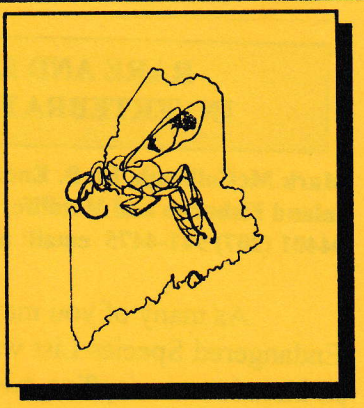
Maine Entomological Society Newsletter 1998

Number 2, Spring

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



From the President

Our third meeting of the MES was held at UMA on Saturday, March 21st. In spite of threatening weather there were nine stalwarts in attendance to discuss business and hear an excellent presentation by Bob Nelson on his work on (and in) the Mima Mounds of southwestern Washington State. The group is committed to continue forging ahead with a professional and amateur entomology club and to keep our attention focused on the aura, magic, and wonderment that the natural world has to offer. With such enthusiasm, it is certain that our small group can survive.

We are sorry to hear that Monica Russo has decided to step back from her duties as newsletter editor to attend to other pressing matters. Nancy Sferra will now be our editor and, with her knowledge of computers and access to e-mail, she will be able to receive newsletter items electronically. Thanks, Monica, for all that you have done to help move the MES forward in its formative stages, and thanks, Nancy, for agreeing to help keep us going.

We have agreed to affiliate with the Vermont Entomology group and share activities and news. The Vermont group has agreed to the affiliation and we look forward to working across state boundaries.

Thanks to all who have supported this fun group. I look forward to future meetings, collecting trips, and newsletters.

- Dick Dearborn, President

Unite in Unity

Our next meeting will be held on Saturday, June 6, in the Unity-Troy area. We'll meet at 9 am in the parking lot in front of the Environmental Sciences Building on the Unity College campus (just south of Routes 9/202 west of Unity Village). Come dressed in field clothes and armed with collecting gear. If in doubt due to poor weather, contact Dick Dearborn at 287-2431 (w) or 293-2288 (h).

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COMPUTER BUGS

A Maine Outdoor Heritage Fund grant covering two years has been awarded to the Maine Forest Service, University of Maine, and Department of Environmental Protection for the purpose of computerizing the state's insect collections. Work this summer will focus on critical groups such as Odonata, but eventually data on all insect specimens will be computerized. It is hoped that the catalogue of insect holdings will be available through the World Wide Web.

INSIDE THIS ISSUE

RARE AND ENDANGERED INVERTEBRATE STUDIES - 1998

Mark McCollough, Ph.D. Endangered Species Group, Maine Inland Fisheries and Wildlife, 650 State St., Bangor, ME 04401 (207) 941-4475 email: mark.mccollough@state.me.us

As many of you may be aware, the Maine Endangered Species List was amended in May, 1997, to include two mayflies, two dragonflies, six butterflies and moths, and two freshwater mussels. This marked the first time that the state afforded protection to rare and endangered invertebrates through the Maine Endangered Species Act. Maine Inland Fisheries and Wildlife had received endangered species funding since the early 1990s to assess and monitor several invertebrates listed as "candidates" for the federal list. The addition of invertebrates to the state list enables the Department to continue to expand survey, monitoring and recovery programs.

The Endangered Species Group, MDIFW, has a number of invertebrate projects planned for 1998. We welcome involvement and input from invertebrate biologists in Maine, particularly since we have no entomologists on the MDIFW staff, and invertebrate biology and life histories are new to us. Most projects described below were initiated by the availability of funding which comes from federal endangered species funds allocated to the state, funds derived in Maine from the income tax check-off and loon license plate, and the new Outdoor Heritage Fund lottery. There is a great need for more invertebrate conservation projects in Maine, and we especially need to assess the status of taxonomic groups other than those currently represented on the state list. We're reasonably optimistic that invertebrate conservation programs will continue to grow. Contact us and let us know of your ideas!

In 1998, we will complete the last year of a six year effort to survey the freshwater mussel fauna of Maine. Freshwater mussels are the most endangered invertebrate fauna in North America, with over half of the 300 species being rare, endangered, or extinct. Maine has only 11 species, but they include several of the rarest in the Northeast. To date, we've surveyed over 1,500 sites statewide and discovered regionally significant populations of rare species such as the brook floater, yellow lampmussel, tidewater mucket, and squawfoot. This summer we hope to enlist the help of a dive team to search some inaccessible areas in our larger rivers. This fall we will be hiring Ethan Nedeau to help us compile the information and write an Atlas of the freshwater mussels of Maine.

