



VES NEWS

The Newsletter of the Vermont Entomological Society

Number 64
2009



On the web at www.VermontInsects.org



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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:

Steve Trombulak, VES Treasurer
 Department of Biology
 Middlebury College
 Middlebury, VT 05753

Cover Photos:

Katie Chang took this close-up of the wing of a luna moth, *Actias luna*, that was found by Alia Richardson in Fairfax in June 2009.

Back Page Photo:

Luke Curtis photographed a *Megarhyssa atrata* wasp as it laid eggs in a sugar maple in Lincoln, VT in July 2009.

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Membership Renewals

Thanks to the many members who confirmed that they'd like to continue to receive *VES News* by sending dues. Some are still in arrears and we've assumed they don't wish to continue membership. If you have questions, contact:

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FOUNDER OF THE VERMONT ENTOMOLOGICAL SOCIETY

By Michael Sabourin

Although I don't exactly remember how I got here, along the way I've become known as a somewhat proficient lepidopterist, and expert on the family Tortricidae, and the daytime collecting of microlepidoptera. As a youth, I don't remember a time when I was not outdoors exploring the Sussex Co., New Jersey countryside collecting rocks, turtles, frogs, snakes, crayfish, aquatic invertebrates, etc.. Being an introvert my solace and companionship was the outdoors. I started collecting butterflies in a more organized sense when I moved to my grandparents house around age twelve. The sides of the house were laced with ornate chrysalises. Things that were common to me at the time, Regal Fritillaries and Falcate Orange

Tips, now would be a big deal to see in New Jersey.

In middle school, I met a teacher, John Padalino, who was an enthusiastic bird watcher. My friends and I at the time became quite active birders developing life lists and participating in Christmas bird counts, etc. When I moved to Vermont as a sophomore in high school bird-watching was probably my primary outside activity.

I always maintained an interest in butterflies. After a failed marriage and in search of myself, I turned back to butterflies in hopes of a more intimate connection to the outdoors. I initiated Xerces butterfly counts in Vermont and was a regional editor for the Xerces fourth of July butterfly counts for a decade. Doing the butterfly counts I

had the opportunity to meet Don Miller, Jonathan Leonard, and Tom Wilson. I met my second wife while conducting a butterfly count on Camel's Hump. My first real introduction to moths was meeting Jim Hedbor on a butterfly count and experiencing his unbridled enthusiasm for these other lepidopterans.



At the Birds of Vermont Museum in Huntington, VT

Luke Curtis

Outside of showier adults and caterpillars, moths remained for me dusty brown things until two fortunate incidents occurred. One, I took a class on lepidoptera given by Charles Covell at Eagle Hill in Steuben, Maine and received a first hand look at moths and how elaborate they are. Second, I met Dr. John Grehan at

University of Vermont's, Spear St. Extension. My wife, Carol Weyland, was working on a master's degree in close proximity to John's office and had heard of John's activities involving lepidoptera and suggested I take the time to meet him.

John Grehan around 1990 started a project which eventually led to the Faunal Checklist of Moths and Butterflies of Vermont (Lepidoptera) in 1995. He kindly let me and others join him on the adventure. Initially I helped collect and identify specimens. A year or so into the project with the encouragement of P. T. Dang at the Canadian National Collection (CNC), I began to concentrate on tortricid moths. You can collect them during the

(Continued on page 4)

Member Profile (cont.)



day, crepuscularly, at light, at bait, in malaise traps, in pheromone traps, by larvae (some leaf roller larvae are easily found); and their small size makes it easy to have a collection. A Schmidt box can hold a couple hundred specimens. As I learned over time there was much more to discover about tortricids; new species, misidentified species, introduced species, cryptic species, polymorphic species, unknown hosts, unknown distributions, higher classification in flux, etc.

