



VES NEWS

The Newsletter of the Vermont Entomological Society

Number 58
Winter 2007-2008



On the web at www.VermontInsects.org



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The Newsletter of the
Vermont Entomological Society

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The Vermont Entomological Society 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:

Scott Griggs
 VES Treasurer
 49 Lover's Lane
 Grand Isle, Vermont 05458

Cover Photo:

Among our more common dragonfly species, *Pachydiplax longipennis* (Blue Dasher) is caught in an obelisk pose (to shed heat) by Bryan Pfeiffer.

Back Page Photo:

Peter Hall, author of our story on *Polyommatus icarus*, took this image of the "new" butterfly near Montreal, which, by the way, isn't too far from Vermont.

See this newsletter in living color
 on the web at:
www.VermontInsects.org

Contents

Number 58 ♦ Winter 2007-2008

FEATURES

- ♦ **DiCesare The Dragon Hunter** Page 5
By Laurie DiCesare
- ♦ **Invertebrates at Your Fingertips** Page 6
By Kent McFarland
- ♦ **Bulldogs and Jack Jumpers** Page 8
By Ross T. Bell
- ♦ **The European Common Blue** Page 9
By Peter Hall
- ♦ **First VT Report of *Chionodes soter*** Page 10
By Michael Sabourin

DEPARTMENTS

- President's Message Page 3
- Field Notes Page 4

CHECK YOUR LABEL!

The upper right corner of your mailing label will inform you of the month and year your VES membership expires. So if it's time to renew, please send your \$15 to:

Scott Griggs
 VES Treasurer
 49 Lover's Lane
 Grand Isle, Vermont 05458



VES and Mosquitoes

By Bryan Pfeiffer

It's an election year. So it's time for change. The VES is a diverse and warm-hearted group of folks with abundant skills and infinite interests. It's been an honor to serve as president. Now it is someone else's turn.

Failing to find a replacement, I've agreed to stay on one more year. But my tenure will most certainly end in January (never dreamed I'd have anything in common with George W. Bush). The same goes for our most-able treasurer, Scott Griggs. By next year, let us give Scott more time with his spectacular moth collection and a break from crunching VES numbers.

This will also be the last newsletter I can produce for VES. I simply lack the time to solicit and edit stories, and to assemble the news of the VES in this newsletter. I would much prefer to devote my final year to strengthening our finances; enhancing our relationship with the State of Vermont, the University of Vermont and other institutions; and making our Society a more effective Vermont voice for invertebrates. So, here's where you can help. Here is what VES needs:

- ◆ A new president
- ◆ A new treasurer
- ◆ A new newsletter editor
- ◆ A new webmaster for our web site

In the past four years or so, VES has boosted its membership, overhauled its web site, improved its newsletter, and initiated an email Google group for sharing information (<http://groups.google.com/group/Vermont-Entomological-Society>). It's been a productive few years.

VES is like a female mosquito; it needs fresh blood. And most of us are used to giving some blood now and then. So if you'd like to contribute, to help VES move forward, please contact me at bryan@wingsenvironmental.com. I've hinted before at our need for more active members. I shall hint no longer. Thanks!

New Dues

Meanwhile, at our winter pot-luck, we voted unanimously to raise membership dues to \$15 per year. You dues cover printing and mailing of this newsletter; our web site hosting fee; grants to researchers; and other activities. We still think \$15 is a good deal. And if you've been diligent and already



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*VES is like a female mosquito;
it needs fresh blood.*

paid your 2007 dues at the \$10 rate, good for you. Your rate won't rise until 2009.

Montpelier BioBlitz

Here's another reminder about the Montpelier BioBlitz, which will be the greatest gathering of scientists and naturalists ever assembled in Vermont.

VES will have a huge role to play in this unique event — the first-ever BioBlitz of an entire state capital. Montpelier is like no other capital. It offers wetlands, ponds, parks, forests, fields, and three rivers. Its natural communities are well mapped.

BioBlitzers like you will eat well for free, get discounts on lodging and camping, and meet colleagues and other entomologists from across the region. We're also planning a lecture series and other educational events.

North Branch Nature Center is organizing this BioBlitz, which runs July 11-12, 2008, and concludes with a huge barbecue supper. You can register now and learn more at: www.northbranchnaturecenter.org/bioblitz

VES President Bryan Pfeiffer specializes in butterflies and dragonflies.

