

Maine Entomological Society Newsletter 1999



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

Volume 3, Number 3, August 1999

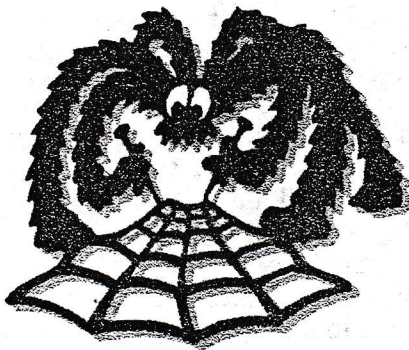
From The President

Although it's been almost five months since our last newsletter, the MES has had a busy schedule of speakers and field trips for the insect enthusiast. On April 2nd, we were treated to an excellent presentation by F. Russell Cole at Colby College on "The Impacts of Exotic Organisms on the Endemic Fauna and Flora of Hawaii". Thanks go to Bob Nelson for an excellent job of organizing the event.

On June 12th, twelve people turned out for a day of collecting at the Maine section of the White Mountain National Forest in Bethel. We welcomed three young people and four members of the Vermont Entomological Society. Fairly extensive species lists of insects and spiders collected during our outing were presented to our hosts. On July 14th, 22 people joined us for a field day at the Massabesic Experimental Forest in Alfred.

If you weren't able to join us for our previous trips, I hope you can attend our next field trip scheduled for August 27th at Maine Audubon Society's Fields Pond Nature Center in Holden. This event is cosponsored by MAS, so be ready to pitch in and answer insect questions. And remember, if you have an idea for a field trip or lecture topic, please let us know.

-Dick Dearborn



Web Sites

<http://www.coleoptera.org/> - Coleoptera databases, bibliography, image and sound library, collecting information, and links to other Coleoptera sites.

www.insect-world.com - General information on insects and links to other sites.

<http://henry.ento.cornell.edu/CUIC> - Cornell University insect collection

<http://www.insecta.com> - Spencer Entomological Museum at University of British Columbia

<http://phylogeny.arizona.edu/tree/phylogeny.html> - Phylogenetic relationships and diversity of life.

New U.S. Postage Stamp

A new series of twenty 33 cent gummed (you lick 'em) postage stamps honoring insects and spiders will be available on October 1, 1999. Those wishing First Day Covers can send a self-addressed stamped envelope with a piece of card stock inside to Insects, Postmaster, Indianapolis, Indiana 46206-9991. These should be sent in October but must reach the Postmaster before October 31, 1999.

-Dick Dearborn

Inside This Issue:

- Insect collecting in disturbed habitats by Monica Russo and RE Nelson
- Treasures in the dung heap
- August 27 field day at Fields Pond Nature Center

WASTE LOT, WANT NOT! (or Collecting in Highly Disturbed Habitats)

By Monica Russo & R. E. Nelson

A trampled, hard-packed baseball diamond at a waste lot in St. Louis is hardly the place you'd choose for a special field trip, or where you'd expect to find exciting insects. But that's where Phil and Nellie Rau discovered a thriving colony of *Bembix* wasps during the summer of 1914. Their documentation of the wasps' activities became one of the most interesting accounts in classic and historic entomological literature.

You don't have to visit a "unique habitat" or a protected sanctuary to find fascinating species - or even state records! Indeed, the first specimens of the alien paperwasp (*Polistes dominulus*) collected in Maine were found at a weedy waste lot alongside a small shopping mall in Biddeford. In Maryland, the same species was captured by hymenopterist Bob Jacobson at a rest area along Interstate 95. Both events were reported in the June, 1996, issue of SPHECOS.

Waste lots, school yards and industrial lots are often overgrown with clover, goldenrod, wild carrot (Queen Anne's Lace) and other flowering weeds that afford excellent foraging ground for many insects. The perimeter of a dirt or gravel parking lot can be promising for species that are particularly interesting to sit down and watch: *Bembix* wasps have been observed in the parking lot at the Biddeford public beach, and both *Bembix* and *Philanthus* wasps have been collected at the Biddeford Airport, in dirt parking areas and at the ends of the runway. Tiger beetles may be very active predators in the same environments.

Most waste lots and other ignored areas have plenty of rotting boards, old tires and soggy

pizza boxes to look under. While we may consider these areas unsightly and disgusting, the insects have a temporary sanctuary here - temporary, because industrial or commercial waste lots often change ownership and use. Monica Russo collected additional specimens of *Polistes dominulus* at a second weedy dirt lot in Biddeford, but early this spring the site became a salesroom and paved parking lot for Maiden Maine mattresses. Bob Nelson collected tiger beetles in a vacant lot area in Waterville that now is home to a shopping mall complex.

