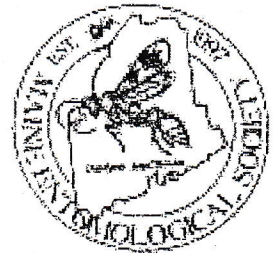


The Maine Entomologist

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



Volume 9, Number 4, November 2005



From the Vice President



Season's Greetings to all! In the four years that I have been involved with the MES I have been very impressed with the degree of involvement that our membership provides to help keep this organization running. I recently made a tally of the members who regularly pitch in to help with the operation of the group, serve on committees, regularly write articles for *The Maine Entomologist*, or host field activities, and came up with a total of 24 people. That's about 19% of our membership, not too bad for a group our size. But as I went through the complete membership list, I realized that there are a great number of individuals that I have never met or even heard from. I have no idea what their interests are, what they think of the MES, or what they may be able to contribute to our group. And I am convinced that every member has something to contribute, if only a word or two of feedback, or just the opportunity to make a new friend. No doubt many members are "armchair" entomologists and may prefer to just read the newsletters, or have joined the MES to support entomology in Maine through their dues. But those of us doing the brunt of the work need help! We need folks to chip in to write articles to keep our newsletter fresh and exciting. You don't need any great entomological knowledge; a piece on something "buggy" that you observed or found interesting would be great. Not interested in collecting? How about hosting an observational

field trip or workshop? Do you have insects that you cannot identify? Contact anyone on the Board of the MES and we will gladly point you in the direction of a member who can help in a very kind and supporting way. Do you have ideas that can help the Board make the MES even more interesting and applicable to you? Do you have concerns about the MES that you would like to discuss? If you answered "yes" to any of the above, then PLEASE contact one of the Board members or officers, or show up at any of the summer field activities or the annual meeting and make your voice heard.

On another note: The Maine Entomological Society was recently granted non-profit status under IRS tax code section 501(c)(3). This generally makes an organization exempt from state and federal income taxes, eligible for receiving grants from government agencies and private foundations, and allows donors to take a tax deduction for charitable donations to the group. It also lends another level of "legitimacy" to our group.

So, as you can see, the MES is a dynamic organization that has its membership in mind. Few groups of our size offer the wide array of activities (Blitzes, field trips, workshops, support for events such as Bug Maine-ia), an outstanding newsletter in *The Maine Entomologist*, and a cadre of extremely knowledgeable members. But to keep moving forward we need fresh ideas and a little help. As winter approaches, maybe now is the time to think about a New Year's resolution: pick an area of involvement that interests you, roll up your sleeves, and lend a hand!

-Chuck Peters

REMINDER:

DON'T FORGET TO RENEW!

Please check the year in the upper right hand corner of your mailing label. If it reads 2005, it's time to renew your membership. MES memberships run on a calendar year and if you don't renew soon, you may miss the next issue of *The Maine Entomologist*. Dues are \$10 per year, or \$18 for two years. Make checks payable to Maine Entomological Society and mail to: Mr. Dana Michaud, Treasurer, at 3 Halde Street, Waterville, ME 04901. Don't delay- renew your membership today!



Inside This Issue:



Upcoming Workshops



The Silver-sided Mosquito



Maine Butterfly Atlasing Project



The European Crane Fly

Winter Workshop

Take a break from the winter blahs! You are cordially invited to the Maine Forest Service Entomological Laboratory at 48 Hospital St., Augusta, Maine on Saturday, January 14, 2006 for an open house from 9:00 to 10:30 am followed by a workshop on Diptera (flies) from 10:30 to 3:00.

The open house at the Maine Forest Service is an opportunity for people to check out one of Maine's best public insect collections and reference library. Visit with others interested in insects and become comfortable with the facility so that you can use the resource for identifying material and/or volunteering time. Material will be set out so that attendees can inspect specimens, use microscopes, browse literature, and check out collecting equipment. Pre-registration is not required, if you find yourself in the area, please feel free to stop in. The Pine Tree Arboretum is just up the street and is a wonderful place to cross country ski or snowshoe for no charge and the Maine State Museum is just across the river.

Visitors are welcome to visit the Entomology Laboratory at other times during regular work hours. Please call ahead to ensure that someone will be here as we do field work and the staff is small.