VES Winter Gathering

The specimens included butterflies, moths, beetles, dragonfly exuviae, and various other delights. The feast included ham, potato salad, and some exquisite desserts. And the conversation included the future of the Vermont Entomological Society – in 2008 and beyond.

In other words, a typical winter meeting of the VES. Ross and Joyce Bell were our hosts again at Wake Robin in Shelburne. Here's a summary of what we discussed:

- ◆ VES finances remain strong over the long run, but took a dip in 2007, owing in part to a newsletter mailing to libraries (which did not attract many subscribers) and a few one-time expenses.
- ◆ Not entirely due to our finances, the assembled members voted unanimously to raise dues to \$15 per year. Our membership fee has been \$10 for quite some time, and rising costs are catching up. We still think VES is a deal that will only improve over time.
- ◆ Current VES officers were re-elected, despite President Bryan Pfeiffer's attempt to step aside to make way for fresh leadership. Treasurer Scott Griggs, who has served us well for about a decade, is also looking to step aside in the future.
- ◆ Laurie DiCesare reported on her trip to Eagle Hill in Maine for the Odonata seminar. (You'll find Laurie's report on the next page of VES News.)
- ◆ We agreed on a few dates for VES outings this year:
Spring Picnic - June 22 at the home of Trish Hanson

Kiel Open House and Day Lillies

Deb and Warren Kiel invite VES members to an open house to investigate insects and enjoy their daylilies. The informal gathering begins on July 26 at 10am (and could even continue through the weekend). Drop by to see the impressive insect collection (including Warren's 20,000 mounted Lepidoptera specimens) and to discover what's flying or walking outside. Bring a dish to share for a picnic. (Sunday at 10am will be our rain date.) Deb and Warren have one extra bedroom and plenty of camping space for those who want to make a weekend of it. This could become an annual event!

Deb and Warren live at 43 Allen Irish Road in Underhill. Take Route 15 through Jericho and Underhill. About 6.5 miles from Underhill pass K&R Auto on the left, continue for another mile or so on route 15, take the left dirt road-marked with a sign for Allen Irish Road. Drive Allen Irish Road for about 1/8 mile, to find, on the left, a white house with a rail fence. Contact Deb at 899-5039 or dkiel@cvca.ws.

and Luke Curtis in South Lincoln. Details to follow in the next VES News.

Birds of Vermont Museum Insect Walk - This is set for July 5 at 10am at the museum grounds in Huntington. If it's raining, call the Museum (434-2167) to see if we've rescheduled.

We're also planning trips to Isle LaMotte in July or August and a trip in Bristol in August.

Finally, we ended this year's winter meeting with a rousing round of "**Buggy Days Are Here Again,**" composed by VES Vice President Mary Burnham. So, without further ado, here are the lyrics, sung to the tune, well, you should be able to figure it out.

Buggy days are here again.
Leps and odes fly far and near again.
Grab a net or jar, and bring a friend.
Buggy days are here again.

Bees, true bugs, Coleoptera.
Ticks and fleas, centipedes, Megaloptera.
Phantom crane flies drift by Thysanoptera.
Buggy days are here again.

We've wished old winter away,
'Till sun and warmth came to stay.

Shout for joy! It's summer now.
Fireflies blinking love, flash come hither down.
Wee Collembola's creeping underground.
Buggy days. Happy days. Buggy days are here again.

VES on About.com

VES News warranted a kind mention on the Entomology division of the information web site About.com by Debbie Hadley. Here's the site: <http://insects.about.com>



Cicindela tranquebarica (Oblique-lined Tiger Beetle)

© Bryan Pfeiffer

DiCesare The Dragon Hunter

Editor's Note: Laurie DiCesare, Naturalist/Interpreter, attended a week-long Odonata seminar at Humboldt Field Research Institute ("Eagle Hill") in Steuben, Maine from July 22 to July 28, 2007. An educational grant from the Vermont Entomological Society, a generous "teacher's discount" from Eagle Hill and permission to take a "sabbatical leave" from Grand Isle State Park enabled her to take this adventure. Below is an account for Laurie's trip. For more information about Eagle Hill seminars, see www.eaglehill.us.

