

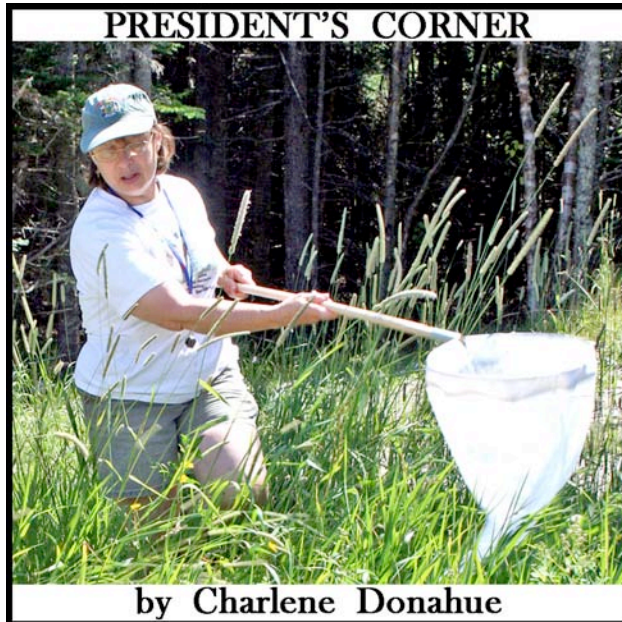
The Maine Entomologist

A forum for students, professionals and amateurs
in the Pine Tree State

The Official Newsletter of the Maine Entomological Society

Vol. 18, No. 2

May, 2014



PRESIDENT'S CORNER

by Charlene Donahue

Many Americans think the only good insect is a dead insect. Why is this? Look at ads; how often do you see an ad that touts the benefits of insects? And how often do you see one promoting a product that KILLS THEM DEAD! Even the primary message from the Maine Forest Service and Maine Agriculture Department is "Beware of Invasive Insects!!!!" Then there are warnings about tick and mosquitoes carrying diseases, which they do but there are ways to protect yourself.

So who is the best ambassador for insects? It is you. Being a scientist and trying to connect with the public on the importance of insects - ones that affect humans both positively and negatively. I have read studies about how behavior is changed. People need to hear a message over and over again before it really sinks in. Ten times you need to hear something before it starts to affect how you behave. Who delivers the message makes a huge difference too. The people who are most influential are family, friends and neighbors.

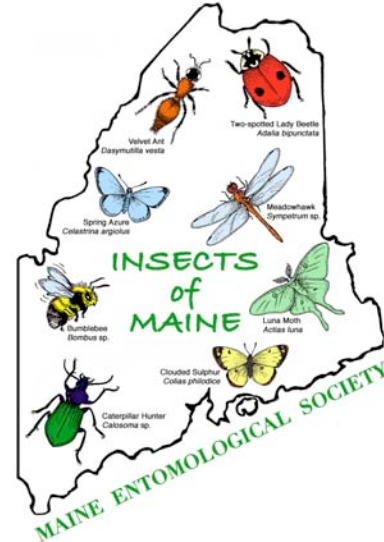
You do not need to get up on a soapbox and shout but start being an advocate. Point out cool or beautiful insects - butterfly season is coming up, bees will be pollinating flowers, and ground beetles will pop out of the ground when you are planting the garden. Engage the children you know, the younger the better, and show them what you see. If there is a pesticide ad on, just put in a word for letting the insects have their share of the world. Suggest alternatives; row covers and netting can be a better investment than sprays and last longer.

I now start my presentations with a few minutes devoted to the fact that most insects are not a problem; over 20,000 species live in Maine filling many important niches and are vital to the ecosystem. They are food for anything larger than

themselves, they are the pollinators, the decomposers, the parasites and predators that keep other insects in check.

Come to a field trip and bring a friend or relative, the first trip is May 17th in Lewiston.

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M.E.S. T-Shirts and Sweatshirts Still Available!

Spring is here, and it's time to think about summer apparel! For those cool days we still have heavy sweatshirts, and 100% heavyweight cotton T-shirts for the warmer ones. Both are on a pale straw yellow with the reconstructed traditional design shown above in full color. Sweatshirts tend to run a little large in size.

In S-M-L, T-shirts are \$13 and sweatshirts are \$17, if you pick them up, \$16 and \$23, respectively, to have them mailed to you. An order form with prices for ordering multiple shirts and larger sizes can be downloaded from the M.E.S. web page. Contact Dana Michaud (address on p. 8) to get yours!