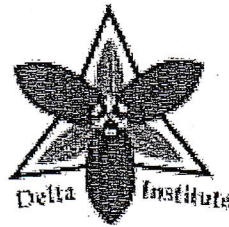
The Diptera Workshop will be a prelude to the summer Diptera Bioblitz at Schoodic Point in Acadia National Park July 14 to 17. Taxonomist Donald Chandler from the University New Hampshire will lead a hands-on workshop covering the basics of identifying flies in all their myriad forms. There will be time to work on your own specimens as well as ones at the Lab. The workshop will begin after the open house and is open to any one interested in flies. There is a \$15 fee to cover expenses and pre-registration is required for the workshop. Attendance at the workshop is limited to 24 so sign up early! Please bring a bag lunch.

To register please send your name, address, phone number and e-mail address to Charlene Donahue, Insect and Disease Laboratory, 48 Hospital St., Augusta, Maine 04330 or contact the laboratory by phone at (207) 287-3244. If the weather is threatening on the day of the workshop, contact Charlene Donahue at home at (207) 549-7241 or by email at charlene.donahue@maine.gov. Please visit the laboratory's website at www.maine.gov/doc/mfs/idmhome.htm. You may also want to check out www.sel.usda.gov/diptera/.

Directions: From I-95 take exit 113, go straight at the first light, cross the bridge, turn right at the second light onto Riverside Drive and continue to the rotary. Take the third exit off the rotary following Route 9 uphill. Go straight at the first light, past the State Police building then the fire station on your right. The next building, approx. ¼ mile from the light, is the Lab. If you get to the AMHI complex of brick buildings, you went too far.

Warren Island Survey

The Warren Island State Park Insect Survey will take place on August 5, 2006. Experience a summer day on a coastal Maine island and collect insects at the same time. The Warren Island Park Manager has invited the MES to survey the island for insects. She will meet us at the Isleboro ferry in Lincolnville and transport intrepid collectors across the cove to Warren Island for the day. People desiring to camp on the island will need their own boat and must make reservations in February with the Maine Bureau of Parks and Lands as this is a very popular park. Contact Charlene Donahue for more information at (207) 549-7241. More information on this trip will be in upcoming issues of the newsletter, although reservations should be made as soon as possible.



May Workshop

On Saturday May 20, 2006 from 9:00 to 4:00, the MES will hold a field trip at the Delta Institute of Natural History in Bowdoin. Located on 29 acres of wetlands and upland, the institute includes an

education building that can serve as a laboratory, lecture hall, library, and ample space for collecting. Tom Vining, our host, is developing checklists of biota found on the grounds of the institute and would appreciate help from MES with the insect list. Tom is also interested in creating a reference collection of common insects found at the institute and is seeking any advice/help that MES members can provide. For more details, please visit www.vfithomas.com/deltahome.htm. Please bring a lunch.

Directions to the Delta Institute: From Interstate 295 (formerly called 95), take exit 43 (Richmond exit, formerly exit 26). Go west on Route 197 (turn left at end of exit ramp for northbound travel; turn right at end of exit ramp for southbound travel), away from Richmond Village, and drive approximately one mile to the intersection of Route 201 at a blinking red light. Drive straight through the intersection (i.e., stay on Route 197 west) and travel another mile. At this point, Route 197 makes a broad, sweeping curve to the right. Do not follow Route 197, rather continue driving straight (by making a left hand turn part way through that curve on Route 197) onto Dead River Road. Drive approximately 3 miles to a gravel driveway on the left (219 Dead River Road and watch for the Delta Institute sign), the last driveway on the left or to the Academy Road (which is about 0.2 miles beyond on the right). If you get lost, please call (207) 266-5748.

Every (Mosquito) Cloud Has its Silver Lining

Recently, I had the unnerving pleasure of relearning mosquito identification as part of West Nile virus (WNV) surveillance in Maine. A brief introduction to the process in 2000 was lost by a lack of practice. As any taxonomist can tell you, it can be pretty stressful jumping into a batch of thousands of legs and wings. Colors range from browns and tans to the occasional splash of red (mites on the cattail mosquito *Coquilletidia perturbans*). But as I began sorting through genera, one species really began to jump out. Amidst the brown and beige of legs was a stark black and white abdomen that shouted from the brown and white. And instead of a dun-colored thorax, a body of brilliant silver, metallic as the chain mail one sees at a Renaissance Faire! Allow an introduction to *Ochleratatus* (previously *Aedes*) *triseriatus*, the silver-sided or eastern treehole mosquito.