By Laurie DiCesare

After an hour's intermission, feasting on a succulent, boiled lobster dinner at our Eagle Hill basecamp just north of Acadia National Park in Steuben, Maine, our odonate class caravaned to a roadside pond to resume our search for dragonflies and damselflies – this time seeking out those only flying at dusk. For about a half an hour we combed the shores of the open pond with conical, fine-mesh nets, identifying the species we gently retrieved from them with thumb and forefinger.

Delicate damselflies, with similarly-shaped fore- and hindwings and widely separated eyes, like Hagen's Bluets (*Enallagma hageni*), Sedge Sprites (*Nehalinnia irene*) and Slender Spreadwings (*Lestes rectangularis*), were relatively easy to catch. One swipe of the net in the insect's direction would usually trap at least one of the colorful fliers. The wide-bodied dragonflies, with enlarged eyes and asymmetrical fore- and hindwings, could often be identified at a distance by their flight patterns and bold markings (like emerald green eyes or lightning-bolt thoracic stripes) - but catching them was a challenge, even for skilled net swingers.

At one oceanside site, all five of us students were exploring a narrow, rectangular pond of brackish water with our assistant teacher, Bronco Quick, in the lead. When Bronco suddenly yelled "Here he comes!" we braced ourselves as best we could on the rocky shore, our nets poised in the air, preparing to swing at the fast-flying creature. One by one we swiped at the dragon as it zoomed through our gauntlet – and escaped over some tall dune grasses near the end of the inlet. Those who pushed on identified Shadow Darners (*Aeshna umbrosa*) and saw a pair of Common Green Darners (*Anax junius*) ovipositing in the nearby pond.

Now, midway through our week of intensive classes and field trips, we were standing on the sandy shoulder of a narrow road combing the pondside bushes for damsels in the twilight – awaiting the emergence of the larger, mosquito-eating dragons. We had enjoyed a full day in the



© Bryan Pfeiffer

Calopteryx maculata (Ebony Jewelwing)

field, including a visit to Long Pond where we saw Slaty Skimmers (*Libellula incesta*) and Lancet Clubtails (*Gomphus exilis*); had a refreshing swim with nibbling fingerling fish in the clear outlet waters of Tunk Lake while searching for exuviae (pupal cases); and visited a shady, riverside haunt where Ebony Jewelwings (*Calopteryx maculata*) cavorted around a patch of Royal Ferns (*Osmunda regalis*), changing from iridescent blue to green and back to blue again depending on your line of sight.

Pleasantly tired from the day's field trips and satiated with garlic bread, corn on the cob and lobster tails dipped in drawn butter, I was clearly slowing down. However our instructor, Fred SaintOurs, who sat next to me at dinner and ate as much if not more lobster than I did, was just hitting his stride. He was sunburned and sweating from the humidity but boyishly grinned and eagerly ran into the marshy field on the opposite side of the road when someone pointed out a large dragonfly headed in that direction.

Jerry, another avid student, joined Fred in the field while the rest of us spotted and quarter-backed from the road. Just as the mosquitoes were becoming unbearable and some of us resorted to putting the net over our head to avoid donating any more blood, several large darners came out to forage. We watched Jerry and Fred alternately crouching and lunging at the passing dragons, circling their nets at the end of the each swing to trap the

(Continued on page 7)

Invertebrates at Your Fingertips

The Vermont Invertebrate Database Alliance (VIDA)

By Kent McFarland

In 300 years of explorations across the globe, biologists have described approximately 1.8 million species of plants, animals, and other organisms. Their evidence is found in roughly 3 billion specimens amassed in the world's natural history museums. These specimens, and their associated biotic data, provide the raw research material for studies of the composition, identity, distribution, ecology, systematics, and history of our planet's diversity. They are literally a library of life. But this library lacks a searchable card catalogue. The Vermont Invertebrate Database Alliance (VIDA) will help change that.

Over a **million** invertebrate specimens are thought to be housed in Vermont collections. Fewer than 10% of these are entered into some form of searchable database or are geo-referenced in some manner. Collections in Vermont range from the University of Vermont's Zadock Thompson Invertebrate Collection, which houses about 590,000 pinned and identified insects, about 50,000 awaiting identification, and a nearly equal number of insect larvae, spiders, snails and other invertebrates, to private collections held by members like you. These collections alone are impressive enough, but together, they represent a library of Vermont's natural heritage and perhaps a key to its conservation.

