver aquatic habitats are small and varied (including small springs and seeps, marshes, forested wetlands, and some sphagnum bogs), with the exception of Hennieke Marsh (Fig. 4), a predominantly sedge meadow covering 15 ha east of the main section of the preserve (though beavers had constructed a dam in it during 2022).

Aquatic insects contribute to a large portion of the biodiversity in freshwater ecosystems (Balian et al. 2008) and are important parts of these communities (Schneider and Frost 1996). The aquatic Coleoptera are among the most diverse orders in freshwaters, but Heteroptera can also be diverse and abundant in many systems (Polhemus and Polhemus 2007; Jäch and Balke 2008). Given the numerous local and global threats posed to freshwater ecosystems, documenting the presence,



Figs. 2–5. Photos of freshwater habitats at Huyck Preserve taken during June 2022. 2, Lincoln Pond. 3, Wetland that was dammed by beavers. 4, Hennicke Marsh at the approximate collection location of *Neoscutoperus hornii*. 5, Small stream where *Heterosternuta allegheniana* was found.

diversity, and abundance of aquatic insect species in these ecosystems and at specific study sites is important for understanding how communities change in the future (Dudgeon et al. 2006; Kharouba et al. 2019). Other than a series of studies into gerrid mating (Jabłoński and Wilcox 1996; Eldakar et al. 2009; Wilcox and Dlugos 2011) and a few other ecological studies (e.g., Brodie et al. 1978; Formanowicz and Brodie 1982; Formanowicz 1986; Ybarrondo 1995), no research at the preserve or other sites in the region have produced extensive inventories of aquatic insect species in the orders Coleoptera or Hemiptera. Ybarrondo (1988) listed 14 species of aquatic beetles that were used in his study at the preserve, but this work was never published, a few of the species are questionable records, and the study

was not intended as a survey of species. The main objective of this study was to improve our knowledge of the aquatic and semiaquatic Coleoptera and Heteroptera of the Huyck Preserve.

MATERIALS AND METHODS

During the summer of 2022, I surveyed and collected aquatic insects in the orders Coleoptera (beetles) and Hemiptera (Heteroptera, true bugs) at the Huyck Preserve in Albany County, New York. The aim of this project was to document the fauna of the preserve, determine which species were common, and document any new distributional records. Most of the sampling occurred during June, while additional sampling occurred in August to further sample many of the most diverse habitats based on June sampling and to

look for additional species, particularly some of the Heteroptera that are often in their adult stages towards late summer. August sampling was also limited because many of the smaller wetlands and nearly all of the small streams were dry. While my focus was on both aquatic and semiaquatic Heteroptera, for beetles I only focused on documenting species with aquatic adult stages. Nevertheless, I include records of Chrysomelidae, Ptilodactylidae, and Scirtidae that I incidentally encountered.

The majority of sampling was performed using aquatic nets (D-frame net, kick net, handheld fine mesh net). I sampled from as many water bodies as I could find across the preserve, from Lake Myosotis to tiny streams and puddles. Coordinates (Fig. 1), dates of collection, and a brief description of individual sites are provided in the dataset (Pintar 2024). Generally, at each site I sampled every different microhabitat, looking for insects to a point of diminishing returns, wherein I stopped collecting when it seemed like I was no longer finding any different species based on coarse field identification. For natural sites sampled with nets, I generally collected at least one individual per site, while more individuals were collected of groups that could not be clearly identified in the field (for some taxa 10+ individuals per site). Many of the larger and readily identifiable species observed at each site were recorded but not always collected.

On nearly every night I set up two black lights (UV LED at sheets), one north-facing on the porch of Lincoln Pond Cottage (sheltered from rain) and a second east-facing light hanging from the porch of Eldridge Research Center (30 m to the west; exposed to rain and not turned on if raining). Lights were typically turned on around sunset and left on until sometime between 21:30 and 00:00, depending on insect activity. Species occurring at

lights were only haphazardly sampled to document species that may not have been observed elsewhere.

The third sampling method I employed was the use of four 100-L (1 m diameter) plastic wading pools that I set up in the vicinity of Lincoln Pond. These pools were placed on the ground, filled with water, and left in place from 10 June until 25 August for insects to colonize. These small fishless wading pools are attractive to many species adapted to smaller, typically ephemeral and fishless habitats and may capture taxa that I may not find via other methods (see summary of prior work with wading pools in Pintar and Resetarits (2020)). Insects that colonized the pools were collected every two or three days while I was at the preserve; all colonists were exhaustively removed from pools on each sampling day. In total, samples were collected at 82 unique sites in natural habitats (sampled with nets; some sites repeated between months, others were not), along with 2 black lights sites and 4 wading pools.