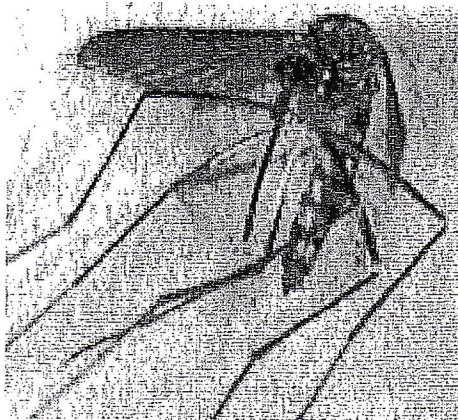
Oc. triseriatus is a pest species, a fairly competent vector of arboviruses such as WNV and is the primary vector of LaCrosse encephalitis in the southern and Midwestern portions of the United States. Although one common name is the eastern treehole mosquito, it will readily take advantage of any 'container,' natural or artificial (tires, cans, etc.) for egg laying. This adaptability allows it to establish itself in close proximity to homes, which usually have a ready abundance of artificial containers nearby, in some cases upright pots, or unused children's wading pools.

Briefly, the biology of this mosquito female along the walls of the container. shift in daylight and go into state of diapause the fall and winter. Larvae emerge from the container for the larval mosquito in this case is not decomposing leaves and vegetation, usually in a log. After a few days of warmth the larvae emerge seeking a bloodmeal. Although they are primarily found on squirrels, primarily in deciduous forests. As a reservoir for the virus in nature. Too, the virus from their mothers may pass it to a new host, completing a cycle of disease in nature.

Its role in the transmission of WNV is known as a bridge vector of the disease. That is, they pick up the virus from another host and transfer it to humans, making the mosquitoes a public health concern. But here comes the rub. *Oc. triseriatus*, a native mosquito, might find itself out-competed in some parts of the US by other species of exotic mosquitoes imported to this country accidentally. Most of the competition occurs during the larval stage, when in the final instars, some bigger larvae might decide to predate on smaller specimens. In the case of our eastern treehole mosquito, one larval competitor might be an Asian tiger mosquito *Aedes albopictus*. Some studies conclude that the two compete for resources in tires where *Ae. albopictus* occurs (southern US to New Jersey at this point!). In Maine, an unknown factor is the occurrence of *Oc. japonicus*, another exotic container mosquito that now occurs through a large portion of the state despite its relatively recent introduction to the mid-Atlantic region in the late 1990's. In both cases, the exotics are extremely efficient carriers of disease, including WNV and eastern equine encephalitis (EEE).

Usually, the question of exotic or alien species revolves around a biodiversity issue. But this brings the problem into the health arena and might allow one to appreciate, in some small way, one of our less than popular native species.

Certainly there are those that would argue that *Oc. japonicus* is equally striking when a good specimen is found – the mosquito has a golden 'lyre shape' on its scutum, and its black and white abdominal and leg bands are indeed noticeable. Some might favor the attractive *Uranotaenia sapphirina*, a late season mosquito that feeds primarily on amphibians and reptiles, marked by electric-blue scales on its proboscis and sides. But for myself, I will choose a moderate display of color, highlighted by silver sides that shine under the light like polished steel.



Ochleratatus triseriatus, the silver-sided or eastern treehole mosquito. Photo courtesy of Michigan State University.

is as follows: single eggs are laid by the female. Eggs laid in the late summer sense the pause or 'suspended animation' through the containers the following spring. Food is the warm blood of mammals but simple and usually ample fare in a tire left out in the sun. The larvae pupate then emerge as silver adults, a human-biter, *Oc. triseriatus*' usual hosts are chipmunks and gray squirrels that inhabit the forest. Studies have shown a high prevalence of encephalitis in these animals, which act as reservoirs for the virus. The male mosquitoes who pick up the virus from the female during mating, indicating a com-

bit more complex. *Oc. triseriatus* is

-Chuck Lubelczyk



Maine Butterfly Atlasing Project



Phillip deMaynadier and Reginald Webster will be collaborating with Ron Butler (University of Maine at Farmington) to begin volunteer butterfly atlasing efforts in 2006. We expect to have a special meeting this winter for MES members who are interested in assisting with this volunteer effort starting with the 2006 field season so stay tuned. More intensive work should begin in 2007. Please contact Gail Everett (207) 743-2840 or capriolee@yahoo.com or Phillip deMaynadier (207) 941-4239 or phillip.demaynadier@maine.gov for more information. MES has provided a link to the Maine Butterfly Checklist on our website, www.colby.edu/MES. Hard copies were included with our May 2004 issue of *The Maine Entomologist*, Vol. 8 Num.2, and can be requested through Dick Dearborn, (207) 293-2288.