The Vermont Endangered Species Committee was created in 1983 to advise the Vermont Secretary of Natural Resources on all matters relating to endangered and threatened species – which species to list, how to protect them and more. The committee quickly recognized the value of establishing expert advisory groups to focus on specific wildlife groups in Vermont – birds, reptiles and amphibians, mammals, and of course, invertebrates. With estimates of over 20,000 invertebrate species in Vermont, the Invertebrate Scientific Advisory Group of the Vermont Endangered Species Committee was given perhaps the biggest task of them all.

Last year, the advisory group recognized that it needed an authoritative database to help understand the status of all of these species. With the help of a State Wildlife Grant from the Vermont Department of Fish and Wildlife, the idea has gone from a dream to reality. This year the Vermont Center for Ecostudies (VCE) will launch the Vermont Invertebrate Database Alliance (VIDA).



© Bryan Pfeiffer

Callophrys gryneus (Olive Hairstreak)

VIDA, the Spanish word for life, will bring over 100 years of accumulated knowledge of the diversity of Vermont invertebrates into currency for science and society. Our goals are to:

Build a cooperative community of professional and amateur scientists interested in understanding and conserving Vermont's invertebrate species.

Facilitate open access to invertebrate data from the internet.

Enhance the value of individual collections through cataloging, databases and to join them with other valuable data.

Conserve curatorial resources across the state.

Foster education about Vermont invertebrates and their conservation by providing the public with the results of shared knowledge of invertebrate biodiversity information.

We have identified over a dozen institutions in Vermont to invite as VIDA members. Additionally, several regional museums have been identified as having large numbers of Vermont specimens in their collections. Maybe you have a personal collection that you would like to see added to VIDA. All potential alliance members will be contacted and invited to a VIDA meeting in early 2008 where we will formally introduce the project and enlist cooperators into the alliance.

(Continued on page 7)

VIDA

(Continued from page 6)

VCE has a database platform ready to be implemented for VIDA. The program known as *Specify* is a research software application, database, and network interface for biological collections information. It manages specimen data such as descriptions of collecting locations and georeference, participants, determination histories, and more.

Specify was developed and is supported with funding from the U.S. National Science Foundation and has received continuous NSF funding since 1987. The objective of the *Specify* Project is to provide a well-supported collections data computing platform, which is responsive to the research management requirements of collections as well as to new research opportunities enabled by the Internet. Collaborating institutions can use *Specify* for no charge. By adopting *Specify* with its web interfaces we avoid the significant ongoing costs of software development, maintenance and support and bring VIDA data to the burgeoning environmental informatics research infrastructure.

Not only will we be looking for alliance members, but we hope to get the help of volunteers as well. Stay tuned to the VES email list for upcoming information as this project gets in full swing. Here are some major biodiversity database alliances.

Project	Internet Site
Mammal Networked Information System (MaNIS)	http://manisnet.org/
FishNet2	http://www.fishnet2.net/index.html
HerpNet	http://www.herpnet.org/
Ornis	http://olla.berkeley.edu/ornisnet/
Avian Knowledge Network	http://www.avianknowledge.net/content/
eBird	http://ebird.org/content/ebird/
The Mountains and Plains Spatio-Temporal Database Informatics Initiative (MaPSTeDI)	http://mapstedi.colorado.edu/
All Taxa Biodiversity Inventory Alliance (ATBI)	http://www.atbiallyance.org/index.shtml
Global Biodiversity Information Facility (GBIF)	http://www.gbif.org/
Antbase	http://antbase.org/

Kent McFarland is senior conservation biologist at the Vermont Center for Ecostudies, which will oversee VIDA.

DiCesare The Dragon Hunter

(Continued from page 5)

“mosquito hawks” in the mesh cones. Fred was working two nets, securing one dragon then immediately grabbing the second net so as not to miss a swing if a second insect happened by.

As darkness was settling in, Fred made a full-body lunge and slapping “pancake” motion with his net, hoping to trap his quarry in the vegetation. A moment later he let out a whoop of delight and we knew he had succeeded. After careful analysis back at the lab, that particular darner turned out to be the elusive Lake Darner (*Aeshna eremita*); a life-list dragonfly for Fred. I’d say he deserved it.