I was responsible for nearly all identifications, with the exception of Chrysomelidae, for which *Donacia* Fabricius were identified by Ed Riley (Texas A & M University, College Station, Texas; TAMU) and *Tricholochmaea* Laboissière by Shawn Clark (Brigham Young University, Provo, Utah; BYU). Primary sources used for beetle identification were Larson et al. (2000) for Dytiscidae, Vondel (2021) for Haliplidae, Gustafson and Miller (2015) and Oygur and Wolfe (1991) for Gyrinidae, and Smetana (1988) for Hydrophilidae, Hydrochidae, and Helophoridae. For Heteroptera, primary sources were Hungerford (1948) for Corixidae, Truxal (1953) and Hutchinson (1945) for Notonectidae, Sites and Polhemus (1994) for Nepidae, Schuh (1968) for Saldidae, and Epler (2006) for Veliidae. Many other sources were consulted for each of these and other families when necessary.

Voucher specimens of most species documented here have been deposited into the Cornell University Insect Collection, Ithaca, New York (CUIC). All *Donacia* specimens are in the TAMU collection and both *Tricholochmaea* specimens are in the BYU collection. Additional voucher specimens are in the University of Texas Insect Collection (UTIC; Austin, Texas) and the National Museum of Natural History (Smithsonian Institution, Washington, DC). Four species of Heteroptera for which only one individual was collected do not have voucher specimens; these specimens have been saved for potential genetic analysis. A full list of voucher specimens is provided in the dataset (Pintar 2024). All other specimens at the time of this publication are in my personal collection; remaining specimens may be deposited in additional museums in the future.

RESULTS AND DISCUSSION

In total, 1524 true bugs were recorded representing 54 species in 13 families (Tables 1, 2) and 2784 beetles were recorded representing 127 species in 13 families (Tables 3–6). Many of the species recorded are species with wide-ranging distributions across the northern United States and southern Canada, but others were eastern species nearing their northern range limit. One Palearctic hydrophilid species, *Coelostoma orbiculare* Fabricius, was a new country record for the United States that I documented in a prior publication (Pintar 2023). Two dytiscid species are new state records for New York, while the occurrence of one dytiscid and two gerromorphans are discussed; these records are listed below.

Although the Huyck Preserve encompasses a relatively small area (1000 ha), the number of species of Dytiscidae, Gyrinidae, and Haliplidae (Tables 3, 5) were approximately on par with similar

sampling efforts over larger areas (Alarie 2019, 2020). Dytiscidae was unsurprisingly the most diverse family with 52 species (Table 3); dozens of other dytiscid species are known to occur in the northeastern United States and perhaps could be encountered at the preserve (Larson et al. 2000). Nevertheless, this study documents the fauna of various habitats across the preserve and illustrates which species were common and widely encountered.

Out of 108 total samples taken from natural habitats, the five most commonly encountered species of beetles were *Laccophilus maculosus* (Germar) (54 samples), *Neoporus undulatus* (Say) (42 samples), *Haliphus immaculicollis* Harris (39 samples), *Hydroporus niger* Say (35 samples), and *Enochrus ochraceus* (Melsheimer) (31 samples). Thirty-four species of beetles were only encountered or positively identified in only one sample, although six of those species were also collected at lights. Seven species of beetles were only encountered at black lights. The single *Hydraena* Kugelann specimen found, a female in the *circulata* group resembling *H. pennsylvanica* Kiesenwetter, was only collected from a wading pool. *Anacaena limbata* (Fabricius), *Helophorus lineatus* Say, *Cymbiodyta vindicata* Fall, and *Acilius mediatius* (Say) were the most commonly encountered species in wading pools.

Most species of Heteroptera were only collected from natural sites. The most commonly encountered species in lentic habitats were *Gerris buenoi* Kirkaldy (36 samples), *Mesovelia mulsanti* White (35 samples), and *Notonecta lunata* Hungerford (30 samples), while all *Sigara* Fabricius (identified males + unidentified females) were found in 29 samples and likewise *Hesperocorixa* Kirkaldy were found in 25 samples. *Lethocerus americanus* (Leidy) and *Sigara* females were observed at lights, while the only male

Table 1. List of species in the hemipteran infraorders Gerromorpha and Leptopodomorpha (Saldidae) recorded at the Huyck Preserve, Albany County, New York during summer 2022. Species are listed by family with the total number of individuals and the number of samples (out of 108 total) from natural habitats in which each species was recorded.