MDIFW will be collaborating with the Maine Natural Areas Program over the next few years to systematically conduct rare and endangered species surveys in each of the state's 17 ecoregions. This year surveys are being conducted in the Central Interior, Mid-coast and Penobscot Bay ecoregions. Phillip deMaynadier will be coordinating surveys for Tomah mayflies; rare peatland, saltmarsh and riverine dragonflies and damselflies; freshwater mussels and rare moths and butterflies. Surveys in 1998 turned up several new sites for rare Odonata including 7 new sites for the New England bluet *Enallagma laterale*, previously known only from a single site in central Maine since the 1940s. We hope to receive funding to survey the Down East ecoregions in 1999 and may be awarding several small contracts for invertebrate surveys.

In 1997, MDIFW and Paul Brunelle received one of the first Outdoor Heritage Fund grants to develop an atlas of the Odonata of Maine and develop a 5-year, volunteer based "Maine Dragonfly and Damselfly Survey." Paul has compiled a database of over 5,000 Maine records, wrote a manual for collecting Odonata, developed systems for collecting and reporting dragonfly information, produced and illustrated fact sheets on 30 rare and endangered species, and illustrated a poster of the rare and endangered dragonflies in Maine. It is anticipated that we will officially announce the initiation of the Maine Dragonfly and Damselfly Survey in 1999. Please let us know if you would like to be involved! Paul will be teaching a week-long workshop "Dragonflies and Damselflies of the Northeast" June 28 to July 4 at Eagle Hill in Steuben.

The Endangered Species Group of MDIFW is looking for field entomologists interested in helping with Lepidoptera and Tomah mayfly surveys in central Maine. If you are interested in helping with this contract work contact Mark McCollough (941-4475) or Phillip deMaynadier (581-2876).

Literature, Book, and Movie Reviews

Peterson, D.L., T.G. Barraclough, and A.P. Vogler. 1997. Distributional maps for North American species of tiger beetles (Coleoptera: Cicindelidae). Cicindela 29 (3-4): 33-84.

This is a major paper that will be useful to anyone who studies tiger beetles in Maine. This paper presents, species by species, outline maps for the distribution of all known and described species of tiger beetles in North America, including northern Mexico and Canada. Subscriptions to the journal are $7 per year; back issues are $2.50. Contact Ronald L. Huber, 4637 West 69th Terrace, Prairie Village, KS 66208.

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Knisley, C.B. and T.D. Schultz. 1997. The biology of tiger beetles and a guide to the species of the South Atlantic States. Virginia Museum of Natural History, Spec. Publ. No. 5, 210 p. [ISBN1-884549-07-1]

This is an excellent overall volume on the biology and ecology of tiger beetles, and though the focus is primarily on more southern areas, ten of Maine's thirteen species are included. Of particular value and beauty are the exquisite color photographs of each species and subspecies included in their area of interest. Intended as a guide for both professionals and lay persons, there is an extensive glossary at the back that explains a lot of the technical terminology that might be initially intimidating for a novice. Definitely a good buy if you have any interest in tiger beetles. For current information on price, contact: Publication Sales, Virginia Museum of Natural History, 1001 Douglas Avenue, Martinsburg, VA 24112.

- Robert Nelson

Microcosmos

If you missed it on the big screen, you now have a chance to catch the movie event of the decade on video. A must-see for every entomologist, Microcosmos is now in many video stores, and if you want your own copy, Insect Lore is selling it in their latest catalogue. For information, call them at 1-800-LIVE BUG.

-Monica Russo

BEETLE T-SHIRTS

The rainforest beetles *Plusiotis chrysargrea* (golden beetle), *Acrocinus longimanus* (harlequin beetle), *Oxysternon conspicullatum* (dung scarab beetle), and *Chrysophora chrysophora* (shining leaf chafer) are now available in a new t-shirt design by D.D Tyler. For more information on this and other designs by D.D., please call Liberty Graphics at (207) 589-4596 or visit the Liberty Graphics outlet in Liberty, Maine.