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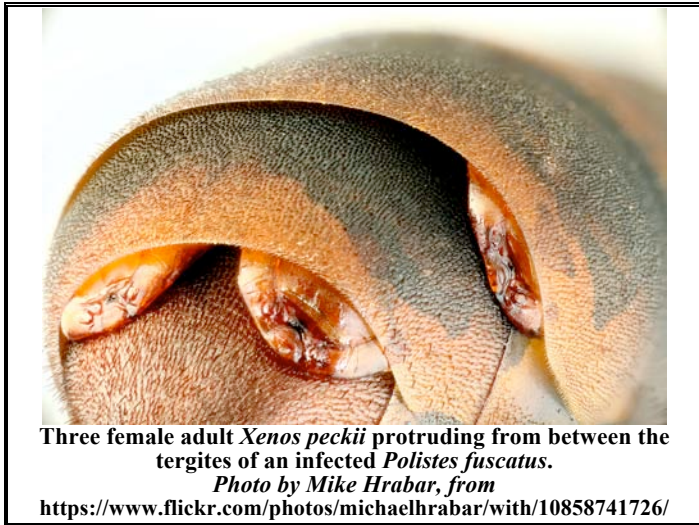
Have you seen Strepsiptera in Maine?

by Paul W. Schaefer

4 Dare Drive, Elkton, Maryland 21921
paulschaefer60@hotmail.com
tel.: 410-398-4590 cell: 302-545-4168

Believe it or not, they may be as close as the eaves of your house, barn, or other outbuilding or under your raised deck! A strepsipteran, or twisted-winged insect, known as *Xenos peckii* is an obligate endoparasite in the Northern Paper Wasp, *Polistes fuscatus*, which make naked paper nests that hang by a pedestal from under various man-made structures. It is just such nests that we hope Maine Entomological Society members will help us to find more of and will permit us use these sites for our upcoming research (details below).

I first became aware of how common *X. peckii* were in Orono, Maine, while there as a University of Maine graduate student in the early 1970s. Then I noticed that as summer ended and the days shortened, I observed increasing numbers of *Polistes fuscatus* with asymmetrical abdomens distorted by the presence of either mostly internal females or empty male pupal cases. The distortions were due to *X. peckii*. I recorded as many as 4 *X. peckii* in a single host, but one per host was most common.



Three female adult *Xenos peckii* protruding from between the tergites of an infected *Polistes fuscatus*.

Photo by Mike Hrabar, from

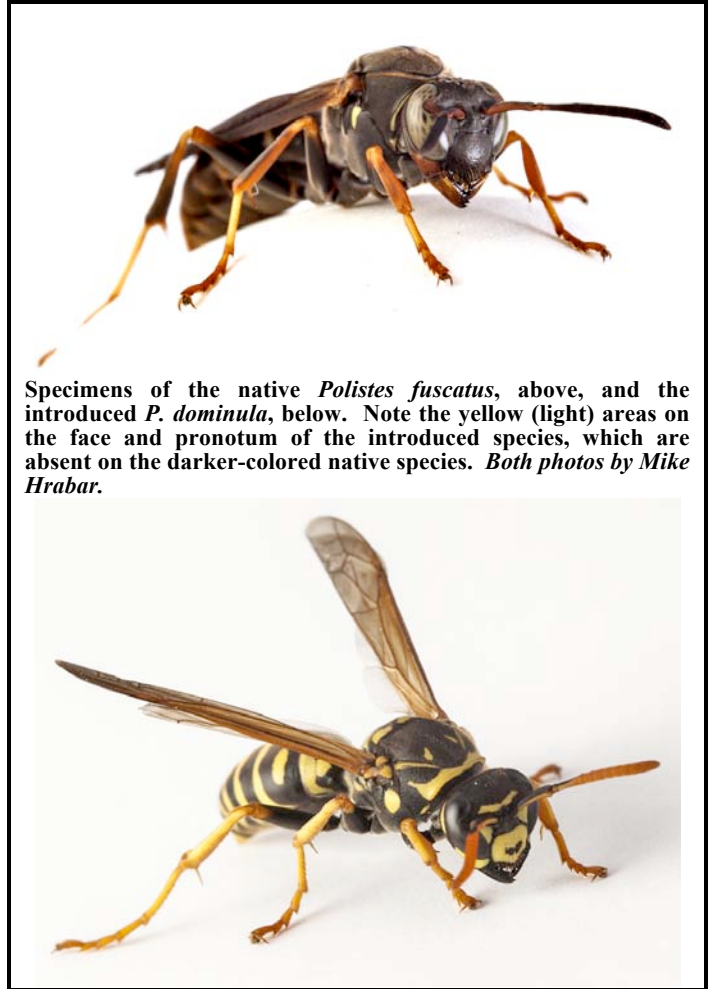
<https://www.flickr.com/photos/michaelhrabar/with/10858741726/>

In 2011, under the guidance of Dr. Gerhard Gries (Simon Fraser Univ. B.C., Canada), we recruited a graduate student, Mike Hrabar, to investigate this most unusual insect-host relationship as part of his graduate thesis work. Mike has excelled in his investigations of *X. peckii*. With support from a team of colleagues and cooperators, we have collected *X. peckii* in *P. fuscatus* nests from Aurora to Orono /Bangor to Skowhegan over the last two seasons. Our most successful collections were made near Canaan, Maine. As a result of these collections, Mike senior-authored a first assessment of our work (Hrabar, in press [2014]) and has taken some stunning images of female of *X. peckii* in its host, the very odd looking free-living males, and even videos of the unique mating sequence that occurs on the abdomen of the host paper wasp. (I invite you to google “*Xenos peckii*” and select out images by Mike Hrabar.)

Our work has led us to sex pheromone investigations of *Xenos peckii* and this resulted in what we believe is a synthetic sex pheromone candidate. The proof requires field testing –i.e. can we attract males of *X. peckii* into sticky traps using this new synthetic bait? This is the project we’ve planned for July-August 2014!!!