Taxon	Abundance	Samples
Gerridae (11 species)	330	79
<i>Aquarius remigis</i> (Say, 1832)	40	22
<i>Gerris buenoi</i> Kirkaldy, 1911	128	36
<i>Gerris comatus</i> Drake & Hottes, 1925	41	15
<i>Gerris insperatus</i> Drake & Hottes, 1925	42	20
<i>Gerris marginatus</i> Say, 1832	7	6
<i>Limnoporus canaliculatus</i> (Say, 1832)	13	6
<i>Limnoporus dissortis</i> (Drake & Harris, 1930)	16	12
<i>Metrobates hesperius</i> Uhler, 1871	5	1
<i>Rheumatobates rileyi</i> Bergroth, 1892	8	2
<i>Trepobates pictus</i> (Herrich-Schaeffer, 1847)	16	2
<i>Trepobates subnitidus</i> Esaki, 1926	14	7
Hebridae (3 species)	20	9
<i>Hebrus burmeisteri</i> Lethierry & Severin, 1896	14	6
<i>Hebrus concinnus</i> Uhler, 1894	1	1
<i>Merragata brunnea</i> Drake, 1917	5	2
Hydrometridae (1 species)	14	8
<i>Hydrometra martini</i> Kirkaldy, 1900	14	8
Mesoveliidae (1 species)	59	35
<i>Mesovelia mulsanti</i> White, 1879	59	35
Veliidae (5 species)	250	56
<i>Microvelia americana</i> (Uhler, 1884)	76	29
<i>Microvelia buenoi</i> Drake, 1920	19	5
<i>Microvelia hinei</i> Drake, 1920	20	8
<i>Microvelia pulchella</i> Westwood, 1834	112	14
<i>Rhagovelia obesa</i> Uhler, 1871	23	4
Saldidae (4 species)	16	8
<i>Salda provancheri</i> Kelton & Lattin, 1968	1	1
<i>Saldula opacula</i> (Zetterstedt, 1838)	2	2
<i>Saldula orbiculata</i> (Uhler, 1877)	1	1
<i>Saldula pallipes</i> (Fabricius, 1794)	12	4

Sigara ornata (Abbott) that I found was in a wading pool.

Most streams at the preserve were small and shallow with cobble or cobble-gravel substrates; they seemed to have relatively little diversity compared to lentic habitats. Only three species of Elmidae were recorded and no Dryopidae, while the only regularly encountered beetles in streams were *Heterosternuta* spp. Strand. The dominant species observed in streams were the common gerromorphans *Aquarius remigis* (Say), *Microvelia*

americana (Uhler), and *Rhagovelia obesa* Uhler. By late summer, most of the smaller streams had dried, which may be partially indicative as to why so few elmids were found, while some of the remaining larger pools in the streams had many *Trepobates pictus* (Herrich-Schaeffer).

The work of Hungerford (1948) has to date been the most comprehensive review of the Corixidae in North America, yet four of the species recorded at the preserve were not reported from New York until (and since) Jansson's (2002)

Table 2. List of species in the hemipteran infraorder Nepomorpha recorded at the Huyck Preserve, Albany County, New York during summer 2022. Species are listed by family with the total number of individuals recorded and the number of samples from natural habitats in which each species was recorded.