North of the Border

The Acadian Entomological Society meeting will be held from August 13 to 15 in Deer Lake, Newfoundland, Canada. Anyone interested in more information should contact Dr. Frank Drummond at (207) 581-2989.

Watching Nature

Monica Russo's latest book, *Watching Nature*, will be released by Sterling Publishers in about a month. It's aimed at the junior high-to-adult level, and is a beginners guide to observing birds, insects, mammals, turtles, wildflowers, lichens, and trees (to name but a few). As Monica says, "I just got tired of seeing birdwatching guides and felt we needed something more generalized." *Watching Nature* will be carried by Bookland.

500 Japanese Beetles

When I was a kid, my grandmother used to give me a penny for every Japanese beetle I picked off of her rose bushes. The MES mailing list is fast approaching 45 individuals, which means we need enough money for postage and paper. A minimal contribution of $5 will go a long way toward the publication of our newsletter. Send your dues to Don Ouellette at 892 Lewiston Road, West Gardiner, ME 04345, and remember, that's only 500 Japanese beetles.

In 1995, MDIFW discovered the rare ringed boghaunter dragonfly in South Berwick. This species is only known from about 30 sites - all in the Northeast. In 1997, Karen Hopkins and Priscilla Cookson documented breeding wetlands, made population estimates from exuvia counts, and discovered a new site in Lyman. Paul Brunelle found a single adult in Fryeburg, approximately 50 miles north of the South Berwick site. In 1998, MDIFW will be investigating the new sites to document breeding wetlands and populations, and continue to search for new sites.

This spring, MDIFW will continue investigations of the Tomah mayfly with the help of Dr. Alex Huryn. In 1997, Alex found an unexpectedly high diversity of caddisfly species associated with Tomah Stream (including several rare species) and initiated a study of energy flow and invertebrate community structure. He will continue this work in 1998.

In 1998, Beth Swartz from MDIFW, will assess Clayton Copper butterfly sites in north-central Maine. MDIFW contracted with the UMaine Entomology Department in the early 1990s to explore techniques for assessing populations. We would like to continue work to develop methods to assess populations and monitor trends. There may be small contracts available in the future to assist MDIFW. Please contact Beth at 941-4476 if you are interested in helping. Similarly, Charlie Todd (941-4468) may begin work in the next year or two to assess Katahdin Arctic butterfly and American pipits in Baxter State Park.

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A Note from the Editor: Do you have any news to share with our readers? Send your tidbits to Nancy Sferra, 8 Seymour St., Sanford, ME 04073. Better yet, if you are on-line, e-mail me at sferra@psouth.net. I now have a scanner, so if you have any photos of nifty insects that you would like to include in the newsletter, send me the photo (which I promise to return). If the photos are not your originals, you need to get the permission of the photographer (and make sure you send along a photo credit).

MAINE'S ENDANGERED AND THREATENED INVERTEBRATES

ENDANGERED

A flat-headed mayfly - *Epeorus frisoni*
Ringed boghaunter dragonfly - *Williamsonia lintneri*
Clayton Copper butterfly - *Lycaena dorcas claytoni*
Edward's Hairstreak butterfly - *Satyrium edwardsii*
Hessel's Hairstreak butterfly - *Mitoura hesseli*
Katahdin Arctic butterfly - *Oenis polixenes katahdin*

THREATENED

Tidewater mucket (freshwater mussel) - *Leptodea ochracea*
Yellow lampmussel - *Lampsilis cariosa*
Tomah mayfly - *Siphlonisca aerodromia*
Pygmy Snaketail dragonfly - *Ophiogomphus howei*
Twilight moth - *Lycia rachelae*
Pine Barrens Zanclognatha moth - *Zanclognatha*

Fact sheets on Maine's endangered invertebrates and information on the endangered species program are available on MDIFW's web site at: http://www.state.me.us/ifw/homepage.html

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Fourth of July Butterfly Count: Gail Everett will once again be conducting a NABA butterfly count on July 11 (rain date July 12) from 9 am to 3 pm at Brownfield Bog in Hiram. No experience is necessary. For more information call Gail at 878-3794.

MES Directory

The 1998 MES Directory has been included with this newsletter. Please check the accuracy of the information for your entry and send any corrections or additions to Nancy Sferra. Don't forget to send your e-mail address if it isn't already listed.