

VES NEWS

The Newsletter of the Vermont Entomological Society

Number 104 Summer2019



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The **Vermont Entomological Society** (VES) is devoted to the study, conservation, and appreciation of invertebrates. Founded in 1993, VES sponsors selected research, workshops and field trips for the public, including children. Our quarterly newsletter features developments in entomology, accounts of insect events and field trips, as well as general contributions from members or other entomologists.

VES is open to anyone interested in arthropods. Our members range from casual insect watchers to amateur and professional entomologists. We welcome members of all ages, abilities and interests.

You can join VES by sending dues of \$15 per year to:

Deb Kiel 147 Allen Irish Road Underhill, VT 05489

<u>Cover Photo</u>: Northeastern Pine Sawyer (*Monochamus notatus*), Milton Town Forest, Milton, VT.

Photo: Bonnie Pease.

<u>Back Cover Photo</u>: Baltimore Checkerspot (*Euphydryas phaeton*), Milton Pond

Trail, Milton, VT. Photo: Laurie DiCesare

For more information on the Vermont Entomological Society, visit www.VermontInsects.org

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Newsletter Schedule

Spring: Deadline April 7 - Publication May 1Summer: Deadline July 7 - Publication August 1Fall: Deadline October 7 - Publication November 1

Winter: Deadline January 7 - Publication February 1

Membership Check Your Mailing Label

The upper right corner of your mailing label will inform you of the month and year your VES membership expires.

Dues are \$15 and can be sent to our Treasurer:

Vermont Entomological Society c/o Deb Kiel 147 Allen Irish Road Underhill, VT 05489



Correction:

Josh Lincoln's photo of a hairy-necked Tiger Beetle (*Cincindela hirticollis*) that graced the back cover of our Spring Newsletter was not taken at Birds of VT Museum. We apologize for the error.

Calendar



Camp Johnson (August 10.) Contact Michael Sabourin mothyet@yahoo.com or 802.426.2133.

Buckner Preserve, West Haven, VT (11 a.m., Sept. 14 at Tim's Trailhead): This amazing site has field, woodland and wetland (pond and river) habits that are home to an abundant variety of species including dragonflies, butterflies, birds and reptiles. For more information contact Michael Sabourin 802.426.2133 or Laurie DiCesare 802.893.1845 NatureHaven@MyFairPoint.net.

Field Notes

Muddy Brook Wetland Reserve Walk (June 8, 2019)

By Don H. Miller [edited LD July 21, 2019]

It was a beautiful Saturday morning for the walk at the Muddy Brook Wetland Reserve in South Burlington, one of the most-recently established parks of the Winooski Valley Park District. (Another park with a similar name, Muddy Brook Park, is located at the mouth of Muddy Brook, several miles to the north.) Much of the Reserve is lowland adjacent to Muddy Creek with thickets of several introduced species of shrubs, predominantly honeysuckle and buckthorn.

In addition to myself, six people attended including VES President Michael Sabourin; VES Treasurer Debbie Kiel and her husband Warren; and Dr. Ann Hazelrigg and her spouse, Dennis. Ann is an expert on plant rusts. She pointed out one, Buckthorn Rust (*Puccinia coronate*) which uses Common Buckthorn as its alternate host to various grasses, including rye and oats.

The Reserve has well-kept walking trails which extend off the property to the north to an old field community. Two very fresh turtle diggings were observed in that area, undoubtedly those of the dominant predator in Muddy Brook, the snapping turtle.



Warren (left) and Deb Kiel, Michael (right.) Photo: Don Miller

Mike identified the Woodland Mosquito (Ochlerotatus stimulans). a member of the composite genus Aedes. Deb identified a Leaffooted Bug (Acanthocephala terminalis) collected by Mike, which I tried to scarf, without success. Muddy Brook Wetland Reserve is a beautiful place to visit, with extensive trails, a pond, an old field, swamp and marsh, and riparian and stream habitats.