During the process of the Vermont checklist, I traveled a number of times to regional institutional and personal collections to identify moths. I often traveled with the late great Gordon R. Nielsen. Some of the institutions visited were the CNC, National Museum of Natural History (USNM), Albany Museum, Peabody Museum, Museum of Comparative Zoology, University of Massachusetts, University of Connecticut, Nova Scotia Museum, and the Zadock Thompson Natural History Collection at UVM. Some personal collections visited were those of Warren Kiel, Scott Griggs, Tony Roberts, and Gordon Nielsen.

Visiting Torrey Hall, I got to meet Dr. Ross Bell and learn of the plight of UVM's entomological collection. That eventually led to the forming of the Vermont Entomological Society in part to try to preserve the Zadock Thompson Natural History Collection as a viable institutional insect collection. To this day, Vermont does not have a synoptic or reference collection of its invertebrates.

On one of the trips to the CNC I met Dr. William E. Miller, a tortricid expert from the University of Minnesota. This turned out to be a fortunate meeting as a few years later when my wife went to veterinarian school at the University of Minnesota, I was invited to collaborate on a sister project to Dr. Miller's now famous 1983 Guide to the Olethreutine Moths of Midland North America (Tortricidae).

Again in Minnesota I got to travel, this time all over the country in search of tortricine moths from Minnesota, Wisconsin, and Michigan. In those travels, I got to meet other reputed tortricid experts such as Dr. Jerry Powell at Berkeley, California and Dr. Richard Brown at Mississippi State University as well as develop relationships with members of the Kentucky and Ohio Lepidopterists Societies and Michigan Entomological Society and other notable collectors like George Balogh and Ron Priest (Michigan), Donald Wright (Ohio), Loren Gibson (Kentucky), Jim Vargo (Indiana), Steve Johnson (Pennsylvania), Richard Heitzman (Missouri) and the late

Bryant Mather (Mississippi).

When Carol graduated from veterinarian school we moved to Burnett Co., Wisconsin so she could work on large animals and I was at least somewhat in the proximity of the University of Minnesota. The collecting was good in Burnett Co. where the prairie habitat meets Northern woodlands and bogs. I also suspect the area was, or was adjacent to, a glacial refuge during the most recent ice age.

I have to thank Drs. Philip Clausen and Ralph Holzenthal for allowing me to take up space at the University of Minnesota insect collection for nearly a decade. Though I had amassed a large number of specimens, written a few papers, and pretty much gotten the template for the Tortricine Guide to Midland North America, after five years we decided it was time to leave Burnett Co. and go somewhere closer to friends and family (Vermont).

Now I am back in Vermont without the use of an institutional collection, library, and other amenities associated with a college campus. I work part-time at the local post office and as a patient representative at the state hospital. When I am not working or doing mental health advocacy I am identifying specimens sent to me from across the country, and trying to do some collecting, dissecting, curating, etc. I still have my personal collection to work with which is probably one of the largest on tortricids in the country.

I want to mention techniques because I see my life advancing or changing with tools learned from others; such as learning to use a template to pin moths (never had to pin butterflies when younger); using ammonia to collect (don't have to relax specimens later); having a dissecting microscope (can see); dissecting with KOH (can identify accurately to species); using a digital camera (can get pictures acceptable for personal use or publication); having a personal collection (necessary depending on your connections or situation), etc., etc.

It's hard for me to think about entomology and not remember the travels and people. It was great visiting different institutions, but really nothing takes the place of being in the field with yourself or colleagues. I have fond memories of collecting with Mogens Nielsen and members of the Michigan Entomological Society in the bogs of the Upper Peninsula in Michigan. Other folks I've met I tried to weave into this article and those not mentioned, do not take offense. I appreciate you all.



