

# The Maine Entomologist

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

The Official Newsletter of the Maine Entomological Society

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## PRESIDENT'S CORNER



BY HILLARY MORIN PETERSON

Dear MES Members,

This past summer has been flying by and has been packed with MES events! In May, many MES members came for an exciting two-part aquatic insect day, which began with a training for anyone interested in the Stream Explorer's project, and ended with a search for the ringed boghaunter, *Williamsonia lintneri*. While we did not find *W. lintneri*, we did find an adult *Williamsonia fletcheri* (Ebony boghaunter), and many, many exuviae of other dragonfly species as well (and we saw a gorgeous water snake!). See Charlene's writeup on page 2 for more about this great day.

Thank you to Tom Schmeelk for hosting the moth night in Dresden, to Dana Michaud for organizing the field day at Viles Arboretum, to Pete Darling for organizing the field day at Field's pond, and to Anna Court and Tinia Graham for organizing the upcoming (as of writing this) field day at Hirundo Wildlife Refuge.

Our Facebook page, *Maine Insects*, has been garnering more attention lately, with a wonderful recent write-up in the Maine Sunday Telegram by Bill Nemitz. The page has been growing rapidly too. We currently sit at 3,400 members with 187 new members in July alone. This page has led to some new people finding out about MES, with a

couple of new attendees at each event this summer. So exciting!

Just a reminder to MES members that the Stream Explorer Kit is still available for rental, and that we are actively seeking someone who would like to run the MES blog on the website. Happy bugging for the rest of this warm season!

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## AGENDA for October 2nd Annual Meeting

Treasurer's Report

Audit books

Minutes of 2020 annual meeting

Election of MES officers for 2022

President

Vice-president

Treasurer

Secretary

Two Members-at-large

Update on Facebook and Web Activity

Shall we increase price for life memberships?

Activities 2022

For sure

Winter workshop

January

Work day(s) at ME State Museum annex

Maple syrup and insects

March

Annual Meeting

October

Possible other activities

Insect Pinning Workshop

Writing workshop (previously postponed due to

Covid) – poetry, articles, journal

Outreach Common Ground Fair

Edith Patch Event(s) ?

Sharing insects events

Other

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**Stream Team Training and *Williamsonia*  
Boghaunter Training  
Holt Pond, Bridgton May 22, 2021  
by Charlene Donahue**

The May MES Field Day was great. It was different from most of our field days in that the focus was on learning how to sample streams to help determine water quality and then how to search for a rare dragonfly. The day was hot and humid but that did not stop us from swinging dip nets in the stream and aerial nets in the bog!



**Dip-net sampling for aquatics at Holt Pond.**  
- Kate Wilcox photo

Representatives from the Audubon Society, Lakes Environmental Association, and the Department of Environmental Protection all came to help. The materials for identifying aquatic insects are excellent and having experts there to confirm identifications was really key.

After lunch we trekked into the bog with Mark Ward to look for the Ringed Boghaunter (*Williamsonia lintneri*). We did not find it, but saw a closely related species, the Ebony Boghaunter (*Williamsonia fletcheri*), and got an eye for what we were looking for and the type of habitat where it would be found.



**Nina Beckwith, Charlene Donahue, and Hillary Peterson identify aquatics collected at Holt Pond.**

- Kate Wilcox photo



**Searching for the elusive Ringed Boghaunter in the bog margin at Holt Pond.**

- Kate Wilcox photo

Hopefully some of the people trained will be out sampling streams this summer and taking others with them. Hillary Peterson has a stream sampling kit for anyone who wants to borrow it. And next spring we can look again for the bog haunters.



**Solitary bee nests at Holt Pond.** - Charlene Donahue photo

(continued on next page)

**Holt Pond (cont.)**

A serendipitous find at the Preserve was a large colony of solitary bees just beyond the parking lot. We all tramped right through them getting to Holt Stream, but the wasps did not seem to care. There were at least two, and maybe more, species of solitary bees - I saw two *Andrena* spp. There were also Pompilidae (spider hunter wasps) and parasitic flies.



Two species of *Andrena* at Holt Pond.