Taxon	Abundance	Samples
Belostomatidae (2 species)	37	25
<i>Belostoma flumineum</i> Say, 1832	26	22
<i>Lethocerus americanus</i> (Leidy, 1847)	11	7
Corixidae (19 species)	581	46
<i>Callicorixa audeni</i> Hungerford, 1928	102	10
<i>Hesperocorixa atopodonta</i> (Hungerford, 1927)	63	9
<i>Hesperocorixa interrupta</i> (Say, 1825)	18	5
<i>Hesperocorixa michiganensis</i> (Hungerford, 1926)	2	2
<i>Hesperocorixa minorella</i> (Hungerford, 1926)	16	6
<i>Hesperocorixa semilucida</i> (Walley, 1930)	1	1
<i>Hesperocorixa vulgaris</i> (Hungerford, 1925)	3	3
<i>Hesperocorixa</i> (females) Kirkaldy, 1908	133	21
<i>Palmacorixa buenoi</i> Abbott, 1913	9	3
<i>Palmacorixa nana</i> Walley, 1930	13	5
<i>Palmacorixa</i> (females) Abbott, 1912	23	4
<i>Sigara alternata</i> (Say, 1825)	21	4
<i>Sigara compressoidea</i> (Hungerford, 1928)	1	1
<i>Sigara grossolineata</i> Hungerford, 1948	13	4
<i>Sigara johnstoni</i> Hungerford, 1948	8	1
<i>Sigara modesta</i> (Abbott, 1916)	21	3
<i>Sigara mullettensis</i> (Hungerford, 1928)	3	3
<i>Sigara ornata</i> (Abbott, 1916)	8	0
<i>Sigara signata</i> (Fieber, 1851)	4	4
<i>Sigara variabilis</i> (Hungerford, 1926)	11	1
<i>Sigara</i> (females) Fabricius, 1775	98	22
<i>Trichocorixa sexcincta</i> (Champion, 1901)	10	7
Naucoridae (1 species)	8	8
<i>Pelocoris femoratus</i> (Palisot de Beauvois, 1820)	8	6
Nepidae (1 species)	36	19
<i>Ranatra fusca</i> Palisot de Beauvois, 1820	36	19
Notonectidae (4 species)	153	42
<i>Buenoa confusa</i> Truxal, 1953	23	3
<i>Notonecta irrorata</i> Uhler, 1879	13	9
<i>Notonecta lunata</i> Hungerford, 1926	68	30
<i>Notonecta undulata</i> Say, 1832	49	18
Ochteridae (1 species)	1	1
<i>Ochterus banksi</i> Barber, 1913	1	1
Pleidae (1 species)	19	11
<i>Neoplea striola</i> (Fieber, 1844)	19	11

documentation of many records in the region. Jansson had planned a revision of the Nearctic Corixidae but never published it before his death, while his 2002 publication never provided detailed records beyond a state/provincial checklist. Thus, I provide the first specific

records of four species of Corixidae from New York for which Jansson (2002) noted the initial new state records. These species are *Callicorixa audeni* Hungerford, *Hesperocorixa minorella* (Hungerford), *Sigara johnstoni* Hungerford, and *Sigara variabilis* (Hungerford). *Callicorixa audeni*

Table 3. List of species in the beetle family Dytiscidae recorded at the Huyck Preserve, Albany County, New York during summer 2022. Species are listed by family with the total number of individuals recorded and the number of samples from natural habitats in which each species was recorded. There were 52 species and 1242 individuals recorded from this family occurring at 90 of sites in natural habitats.