There is one drawback to thinking that any *Polistes* paper wasp will do. It happened in recent decades that another

exotic species, *Polistes dominula*, the European Paper Wasp, has become established in northeastern US and this species is displacing the native *P. fuscatus*. This is occurring in much of southern Maine. The problem is *P. dominula* (distinguished by appearing very yellow in color and not unlike a common yellowjacket) is not suitable as a host for *X. peckii*. The reason for this remains a mystery. Therefore we must confine our search to areas generally north of Augusta to avoid competition with *P. dominula*.



Specimens of the native *Polistes fuscatus*, above, and the introduced *P. dominula*, below. Note the yellow (light) areas on the face and pronotum of the introduced species, which are absent on the darker-colored native species. Both photos by Mike Hrabar.

In order to find more suitable locations where traps might be deployed this coming season or where nests of *Polistes fuscatus* might be collected, I am asking fellow Maine Entomological Society members for assistance. If you or your neighbors live north of Augusta and have suitable habitats (old barns, outbuildings, garages, raised decks, etc.) where there are known or likely populations of *P. fuscatus* present, and you are willing to have us visit to collect or hang sticky traps, please contact me via email with details of how to find you and to find your location (name, address, phone number, GPS coordinates, email address).

Meanwhile, marvel at knowing that not too far away can be found a very remarkable Strepsiptera known as *Xenos peckii* that exists in association with a once more common Maine resident, the Northern Paper Wasp. Remember to be on the lookout for paper wasps with distorted abdomens or a motley crew of entomologists on the verge of getting themselves stung by female paper wasps.

For more information, see

http://en.wikipedia.org/wiki/Polistes_fuscatus

(cont. on next page)

Strepsiptera (cont.)

for information on the host, the Northern Paper Wasp, and <http://ento.psu.edu/extension/factsheets/dominulus-or-european-paper-wasp> for the life cycle and images of the look-alike but non-suitable host, the European paper wasp.

For images of *Xenos peckii* by Mike Hrabar, see <http://www.flickr.com/photos/michaelhrabar/with/11077419233/>



Reference cited:

M. Hrabar, A. Danci, S. McCann, P.W. Schaefer and G. Gries, in press [2014]. New findings on life history traits of *Xenos peckii* (Strepsiptera: Xenidae). *The Canadian Entomologist*, available on CJO2014. doi:10.4039/tce.2013.85.

The following is also a really neat, illustrated 2-page summary article on Strepsiptera in general:

McMahon, D. P., A. Hayward and J. Kathirithamby, 2011: Strepsiptera. *Current Biology*, v. 21, no. 8, p. R271-272.

Send an e-mail to Bob Nelson if you don't have access to the journal and would like a pdf copy of this article.

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Report for the July 2013 Beetle Blitz at Acadia National Park by Don Chandler

The 11th annual bioblitz was held on July 12-15, 2013 at Acadia National Park, with a goal of collecting as many beetle species as possible over an approximately 24-hour period. After the introductory meeting on Friday, the target for Saturday was Mt. Desert Island, and the Schoodic Peninsula on Sunday morning. Forces were quickly marshaled on Saturday morning, for a pleasant and productive day of collecting on Mt. Desert Island. Each of the five previously identified priority areas had a team assigned, with the areas being: Bass Harbor, Canon Brook, Duck Brook, the Great Meadow, and Western Mountain. On Sunday it was free-form collecting on the Schoodic Peninsula, plus gathering of Lindgren funnel and flight-intercept traps with their specimens which had been set up earlier on MDI.

As collecting proceeded, starting Saturday evening specimen processing began, and continued until Monday morning, with the night-time hours not neglected by a few. Specimen sample log-in, rough sorting, mounting, labeling, sorting to species, and finally identifying the species always takes more time than all but the most experienced blitzers can appreciate.

At the golden hour of 12 noon, the blitz officially stopped on Sunday, to be followed by the official count of the number of species taken at the end of lunch. The blitz count was announced as being about 200 species seen. This

announcement is always an underestimate of the final total, as at that time many of the samples have not yet been sorted nor examined, and the more challenging groups have not been carefully examined for the presence of similar species. As part of the pronouncement, an estimate of the final number of species was given by the lead scientist Don Chandler, written on a scrap of paper that was then misplaced and the number is not now certain, but his faint and possibly erroneous recollection was that the predicted number was 320 species. With that, identification activities commenced again, and by Monday morning over half of the material had been identified to species, and 7 boxes accompanied Don back to the University of New Hampshire to await identifications.