- Charlene Donahue photos



A pompilid wasp drags a spider that it has immobilized with a sting, to stock a nest where she will lay an egg. When the egg hatches, the larva will eat its way through the larder that its mother stocked in this way, pupate and emerge as a new adult.

- Charlene Donahue photo

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**Literary Observations on Fields Pond**

On the way back from the July 24th Field Day at the Fields Pond Audubon Center in Holden, a small cadre of enthusiastic participants decided it would be a great idea for everyone who'd attended to write a poem or haiku to commemorate the occasion, to be published in the August newsletter.

Why haiku?

Birch leaf feeders started it all. First I (Charlene Donahue) noticed the leafminer damage and showed it to the insect enthusiasts nearby. At least three birch leafminers are common in Maine, and the mines we saw looked like those of *Fenusella nana*. The miners are sawflies in the family Tenthredinidae. Then I saw a leaf-folder that had neatly folded over the edge of a leaf and stitched it down with silk, perhaps a *Parornix* moth larva, in the family Gracillariidae. And finally we found a leaf-tying caterpillar holding two leaves together with silk. One possible candidate making this shelter is *Ortholepis pasadamia*, a Pyralid moth.

There are also birch leaf-rollers. And someone said, "Miners, folders, tie-ers, and rollers; that sounds like it should be a song." None of us were music composers, so someone else suggested a poem, and then another said we could do haiku! And so the idea to compose haiku about the field day was born.

While we're not intending to serve as a venue for literary criticism (e.g., traditional Haiku *never* has titles), below are the offerings that have been submitted. Enjoy!

For those who would like to explore this literary genre more fully, there's a good introduction to be found at <http://www.haikuworld.org/begin/mdwelch.apr2003.html>.

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**Happy Birthday To Us!**

June, 2022, will mark the 25th anniversary of the 1997 founding of the M.E.S. Plans are already afoot for a special birthday bash at Viles Arboretum in Augusta, which was where it all started.

A full announcement will be in next May's newsletter, but keep this in the back of your mind if you're looking to plan any long-distance traveling next year, and don't want to miss it!

**Saturday Haiku**  
**by Dana Michaud**

*Roar planes overhead pass,  
below meadows insects thrive,  
metamorphosis!*

**by Cathie Murray**  
*Sunny dogbane field.  
Waiting, in a leaf's shadow,  
Beetle, bejewelled.*

**Birch Feeders**  
**by Charlene Donahue**  
*Wind rustles birch leaves  
Miners, tie-ers and folders  
Grow fat inside them.*

**Field Day**  
**by Brian Mason**  
*This is a haiku  
It is about a field day  
We found lots of bugs.*

**by E. L. Merry**  
*Summer warms the field.  
Butterfly drinks the nectar.  
Ambush hides below.*

**by E. L. Merry**  
*Droplet on the leaf  
Beetle locked inside, can't escape.  
Putz releases beetle.*

**Untitled**  
**by Kathy Claerr**  
*Insect on Birch tree  
Does larva fold, roll or tie?  
Helps identify!*

**What's in a word?**  
**by Kathy Claerr**  
*Rock and roll mem'ries  
Beatles, Byrds, Phish and Monkees  
Nature remembered*

**by Nina Beckwith**  
*dragons and damsels  
flying on crystalline wings  
faeries of old tales*

**by Nina Beckwith**  
*Oh hocus-pocus!  
My camera won't focus.  
On me is jokus.*

**by Anna Court**  
*Insect flight like song  
Or poetry without words  
Lands here and then there.*

**Observations**

**by Bob Nelson**

*So many insects,  
butterflies and dragonflies,  
so few Carabids!*

\* \* \* \* \*

**September 11th Field Day:**  
**CHANGE OF VENUE to Burnham!**  
**by Bob Nelson**

The September 11th M.E.S. field day was originally planned for Cherryfield, in Washington County. However, that's a *long* way for folks to go.

SO, we have an alternate site that should make people a little more comfortable with the "commute." It's the Albert Sousa Preserve (<https://www.sebasticookrft.org/albert-j-sousa-preserve>) in Burnham (Waldo County). Since we've had precious few field days in Waldo County, this could also be a useful exercise. We'll meet at the Preserve kiosk.

