



VES NEWS

The Newsletter of the Vermont Entomological Society

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Fall 2019



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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

Cover Photo:

Lance-tipped Darners (*Aeshna constricta*) in wheel position.
Delta Park, Colchester, VT
Photo: Laurie DiCesare

Back Cover Photo:

Eastern Comma (*Polytonia comma*) larva
Panton, VT
Photo: Mary Metcalf

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

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Newsletter Schedule

Spring: Deadline April 7 - Publication May 1
Summer: Deadline July 7 - Publication August 1
Fall: 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
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We have come to the end of another organized Vermont Entomological Society (VES) field season. For the most part the season went pretty well. All of the scheduled events took place except for **Camp Johnson** (August 10), where we were unexpectedly unexpected, necessitating a plan B switch to **Sunny Hollow Natural Area**. We will have to try a different approach to getting into Camp Johnson in the future.

The first event of the year was the **Herrick's Cove Wildlife Festival** (May 5th) which I appreciate because it reminds me that if you can't find anything on land, try the water. It was also a precursor to the rest of the year because ticks were already a major topic.

I want to thank everyone who was able to participate in a VES event this season; especially **Doug and Mary Burnham** for holding our annual potluck meeting; **Laurie DiCesare** and **Don Miller** for leading field trips, **Susan Sawyer** for attending a table at the **Adamant Blackfly Festival** (June 1st) and **JoAnne Russo** for conducting the **Jericho Moth Night** (July 25th).

Our events covered most of the State but we didn't have any events in the Northern part, which I hope we remedy next year. We were able to participate in several community events and all the field trips except one had at least six participants.

Beyond the aesthetic value that invertebrates play in our lives, they continue to have a persistent negative presence for some folks as pests or illness vectors; and then there are those who are allergic to bees, etc. We are well aware of the presence of ticks, mosquitos, and Emerald Ash Borers but also, to a lesser extent, garden pests.

I had a Leek Moth (*Acrolepiopsis assectella*) show up at my lights this Fall. Does that mean I should stop planting garlic? Other garden pests like the Tomato Horn Worm, Lily Beetle and the Squash Vine Borer may have effects on an individual's desire to continue gardening.

On a bright note, the **Vermont Entomological Society Facebook Group** created by **JoAnne Russo** has thrived with 69 members and over 30 posts and 70 likes for September alone. That's where my caterpillar photo of the Black-etched Prominent (*Tecmessa scitiscrupta*) was first identified. I encourage people to visit and use this site. Of note, **Trish Hanson** retired from her role as the State Forest Entomologist. We wish her the best in everything, but will certainly miss her presence and expertise in State government.

VES and the **Zadock Thompson Zoological Collection** (UVM) will be exploring ways that members and students can collaborate together in the future. Feel free to pass on any suggestions to me.

Zadock Thompson Zoological Collection will be holding an open house on Saturday (Nov. 9th) from 10- 3PM; Blundell House, 342 S. Prospect St. in Burlington. The event is open to all ages.

In addition, I expect the association with the **Maine Entomological Society** and **Cambridge Entomological Club** to continue. This summer we had a fantastic voyage to Appledore Island (July 20) off the coast of Maine. I'm looking forward to where we may go next.

Well, I don't know if I'm happy to see the leaves turn, but that's part of life. At least as they change color, I look forward to the frost as it puts the overwintering moths down into the "duff." On a warm day, I can either flush or bait for moths until the ground is snow covered.

Season's Greetings, Michael Sabourin, President



Julia Brewer at Jericho Moth night.

Photo: Michael Sabourin



Trish Hanson at her Retirement Party

Photos: Michael Sabourin



Helen W. Buckner Preserve, West Haven, VT (September 15, 2019)

By Michael Sabourin and Laurie DiCesare

Six individuals participated in the annual Buckner Preserve field trip in West Haven, Vermont on Sept. 15, including eminent leaf miner experts Charley Eiseman and Julia Blyth. It was a lovely, sunny day with the temperature in the low 70s and no noticeable wind. The day turned out to be one of our more productive visits to the preserve, with over 85 species of invertebrates recorded, including six State records and two new host records. It was also an aesthetically-pleasing day as Monarchs (*Danaus plexippus*) and Painted Ladies (*Vanessa cardui*) were plentiful on Goldenrod (*Solidago* sp.) and other nectar sources.



Rice Worm Moth (*Apamea apamiformis*)
Photo: Michael Sabourin

Two Lepidoptera (butterflies and moths) species of economic importance, the Rice Worm Moth (*Apamea apamiformis*) and Pecan Leafminer Moth (*Cameraria caryaefoliella*) were recorded for the State for the first time. Additional lepidoptera state records included *Coleophora cornella* (Gray Dogwood Casebearer) larva, and the following leafminers on hickory: *Ectoedemia virgulae*, *Stigmella caryaefoliella* and *Stigmella* n. sp.