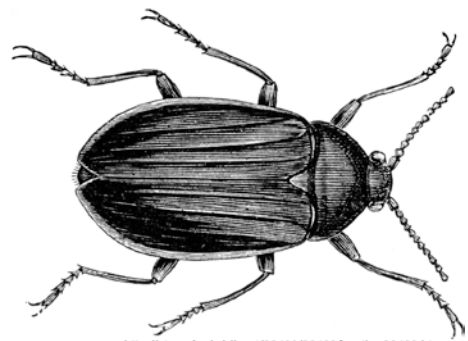
The identifications were completed just in time to meet the NPS deadline for final reports. The total was 371 species in 53 families, with the totals for the most diverse 10 families for 2013 (and three notable families for 2005) being:

	2005	2013
Curculionidae	45	49
Chrysomelidae	24	35
Staphylinidae	45	35
Carabidae	34	31
Elateridae	25	27
Cerambycidae	16	19
Cantharidae	22	16
Scarabaeidae	12	14
Tenebrionidae	8	14
Hydrophilidae	7	8
Dytiscidae	18	7
Nitidulidae	10	5
Silphidae	6	2

There were 103 species newly recorded for ANP, or 28% of the species taken. The 2005 Coleoptera bioblitz produced 349 species in 46 families. Both in species numbers and families represented, the 2013 blitz is a notable increase over the 2005 Coleoptera bioblitz. When the lists of more diverse families from both years are compared, some shifts are apparent. In 2005 the use of a number of fruit and carrion bait traps produced species in the Nitidulidae (sap beetles) and Silphidae (carrion beetles) that were not taken in 2013, and the use of specialized collecting and processing protocols by those interested in Dytiscidae (predaceous diving beetles) and Staphylinidae (rove beetles) in 2005 generated larger numbers of those groups. Noticeable increases in 2013 were seen amongst the Chrysomelidae (leaf beetles), and Tenebrionidae (darkling and comb-clawed beetles), which indicates that sweeping on the more botanically diverse MDI was more productive than on the Schoodic Peninsula.

In summary, a new record for beetle species and families, 103 species newly recorded for ANP, a beautiful day and productive new sites on MDI, all led to a very successful 2013 bioblitz.

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http://etc.usf.edu/cipart/26400/26489/beetle_26489.htm

Register Now for the 2014 Acadia National Park Beetle Blitz

Registration is now available for the 12th annual BioBlitz at Acadia National Park on July 18-21, 2014. This year, we will again be targeting beetles. The event is open to professional entomologists, amateur naturalists, and other interested persons. Registration is open from May 9 through June 20, 2014.

As in the past, the event will be based at the park's Schoodic Education and Research Center. We will be collecting beetles from diverse habitats in Acadia on Mount Desert Island and the Schoodic Peninsula. The lead taxonomist for the event will be Dr. Don Chandler from the University of New Hampshire.

The event will begin with dinner on Friday evening at 5:30 PM in Schooner Commons and will be followed by a presentation and strategy session in Moore Auditorium at 7 PM. The official BioBlitz collection will begin Saturday morning and continue for 24 hours. Saturday's effort will be in the Mount Desert Island section of Acadia National Park. Sunday's effort will be in the Schoodic section of the park. The remainder of Sunday afternoon and Monday morning will be spent sorting, pinning, and identifying collected specimens.

Registration for the blitz is \$40.

Meal Costs (there are a couple of different meal plans available, which are described when you register online).

NEW INFORMATION REGARDING LODGING! Lodging is available on the campus of the Schoodic Education & Research Center (SERC). BUNKHOUSE lodging is FREE. It is limited, and available on a first-registered, first-served basis. Please note that accommodations in 2-, 3- and 4-bedroom apartment-style housing is available at \$40/night per person for ages 11 and up, and \$20/night for children 6-10.

To participate, you must pre-register. Please use this link to sign up:

<http://www.uevent.com/registration?code=YIPJ7H0MMF>

If you have questions please call (207) 288-1310 or email pmorris@schoodicinstitute.org.

Thank you for your interest and support.

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Centipedes of Maine: Specimens Needed

My name is Joseph DeSisto, and I am an undergraduate at the University of Connecticut studying centipedes, seeking to update distributional records by identifying specimens from throughout New England. So far in Connecticut, I have identified 19 species that were not previously recorded in the state. There were a mere 10 recorded before, and in Maine, the situation is even worse: only 4 centipede species have been recorded, where as many as 35 or so may occur.

Centipedes are fascinating and charismatic members of the soil and leaf litter fauna. They can be identified by having at least 15 pairs of legs, and have a single pair of legs per segment, unlike millipedes, which have two pairs per segment. Among soil invertebrates they are top predators, and their ecological importance is likely great, despite the local fauna being so poorly known.

I would greatly appreciate any centipede specimens from anywhere in Maine. Centipedes can be found by sifting through soil, flipping debris, and by peeling loose bark from dead logs and stumps. Please be aware that centipedes are mildly venomous and the larger specimens (>.5 in.) can bite, so pick them up with forceps or by putting a container directly in front of them as they run. The bite amounts to little worse than a small sting.

If you collect them, please preserve them in isopropyl or ethyl alcohol, along with a label containing the date, the site

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location (township is specific enough), and the collector's name. Then you can send them to the address below. Alternatively, you can give the specimens to Charlene Donahue at the MFS Entomology Lab in Augusta and she will get them to me. Charlene also has vials you can use for preserving the centipedes.



The underside of the head and forebody of a common Maine centipede, *Bothropolys multidentatus* (Newport). Note the large fangs, which are used to inject venom into their invertebrate prey. Photo by Joseph DeSisto.

Centipedes are an entire class of organisms, so it is perfectly okay to send many specimens from the same site. I will be accepting specimens for the foreseeable future, although after the end of this field season (2014) please contact me to verify the address.