The Sousa Preserve is part of the Sebasticook Regional Land Trust system, so I did promise the steward for this particular parcel that we (I) would provide him with a list of all insect species that we observe and/or collect, as we usually do. I think the SRLT folks are relatively new to this, and the steward is, in his word, "Psyched!" that we're going to do this for them.

The parcel only came into their system in 2013, and has no established trails, no restrooms, no real parking lot, and just a kiosk at the roadside. They DO have what appears to be a small stand of trees planted - which I presume are hybrid American chestnuts (based on a posting on their kiosk). There's room for 3-4 cars to park on the roadside, but we may also be able to park at a neighbor's - a private residence in what used to be the old elementary schoolhouse - as long as we don't block them in.

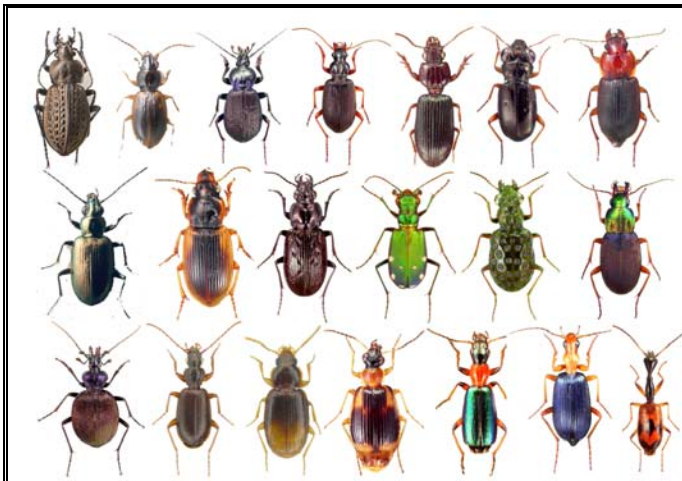
The Preserve includes an old Belfast-Moosehead Lake Railroad thoroughfare which is no longer in operation (and which has a bridge over the Sebasticook River), as well as open meadows, wetlands, closed-canopy mixed forest, and frontage on both a small brook (Twentyfivemile Stream) and the Sebasticook River itself. So, there are plenty of varied habitats!

To get here from the south, take Exit 138 from I-95. At the end of the offramp, turn right. Stay on this road until you come to a stop sign and "T" intersection. Turn left and go ~5.7 miles, until you see a sawmill on the left. Turn right onto the Troy Road, and the kiosk will be about ¼ mile down this road, on your right.

To get here from the north, take the Pittsfield exit from I-95 (Exit 150). Turn left at the end of the offramp and go 1.2 miles into downtown Pittsfield; turn right at the stoplight onto Route 11 (Main Street). Go about 7.3 miles until you get to the Kennebec Lumber mill complex in "downtown" Burnham, and turn left onto the Troy Road. The kiosk is about ¼ mile down the road, on your right.

GPS coordinates: 44 deg., 41.43'N; 69 deg., 25.39'W.

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Just a sampling of the diversity of species in the Carabid fauna of Maine; actual lengths range from 2-35 mm. *Elaphrus olivaceus* is the second species from the right in the second row. (Most photos by Henri Goulet, CNC)

### WHY do I like Carabids So Much? by Bob Nelson

Many of us have our own favorite groups of insects - whether they be moths, butterflies, dragonflies, wasps, ants, or whatever. More than a few people are fascinated by all beetles.... and I have to admit, I find the diversity here to be downright incredible and fascinating - if not overwhelming!

As some MES members know, I came into entomology via a "back door" route in geology. I used the bits and pieces of insects (mostly beetles), as well as pollen and plant remains like seeds, that I found in sediments exposed in stream banks and other excavations to reconstruct past environments, and from that, gain an understanding as well of past climates.