Insect Walk at NatureHaven and Milton Pond, Saturday, August 8, 2009, 10 a.m. (Rain or shine)

This will be a field trip in search of flying and crawling insects (dragons and damsels, butterflies, beetles, grubs and bugs) and their allies (spiders, pillbugs, etc.) or whatever else we can photograph and/or get a net around. We'll start with a field trip around Laurie's home, "NatureHaven", share a pot luck lunch, then carpool to Milton Pond. Call Laurie at 802-893-1845 (or email NatureHaven8@huges.net) if you need more information.

Directions to NatureHaven from the South: I 89 Exit 17, "Chimney Corners": Take a left off the exit ramp and immediately turn left again at the stoplight (the intersection with Route 7.) Follow Rt. 7 north toward and through Milton, past the Hannaford Shopping Center then downhill past Riverside Park. At the next light, turn right onto Main Street (just before the Lake Arrowhead Dam) and travel .6 mile uphill, past several churches and over RR tracks, to a 4-way intersection. Turn right onto East Road at this intersection and travel 2 miles south. Park perpendicular to the road in the gravel parking area by the light blue farmhouse, #431East Road. Welcome!

Shelburne Farms Harvest Festival, September 19, 10 am—4 pm.

Maggie Desch and Dawn Anderson have been driving forces behind our participation in this event in past years. If you're interested in helping, let Maggie know (mdesch@u32.org).

BELLFEST 2010

This event is being organized to recognize the 50-year career of Ross and Joyce Bell in biological education and insect systematics, and to celebrate their work on rhyssoline carabid beetles, and contributions to the general natural history in New England. The idea was inspired by Ross's 80th birthday in April 2009. We plan to hold a symposium of several days in June, 2010 (exact dates TBA), in Burlington, Vermont, at the University of Vermont. The event will feature scientific presentations, a banquet and a day in the field for collecting and collegial discussion. Within a year of the meeting, we aim to publish a Festschrift, based primarily on the presentations offered during the symposium, but also open to additional contributions.

Field Notes



INSECT PHOTOGRAPHY (IN AFRICA)

By Jim Hedbor

My preferred way to study insects – butterflies and moths – is to collect specimens. I'm persuaded that the properly preserved specimen on a pin (or in a vial) with thorough data is the indispensable unit of data for many kinds of study. At the most basic level, questions of identity can often be settled only with specimens.

That said, sometimes you can't collect. The owner of the property may not give you permission, or you may be in a reserve of some kind – or in another country where it is burdensome or just is not possible to obtain the necessary permits.

Last January, we traveled to Tanzania, and I decided to do my best to "collect" using digital photos. After a bit of research, my family bought me a Sony Alpha 200 Digital SLR with a macro zoom lens for my birthday, and followed with a Tamron 70 -300 mm telescopic zoom lens. The price of equipment this capable, a few years ago,

might have been more than the two week trip to Africa, but now it is around \$750, which is not chickenfeed, but still an amazing bargain.

We have some wonderful photographers in our club. I'm not one of them and may never be – but I got good enough pictures on the trip to identify over 50 species of butterflies and moths. I'm no Bryan Pfeiffer, and still have tons to learn, but with this great equipment, you don't have to be. The images are a nice record of the trip, and a few of the pictures are breathtaking – because the creatures they capture are incredible.

We found that we love learning to do this. There is a new set of skills to learn, and you are compelled to be a better observer and a bit less of a hunter. On one hand, we had difficulty getting any kind of useful image of some butterflies that never settled within camera range, like hill-topping swallowtails. Maybe we could have netted a good specimen. On the other hand, we got wonderful shots of some where we never got closer than 25 feet!

Have a look.
<http://picasaweb.google.com/jimhedbor/BwanaKipipeo#>



VES BUTTERFLY WALK AT BIRDS OF VERMONT MUSEUM

By Laurie DiCesare

On Sunday, July 5, Gale Lawrence and Bob Spear were our gracious hosts at the Birds of Vermont Museum for the annual VES invitational Butterfly Walk. In the midst of a very rainy summer, we were gifted with a morning of warm sunshine. Many members and their families, including the Hedbor and Ferguson clans, attended the

great-crested flycatcher and yellow throat (witchity, witchity) let us know they were also in the area. A more extensive species list can be e-mailed to interested members.