In preparation for this atlasing project a baseline atlas and list has been assembled in electronic format (Reginald P. Webster and Phillip G. deMaynadier, August 12, 2005. A Baseline Atlas and Conservation Assessment of the Butterflies of Maine). This report is filled with color plates, maps, and is 128 pp long so it's too large to send electronically. Digital PDF versions of the report will be made available upon request to Phillip deMaynadier. To purchase bound copies of the full report you should contact Tom Vining of the V.F. Thomas Co. 219 Dead River Rd., Bowdoin, ME 04287 (info@vftomas.com or (207) 266-5748). The cost is \$39.95 (plus tax and shipping). The following excerpt of the Executive Summary from this report will give you an idea of its content.

Executive Summary: "Colorful and conspicuous, butterflies are among the few insect groups in Maine that have benefited from considerable attention by early naturalists (starting circa 1870) and recent state-sponsored surveys. This report summarizes the current state of knowledge for the butterfly species of Maine and highlights species of conservation concern. Information on the occurrence of butterflies in Maine was reviewed from a variety of sources, including Brower (1974) and numerous other publications, specimens contained in most major northeastern museums, numerous private collections, data compiled during Maine Department of Inland Fisheries and Wildlife's (MDIFW) ecoregional survey project, and MDIFW's rare species tracking database.

A database of nearly 9000 records contained in 42 fields was constructed from all records obtained from the above sources. These include both locality and date records (records with different dates from same locality) and 3904 township records. At the completion of the Maine Butterfly Survey Project this data will be shared with conservation partners and other interested parties.

Brower listed 103 species of butterflies and skippers for Maine. Following a review of the sources listed above, an additional 11 species have been added bringing the state's total list to 114 species. A few of the additions are the result of taxonomic changes that split formerly one species into two, but most result from new species discoveries. Of special note is the relatively high proportion (13%) of Maine butterflies and skippers that are extirpated (5 species) or state-listed as endangered or special concern (10 spp.), a result consistent with global trends elsewhere for the group. Much has been learned regarding butterfly species rarity and threat in Maine since the previous state-listing process in 1997, and several revisions, mainly additions to the endangered and special concern list, are recommended based on the data summarized in this study.

On average, 63 species of butterflies were found in each county in Maine. This represents about 55% of the 114 species of butterflies reported for the state. Highest species richness was recorded in Oxford Co. with 91 species (80% of all species known from Maine). Relatively high species richness was also recorded from Washington Co. (87 species) and Penobscot Co. (81 species). The least number of species was recorded from Sagadahoc Co. (37 species), Knox Co. (38), Lincoln Co. (43), and Androscoggin Co. (42). Only eight species were recorded from all counties in the state. However, collecting effort in Maine has not been uniform and the data compiled in this assessment should help to focus future sampling effort toward under-surveyed species and locales.

Color fact sheets are provided for 35 breeding resident species in Maine that are considered endangered, special concern, extirpated, or rare. The factsheets include information on identification, distribution, status, ecology, and threats and are intended to stimulate further protection and study of Maine's rarest butterflies. Finally, township-scale distribution maps are provided for each of Maine's 114 butterfly species, all of which require further distributional study."



Report on the Annual Meeting

The 2005 MES Annual Meeting was held on September 11 at the home of Chuck and Ellen Peters in New Gloucester. Another rainy day may have put a damper on any collecting opportunities, but failed to dampen the spirits of the dozen or so core members who were in attendance. A morning of insect related discussion was soon followed by a chicken barbecue with a mouth-watering array of salads, side dishes, and desserts.

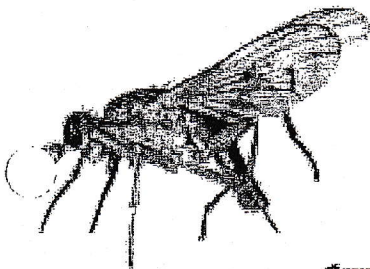
Our President, Dick Dearborn, called the meeting to order promptly at 1:00. Treasurer Dana Michaud presented a report of the budget, and the following officers were elected to serve for 2006: President-Dick Dearborn, Vice President-Chuck Peters, Treasurer-Dana Michaud, Board Members-at-large-Gail Everett and Charlene Donahue, and Newsletter Editors-Chuck and Laura Lubelczyk. For their many years of service to the MES, former Board Members Sam Ristich and Monica Russo were honored by receiving Life-time Member status.