Aeshnidae (Darners) exuvia

Bulldogs and Jack Jumpers: Adventures with Australian Ants

By Ross T. Bell

Our Vermont ants attract few collectors. They are small (except for carpenter ants) and they come in few colors. They are interesting to watch, however. You can observe them guarding and carrying their domestic animals (plant lice or aphids, also some kinds of treehoppers).

Last summer we watched one species carrying out a slave raid against another species.

In 1988-89 we lived in Australia for a year. Ants there are much more prominent than here and there are lots more kinds of them. For example, they come in many colors. When we were in tropical Queensland,

several times we parked our car under trees containing nests of weaver ants. These ants are shining green or blue, like miniature Christmas tree ornaments. They get their name from the way they make their nests. They attach several leaves together. Each worker ant holds an ant larva between its jaws. If slightly squeezed, the larva produces a strand of silk from its mouth. A team of workers can quickly join two leaves together this way.

The most notable group of Australian ants are those of the genus *Myrmecia*, called "bulldog ants." Their colors are brown or black or a combination of the two. The workers are over an inch long, and are armed with long saw-edged jaws in front, and a very potent sting at the other end. Ants are thought to be related (distantly) to hornets, and these monster ants seem like wingless versions of hornets. They act like hornets too. Unlike most ants, these ants have big eyes and good vision. Once I was chasing a desirable beetle which ran under a flap of bark. I rashly reached under the bark, and was given an excruciating sting on the finger tip. At once about 50 ants popped out of the log. These ants

don't mill around trying to pick up your scent: they see you with their big eyes, and start straight for you as fast as their long legs will carry them. My legs are even longer. I did a broad jump over a handy brook. I wonder how far they would have chased me if the brook hadn't been there. Some people have died from as few as 10 bulldog stings.



Bulldogs operate differently from other ants. Each worker goes out on her own, and each has a particular hunting ground which she has memorized. These ants have more plastic behavior than you would expect in an insect. I remember one which came walking as we were collecting on the forest floor. She abruptly halted and looked at us for a while, then turned and trotted off.

In another place in the Brindabella

Mountains, we collected many times in the same huge fallen tree, which formed a single log about 60 feet long. We were after Rhysodine beetles. We were hacking at one end of the log and there were bulldogs in a hollow at the other end. Each time we starting working two hulking bulldogs came out on the bark, and started marching slowly back and forth across the log. Obviously, they were marking their boundary. You couldn't call this bluffing, because they were well armed and ready to fight. We did not try to cross their border.

You need a permit to collect in a national park, but you also need permission of the bulldogs. Jack jumpers are a subset of bulldogs. They have bright yellow jaws. If you get too close to their nest, they warn you off by jumping into the air while gnashing their jaws together. This easily convinced us to collect in another spot.

Ross Bell, emeritus professor at the University of Vermont, is a founding and emeritus member of VES.

The European Common Blue *Polyommatus icarus*: A New Alien Butterfly Close to Vermont

By Peter Hall

Ara Sarafian wasn't sure what blue butterfly he was observing in old fields and ditches around where he works at Mirabel Airport north of Montreal, Quebec. An amateur entomologist, he thought it might be a Northern Blue (*Lycaeides idas*) or possibly a Karner Blue (*Lycaeides melissa samuelis*), but neither has ever been recorded from his area and it seemed different from both. After sending images in June, 2007, to the Canadian National Collection of Insects in Ottawa, Don Lafontaine identified it as *Polyommatus icarus*, known in England as the Common Blue, and one of the most widespread of European butterflies.

In light of its origin as a European species and the possible confusion from calling it just the Common Blue here in North America, it has been decided to call it the European Common Blue. This is in keeping with the precedent set by calling the invasive Essex Skipper, *Thymelicus lineola*, the European Skipper in North America.

Mr. Sarafian had been seeing the butterflies in the area for three years starting in 2005. A number of butterfly specialists, including Ross Layberry, Chris Schmidt, Diane Lepage, Louis Handfield and Peter Hall, as well as Mr. Sarafian, conducted searches around and out from the Mirabel Airport in 2007 and, by October, the alien butterfly had been seen regularly in a triangular area with an east to west distance of 27 kilometers and a north to south distance of 17 kilometers with Mirabel Airport in the south-central part of the triangle. Some of the sites would have dozens of the butterfly in flight.