Wood frog tadpole

field trip. We walked through an open, mowed field with active bluebird boxes, then up past an unmowed field where we saw black-bordered, orange-

Ron Russotti

winged European skippers (*Thymelicus lineola*) and a vice-roy butterfly (*Limenitis archippus*) on our way to the pond.

The pond was full of adolescent wood frog tadpoles, testing out their new legs, and red-spotted newts sunning themselves in the epilimnion. The kids had their water nets in the pond almost as soon as they arrived, retrieving a dragonfly nymph, and a water tiger - the larval form of the predacious diving beetle (Family Dytiscidae) which can attack prey that is larger than itself.

Along the path leading around the pond, we found a pearl crescent (*Phyciodes tharos*) with crescent moon shapes in the hind wings, a Peck's skipper (*Polites spp.*) with yellow spots on the underside of the hind wings, a cream-color little wood satyr (*Megisto cymela*) and a comma (*Polygonia spp.*) We also saw spring and geometrid moths. Dragonfly sightings were sparse but bluet damselflies appeared all along the shore. For many people, this was also a first opportunity to see a snout-nosed scorpionfly (Order Mecoptera, *Panoptera sp.*)

At least nine species of birds, including a scarlet tanager,



The "water tiger" in the family Dytiscidae

Ron Russotti

For more information about the **Birds of Vermont Museum**, including a site map and directions, see: Birds of Vermont.org.

Editor's Note: *Jim Kellogg, aquatic entomologist with VT ANR, viewed Ron's picture above and told us that the predaceous diving beetle is from one of three genera, namely Acilius sp., Graphoderus sp. or Thermonectus sp.). Acilius is the most common in the ANR collections. They are one of the top predators in fishless acid lakes, vernal pools and wetlands.*



Sundew

Ron Russotti



Thanks to Laurie DiCesare for the following two book reviews.

A Dragon in the Sky: The Story of a Green Darner Dragonfly by Laurence Pringle; paintings by Bob Marshall. Orchard Books (Scholastic Inc.), NY, NY. 2001.

A *Dragon in the Sky* covers an amazing amount of information within its 64 large, well-illustrated pages. The finely detailed, life size and highly-magnified drawings on the cover, title page and throughout the book encourage both gradeschool children and adults to begin turning pages and enter the life of a green darner dragonfly named Anax..

The story begins abruptly with a bullfrog eating a female dragonfly that has been laying her fertilized eggs in a pond. After her previously-attentive mate flies away, the story shifts to their legacy - the dozens of developing eggs individually deposited by the female within the submerged portion of nearby cattail leaves. Throughout the book, as the young nymph, Anax, grows and molts, his numerous predators attempt to make a meal of him, demonstrating how difficult it is for any individual dragonfly to successfully grow to adulthood and survive long enough to reproduce.

The text is well written, well paced and contains so many quick yet detailed observations that you feel as if you're swimming along beside the young nymph as it begins to trap prey with its extendable lower lip and grasping claws. Sidebars in smaller, pale green print offer fascinating snippets of biology, history and folklore. (Ex.: To the Hopi and Zuni of the American Southwest, dragonflies are "a symbol of hope and good luck" and the bringers of rain.)

As Anax crawls from the water and takes his first breath of air, one suspects the author must have watched films or read detailed accounts of the emergence process. Readers become eyewitness observers as Anax gyrates his abdomen before cracking and crawling out of his exoskeleton, and slowly inflating his wings.

At the back of the book, an extensive bibliography, a list of pertinent websites and a section on carefully catching and releasing dragonfly nymphs, offer the reader ways to further indulge their interest in odonates. A one-page index helps locate specific information within the book.

