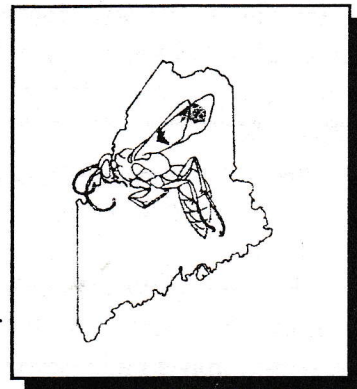


Maine Entomological Society

Newsletter 1998

Number 3, Summer

A FORUM FOR STUDENTS, PROFESSIONALS, & AMATEURS
IN THE PINE TREE STATE



From the President

Our fourth meeting of the MES was held at Unity College on June 6th. Doug Fox, an instructor there, was kind enough to do the ground work and get us a room in which to meet. Doug also brought along a couple of young enthusiasts to liven up the group. Thanks Doug! We had a great meeting in spite of threatening weather with ten adults and three children in attendance. After our business meeting, which lasted about an hour, we had a great field trip in the fields and woods around the back side of the campus. I hate summaries but will now attempt to highlight four major foci of the meeting discussion:

- Keep the newsletter going strong with four issues per year. As we are stressing networking and interaction, we will update our directory annually.
- It appears that the group likes the idea of a one page feature article and a series of short quipsy articles on neat stuff (ie, new records, reviews, etc.).
- There appeared to be a lot of interest in how to reach out to schools so the thought was to provide information (such as web sites, etc.) and/or materials to those interested in giving talks or leading groups. Kathy Murray and Gail Everett will pursue this and try and provide direction here. All other contributions are gratefully accepted.
- Interaction with other groups was again stressed. Both Sam Ristich and Gail Everett suggested that someone contact groups such as the Sorrento Scientific Society (Bill Townsend - *Guillemot*) regarding possible coordination of information or at least making him aware of our group. I agreed to touch base with him. The Vermont

Entomological Society has now agreed to recognize our group through Dr. Ross T. Bell, and we should be hearing more from them.

We have had a couple of inquiries from the media concerning our group activities. Don't pass up such an opportunity if it comes your way. Such things fall right in line with our goal to bring the fascinating and enjoyable side of entomology to the public.

Keep an eye open for the new and unusual, and watch out for those woolly bears crossing the road this fall. I may need them for my winter weather prediction!!!

- Dick Dearborn, President

MEETING ANNOUNCEMENT

When: Saturday, September 12, 1998 @ 10 am, rain or shine

Where: The Holt Research Forest, Arrowsic

Speaker: Dawn Nelson - PhD student, Dept. of Wildlife Ecology, University of Maine, Orono

Topic: "The Invertebrate Community of Tree Bark"

Directions: From Rte. 1 on the east side of the Carleton Bridge in Bath, take Rte. 127 south toward Georgetown and Reid State Park. Go just under 2 miles to a 4 corner intersection. Turn left onto Old Stage Road. You will pass the Arrowsic Town Hall on the left just after this turn. The Holt Research Forest office and lab is on the left, 2.4 miles from the Town Hall. Look for a log house and adjacent two-story garage (Box 309). We will be meeting in the garage at 10 am.

Bring your family, friends, a lunch, and collecting gear.

Potential New Tiger Beetle Habitats with the Removal of Edwards Dam From the Kennebec River

by Dr. Robert E. Nelson, Chair, Department of Geology, Colby College, 5804 Mayflower Hill, Waterville, ME 04901-8858

The tiger beetles (Family Cicindelidae, or Subfamily Cicindelinae of the family Carabidae) are represented in Maine by some thirteen species. Virtually all of our species are found on moderately to completely open ground, though little can be generalized beyond this; they are very fast visual predators and hard to catch (or even see!) unless you're specifically looking for them. Most are about 15 mm long, and they're most easily distinguished by the maculation patterns, consisting of light areas against a darker background; arrows on the diagram indicate key things to look for in individual species.

The planned 1999 demolition of the Edwards Dam on the Kennebec River in Augusta is expected to lower upstream river levels by as much as 18 feet. This will open up significant habitats along the river course for several species, three of which will be particularly noteworthy if they are found to have become established on this newly exposed habitat.