For a more complete list of biota observed or detected, contact Don Miller at entdon@gmail. Thanks to Lauren Chicote, Program Director of the Winooski Valley Park District (1 Ethan Allen Homestead, Burlington, VT 05408, info@wvpd.org) for her help. For additional information on the Winooski Valley Park District see www.wvpd.org or call 802.863.5744.

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Lily Pond Field Trip, Vernon, VT (June 22, 2019)

By Michael Sabourin

On June 22nd, I had the rare opportunity of viewing haunts in southern Vermont; particularly the Vernon area. Although the focal point of the day was Lily Pond, I also noticed some potential Odonate spots along the Connecticut River, especially south of the Vernon Dam.

One of the first things I learned was you can't get to Lily Pond via Lily Pond Road - but a local politely



Spangled Skimmer (*Libellula cyanea*) Photo: Michael Sabourin

informed me about a dirt drive a quarter mile south of Lily Pond Road that gives you access to the Pond. From there you can walk around the parking area and adjoining fields.

Lily Pond did turn out to be a good spot for dragonflies and damselflies as I saw at least 14 species, including three "life listers" for me. The lifers included the Spangled Skimmer (*Libellula cyanea*), Fragile Forktail (*Ischnura posita*), and New England Bluet (*Enallagma laterale*.)

I also stumbled upon a large <u>Black Horse Fly</u> (*Tabanus atratus*), along the bank of the pond. I had to nudge it with a stick to confirm that it was alive. I look forward to returning to the area and looking for the Black Gum swamps which I was told you can access off of Basin Road...when I have a little more time.

Birds of VT Museum, Huntington, VT (July 14, 2019)

By Laurie DiCesare and Michael Sabourin

About a dozen participants were grateful for a warm, sunny day interspersed with some refreshing breezes for our annual Birds of Vermont Museum. Our insect / natural history enthusiasts included several museum volunteers and two UVM graduates who learned about our event on Facebook.

In a field, our trip leader, Michael Sabourin, helped visitors identify a Northern Pearl Crescent



Michael Sabourin with Caroline Frigon (left) and Shirley Zundel (right) Photo: Laurie DiCesare

(*Phyciodes cocyta*); a Silver-spotted Skipper (*Epargyreus clarus*); a beautiful pink Raspberry Pyrausta Moth (*Pyrausta signatalis*); the attractive Snowy Urola Moth (*Urola nivalis*); a Spotted Thyris Moth (*Thyris maculata*); T-shaped plume moths (*Pterophoridae* sp.); as well as a click beetle (*Elateridae* sp.) and a very yellow bumble bee (*Bombus* sp.) We also observed several lepidoptera larvae, one tentatively identified as a Pug (*Eupithecia* sp.) Michael noted that many insects were attracted by the white-flowered Meadowsweet. Common St. Johnswort, Yarrow and Heal-all were also in bloom. Along the way, naturalist Michele Patenaude added a few "new" birds to our VES "Combined Species list" (with plant and animal species sighted from 2009 to present), including a Chestnut-sided Warbler, Hairy Woodpecker, Red-eyed Vireo and a Veery.

Around the pond, we started seeing a variety of Odonates (dragonflies and damselflies) with some females swiftly dipping their abdomens into the shallow water to release fertilized eggs. A Common Green Darner (*Anax junius*) and a Twelve-spotted Skimmer (*Libellula pulchella*), with dark wingtips, independently approached then continued patrolling the shoreline. For damselflies we noted the distinctive Aurora Damsel (*Chromagrion conditum*) with

Birds of VT Museum, Huntington, VT (July 14, 2019) Continued from page 4

By Laurie DiCesare and Michael Sabourin

a small patch of yellow on its lower thorax; a Marsh Bluet (*Enallagma ebrium*), Hagen's Bluet (*E. hageni*) and the ubiquitous Eastern Forktail (*Ischnura verticalis*) with a green "chin" (mandible.) Our most fascinating discovery was Michael's American Giant Water Bug (*Lethocerus americanus*) that provided a great photo op.