Of Diptera (flies), the Agromyzid Leafminer (*Ophiomyia carolinensis*) mines found on smooth aster was a new host record and new State record. Grass Sheathminer (*Cerodontha dorsalis*) leaf mines discovered on wild rice was also a new host record. In total, Charley and Julia photographed 17 species of leaf-mining Diptera and Lepidoptera for the day.



Deb Kiel with Northern Walkingstick (*Diaperomera femorata*)
Photo: Laurie DiCesare

Some of our other interesting finds of the day were several European

Praying Mantises (*Mantis religiosa*); a Northern Walkingstick (*Diaperomera femorata*) that slowly walked up Deb Kiel's tee-shirt as she was eating lunch; an American Nursery Web Spider



American Nursery Web Spider (*Pisaurina mira*)
Photo: Laurie DiCesare



Yellow-necked Caterpillar (*Datana ministra*)
Photo: Laurie DiCesare

(*Pisaurina mira*); a Yellow-necked Caterpillar Moth (*Datana ministra*); a Spiny Oak Slug Moth (*Euclea delphini*) larva; and a Silver-spotted Skipper (*Epargyreus clarus*) caterpillar in a False Indigo Bush (*Amorpha fruticosa*) shelter. We were also delighted by the nearly-annual (since 2014) fly-by of a Giant Swallowtail Butterfly (*Papilio cresphontes*.)



Spiny Oak Slug Moth (*Euclea delphini*)
Photo: Laurie DiCesare

For a complete species list you may contact Laurie DiCesare (NatureHaven@MyFairPoint.net) or Michael Sabourin (mothvet@Yahoo.com.)

Delta Park Field Trips (Summer to Fall 2019)

By Laurie DiCesare

Delta Park, at the mouth of the Winooski River in Colchester, Vermont, is an amazing site for natural history observations. On Aug. 14, Shirley Zundell and I saw a **12-Spotted Skimmer (*Libellula pulchella*)** and some **Meadowhawks (*Sympetrum sp.*)** When I returned for a late-afternoon walk on Sept. 27, I was delighted to see several darners flying slowly along the tree line, occasionally landing and mating. I was



Delta Park shoreline
Photo: Laurie DiCesare

able to snap one quick photo of a **Black-tipped Darner (*Aeshna tuberculifera*)** hanging from a tree branch before it flew off. A few minutes later I found two **Lance-tipped Darners (*A. constricta*)** in the wheel position (see cover photo) which precedes egg laying.

In 2017, I had photographed a lone female **Lance-tipped Darner (*A. constricta*)** as late as Oct. 1, so on Oct. 9, with recent moderate temperatures,

Shirley and I revisited Delta Park with great *Aeshna* expectations but only noticed a few **Meadowhawks (*Sympetrum sp.*)** On our way out of the park, though, the flicking, blue-black wings of a **Blue-black Spider Wasp (*Anoplius sp.*)** searching the sandy soil caught my attention. Shirley and I snapped photos as the wasp dragged a paralyzed spider at least half its size a couple of yards over beach debris, up and over an eight-inch diameter driftwood log, then into the underbrush, presumably to nourish its progeny over the winter.

Delta Park is one of the seven member communities of the Winooski Valley Park District.

For more information see www.wvvpd.org or call 802.863.5744.



Blue-black Spider Wasp (*Anoplius sp.*) with prey
Photo: Laurie DiCesare

DSA Meeting in Springfield, VT (July 25 -28, 2019)

By Laurie DiCesare

This summer the **Dragonfly Society of the Americas** held its Northeast regional meeting in Springfield, Vermont. Twenty-four participants attended the long-week-end of field trips coordinated by **Bryan Pfeiffer** and **Joshua Rose**. The weather was mostly hot and sunny and the Odonates (Dragonflies and Damselflies) were out in good numbers.



Zebra Clubtail (*Stylurus scudderii*)
Photo: Laurie DiCesare

Kelly Stetner, with the Black River Action Team, provided maps with directions to six local wetland sites including Hoyt's Landing and White's Cove at the confluence of the Connecticut and Black Rivers; Muckcross State Park; North Springfield Bog; Knapp Ponds (#1 and 2); and **Phil Drinker's farm** where we gathered Saturday evening for a pot luck dinner, species sharing and an update by **Pam**

Hunt about her *Enallagma* studies. Some participants also stayed for the nocturnal session of the BioBlitz.

Seeing **Zebra Clubtails (*Stylurus scudderii*)**

eclosing and bright-yellow **Vesper Bluets (*Enallagma vesperum*)** at Hoyt's Landing at dusk on our first evening was a great start. Photographing a very cooperative **Robber Fly (*Asilidae*)** with its prey at Stoughton Pond was also fun. My favorite photo, though, was of a **Rusty Snaketail (*Ophiogomphus rupinsulensis*)** that someone netted in the parking lot by North Springfield Bog. That was a delight for everyone in attendance and the first photo of the insect for me.