Cicindela ancocisconensis, like the others discussed here, is a greenish- to reddish- or purplish-brown tiger beetle with an ivory maculation pattern illustrated by sketch "A" on the diagram. Though widespread throughout the northeastern part of the U.S. and adjacent Canada, it has been found in Maine only along the Saco River at Fryeburg and the Sandy River in Farmington. This species seems to prefer partly vegetated upper floodplain areas with a substrate of sand and gravel, on medium-sized and larger rivers; most of its potential habitat in Maine has been flooded behind dams. Though the two known localities are far distant from the part of the Kennebec that will be affected by dam removal, it will be very interesting to see whether this species is able to establish itself on the newly exposed banks of the Kennebec River.

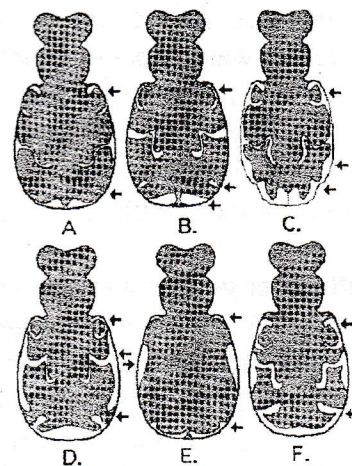
"B" and "F" on the diagram represent *Cicindela duodecimguttata* and *C. repanda*, respectively. These are among the most common tiger beetles in the state, and both should become quickly established on suitable

substrates along the Kennebec. *C. sexguttata*, which is not figured here, should also be found at the forest margins on drier ground; it is a bright metallic green to greenish-blue, and easily recognized in Maine.

Two other tiger beetles of note, though less likely to advance into this new territory, include *C. marginata* and *C. hirticollis rhodensis*. *C. marginata*, "C" on the diagram, is an Atlantic coastal species that reaches its northeastern limit at Popham Beach, at the mouth of the Kennebec. It prefers muddy seaside substrates, but may potentially invade inland along the tidal Kennebec as far inland as Augusta; according to Ross Bell, it is most easily collected at night by flashlight. *C. hirticollis rhodensis*, "E" on the diagram, is likewise a coastal variety, though the nominate species *C. hirticollis* (D) is reportedly found throughout the state. (This latter is based on a recent paper on North American tiger beetle distributions by Peterson and others, reviewed in the previous MES Newsletter; I've not seen it at all myself from inland sites.)

Anyone thinking they've found specimens of *C. ancocisconensis*, *C. marginata*, or *C. hirticollis* along the newly exposed Kennebec banks after demolition of the Edwards Dam is encouraged to contact either Dick Dearborn or Bob Nelson. We'd be delighted to have a chance to see the specimens and know precisely where and when they were collected.

More information on Maine tiger beetles may be found in the paper "The Cicindelidae of Maine", by D. A. Wilson and A. E. Brower. *Cicindela*, v. 15, p. 1-33; 1983. The sketches in the figure used here are drawn in part from their illustrations.



Lepidoptera News

LIVE BUTTERFLIES SHIPPED INTERSTATE

In recent years, the release of live butterflies at weddings, graduations, and other celebrations has become popular, and several businesses have been established around the country to rear and offer butterflies for sale. An Application and Permit to Move Live Plant Pests (USDA, PPQ Form 526) must be obtained from the USDA and signed off by both state and federal officials before the live insects are allowed to be shipped across state lines. Nearly all states routinely sign off on the movement of butterflies as the species may already be present in the state or the southern types are unable to find the food plants to produce new generations. Maine has received several applications from these butterfly operations, but we do not know if any butterflies have actually been shipped. If you spot an exotic butterfly as you collect in Maine, be aware that the insect may have been imported from the south and released at a recent wedding. If you have thoughts or reservations about the movement of live butterflies (including exotics), please contact Dick Folsom or Ann Gibbs at the Maine Department of Agriculture (287-3891).

- Dick Folsom

HAVE YOU SEEN A BALTIMORE BUTTERFLY LATELY?