The adventive European species *Lithobius forficatus* (L.) is one of the most common centipedes in the Northeast and adapts readily to human-disturbed habitats. Microscopic examination can be necessary to distinguish this from the native *Bothropolys multidentatus*. Photo by Joseph DeSisto.

If you have any questions about this project, or about centipedes in general, please feel free to contact me by e-mail at joseph.desisto@uconn.edu. Thank you for being a part of this effort to expand our knowledge of an understudied yet important and fascinating group.

Joseph DeSisto
Biological Collections
Dept. of Ecology and Evolutionary Biology
University of Connecticut Unit 3043
Storrs, CT 06269-3043

☛ [Check out Joseph's Centipede Blog at
http://theweeklychilopod.wordpress.com/](http://theweeklychilopod.wordpress.com/)

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Thorncrag Nature Sanctuary and USM Atrium Art Gallery Field Trip: Saturday, May 17th

The first MES field trip for 2014 is set for Saturday morning May 17th from 9-12 at Thorncrag Nature Sanctuary with a picnic and more collecting at the USM Atrium Art Gallery from 12-2 p.m. Ant expert Aaron Ellison from the Harvard Forest, will be collecting with us so come prepared to learn about ants and collecting them.

Thorncrag normally does not allow collecting of any kind in the Sanctuary but they have made an exception for MES in exchange for a list of what we find.

<http://www.stantonbirdclub.org/thorncrag.htm>

The USM Atrium Art Gallery is showing an insect related exhibit Ant Farm: At the Nexus of Art and Science and we have set up the day so that hopefully some of the public will meet with us for a picnic, collecting near the gallery and a visit to the exhibit. At lunch time the Ant Girls will talk about the exhibit and Aaron Ellison will give a talk on ants – the art and science of ants all in one day! The gallery curator is MES member Robyn Holman.



One of the early attendees at the opening of *Ant Farm: At the Nexus of Art and Science* at the Atrium Art Gallery on April 11th. Photo provided by Robyn Holman.

Dress for the weather and biting insects, bring collecting gear, a camera, enthusiasm and a lunch. *Please note that* no dogs are allowed at Thorncrag, including in the parking lot.

Here's a link to a great review of the ant farm art exhibit that was in the Portland Press Herald:

<http://tinyurl.com/lmkhofb>

GETTING TO THORNCRAG NATURE SANCTUARY

FROM I-495 - MAINE TURNPIKE, NORTH & SOUTH

Take exit 80 in Lewiston and head west on Rte. 196 (Lisbon Street).

Turn right onto East Avenue. (the Promenade Mall will be on your left, Martel School will be on your right). Take East Avenue to the intersection of Sabattus Street (Rte. 126). You will see Rite Aid on the opposite left corner.

Turn right onto Sabattus Street and continue until you see Hannaford's Supermarket on the left.

Turn left there onto Highland Spring Road at the stone pillar with a Thorncrag sign on top.

At the end of Highland Spring Road, turn right, and the Sanctuary parking area will be on your left.

FROM THE SOUTH and WEST (Gray, Poland & Minot)

Approach Lewiston along Court Street in Auburn, and cross into Lewiston over the Androscoggin River at Great Falls onto Main Street.

Head north on Main Street (Rt. 202)

Bear right onto Sabattus Street (Rt.126. You'll see a building with gold letters saying "287 Main Street" at that intersection. The Kora Temple will be on your right)

Stay on Sabattus Street until you come to Hannaford's Supermarket on the left.

Turn left there onto Highland Spring Road at the stone pillar with a Thorncrag sign on top.

At the end of Highland Spring Road, turn right, and the Sanctuary parking area will be on your left.

To get from Thorncrag Bird Sanctuary to Atrium Art Gallery

Head south on Highland Spring Road toward Sabattus Street
0.1 mi / 20 s

Turn right onto Sabattus Street (0.4 mi / 1 min)

Take Farwell Street to Webster Street (0.6 mi / 2 min)

Continue on Webster Street to Lexington Street (1.3 mi / 3 min)

Continue on Lexington Street to Westminster Street (0.6 mi / 2 min)

Take the 1st left onto Lexington Street (0.4 mi)

Take the 1st right onto Westminster Street

Destination will be 0.2 miles down on the left

Lewistin-Auburn College
51 Westminster St, Lewiston

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The Atrium Art Gallery exhibit on ants opened on Friday, April 11th, to a respectable crowd that was sometimes so dense it was hard to get around to see the many artworks on display. Even the gallery itself is now labeled the "Atrium ANT Gallery!"

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June Field Day at Ordway Grove and Witt Swamp, Norway – Saturday, June 14th

The Ordway Grove is a 7-acre old-growth white pine-red oak stand in the town of Norway, deeded to the Twin Town Nature Club in August of 1931 and maintained since then as a park and nature preserve. A 1/2-mile walking loop trail through the Grove will take us through some magnificent, giant pines and other ancient trees, before we come to the shore of Penneesseewassee Lake. The site has not been logged in at least 300 years, if ever, and has some of the largest trees, if not *the* largest trees, in the state of Maine.