Both the author and illustrator also collaborated on *An Extraordinary Life: The Story of a Monarch Butterfly*. Both have won many awards for their work. This book is a flash of enlightenment. It is highly recommended and enjoyable reading.

Insects and Gardens: In Pursuit of a Garden Ecology by Eric Grissell with photographs by Carll Goodpasture. Timber Press, Portland, OR @2001.

Insects and Gardens first captivates you with its glossy pages with breathtaking insect photographs. Most are highly-magnified close-ups that offer the viewer a window into the micro-world of insects. Starting with a survey of arthropods ("What is [and is not] an Insect?"), the author describes insects and allies that are most often found in our garden. The colorful, well-illustrated chart of Arthropod classes including Class Insecta's orders, and detailed descriptions of various types of metamorphosis are also very helpful.

The main focus of the remainder of the book is garden ecology. The author describes insect interactions with plants, their mates (including some unusual mating rituals) and other garden creatures. Carll Goodpasture's photographs of special moments in nature (narcissus flies mating, a close-up of a scorpionfly, a male ambush bug waiting for the right moment to approach his potential mate, and a grasshopper "studying a past life" on its exuvium) grace nearly every page.

Eric Grissell's descriptions of garden ecology, sprinkled with humor, make fascinating reading. Who knew that katydids will eat any slow movers in their path; that mantids are more apt to eat their mates in captivity; that lightning bug larvae eat snails; or that a female mosquito's "hypodermic needles are simply modified mandibles that no longer can chew"?

Most importantly, the author is urging us to give up our "nozzlehead" chemical dependencies and learn to work with Mother Nature. "A garden is essentially a nonfunctional ecosystem...It is simply human nature to meddle...if we work with the laws of nature, we have a much better chance of developing a garden that functions as a balanced, naturalistic system should."

This bountiful, 345-page resource also includes a 15-page index and four pages of "Additional Reading" references.

Eric Grissell works as a research entomologist for the USDA. Carll Goodpasture has a doctorate in entomology. His photographs are exhibited internationally. The book won an American Horticultural Society book award.

If you have other favorite youth or adult entomology books that you would like reviewed, please contact Laurie DiCesare at NatureHaven8@Hughes.net.

BELL BIRTHDAY BASH

By Bob Davidson and Bob Acciavatti

On Thursday, April 23, 2009, our friend and colleague, the preeminent naturalist, biologist, taxonomist, expert on the spineless beasts of New England and (with his wife Joyce) the wrinkled bark beetles of the world, Dr. Ross Taylor Bell, reached his 80th birthday, which he passed in equanimity in good spirits with good humor and good grace. The following evening (a convenience of travel) a number of Ross's former students, as well as current friends from the VES, gathered at Pauline's Kitchen for a celebratory dinner. Former student Robert Davidson, now an entomologist at the Carnegie Museum of Natural History in Pittsburgh, provided the initial impetus for the event and brought the gift, and former students Denise Martin (now at St. Michael's College) and Jonathan Leonard (now at UVM) made the dinner arrangements and brought a cake crafted to resemble one of the highlights of evolution, a carabid beetle. Several friends travelled some distance to attend, such as tiger beetle expert Robert Acciavatti, who traveled from Pittsburgh with Davidson, and Jessica Rykken (former student and part-time Vermonter), now coordinator of the Boston Harbor Islands All Taxon Inventory through the Museum of Comparative Zoology at Harvard, who drove north from Boston. But the greatest distance was covered by friend and former student John Spence, now chairman of the bug department at the University of Alberta, who travelled all the way from Edmonton to be present and to give the keynote speech. Former student Peter Wimmer (now retired; a Trichoptera expert) drove north from Middlebury, and Trish Hanson (entomologist

for the Vermont Department of Forests, Parks and Recreation) came up from Lincoln. And quite a number of fellow members of the Vermont Entomological Society made the effort and expense to attend: Dawn Anderson (Vermont Department of Health), Doug and Mary Burnham (Doug now retired from the Vermont Department of Environmental Conservation (aquatics lab) after some

43 years, Mary still working with Trish in Waterbury), Luke Curtis (woodworking bug friend of the Bells), Maggie Desch (high school science teacher in Montpelier), Rachael and Scott Griggs (now retired, avid collectors and charter members of VES), and Michael Sabourin (postal service, and expert in the moth family Tortricidae). Most of these people at



Ross basking in the glow of his birthday candles

one time or another took Ross's field zoology course, which crystallized their interest in insects and natural history.