After the walk, we returned to the Museum. Several people enjoyed sitting by the full-length, bird-viewing window while others checked out some new items in the gift shop.

Our thanks to the staff of the Birds of Vermont Museum for sponsoring this walk and offering our group free admittance to the Museum. For more information about the Birds of Vermont Museum, see www.BirdsofVermont.org



Aurora Damsel (*Chromagrion conditum*)
Photo: Laurie DiCesare

or call 802.434.2167. For those who would like a complete species list from our walk, e-mail Laurie DiCesare NatureHaven@MyFairPoint.net or call 802.893.1845.

A BugFest Recap (June 29 - 30, 2019)

By Sean Beckett

Over 275 Vermonters turned out for a very successful BugFest at the end of June at North Branch Nature Center! The Caterpillar Lab arrived from New Hampshire to dazzle spectators with microscopic video feed of Silvery Blue butterfly caterpillars (Glaucopsyche lygdamus) coercing ants with their natural dopamine spray. Meanwhile, NBNC staff uncovered a hatch of teneral Meadowhawk (*Sympetrum* sp.) dragonflies perched in the goldenrods. Families assembled scores of pollinator boxes for backvard installation, while other kids destroyed a rotten stump to yield dozens of beetle species inside. The event was a celebration of our native insects and pollinators, and their important role of tying together the entire biosphere. It remains unclear how most of our Vermont insect populations are faring amid reports worldwide of vanishing pollinators, but the first step to any successful conservation is communitywide awareness and appreciation. We're happy to report that Vermonters really love their bugs! Thank you to all those at VES who attended or supported our BugFest! North Branch Nature Center has put people in touch with the wild faces and places within our state capital for more than 23 years. NBNC is Central Vermont's hub of outdoor learning and exploration, serving over 10,000 people annually.

Sean Beckett is Staff Naturalist at North Branch Nature Center, 713 Elm St, Montpelier VT 05602 (802) $229-6206 \times 102$.



A BugFest participant with Abbott's Sphinx Moth (Sphecodina abbottii) caterpillar. Photo: Emily Seiffert

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Gordon Nielsen's Lepidoptera: From Vermont to Florida

By JoAnne Russo and Laura Gaudette

Ever wonder what happens to insect collections that are donated to a museum? In May of 2017, the McGuire Center received boxes full of Petri dishes containing more than 20,000 moths and a few butterflies collected in Vermont by Dr. Gordon R. Nielsen. The McGuire Center for Lepidoptera and Biodiversity, Gainesville, is part of the Florida Museum of Natural History and houses one of the world's largest butterfly and moth collections.

This acquisition was part of Dr. Nielsen's diverse collection from two locations in Vermont: Essex and Hinesburg (Chittenden County.) Gordon received a B.S. in forestry at Syracuse University and his Ph.D. in entomology at Cornell University. After serving in the military during the Korean Conflict, he worked for the Forestry Service in Idaho and Vermont. From 1965 to 1992, Dr. Nielsen was employed at the University of Vermont (UVM) in the Extension Service as an Entomologist and Pesticide Coordinator. After retirement from UVM, he continued to provide entomological services for Vermont and surrounding states. In addition, Gordon was a founding member of the Vermont Entomological Society (VES) and one of the co-authors of "Moths and Butterflies of Vermont (Lepidoptera); A Faunal Checklist", (1995.)

According to Michael Sabourin, Gordon would operate ultraviolet/mercury vapor lights on every side of his house along with malaise traps, then he would put the night's material in a Petri dish labeled with the date and location. Until Nielsen's material was delivered to the McGuire Center, the specimens were stored in freezers at the Vermont Agency of Agriculture in Barre. The pinned material from his collection went to the Carnegie Museum of Natural History in Pittsburgh, Pennsylvania.