We'll meet at the entrance to the right-of-way (we'll have to walk through private land to get to the site) on Pleasant Street on the western end of Norway at 10:00 a.m. The TTNC's John Crumpton and/or Pixie Williams will meet us at the site; those of you who went to the Jughtown Plains trip in 2012 would have met Pixie already. Bring your lunch and your collecting gear, and we'll have a grand time!

To get to the site, one needs to get onto Route 117 through Norway - and there are many different routes to this end. If coming into town from the east (e.g., from Lewiston), Pleasant Street is a right-turn at the end of the business district, 1/2 block past the Universalist Unitarian Church (which will be on your right also). If you're coming from the west, it'll be the second left turn past the end of Penneesseewassee Lake (the first will be Packard Avenue).

The entrance area has room for parking for two vehicles, and is 2-1/2 blocks up Pleasant Street, on your left. Roadside parking is OK, but given the narrowness of the road, it would
(cont. on next page)

June Field Day in Norway (cont.)

probably be best for those coming to all park on the west (i.e., Ordway Grove) side of the road, so we don't overly constrict the roadway. If you drive up Pleasant Street until you reach Hayden Avenue, you've gone too far - turn around and come back!



Google Earth image of the Ordway Grove in western Norway, on the eastern end of Penneesseewassee Lake, with local streets labeled.

M.E.S. signs will be out from the intersection of Pleasant Street with State Route 117 through the heart of town, as well as at the entrance to the Grove from Pleasant Street. You can also check the site out as well at the Maine Trail Finder web site at

<http://www.mainetrailfinder.com/trail/ordway-grove-trail/>



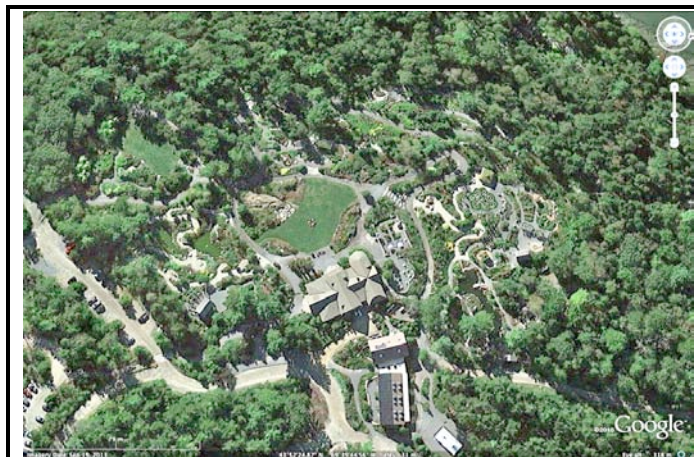
Trails through Witt Swamp are elevated where necessary to protect the underlying wetland environments.

(Photo from the Western Foothill Lands Trust, via <http://www.mainetrailfinder.com/trails/trail/witt-swamp-trail>)

Moths in the Moonlight

Coastal Maine Botanical Gardens is celebrating the theme "Pollinators!" this year. Along with MES, we're planning a program called "Moths in the Moonlight" to observe moths in our Gardens, and would like to invite MES members to help lead this program and share their moth expertise.

The program will be at the Gardens on Friday evening, June 27 from 8:00 - 9:30 p.m. One of the garden staff will also be there to point out night-blooming flowers planted to attract moth pollinators.

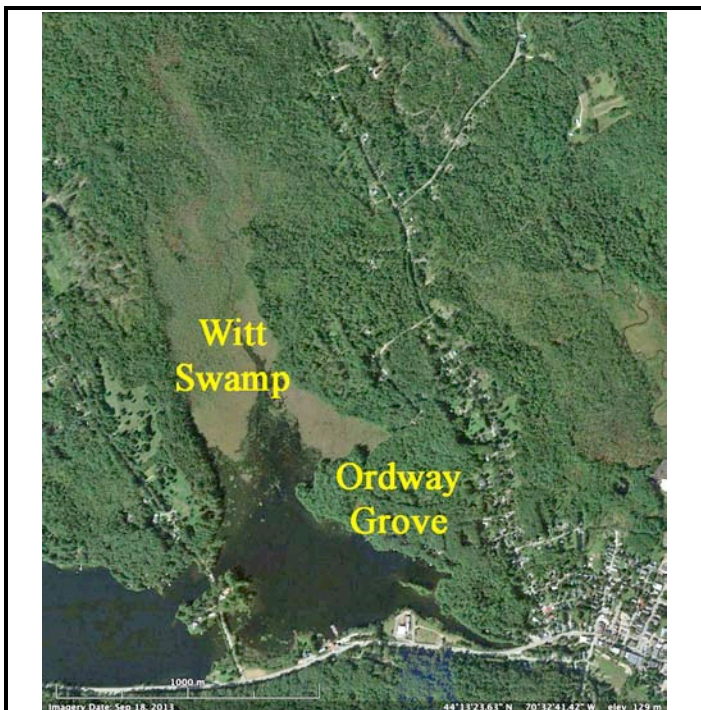


This highly reduced Google Earth image cannot do justice to the intricate landscaping at the Coastal Maine Botanical Gardens, sponsoring the "Moths in the Moonlight" walk on Friday evening, June 27th.