The event began with a gathering over drinks around 7 PM, followed by a nice dinner, and that followed by the dissection of the carabid cake. John Spence then winged a speech with some juicy tidbits of personal reminiscences, and summed up how we all felt about the Bells contributions to our lives. Davidson then handed over the gift he had brought, paid for with contributions from all present (well, except the Bells), which Spence presented: a large and handsome volume on the European fauna of the genus *Carabus*, a group of large, often montane and often stunningly gorgeous carabid beetles which is very speciose in Europe; the tome itself filled

(Continued on page 9)

Bob Acciavatti

(Continued from page 8)

with fine color plates, habitat shots and ecological diagrams. Davidson then made a brief announcement about plans (for June, 2010) to put together a larger, formal symposium to honor the Bells' contributions to science, to include we hope speakers on carabids, beetles and New England natural history in general, as well as a celebratory Festschrift (a published volume of scientific papers in honor of a person or persons). Since Ross can no longer travel very far, it will be necessary to bring the symposium to Burlington, and feelers have been sent out already to a number of potential victims. If enough speakers are able to participate to make this float, we will make a formal invitation in a future newsletter and encourage all members of the VES, as well as other New England entomological or natural history societies, to try their best to attend.

Most of you know Ross and Joyce as experts on invertebrates of Vermont and New England, but you may not be as aware of their contributions to science at the world level. Together they built the insect collection at the University of Vermont, which would be nothing today without their international travels and collecting, as well as local collecting and specimens from survey work and field zoology courses. Sabbaticals spent in the field include the Caribbean, Australia, New Zealand and New Guinea, as well as fieldwork within the U. S. in Oregon, Colorado and elsewhere. Early work published under Ross's name includes several fundamental papers on the

relationships between tribes of Carabidae and families of Adephaga, a revision of the North American species of the very attractive beetles in the genus *Chlaenius*, and a seminal paper on the rhyssodid beetles of North and Middle America and the West Indies. The latter led to a life-long interest in this group and resulted in more than a dozen major papers by Bell and Bell revising the rhyssodid beetle fauna of the world, something around 500 species and still counting. There are also some morphological works trying to figure out the proper placement and ranking of this enigmatic group of beetles. They do not occur in Vermont, but there are many species from Pennsylvania south, and in most of the tropical parts of the world. They can tunnel through solid wood by prying the fibers apart and are thought to eat slime molds, which they can presumably carry in the various grooves and pilosities on their bodies and infect new wood when they move to another habitat.

Around 10 PM, and with most of the hemoglobin now funneled with the blood to the mesenteric circulatory regions of the attendees to ferry away the processed food, the party degenerated into the usual postprandial random conversations and began to break up. But it was an enjoyable experience for all, and we wish Ross many more happy years to come.

Robert L. Davidson, Carnegie Museum of Natural History, Pittsburgh, Pennsylvania and Robert E. Acciavatti, U. S. Forest Service (retired), Morgantown, West Virginia