Several of us have been wondering what has happened to the Baltimore butterfly, *Euphydryas phaeton*, in Maine. Years ago in the 60's and 70's, I saw a good number each year as I went about farming activities in Mt. Vernon. I took great pains not to disrupt their habitat but the numbers fell off and for the past ten years the annual count has been zero! The primary larval foodplant, turtlehead (*Chelone glabra*), is still present. On a promising note, I have heard from one MES member recently of several larval colonies at one site near Bangor. Has anyone seen any others? Get back to me. This beautiful species may be threatened or endangered in Maine!

- Dick Dearborn

Blame it on El Nino...

On 27 June, the annual 4th of July Butterfly Count was held in Oxford County. While 1997 was a record breaking year due to a peak population of European skippers and perfect count conditions, the 1998 census was a victim of rainy weather. Heavy rains in June left Brownfield Bog under water, making the bog inaccessible for the count. Therefore, we were unable to survey for bog copper (*Lycaena epixanthe*). The following table is a summary of our count results for the past seven years.

Date of Count	# of Species	# of Individuals
18-19 July 1992	19	80
17 July 1993	18	204
9 July 1994	13	53
9 July 1995	19	112
29 June 1996	11	163
5 July 1997	17	1,660
27 June 1998	16	180

- Gail Everett

...and the warmest summer on record

The last few weeks have brought to light some interesting western moths. The first, *Chalcoela iphitalis* (Wlk.), a pretty pyralid that lives in paper wasp nests, was first taken by Monica Russo at Arundel in 1995; its appearance in Steuben suggests it is now established. It was previously known only as far east as Michigan. *Tinea irrepta* Braun normally hails from Alberta, Utah, and California. Finally, the sterrhine geometrid *Idea dimidiata* (Hufnagle) has suddenly appeared in numbers at Steuben, and also at Mount Vernon, ME, and in northwestern Connecticut. A more or less cosmopolitan insect, it had been known from North America apparently only from British Columbia, with a single record from upstate New York. El nino? Global warming? Whatever the explanation, there definitely is western gold in these hills.

- Tony Roberts

Franklin Park Zoo in Boston has opened a two year butterfly exhibit featuring 45 species of live North American butterflies. Funding of \$100,000 was obtained from BankBoston. The live butterflies are shipped weekly from insectaries in Florida and Texas.

- Kathy Murray

NEW BAGWORM IN MAINE

A species of bagworm (Psychidae) new to Maine has been found at a lumber supply business in Sanford. The garden or snailcase bagworm (*Apterona helix*) is a European species first recorded in the US in California in 1940. It has since extended its range to all states west of the Rockies and to NY, PA, MI, MA, and now ME. The insect has probably been present at the lumber business for a few years. Large numbers of the small spiral, dirt-covered cases in which the tiny worms live can be found on pine trees, fences, and other objects. The garden bagworm is not likely to become a serious plant pest (it feeds on a variety of plants and weeds), but could become a nuisance problem as the larvae ascend trees, fences, buildings, and other objects to pupate. Some Christmas tree growers in New York have been plagued by large numbers of cases attached to fir tree branches.

-Dick Folsom

ABOUT OUR LOGO

The little wasp featured as our MES logo is *Dipogon sayi*. Endearing characteristics are the pretty dark bands on the wings and brushy curving bristles under the "chin". Females stuff their nursery cells with spiders, and they are quite interesting to watch as they roam around hunting spiders. *Dipogon* can be attracted to "trap nests" or vespriaries. You can simply drill a series of 1/4" diameter holes in some old pine boards and stack them up at eye level around the garden or garage, and you'll get all sorts of solitary wasps and bees -- pollinators! You might also get a *Dipogon*. These interesting wasps are members of the Family Pompilidae, which also includes the big "tarantula hawks" of the west. The spider hunters are cool to watch because it looks like they are hunting all over for their lost car keys.

- Monica Russo

For the past 13 years, Sam Ristich has been following the fate of Harris checkerspots (*Chlosyne harrisii*) on an annually mowed 3-acre old field. This year, he found 17 larval colonies on flat-topped aster (*Aster umbellatus*), the only larval host for the Harris checkerspot. The female lays her eggs apically, leaving the larvae to work their way from the top of the plant to the bottom. This year, the second instar larvae emerged from overwintering on 10 May and by 20 June, the adults had emerged. Sam found the first egg mass on 25 June and the first eggs hatched on 13 July. Molting to the second instar began on 9 August. See Sam for more information on Harris checkerspots.

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