For more information see **OdonataCentral.org** which hosts the website for **Dragonfly Society of the Americas**. The journals *Argia* and the **Bulletin of American Odonatology** are online and searchable. Dues are \$15 per year. For information on the **Black River Bioblitz** see <http://www.BlackriverActionTeam.org>.



Rusty Snaketail (*Ophiogomphus rupinsulensis*)
Photo: Laurie DiCesare

Hale to the Zale!

By State Entomologist Judy Rosovsky

This summer, I was asked to view some willow trees by the Winooski River in Waterbury, Vermont. They were not doing well, and I was trying to determine what might be causing or contributing to their decline. The area had been flooded during Tropical Storm Irene, and the ground had a number of cavities. I suspected that the long immersion in flood water was the start of the problems that I was seeing in the trees. As we looked around, the landowner found a caterpillar under some of the willow bark. I brought it home in a coffee cup, added some willow leaves, and rushed off to do something else. The caterpillar took the opportunity to liberate itself, frustrating my desire to rear it. I had tentatively identified it as *Zale* sp., but had only taken a couple of casual field shots. I have subsequently realized those were not enough for me to make a species determination.

I had never heard of the genus *Zale* before, and the absent caterpillar piqued my interest. They are in the superfamily Noctuoidea, and typical of that group, their placement into families and subfamilies is as confusing as their variable coloration. Wagner *et al.* have them in the Noctuidae subfamily Catocalinae, whereas [BugGuide.net](https://bugguide.net) and Lafontaine and Schmidt have them in the family Erebidae, subfamily Eribinae. No doubt more recent molecular studies will result in another taxonomic shuffle.

The group has a wide range in the U.S., mostly east of the Rockies and then along the west coast, but I suspect that is because this is not a well-known group, hence the limited representation from some of the western parts of the country.

Wagner states that there are 25 species in the eastern U.S., most which feed on various hardwoods, including willow, though a significant portion feed on pine. Some are more monophagous than others. The Black-eyed Zale (*Zale curema*) is primarily a pitch pine feeder; *Z. largera* feeds only on jack pine; and the Maple Zale (*Z. galbanata*) specializes on maple. *Z. lunata* has a less-specialized palate, and is known to consume fruit tree foliage, willows, oak, maple and a few other species. It would be interesting to find out why some of this group evolved into pine specialists and others branched out.

References:

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Unknown Zale (*Zale* sp.)

Photo: Judy Rosovsky

New Fly Species for Vermont Discovered by iNaturalist Contributor

By Roy Pilcher

You don't have to go far to help the Vermont Atlas of Life discover species new to Vermont. You just have to be observant. On August 12, I found a new VT fly species in my car! While visiting the Helen W. Buckner Memorial Natural Area, I noticed that a large fly had flown in through my open car window. Luckily, I am friends with Dr. Jeff Freeman, Professor Emeritus at Castleton University. Jeff has devoted much of his research into horse and deer flies. His extensive collections are housed at the University of Vermont (UVM) Natural History Museum, Rutgers University, the Natural History Museum in Philadelphia and other museums.

Curious about the fly's identity, I captured it and delivered it to Jeff for identification. The fly was *Tabanus limbatinevris*, a new species for Vermont! An identifying venation character of *T. limbatinerus* is the forewing cell formed by the closure of R₅ and M₁ at the wing margin (see arrow a in wing-margin photo.) Lacking a common name, *T. limbatinevris* was first discovered in 1847 but



Tabanus limbatinevris

Photo: Jeff Freeman

remained unrecognized until 1983 because it was confused with other similar horse flies. Its range was thought to be from Michigan and Ontario east to New Hampshire, and south to Georgia and Texas, but it had never been found in Vermont before this fortunate discovery. As a dedicated user of the Vermont Atlas of Life on iNaturalist, I added the observation and Jeff's identification to the project. The specimen will join others in the UVM Natural History Museum collection. There are now 14 species of horse flies known from Vermont.

Roy Pilcher was the recipient of the Julie Nicholson Citizen Science Award in 2009. His discovery of *T. limbatinevris* was previously reported on Oct. 1, 2019. <http://val.vtecostudies.org/vermont-life-list/discoveries>.

Dr. Thomas's photo was previously illustrated in the online Canadian Journal of Arthropod Identification.

Dr. Thomas's photo was previously illustrated in the online Canadian Journal of Arthropod Identification.



T. limbatinevris showing closure before wing margin

Photo Dr. Tony Thomas

Zadock Thompson Museum's Invertebrate Collection!

OPEN HOUSE 10-3pm Saturday, Nov. 9th!

Learn about and investigate our invertebrate collection, enjoy an array of snacks, participate in some fly kid friendly activities, buggo down to some music and catch a sneak peak of our volunteers working in the collection!



Blundell House: 342 So. Prospect St, Redstone Campus



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Eastern Comma (*Polygonia comma*) larva
Photo: Mary Metcalf