FIRST REPORT OF TWO PALEARCTIC *DICHRORAMPA* (LEPIDOPTERA: TORTRICIDAE) SPECIES FOR VERMONT

By Michael Sabourin

Dichrorampha acuminatana (Lienig & Zeller) (Fig. 1) is reported for the first time from Vermont; it was recorded previously from Maine (Roberts and Miller, 2003). I discovered the species while curating my collection earlier this year. I noticed a male specimen identified as *Dichrorampha sedatana* (Busck) that possessed a costal fold on its forewing; a character not indicative of *D. sedatana*. I was aware of recent regional works on introduced *Dichrorampha*, Roberts (1991) and Roberts and Miller (2003). When I checked Roberts and Miller (2003), I was readily able to identify the specimen as *D. acuminatana*. In addition to the male costal fold, *D. acuminatana* can be identified by the dorsal patch on the forewing being a lighter hue than the basal patch and surrounding ground color. On



Figure 1. *Dichrorampha acuminatana*

May 30th this spring, I collected a female specimen close to the ground, but soon found the species numerous in following weeks flying during the day and coming to light at night. The species was first collected in 2003. In Vermont, the species has only been collected in Washington and Caledonia counties. Collection dates range from May 30th to June 15th with an additional record of August 13th suggesting the species may be bi-voltine. Fifteen specimens were examined; ten were collected at light and five during the day including the only two female specimens.

Dichrorampha aeratana (Pierce and Metcalfe) (Fig. 2) Is reported for Vermont and North America for the first time. The species was discovered while mounting

a series of *D. acuminatana* and noticing a male without a costal fold. The specimen was dissected. *D. aeratana* male genitalia (Fig.3) is unique for the genus with a dorsally situated, in relation to the aedeagus, anellus lobe; a subterminal dentate thorn on the dorsal surface of the aedeagus; and a moderate bulge on the valval neck. I was unable to identify the species after a search of North American and Palearctic literature until I checked Chambon (1999). It was the only illustration that shows the anellus lobes flattened and diagnostic. Like *D. acuminatana*, *D. aeratana* was mixed in my collection with *D. sedatana* (Fig. 4). Superficially it is difficult to distinguish *D. aeratana* and *D. sedatana*. On the forewing, the thin median and post median lines are irrotated with black and yellowish brown scales in *D. sedatana*, and *D. aeratana* lacks the black scales on the median lines. Also, *D. aeratana* has a lighter hindwing fringe with the outer margin of the fringe lighter than the basal margin; in *D. sedatana* the outer and basal margins of the hindwing fringe are about equally dark. *D. aeratana* was first collected in 1992. It has been collected throughout northern Vermont with specimens from Brighton, Lunenburg, Marshfield, Mt. Mansfield, New Haven, North Hero, and Peacham. Collection dates range from May 29th to July 8th. Twenty six specimens were examined; twenty three including two females were collected during the day, one male was collected at light, and one male and one female in a malaise trap. An additional male specimen was discovered in my collection that was captured at mercury vapor light on May 30th 1994 in Alymer, Quebec by Bernard Landry.



Figure 2. *Dichrorampha aeratana*

It was the only illustration that shows the anellus lobes flattened and diagnostic. Like *D. acuminatana*, *D. aeratana* was mixed in my collection with *D. sedatana* (Fig. 4). Superficially it is difficult to distinguish *D. aeratana* and *D. sedatana*. On the forewing, the thin median and post median lines are irrotated with black and yellowish brown scales in *D. sedatana*, and *D. aeratana* lacks the black scales on the median lines. Also, *D. aeratana* has a lighter hindwing fringe with the outer margin of the fringe lighter than the basal margin; in *D. sedatana* the outer and basal margins of the hindwing fringe are about equally dark. *D. aeratana* was first collected in 1992. It has been collected throughout northern Vermont with specimens from Brighton, Lunenburg, Marshfield, Mt. Mansfield, New Haven, North Hero, and Peacham. Collection dates range from May 29th to July 8th. Twenty six specimens were examined; twenty three including two females were collected during the day, one male was collected at light, and one male and one female in a malaise trap. An additional male specimen was discovered in my collection that was captured at mercury vapor light on May 30th 1994 in Alymer, Quebec by Bernard Landry.