Andrei Sourakov, Ph.D., is Collections Coordinator at the McGuire Center. The Florida Museum coordinates a Junior Volunteer Program (JVs) in Lepidoptera Collections which started in 2009. To date, over 200 JVs (high school students from Alachua County, Florida) participate in projects ranging from scanning Riker mounts, to databasing, pinning and labeling moths from trap samples. IVs work one week (4 hours a day for 5 days) during the summer, and are selected through interviews and dexterity tests in April from among approximately 200 applicants to the Museum program which includes working in exhibits and camps. Normally 30 to 40 students pass this thorough evaluation each year. During 2017-2018, IVs worked almost exclusively on Dr. Nielsen's moths; pinning, labeling and partially sorting 12,000 specimens in 2017 and 8,700 in 2018 totaling 20,700 specimens.



Laura Gaudette and I visited the McGuire Center in August 2018, with the intention of viewing the Nielsen Collection. Laura, formerly of Putney, Vermont, and a VES member, now lives in Gainesville. We found over 110 Cornell boxes filled with pinned moths, all in need of sorting and curation. We started with several of the easily-recognizable species and went through all the boxes extracting our choices. In two days, we had pulled out 22 species and assembled them in three Cornell boxes, ready to be curated into the

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McGuire collection. Laura has been making frequent trips to the McGuire Center to continue this work, and we will post more updates as we dig deeper into the collection.



One of the Cornell boxes from the Nielsen collection at the McGuire Center before curation.

Photo: JoAnne Russo.

The JVs pinned 20,700 specimens from Nielsen's donation, and while this represents the majority of macro moths, there are plenty of micros and small macro moths left. Dr. Sourakov has noted that if

there is a desire for anyone to get involved with the inventory, he will be happy to give them access. While the McGuire Center will store the remaining moths in perpetuity, unless specialists in specific groups are involved, they do not plan to have them pinned. The exception is the Plume Moths (*Pterophoridae*), which have already been pinned and curated by Debbie Matthews Lott.

Laura and I have been taking one picture of each species from both locations and recording them on iNaturalist. If you want to see what we've found so far, visit www.iNaturalist.org; click on EXPLORE on the top left; on the observation page select the gray box FILTERS on the top right; in the DESCRIPTION/TAGS box type "Gordon Nielsen" and click UPDATE SEARCH.

One of our unexpected finds was a ragged specimen of Scarlet-winged Lichen Moth (Hypoprepia miniata) found at Gordon's residence



Junior Volunteer pinning moths from the Gordon Nielsen collection. Photo: Florida Museum of Natural History.

at 15 Sage Circle, Essex, Vermont, on July 16, 1999. While listed in Vermont's Lepidoptera Faunal Checklist (1995), this species is seldom reported in Vermont with only three reports on iNaturalist from the state. Michael Sabourin found one at the Buckner Preserve in West Haven (Rutland County) on July 23, 2017 and Tyler Pockette found one on August 2, 2018 and two on August 7, 2018 in Salisbury



Scarlet-winged Lichen Moth (Hypoprepia miniata). Photo: JoAnne Russo.

(Addison County.) None are documented from VT on the BugGuide or Butterflies and Moths of North America websites.

Thanks for the coordination and transfer

from Vermont to the McGuire Center in Gainesville, Florida go to Alan C. Graham, Michael Sabourin, Trish Hanson, Jeffrey V. Freeman, Patti Casey, Tim Schmalz and others.



Working on the Nielsen Collection at the McGuire Center. Photo: JoAnne Russo.

References/Sources/Literature

Grehan, J.R., et. al. *Moths and Butterflies of Vermont, a faunal checklist*. Agricultural Experiment Station, University of Vermont, Department of Forests, Parks and Recreation, State of Vermont Misc. Publication 116. January, 1995.

Gordon R. Nielsen. obituary, Burlington Free Press. Monday, August 27, 2007, page 10.

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www.iNaturalist.org www.bugguide.net www.butterfliesandmoths.org

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JoAnne Russo and Laura Gaudette at the McGuire Center, Florida Museum of Natural History, Gainesville, 2018. Photo: James Hayden.

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