What I found fascinating, and incredibly useful, was that many species of beetles have extremely restricted habitat or food requirements. Consider this description by the late, great Carl Lindroth of the habitat for the Carabid species *Elaphrus clairvillei*, which I've collected here in Maine and also found in "ice age" deposits both here and in Washington State: "This species avoids exposed places and prefers shores half-shaded by trees and bushes or with high, dense *Carex-Amblystegium* vegetation, with bare spots of mud or organic detritus in between. Always on wet, soft soil, but often in some distance from the water.\*"

How specific can you be? Change that habitat even slightly, and you'll get a different species, if there are any *Elaphrus* to be found at all. They don't, in my experience, like coarse sand or gravel. But other taxa do! However, having 30-50 species you can identify in an assemblage, and having this kind of detail about the habitats for most if not all of them, can give you a very accurate overall picture of the environment in which they lived - whether it was 700 years ago (like an assemblage I studied with students along the lower Sandy River in Starks) or 50,000 years ago, like some deposits I've studied in northern Alaska. And a bucketful of organic-rich silt from a stream deposit can have bits of hundreds of individual beetles in it!

In order to identify the fossil bits and pieces, you need a good reference collection. And so, in 1979, I started assembling one .... and I'm still at it! I've found the modern collecting, particularly in wetland environments, to be a fascinating end in and of itself, as it was these wetland environments in particular that produce the deposits that I started out studying. Species diversity here is also amazing. I've collected multiple times in two adjoining or closely-spaced wetlands, sometimes just on the opposite sides of a road, and found major differences in the species to be found in one compared to another, even when the wetlands appeared to be quite similar.

Carabids can also be incredibly gorgeous. The *Elaphrus clairvillei* I mentioned is maybe 6-7 mm long (about ¼ inch), and is a deep bronze in color, like an aged penny or copper roof that hasn't yet started greening up. But on each of its elytra (the hardened forewings on beetles) are maybe a dozen indented "punctures" that are colored bright metallic purple. A closely related species, *E. olivaceus*, is emerald green, with less-pronounced punctures that are more of a blue-violet color (see photo).

In 2014, when we published a synthesis paper on the Maine Carabid fauna\*\*, there were 425 species we knew to be found in the state. This is now at least 430, including *Bembidion iridipenne*, a species only described in 2006 by Yves Bousquet and M.E.S. member Reggie Webster, and for which I collected the first known Maine records on M.E.S. field days in 2016 and 2020. Another species, *Agonum ferreum*, was also first collected in the state on M.E.S. field days - along a creek by Kathy Claerr's home in 2017, and on a 2020 field day in Buckfield. Brandon Woo has also found at least two species not previously known in Maine, in his collecting in the southern part of the state: *Calleida purpurea* and *Scarites subterraneus*.

So, there's always something new to find, and it's a great excuse to be out and enjoying the Maine environment!

#### References:

\* Lindroth, C. H., 1961: The Ground-Beetles (Carabidae, excl. Cicindelinae) of Canada and Alaska, Part 2. *Opuscula Entomologica, Supplementum* 20: p. 113.

\*\* Dearborn, R. G., R. E. Nelson, C. Donahue, R. T. Bell, and R. P. Webster, 2014: The Ground-Beetle (Coleoptera: Carabidae) Fauna of Maine, U.S.A. *Coleopterists Bulletin*, vol. 68, no. 3, pp. 441-599.

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Back when Chuck Lubelczyk edited the M.E.S. newsletter, he regularly featured a "Bug Mug Shot" that provided a venue for people to write about one of their favorite insects in the Maine fauna. If **you** have a special insect or group you'd like to share with others, submit your piece for the Newsletter! We can find needed photos.

## M.E.S. Members Publish Important Paper on Browntail Moth

Four MES members (Karla Boyd, Frank Drummond, Charlene Donahue and Ellie Groden) have just published a paper on browntail moth in Maine in the journal *Environmental Entomology*.

This is the first published paper on browntail research exclusively in Maine and it addresses current factors affecting populations. The University of Maine and the Maine Forest Service combined resources to pay for open source publishing so that anyone can access it. The paper can be found on the Maine Forest Service website at: [https://www.maine.gov/dacf/mfs/forest\\_health/invasive\\_threats/browntail\\_moth\\_info.htm#research](https://www.maine.gov/dacf/mfs/forest_health/invasive_threats/browntail_moth_info.htm#research). Bob Nelson can also provide a pdf copy.