The most likely explanation for the European Common Blue's appearance around the airport was that it arrived in one of its stages, either two or more immatures or a gravid female, in a cargo at the airport and subsequently escaped and was able to successfully reproduce.

In its widespread European locations, it feeds regularly as a larva on a variety of legume plants, particularly Common Bird's-foot-trefoil (*Lotus corniculatus*). Many of the major clover and trefoil favorite larval foodplants in Europe are found commonly as alien invasives along many roadsides



© Peter Hall

European Common Blue (*Polyommatus icarus*)

in North America. The potential sites for the butterfly are easy to find as all it takes is perusal of roadside patches of the conspicuously yellow Common Bird's-foot-trefoil which blooms into October. Larvae were also found and reared on the trefoil. It appears that there could be as many as three or four generations as butterflies were seen flying from June and then well into October.

It will be very informative to track this new species over time and watch its spread.

When the European Skipper first showed up in London, Ontario, about 1910, there were very few butterfly specialists around to track its expanding distribution. Now it is one of the most common butterflies in North America feeding on Timothy Grass (*Phleum pratense*) associated with hay field and other grasses. Today, there are many more butterfly enthusiasts who can lend a monitoring hand with the European Common Blue.

Peter Hall is a Research Associate with the Canadian National Collection of Insects in Ottawa, Ontario, and is co-author of the Butterflies of Canada. He can be reached at halljp@rogers.com.

First Report of *Chionodes soter* (Hodges) And a List of Potential Vermont Congeners

By Michael Sabourin

Following is a list of *Chionodes* (Lepidoptera, Gelechioidea) species; the list includes one new record for the state and additional species expected to be in the state, but which remain undiscovered to date.

The species not recorded from Vermont are given to illustrate the type of investigative research the late Gordon Nielsen would do and to point out the need for continued research on Vermont lepidoptera. Grehan et al (1995) and the addition of *C. soter* account for twelve *Chionodes* species recorded from Vermont; this is less than half of what would be considered possible for the state.

The list is intended to conform to Grehan et al (1995) and is based on Hodges' (1999) fascicle. The number system {2058.2, etc.} is based on an alphabetical interpretation of the MONA number system of Hodges (1983).

The List

2058.2 *Chionodes adamas* Hodges 1999, not recorded from Vermont.

C. adamas occurs from southern Quebec to Winnipeg, Manitoba; hosts are *Quercus* (oak) species (Hodges, 1999).

2062.2 *Chionodes baro* Hodges, 1999, not recorded from Vermont.

C. baro occurs from Windham Co., Connecticut to Brandon, Manitoba; host unknown (Hodges, 1999).

2074 *Chionodes flavicorporella* (Walsingham, 1882), not recorded from Vermont.

C. flavicorporella occurs from Prince Edward island to Wyoming, host is unknown (Hodges, 1999).

2076 *Chionodes fondella* (Busck, 1906), not recorded from Vermont.

C. fondella occurs from Nova Scotia to southern Manitoba, hosts are everlasting (Asteraceae) and *Monarda fistulosa* L. (Lamiaceae) (Hodges, 1999).

2077 *Chionodes formosella* (Murtfeldt, 1881), not recorded from Vermont.

C. formosella occurs from Nova Scotia to southwestern Manitoba; hosts are oaks, particularly the red oak group (Hodges, 1999).

2079 *Chionodes fuscomaculella* (Chambers, 1872), not recorded from Vermont.

C. fuscomaculella occurs from Nova Scotia to southwestern Wisconsin; hosts are oaks (Hodges, 1999).

2080 *Chionodes gilvamaculella* (Clemens, 1863), not recorded from Vermont.

C. gilvamaculella occurs from Nova Scotia to southern Ontario, host is unknown (Hodges, 1999).

2084.4 *Chionodes imber* Hodges, 1999, not recorded from Vermont.