In heavily forested areas like northern Maine, recent clearcuts and the belts along major power line routes may indeed be the only extensive open ground to be found. This may be about the only area in some townships in which one may find any butterflies at all, and provide valuable habitats as well for other species of insects that thrive in more open environments than the undisturbed forest provides.

Abandoned large sand and gravel pits may be particularly productive collecting areas, and can yield greater diversity of insects than many other areas of comparable size; variations in substrate granulometry and plant succession are key here. Open sand and gravel areas may yield dry-ground taxa not common elsewhere in Maine, while areas with upstart weedy vegetation dominated by pioneering grasses and wildflowers may be particularly productive for Orthoptera, Lepidoptera, Hymenoptera and Diptera in great variety. The bottoms of such pits often have an area which now may hold a small pond or marshy area - with a completely different flora and insect fauna.

Collecting such disturbed sites may also be one of the best means of tracking the spread of introduced species, some of which (such as the alien paperwasp) may only be entering Maine even now. Most introduced species that survive in their new homes are specialists in highly disturbed habitats - which is precisely what these waste lots are. The common large ground beetle here in Maine (*Carabus nemoralis*, 20-28 mm long, black with purplish or greenish reflections on the margins) is frequently encountered in spring gardens, and is reportedly much more common here than in Europe! It is rarely seen in Maine, however, outside of such disturbed sites, even though it is now distributed almost statewide.

Most people don't care what you're doing in a vacant lot or other such site, especially if they see you have a field net with you. Land owners at the site will very likely give you permission to collect, and are usually interested or clearly amused at your endeavors; many will be more than happy to learn you just want to take some of the "bugs" out! Their normal concerns are that you're NOT there to dump trash, spray-paint structures, or otherwise vandalize their property.

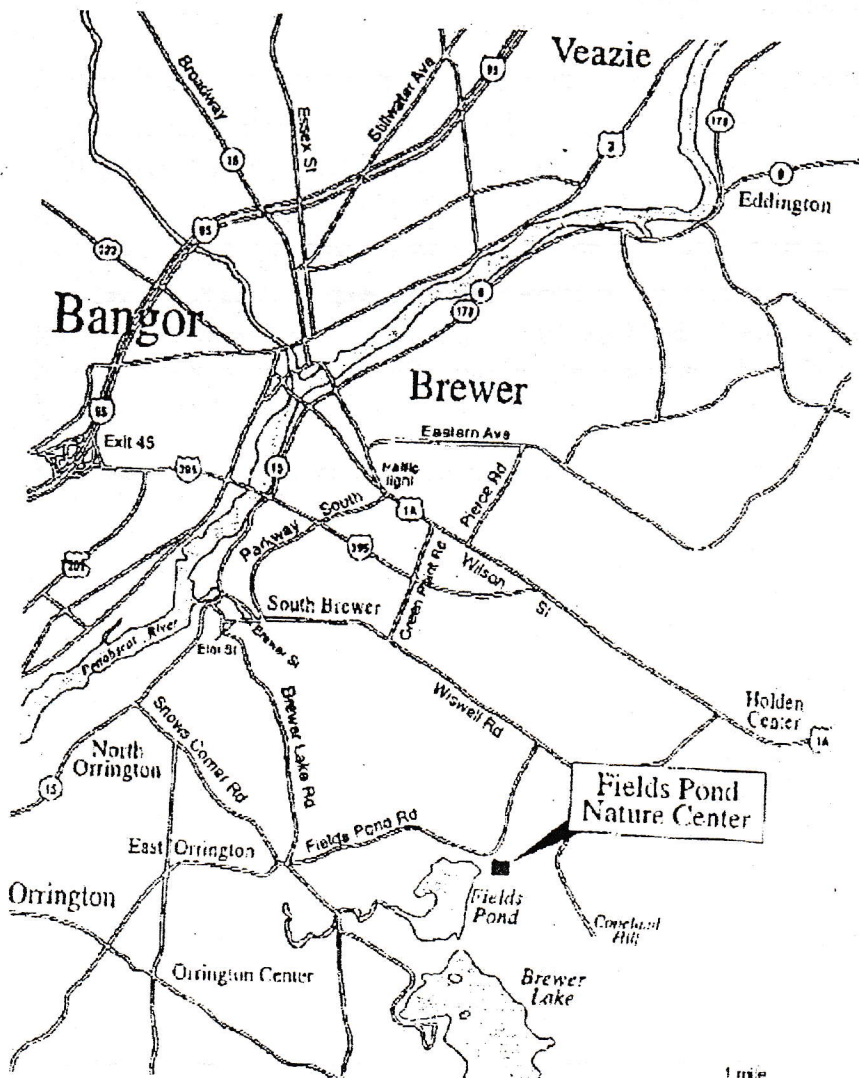
Remember, though, to wander about cautiously, since broken glass, metal scrap, and boards with rusty nails are all normal hazards at these sites. If you haven't had a tetanus booster in 8 or 10 years, it's a good idea to get one.