Taxon	Abundance	Samples
<i>Acilius fraternus</i> (Harris, 1828)	1	1
<i>Acilius mediatus</i> (Say, 1823)	24	9
<i>Acilius semisulcatus</i> Aubé, 1838	10	5
<i>Acilius sylvanus</i> Hilsenhoff, 1975	4	2
<i>Agabus ambiguus</i> (Say, 1823)	24	9
<i>Agabus anthracinus</i> Mannerheim, 1852	8	4
<i>Agabus erythropterus</i> (Say, 1823)	2	1
<i>Agabus semipunctatus</i> (Kirby, 1837)	1	1
<i>Agabus subfuscatus</i> Sharp, 1882	5	5
<i>Celina angustata</i> Aubé, 1838	4	2
<i>Celina hubbelli</i> Young, 1979	2	0
<i>Clemnius laccophilinus</i> (LeConte, 1878)	8	6
<i>Copelatus glyphicus</i> (Say, 1823)	2	1
<i>Coptotomus longulus lenticus</i> Hilsenhoff, 1980	28	10
<i>Desmopachria convexa</i> (Aubé, 1838)	37	15
<i>Dytiscus verticalis</i> Say, 1823	7	4
<i>Graphoderus fascicollis</i> (Harris, 1828)	8	6
<i>Graphoderus liberus</i> (Say, 1825)	7	4
<i>Heterosternuta allegheniana</i> (Matta & Wolfe, 1979)	5	2
<i>Heterosternuta cocheconis</i> (Fall, 1917)	9	5
<i>Heterosternuta pulchra</i> (LeConte, 1855)	11	4
<i>Heterosternuta wickhami</i> (Zaitzev, 1908)	2	1
<i>Heterosternuta</i> spp. Strand, 1935 (females)	46	12
<i>Hydaticus aruspex</i> Clark, 1864	2	2
<i>Hydaticus piceus</i> LeConte, 1863	2	2
<i>Hydrocolus paugus</i> (Fall, 1923)	9	4
<i>Hydroporus dentellus</i> Fall, 1917	7	4
<i>Hydroporus dichrous</i> Melsheimer, 1844	19	11
<i>Hydroporus niger</i> Say, 1823	168	35
<i>Hydroporus signatus</i> Mannerheim, 1853	2	2
<i>Hydrovatus pustulatus</i> (Melsheimer, 1844)	20	12
<i>Hygrotus dissimilis</i> (Gemminge & Harold, 1868)	2	2
<i>Hygrotus picatus</i> (Kirby, 1837)	20	4
<i>Hygrotus sayi</i> J. Balfour-Browne, 1944	58	19
<i>Ilybiosoma seriatum</i> (Say, 1823)	7	4
<i>Ilybius biguttulus</i> (Germar, 1824)	71	26
<i>Ilybius gagates</i> (Aubé, 1838)	22	13
<i>Ilybius ignarus</i> (LeConte, 1862)	6	5
<i>Ilybius incarinatus</i> Zimmermann, 1928	9	4
<i>Ilybius oblitus</i> Sharp, 1882	1	1
<i>Ilybius pleuriticus</i> LeConte, 1850	11	6
<i>Ilybius</i> sp. Erichson, 1832 (females)	97	30
<i>Laccophilus maculosus maculosus</i> (Germar, 1823)	143	54
<i>Laccophilus undatus</i> Aubé, 1838	30	7
<i>Laccornis latens</i> (Fall, 1937)	1	1
<i>Liodessus affinis</i> (Say, 1823)	20	11
<i>Matus ovatus ovatus</i> Leech, 1941	13	5

(Continued)

Table 3. (Continued)

Taxon	Abundance	Samples
<i>Neoporus dimidiatus</i> (Gemminger & Harold, 1868)	1	1
<i>Neoporus undulatus</i> (Say, 1823)	187	42
<i>Neoscutopterus hornii</i> (Crotch, 1873)	1	1
<i>Platambus semivittatus</i> (LeConte, 1852)	1	1
<i>Rhantus binotatus</i> (Harris, 1828)	34	14
<i>Rhantus wallisi</i> Hatch, 1953	1	1
<i>Uvarus falli</i> (Young, 1940)	22	8

Table 4. List of species in the beetle epifamily Hydrophiloidea recorded at the Huyck Preserve, Albany County, New York during summer 2022. Species are listed by family with the total number of individuals recorded and the number of samples from natural habitats in which each species was recorded.

Taxon	Abundance	Samples
Helophoridae (3 species)	58	13
<i>Helophorus angusticollis</i> Orchymont, 1945	2	1
<i>Helophorus lacustris</i> LeConte, 1850	3	2
<i>Helophorus lineatus</i> Say, 1823	53	11
Hydrochidae (2 species)	10	5
<i>Hydrochus neosquamifer</i> Smetana, 1988	2	2
<i>Hydrochus squamifer</i> LeConte, 1855	5	3
<i>Hydrochus</i> sp. Leach, 1817 (females)	3	1
Hydrophilidae (31 species)	741	79
<i>Anacaena limbata</i> (Fabricius, 1792)	113	25
<i>Berosus peregrinus</i> (Herbst, 1797)	2	0
<i>Berosus sayi</i> Hansen, 1999	16	8
<i>Cercyon herceus</i> Smetana, 1978	2	1
<i>Cercyon praetextatus</i> (Say, 1825)	23	0
<i>Coelostoma orbiculare</i> (Fabricius, 1775)	3	3
<i>Crenitis digesta</i> (LeConte, 1855)	2	2
<i>Crenitis monticola</i> (Horn, 1890)	5	3
<i>Cymbiodyta acuminata</i> Fall, 1924	7	1
<i>Cymbiodyta bifida</i> (LeConte, 1855)	21	9
<i>Cymbiodyta blanchardi</i> Horn, 1890	21	10
<i>Cymbiodyta chamberlaini</i> Smetana, 1974	2	2
<i>Cymbiodyta vindicata</i> Fall, 1924	56	20
<i>Enochrus cinctus</i> (Say, 1824)	26	12
<i>Enochrus consors</i> (LeConte, 1863)	5	1
<i>Enochrus fimbriatus</i> (Melsheimer, 1844)	11	0
<i>Enochrus hamiltoni</i> (Horn, 1890)	6	3
<i>Enochrus ochraceus</i> (Melsheimer, 1844)	138	31
<i>Enochrus pygmaeus nebulosus</i> (Say, 1824)	44	3
<i>Enochrus sayi</i> Gundersen, 1977	4	0
<i>Hydrobius fuscipes</i> (Linnaeus, 1758)	14	9
<i>Hydrochara obtusata</i> (Say, 1823)	6	5
<i>Laccobius agilis</i> (Randall, 1838)	1	1
<i>Laccobius minutoides</i> Orchymont, 1942	5	2
<i>Laccobius spangleri</i> Cheary, 1971	10	2
<i>Limnohydrobius melaenus</i> (Germar, 1824)	11	3
<i>Paracymus subcupreus</i> (Say, 1825)	11	3
<i>Paracymus</i> sp. Thomson, 1867 (females)	30	15