Please contact Charlene Donahue at charlene.donahue@maine.gov or 485-0960, if you're interested in helping her lead this program and introduce others to 'mothing'. (There is a fee for this program, but MES members will get in free, so **be sure** to let Charlene know you are coming!)

Bring a headlight or flashlight - and collecting gear, lights/bait if you wish. Driving directions are to be found on the next page.

(continued on next page)



Google Earth image showing the relationship between the Ordway Grove and nearby Witt Swamp.

In the afternoon, following lunch, we'll go up the road to the Witt Swamp, which is a preserve of the Western Foothills Land Trust. You can see and read much more about this site at <http://www.wflmaine.org/witt-swamp.html>.

Contact person: Bob Nelson (426-9629; or by e-mail at BeetleBob2003@yahoo.com).

Moths in the Moonlight (cont.)

Directions to Coastal Maine Botanical Gardens
132 Botanical Gardens Drive, Boothbay, ME
<https://www.maine gardens.org/home>

From southern and western Maine: Follow signs to the Boothbay region. Soon after crossing the Wiscasset bridge on Route 1 North, turn right onto Route 27 South towards Boothbay. After 9.3 miles, bear right at the Boothbay monument, across from the town common and gazebo. Go straight at the stop sign immediately ahead. After 0.25 miles, turn right onto Barters Island Road. The entrance to the Gardens is about 1 mile ahead, on the left.

From points east: Follow directions to Route 1 South. Continue on Route 1 through Damariscotta and Newcastle. In Edgecomb, turn left onto Route 27 South towards Boothbay. Follow the directions above.

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Summer Workshops at Eagle Hill Announced

The 2014 summer seminar and workshop series in natural history has been set at Eagle Hill in Steuben, and includes a number of sessions of potential interest specifically to M.E.S. members.

For those who wish they could have attended the Winter Workshop, or who were there and can't wait to get more, Drs. Alison Dibble and Frank Drummond from the University of Maine will be co-teaching a workshop on Native Bees as Pollinators from July 20th-July 26th.

The next week, July 27th-August 2nd, Dr. Steven Burian of Southern Connecticut State University will be teaching a session on Applied Aquatic Entomology: The EPT Taxa – Ephemeroptera, Plecoptera and Trichoptera. The following week (August 3rd-9th), Dr. Burian will be following this up with a more generalized workshop on Natural History of Freshwater Invertebrates.

Dr. Matthias Foellmer of Adelphi University in New York will be teaching a course on Spiders: Identification, Diversity, Ecology and Biology, in the week of August 10th-16th.

A major team effort comes to bear the week of August 17th-23rd, with Michael Gates, Dr. Matthew Buffington and Robert Kula of the USDA-ARS Systematic Entomology Lab at the Smithsonian, along with Dr. John Lill from George Washington University, Dr. James Pitts of Utah State University, and Dr. David Wahl of the American Entomological Institute. They will be teaching a program on Wasp, Bee and Ant Collection, Identification and Natural History, with an emphasis on parasitic wasps.

A full list of all seminars and workshops for the summer at Eagle Hill can be accessed at

<http://www.eaglehill.us/programs/nhs/nhs-calendar.shtml>

or by clicking on their link in the table on the M.E.S. web page, under "Research Resources, Institutes, Publications, etc." The web site at Eagle Hill also has information on program costs, accommodations, etc.

If you received one of the flyers on these programs from Eagle Hill that also showed a workshop on Odonates scheduled for July 6th-12th, please note that unfortunately, that workshop has had to be withdrawn. They are hoping to be able to offer it in 2015.

Background: The Eagle Hill Institute is located on the densely forested summit of Eagle Hill, the highest part of Dyer Point, the peninsula between the Schoodic Point section of Acadia National Park and Petit Manan National Wildlife Refuge. Trails lead from the summit of Eagle Hill to a number of overlooks offering inspirational views of the coast of Maine, with its rocky and evergreen-lined shore and its

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many islands, bays, and peninsulas. This setting is very conducive to scholarly and educational pursuits.

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2014 Maine Pollination Workshops

During the spring and summer of 2014, researchers from the University of Maine are hosting a series of free pollination workshops for fruit and vegetable growers. These workshops are supported by a grant from the Northeast Sustainable Agriculture Research and Education (SARE) program. The workshops will provide instruction on assessing bees' impact on fruit set and identifying wild bees. They will also include information on strategies to improve habitat for wild bees.

For more information, contact Kourtney Collum at kourtney.collum@maine.edu. In case of inclement weather, visit the following website for more information: <http://mainepollinationworkshops.weebly.com/>.

No preregistration is required for these workshops.

Pollination Workshop for Apple Growers

Tuesday, May 20, 2014 from 1:00 p.m. to 3:00 p.m.

Rain date: Thursday, May 22, 2014 from 1:00 p.m. to 3:00 p.m.

Highmoor Farm, UMaine Experiment Station, 52 U.S. Route 202, Monmouth, Maine 04259

This workshop is designed specifically for apple growers.

Pollination Workshop for Lowbush Blueberry Growers

Tuesday, May 27, 2014 from 4:00 p.m. to 6:00 p.m.

Rain date: Tuesday, June 3, 2014 from 4:00 p.m. to 6:00 p.m.