Figure 3. *D. aeratana* genitalia

Razowski (2003) gives the host plant for all three species above as the roots of *Chrysanthemum leucanthemum*, Ox-eye Daisy. Ox-eye Daisy was introduced into the United

States from Eurasia as an ornamental plant (2009a) and is distributed throughout the United States and parts of Canada (2009b). Heinrich (1926) gives a similar broad distribution for *D. sedatana* as *D. sedatana* and *D. bana* (Kft.) (Miller, 1983). One would suspect that *D. aeratana* and *D. acuminatana* will at some point have a much broader Nearctic distribution. *D. acuminatana* was quite common this year which may be indicative of a recent introduction. *D. aeratana* is generally distributed in Vermont which may be indicative of it being somewhat naturalized and overlooked. *D. petiverella* (L.) also feeds on *C. leucanthemum* and has previously been reported from Maine (Roberts, 1991). Razowski (2003) gives seven additional Palearctic species that feed on *Chrysanthemum leucanthemum*; *D. plumbana* (Scopoli), *D. consortana* Stephens, *D. sequana* (Hbn.), *D. senectana* Gn., *D. flavidorsana* Knaggs, *D. alpinana* (Treitschke), and *D. montanana* (Duponchel) which should be monitored for their possible occurrence in North America.



Figure 4. *Dichrorampha sedatana*

Literature Cited:

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Razowski, J. 2003. Tortricidae of Europe, Vol. 2, Olethreutinae. F. Slamka, Bratislava. 301 pp.

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2009a. http://www.illinoiswildflowers.info/weeds/plants/oxeye_daisy.htm

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VES Flea Market



Bumblebee Specimens. I am seeking bumblebee specimens from Vermont and other northeastern states, both those recently collected and also older specimens. I'm collaborating on a project to map declines in distribution of several once common bumblebee species, *Bombus terricola* and *B. affinis*. Historic (especially mid- to late-twentieth century) collections will allow us to map previous ranges of the bees, and recent specimens allow us to figure out where the bees still occur. If you would like to contribute data to this project, please contact me at leif.richardson@state.vt.us or (802) 476-0128. I'll identify your specimens and add the label information to a database of similar information. Thanks.

NatureHaven Day Camp Summer 2009 for children ages 8 to 13. Naturalist / entomology enthusiast Laurie DiCesare is sponsoring a summer day camp for two to four children each week at her farmhouse in Milton, VT. "Green" activities will include organic gardening, composting, "critter" walks, edible and medicinal plants, and plant / animal interactions. Quiet times and rainy days will feature educational games (involving words, numbers, light strategy and ecology), origami, beading and

artwork. We'll also get outside for badminton, croquet and other active games. \$125 a week. For more information, call Laurie at 802-903-1845 or e-mail NatureHaven8@Hughes.net.

Planting for Pollinators. A new series of ecoregional planting guides has been created to help farmers and ranchers, land managers, and gardeners select plants to increase the number of pollinators in their area. It is estimated that animal pollinators--bees, butterflies, birds, bats--are needed for the reproduction of 80% of flowering plants and one-third of human food crops. Each of us depends on these industrious pollinators to provide us with a wide range of foods we eat. In addition, pollinators are part of the intricate web that supports the biological diversity in natural ecosystems. This series was created by the Pollinator Partnership (P2), to which the Forest Service is affiliated, along with several other federal agencies. These 28 guides are tailored to specific ecoregion provinces in the U.S., as mapped by the Forest Service, and are available for downloading, free of charge, at <http://www.pollinator.org/guides.htm>. They have an [Ecoregion Locator using your zip code](#).

Odds and Ends



Bob Acciavatti

Unusual beetle seen in Shelburne cafe



Vermont Entomological Society
c/o Steve Trombulak
Department of Biology
Middlebury College
Middlebury, VT 05753

Megarhysa atrata laying eggs in sugar maple tree July 12, 2009 Lincoln, VT



Luke Curtis