(Continued)

Table 4. (Continued)

Taxon	Abundance	Samples
<i>Tropisternus glaber</i> (Herbst, 1797)	50	29
<i>Tropisternus lateralis nimbatu</i> s (Say, 1823)	7	4
<i>Tropisternus mixtus</i> (LeConte, 1855)	82	30
<i>Tropisternus natator natator</i> Orchymont, 1938	7	2

Table 5. List of species of miscellaneous aquatic beetle families recorded at the Huyck Preserve, Albany County, New York during summer 2022. Species are listed by family with the total number of individuals recorded and the number of samples from natural habitats in which each species was recorded.

Taxon	Abundance	Samples
Elmidae (3 species)	5	4
<i>Heterolimnius ovalis</i> (LeConte, 1863)	1	1
<i>Macronychus glabratus</i> Say, 1825	1	1
<i>Stenelmis crenata</i> (Say, 1824)	3	3
Gyrinidae (8 species)	151	32
<i>Dineutus assimilis</i> (Kirby, 1837)	30	10
<i>Dineutus hornii</i> Roberts, 1895	15	5
<i>Dineutus nigrrior</i> Roberts, 1895	23	9
<i>Gyrinus borealis</i> Aubé, 1838	11	4
<i>Gyrinus gibber</i> LeConte, 1868	3	1
<i>Gyrinus latilimbus</i> Fall, 1922	57	16
<i>Gyrinus sayi</i> Aubé, 1838	4	2
<i>Gyrinus ventralis</i> Kirby, 1837	8	1
Haliplidae (13 species)	428	58
<i>Haliplus connexus</i> Matheson, 1912	1	1
<i>Haliplus cribrarius</i> LeConte, 1850	1	1
<i>Haliplus fasciatus</i> Aubé, 1838	53	20
<i>Haliplus immaculicollis</i> Harris, 1828	179	39
<i>Haliplus leopardus</i> Roberts, 1913	13	10
<i>Haliplus longulus</i> LeConte, 1850	3	2
<i>Haliplus pantherinus</i> Aubé, 1838	1	1
<i>Haliplus triopsis</i> Say, 1825	1	1
<i>Peltodytes duodecimpunctatus</i> Régimbart, 1878	49	14
<i>Peltodytes edentulus</i> (LeConte, 1863)	56	21
<i>Peltodytes muticus</i> (LeConte, 1853)	55	28
<i>Peltodytes shermani</i> Roberts, 1913	10	5
<i>Peltodytes tortulosus</i> Roberts, 1913	6	5
Hydraenidae (1 species)	1	0
<i>Hydraena</i> cf. <i>pensylvanica</i> Kiesenwetter, 1849	1	0
Noteridae (2 species)	31	20
<i>Hydrocanthus iricolor</i> Say, 1823	30	19
<i>Suphisellus puncticollis</i> (Crotch, 1873)	1	1
Psephenidae (1 species)	1	0
<i>Psephenus herricki</i> (DeKay, 1844)	1	1

is of particular interest because it was seemingly the most common corixid species at the preserve yet it had not

been previously recorded from the state. Hungerford (1948) recorded the similar *C. alaskensis* Hungerford from New York

Table 6. List of species in miscellaneous beetle families recorded at the Huyck Preserve, Albany County, New York during summer 2022. Species are listed by family with the total number of individuals recorded and the number of samples from natural habitats in which each species was recorded. These families were not a focus of this project.