This is the second excellent volume to come out recently on a regional tiger beetle fauna, providing an outstanding companion to Knisley & Schultz's volume on the tiger beetles of the South Atlantic states. The volume, subtitled "A Field Guide to Tiger Beetles of New England and Eastern Canada," is well written and includes much information that would be helpful for the beginning cicindelist on the basic nature of species, tiger beetle physiology and ecology, and collecting and preparation techniques. Cautions are also included against collecting endangered and protected species (none of which are known to occur in Maine), with strong and specific advice on photographic techniques for these.

More advanced materials include keys to both adults and third-instar larvae. Each species is described, and key identifying characteristics are underlined for easy reference; distinguishing characteristics from similar species are included for each, which is a big help for the beginner. The volume is profusely illustrated with line drawings and a black-and-white reference photograph of each species; color photographs of all species included in the study area are also included in separate plates. Maps showing distributions in the New England states and adjacent Canada are more detailed than those of Knisley & Schultz, and include major rivers and lakes.

This volume has enough basic information to be of immense educational value to anyone who doesn't already know about tiger beetles in our area, but would like to learn. It is an essential addition to the library of any serious collector of tiger beetles in this region.

- Bob Nelson

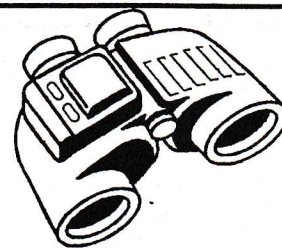


INSECT INTEREST DAY AT FIELDS POND NATURE CENTER

Friday, August 27, 10 am to 3 pm

The Maine Entomological Society and the Maine Audubon Society are holding a joint Insect Interest Day at the 192 acre Fields Pond Nature Center in Holden. We will be searching the marshes, woods, fields, and pond for insects and sharing our discoveries with the staff and visitors of the Nature Center. Be ready to answer questions about the world of insects. Sturdy boots are recommended for the trails in the woods. For more information, contact Dick Dearborn at 287-2431 or the Fields Pond Nature Center at 989-2591.

SIGHTINGS



OH POOP!

Picking up "doggie doo-doo" is not my favorite task but for those who wish to have Fido for a pet, the pick-up detail is essential. Due to a period of procrastination, the piles accumulated on my lawn, leaving me to spend a portion of my Sunday morning bent to the task. I was moving right along until I realized that beneath some of the well cured piles were some very interesting and colorful beetles. I was on my knees carefully lifting individual turds with a pair of forceps and hastily trying to transfer the scattering herds to alcohol. At last count I had over 10 species including a terrestrial hydrophilid beetle (*Sphaeridium scarabaeoides*), at least five species of staphylinid beetles (some very colorful ones), two his-

terid beetles, and two or more scarab beetles (*Onthophagus* sp. and *Aphodius* sp.). So next time you dread the chore of picking up after your dog, think about the possibilities.

-Dick Dearborn

DOWN IN THE CELLAR

Pholcus phalangoides, the long-bodied cellar spider, is a house spider that closely resembles the harvestmen or daddy long-legs (Order Phalangida). *Pholcus* has very long legs, cylindrical abdomen, and an interesting eye pattern. Six of the eyes are large and clustered in threes; the other two tiny eyes are located between the two clusters.

This species lives two to three years. The female, which shakes violently when disturbed, produces several clusters of eggs yearly and carries the tiny, spherical sac of eggs in her chelicerae.

Don Beckwith called to tell me he had hundreds of white daddy long-legs hanging from the ceiling of his root cellar. When I saw the phenomenon, I uttered my famous expression, "Holy Cow. What an extravaganza!" The white spiders were parasitized by a fungus. We counted over 85 embalmed bodies and took some great photographs, which I've sent to Dan Jennings and several of my friends who are fungus experts.

-Sam Ristich

The deadline for the next issue of the Maine Entomological Society Newsletter is October 15, with a projected mailing date of November 1. Send your submissions to Nancy Sferra.

The Maine Entomological Society Newsletter is published quarterly by the Maine Entomological Society. Send newsletter items to Nancy Sferra, editor, at HC-33, Box 350, Bath, ME 04530 or via e-mail: nsferra@clinic.net. Dues are \$5.00 per year. Checks should be made out to Maine Entomological Society and sent to Don Ouellette, Treasurer, at 892 Lewiston Road, West Gardiner, ME 04345.

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