C. imber occurs from eastern Massachusetts to northern Idaho; host is sweetfern (Hodges, 1999).

2094.1 *Chionodes molitor* Hodges, 1999, (1121) det R. Hodges, 1999. **RH 7.6** Pl.3(36)

Chittenden Co., S. Burlington, 20 July 1992, paratype male; given as n. sp. name in manuscript in Grehan et al (1995). *C. molitor* occurs from northern Vermont to central Illinois; host is unknown (Hodges, 1999).

2101 *Chionodes oclusus* (Braun, 1921), not recorded from Vermont.

C. oclusus is known from central New York west to British Columbia; host is unknown (Hodges, 1999).

2087 *Chionodes praeclarella* (H.-S., 1854) (1328) det R. W. Hodges. **RH 7.6** Pl.4(64-67).

C. praeclarella is in ERL collection under *C. labradoricus* (Moschler). *C. labradoricus* was synonymized under *C. praeclarella* in Hodges, 1999. *C. praeclarella* occurs from Labrador south to New Jersey and west to British Columbia; host is unknown. (Hodges, 1999).

2109.4 *Chionodes praeco* Hodges, 1999, not recorded from Vermont.

C. praeco occurs from Nova Scotia west to southeastern Alberta; host is unknown (Hodges, 1999).

2110 *Chionodes pseudofondella* (Busck, 1908), not recorded from Vermont.

C. pseudofondella occurs from Rockingham Co., New Hampshire and southern Ontario to Cherry Co., Nebraska; hosts are *Origanum vulgare* L., *Pycnanthemum flexuosum* (Walter) (Lamiaceae) and *Eupatorium hyssopifolium* L. (Asteraceae) (Hodges, 1999).

2111 *Chionodes psilopterus* Barnes and Busck, 1920, not recorded from Vermont.

(Continued on page 11)

(Continued from page 10)

C. psilopterus occurs from Prince Edward Island across Canada south to Northern New York, etc.; host is Kentucky bluegrass (*Poa pratensis* L., Poaceae) (Hodges, 1999).

2114.3 *Chionodes sattleri* Hodges, 1999, not recorded from Vermont.

C. sattleri occurs from Nova Scotia to British Columbia south to Maine and Michigan; host is unknown (Hodges, 1999).

2116.1 *Chionodes soter* Hodges, 1999 (GRN) det. M. Sabourin, **RH 7.6** Pl.2(39-41).

Chittenden Co., Essex, 30 Aug. 2006, in malaise trap. *C. soter* occurs from Nova Scotia to southwest Wisconsin, hosts are oak species (Hodges, 1999).

2116.5 *Chionodes tarmes* Hodges, 1999, not recorded from Vermont.

C. tarmes occurs from Maine to the northern Lower Peninsula of Michigan, host is unknown (Hodges, 1999).

2118.1 *Chionodes theurgis* Hodges, 1999, not recorded from Vermont.

C. theurgis occurs from southern Quebec to southern Manitoba, host is unknown (Hodges, 1999).

2123 *Chionodes viduella* (Fabricius, 1794), not recorded from Vermont.

C. viduella occurs from Labrador to British Columbia south to Maine and New Hampshire; hosts are birch (*Betula* species, Betulaceae) and raspberry (*Rubus* L. Rosaceae) (Hodges, 1999).

Additional Notes

(1121) & (1328) indicate numbers in the ERL (Entomology Research Lab), UVM, Burlington, Vermont.

(1338) a specimen referenced as n. sp. #21 in Grehan et al (1995) was not available to be examined within the time

frame given for this paper.

(GRN) = Gordon R. Nielsen collection, Hinesburg and Essex, Vermont.

Data sheets (courtesy of Gordon Nielsen) on species identified are kept in three ringed binders.

RH 7.6 = Hodges (1999)



References

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Acknowledgement

This article is in fond memory of Gordon Nielsen with whom I worked closely and traveled extensively during the process of the Vermont checklist.

Gordon and I had continued investigation of the fauna of Vermont lepidoptera and it is hoped that an update of the Vermont checklist will be published; unfortunately posthumously in this case.

Michael Sabourin, a Peacham resident, studies the taxonomy and natural history of Tortricid moths. He participated in the Vermont checklist published in 1995 and has had several journal articles published.



Vermont Entomological Society
49 Lover's Lane
Grand Isle, Vermont 05458

This butterfly may be coming to a field or roadside near you. See Page 9 for details.



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