Taxon	Abundance	Samples
Chrysomelidae (6 species)	15	10
<i>Donacia fulgens</i> LeConte, 1851	6	5
<i>Donacia hirticollis</i> Kirby, 1837	1	1
<i>Donacia subtilis</i> Kunze, 1818	1	1
<i>Donacia subtilis</i> group (females)	3	3
<i>Galerucella nymphaeae</i> Crotch, 1873	1	1
<i>Neohaemonia nigricornis</i> (Kirby, 1837)	1	1
<i>Tricholochmaea</i> sp. (<i>decora/spiraeae</i> complex) Laboissière, 1932	2	2
Ptilodactylidae (1 species)	4	0
<i>Ptilodactyla serricollis</i> (Say, 1823)	4	0
Scirtidae (5 taxa)	97	7
<i>Contacyphon</i> spp. Des Gozis, 1886	29	7
<i>Elodes maculicollis</i> Horn, 1880	2	0
<i>Nyholmia collaris</i> (Guérin-Ménéville, 1843)	1	1
<i>Prionocyphon limbatus</i> LeConte, 1866	18	1
<i>Scirtes tibialis</i> Guérin-Ménéville, 1843	47	1

and some surrounding states, but I did not find it at the Huyck Preserve.

Heterosternuta allegheniana
(Matta & Wolfe)

Five individuals of this species were found in one small stream (Fig. 5), one during June and four during August. It co-occurred with *H. cocheconis* (Fall), and during August the stream was mostly dry with only a few remaining small pools. This species ranges from Cape Breton Island to Tennessee, but is generally not as widely documented as other species in the genus (Matta and Wolfe 1979, 1981; Larson et al. 2000; Alarie 2019). It is a new state record for New York.

Hygrotus picatus (Kirby)

A widely distributed species across boreal areas from Newfoundland to Illinois and Alaska (Larson et al. 2000). It was excluded from the map of records in Larson et al. (2000), but Anderson (1983) included New York in his distribution list but not on his distribution map. Most (16 out of 20) of the individuals that I found

were collected from beaver wetlands during June. No individuals were found of the similar, but more widely documented (including in New York) species, *Hygrotus impressopunctatus* (Schaller).

Neoscutopterus hornii (Crotch)

A single individual of this transcontinental species was collected in Hennessee Marsh (Fig. 4) during June. Larson et al. (2000) did not include any records of the genus in New York. However, one other specimen of this genus has been recorded from New York, a specimen reported as *Neoscutopterus angustus* (LeConte) from Kenne Valley, Essex County in July 1890 (Leonard 1926). I examined the Essex County specimen in the New York State Museum (Albany, New York), and despite being an old specimen that was missing some appendages, the ventral coloration of abdominal sterna 2 and 3 were rufous and the metacoxal width was approximately 4 times the width of the metasternal wing, both indicative of *N. hornii*. Therefore, these two specimens are the first record of *N. hornii* in New York,

while *N. angustus* is not known to occur in the state but may still occur there. Both of these species are rarely encountered, and there is only one other record of *N. hornii* in the northeastern United States, an individual posted to iNaturalist from Norfolk County, Massachusetts and observed in 2012 (GBIF.org 2024).

Merragata brunnea Drake

This species has been recorded from several of the eastern states and southern Canada (Drake and Chapman 1958, Polhemus and Polhemus 1988). Although Polhemus and Polhemus (1988) did not include New York on their list of states where this species has been found, in Porter's (1950) unpublished thesis, New York was listed as having published records as well as under material examined but without any details. The only record I was able to locate from New York was Drake's (1920a) mention of it ranging from "Nebraska east to New York City and south to Florida", but it is unknown if that was just a generalization or if specimens from New York City were actually observed. One of the more easily identifiable macropterous individuals was collected, while two apterous males were recorded; two co-occurring apterous females are presumed to be *M. brunnea*.

Microvelia buenoi Drake

The type locality of this species is in the Adirondacks of northern New York (Drake 1920b), yet Smith (1988) seemingly left New York out of the distribution list and only noted "NY" next to the type locality; it is a widely distributed species in Canada and the northern United States (Smith and Polhemus 1978). This species was locally common at a few sites at the Huyck Preserve, but it was not found in the same samples as the most common lentic *Microvelia* species, *M. pulchella* Westwood.

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