Seven Tree Farm, Route 235, 2740 Western Road, Warren, Maine 04864

This workshop is designed specifically for lowbush blueberry growers.

Pollination Workshop II for Lowbush Blueberry Growers

Wednesday, May 28, 2014 from 4:00 p.m. to 6:00 p.m.

Rain date: Wednesday, June 4, 2014 from 4:00 p.m. to 6:00 p.m.

Blueberry Hill Farm, UMaine Experiment Station, 1643 Route 1, Jonesboro, Maine 04648

This workshop is designed specifically for lowbush blueberry growers.

Pollination Workshop for Squash and Pumpkin Growers

Monday, July 14, 2014 from 5:00 p.m. to 7:00 p.m.

Rain date: Thursday, July 17, 2014 from 5:00 p.m. to 7:00 p.m.

Highmoor Farm, UMaine Experiment Station, 52 U.S. Route 202, Monmouth, Maine 04259

This workshop is designed specifically for squash and pumpkin growers.

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Want 'Em All? Sample Low and Tall!

A recent paper* reported the results of a comparative study of insect sampling in northeastern pine forest canopy and in the understory. Statistical analyses of the results (8463 insects in total sampled) indicate that both trap positions sampled highly similar communities. However, traps in the canopy yielded different ratios between taxa than those in the understory. The conclusion was that although understory sampling is the more common approach utilized in forest surveys, sampling at different vertical placements within the forest could yield additional species.

* Dodds, Kevin J., 2014. Effects of trap height on captures of arboreal insects in pine stands of northeastern United States of America. *Canadian Entomologist*, v. 146, p. 80-89.

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Knox County Butterfly Count –July 5th

After a successful inaugural count last year, I am pleased to announce the second annual Knox County butterfly count. The count will take place on July 5, starting at 8:30 a.m. at the Camden Snow Bowl, which is the first location that we will visit. We will end at the Sweetgrass Winery Farm in Union (wine-tasting optional). The count will likely last until about 4:00 p.m., although one need not stay for the entire count. The cost is \$3 per person, which goes to NABA (North American Butterfly Association). If you are interested in participating (no experience necessary), please send me an e-mail to that effect. Pre-registration is important so that I can notify you of any additional information or last-minute changes.

Thanks!

Roger Rittmaster
42 William Glen Drive
Camden, Maine 04843
207-470-0445 (home)
919-491-5440 (cell)

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August Field Day, at Reclaim Plains in Old Orchard Beach Saturday, 16 August, 2014

Join us at the Reclaim Plains of Old Orchard Beach in York County on August 16th! This area features a large grassland, similar to the Kennebunk Plains, that hosts several uncommon wildflowers and birds. There are also many woodland trails that have a mix of conifers and broadleaved trees. Even though one often encounters an occasional bit of man-made trash, it certainly doesn't stop a variety of insects from inhabiting this unique environment! Bring a bag lunch; also be aware that there are no bathroom facilities at the Plains, but there is a Hannaford's about a mile away.

Directions: From either north or south on I-95, take exit 36 onto route I-195. Take exit 2B (Saco/Portland). Continue onto Route 1 and take a right at the first light (Ross Rd.). Go 0.8 miles, and a small parking lot will be on the right.

There's an old, dilapidated sign that says Reclaim Plains. If you get to Dunegrass Golf Club, you've gone too far. Coordinates: 43°31'16.60"N, 70°25'0.35"W

For further information, e-mail Brandon Woo at magicicadaseptendecim@gmail.com, or call Domenica at (207) 967-6159.

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Have An Interesting Insect Story to Tell?

If you have an interesting entomological anecdote, collecting story, or bit of advice to share or pass along to the M.E.S. community, we'd love to hear from you! Good book reviews are also always welcome – letting others know of new volumes that may have appeared recently that they didn't know about.

Just e-mail your contribution to Bob Nelson (BeetleBob2003@yahoo.com). We're always looking for good materials to fill the next issue of the newsletter!

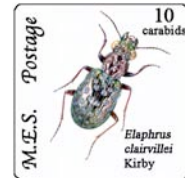
COMING M.E.S. EVENTS in 2014:

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| 17 May | Ant Picnic, Lewiston (in conjunction with "Ant Farm" at the Atrium Art Museum, Lewiston; contact persons: Charlene Donahue and Robyn Holman; see story, p. 5) |
| 14 June | Ordway Grove and Witt Swamp, Norway (contact person: Bob Nelson; see p. 6) |
| 18-21 July | Entomological BioBlitz, Acadia National Park (see story, p. 4) |
| 16 August | Reclaimed Plains, Old Orchard Beach (contact people: Domenica Vacca and Brandon Woo; see story at left) |
| 10 September | Bug Maine-ia, Maine State Museum, Augusta (contact person: Joanna Torow) |
| 13 September | M.E.S. Annual Meeting, Clinton |

(See <http://www.colby.edu/MES/> for more detailed information; new information on any event will be posted as it is received.)



Maine Entomological Society
c/o R. E. Nelson
Department of Geology
Colby College
5804 Mayflower Hill
Waterville, Maine 04901-8858 U.S.A.



Please visit our website at <http://www.colby.edu/MES/>

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