Browntail moth adults, which were abundant in parts of Maine in July of this year. - Photo by Jan Samanek, Phytosanitary Administration, Bugwood.org

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### Annual Meeting: October 2nd in Clinton

Join us on **Saturday, October 2nd**, for this year's M.E.S. Annual Meeting, at Bob and Nettie Nelson's home in Clinton.

Minutes of the 2020 Meeting were published in the November, 2020, issue of the newsletter, on pp. 2-3. Please be ready to bring any errors to our attention, since one of the first agenda items will be to confirm to accept (or amend) these minutes.

If the weather's good, we'll meet outside; if not so great, we should be able to get everyone inside. Hopefully, the Covid surge will be behind us, but anyone who feels more comfortable doing so can certainly wear a mask. If it looks like it could be a good day for an outdoor meeting, please bring your favorite folding lawn chair (though we do have maybe a dozen here for those who may not have one).

The grounds will be open for collecting, as usual, with some changes since last year as to habitats, and we'll try to have pathways cleared through the brush down in back for

exploration. Our perennial sunflowers should be in full bloom at this time, and are usually a haven for late-season Lepidoptera, Hymenoptera, Diptera and other nectar and pollen feeders.

We'll have oven-roasted chicken and vegan chili available, and invite everyone to bring something else to add to the regular pot-luck luncheon that precedes the business meeting.

We'll be ready for guests by 10:00 a.m., so people can spread out across the fields and forest for collecting. Lunch will begin around noon, and the business meeting will start at ~1:30. Dana Michaud will be in attendance, so this'll also be a good opportunity to renew your membership for 2022 (hint!).

Please do let us know if you're planning to attend to help with our planning; preferably via e-mail at [BeetleBob2003@gmail.com](mailto:BeetleBob2003@gmail.com); or by phone at 207-426-9629. Do expect to leave a message, since we're getting so many robocalls these days we rarely answer the phone right off.

Signs will be posted at the ends of the Clinton off-ramps from I-95 (Exit 138) to guide you to the meeting. GPS coordinates for the end for the driveway are 44 degrees 41.94'N, 69 degrees 33.56'W. Please contact Bob if you need directions from another route.

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### Downsizing – insect books and paraphernalia available at annual meeting

I am reducing the amount of “stuff” I own. This may be an opportunity for you to score an insect book or cool insect-related item from my stash. I am thinking a raffle at the Annual Meeting for some of the items would be fun, with proceeds to benefit MES.

Types of items: General audience books, pictures, pitchers, toys, maybe some of my bling jewelry. Not sure what else will end up in the pile by October...

- Charlene Donahue

### COMING M.E.S. EVENTS in 2021

(See the MES web site at

<https://www.maineentsociety.org/events> for additional information on any event, which will be posted as soon as it's received.)

**August 7:** Hirundo Wildlife Refuge, Old Town/Alton (Penobscot County). Coordinators: Bob Nelson and Tina Graham.

**September 11:** Burnham (Waldo County) - Albert J. Sousa Preserve (see p. ). Coordinator: Bob Nelson. (see p. 4)

**October 2:** MES Annual Meeting at Bob & Nettie Nelson's home in Clinton. Collecting from 10:00 - noon, then "pot luck" lunch, business meeting @ 1:30 p.m. Coordinator: Bob Nelson. (see note at left)

*The Maine Entomologist* is the quarterly newsletter of the Maine Entomological Society. Dues are \$15 per year, or \$18 if paid through our web site (<https://www.maineentsociety.org/join>). Checks should be made payable to the M.E.S. and sent to Mr. Dana Michaud, M.E.S. Treasurer, at 3 Halde Street, Waterville, ME 04901-6317 (e-mail: [djmichaud1@gmail.com](mailto:djmichaud1@gmail.com)). If you're unsure about your dues status, please contact the Treasurer. *Individual articles reflect the opinions of the authors and mention of any specific commercial products or businesses should not be construed as formal endorsement by the M.E.S. of any such product or business.*