Other discussions included a report of the 2005 Schoodic Coleoptera Blitz by Don Chandler as well as a proposed Diptera Blitz at Schoodic for 2006. Chuck Peters reported on the Winter Workshop held at Delta Institute in Bowdoin last January, and Charlene Donahue volunteered to host a Winter Workshop/Open House to be held at the Maine State Insect Lab in Augusta. Dick Dearborn gave an update on the Bug Maine-ia event, which was held later in the month of September, and we worked out a schedule of field events for the summer season.

One area of great concern (and much discussion) was centered on finding a replacement for our Newsletter Editors. Chuck and Laura Lubelczyk have done an outstanding job in the past years and their expertise and service has been greatly appreciated. But they do feel that the time has come for them to step down. Since no one has come forward to take over their role, they have both graciously offered to remain as editors this year until a replacement can be found. If anyone could come forward to help us out as editor, please let one of the officers know.

Mark your calendars: the Annual Meeting for 2006 will be held again in New Gloucester on September 16th. Maybe this year the weather will cooperate!

-Chuck Peters



Tetanocera annae
adult. Photo courtesy
of Joe Keiper at the
Cleveland Museum
of Natural History.

Flies! FLIES! Flies!

When most of us think of flies, we think of those that bite or are a nuisance such as houseflies and cluster flies. To the dipterist, flies are as fascinating as any group of insects. Since MES was formerly organized in 1997 we have tended to focus primarily on the aesthetic aspects of entomology, from dragonflies and damselflies to butterflies (note the suffix) and moths and on beetles. Now it is time to step back and refocus on another fascinating group, Diptera, and 2006 seems to be coming together as the "Year of The Fly!" This all begins with our Winter Workshop in January conducted by Don Chandler (see page 2). For the more serious budding dipterologists we encourage you to look into a three day Diptera workshop at the Delta Institute in Bowdoin, Maine just before our bioblitz in July. The culmination of this season's learning experience will be our July Schoodic Blitz. Make your plans now.

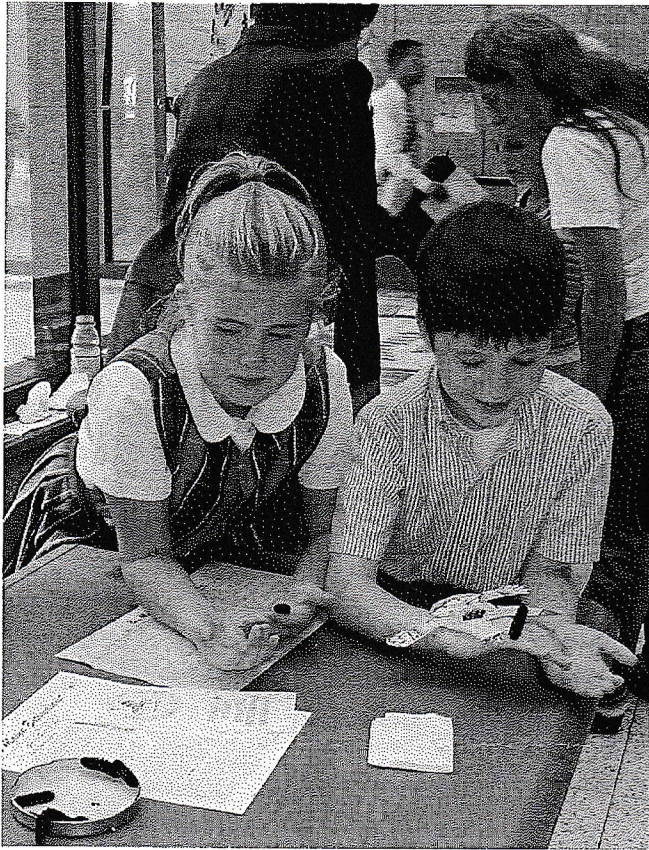
Our Bioblitz for 2006 will again be at the Schoodic Education and Research Center (SERC) in Winter Harbor. The MES will again cooperate with Acadia National Park, Maine Forest Service, University of Maine and the George B. Dorr Museum of Natural History at College of the Atlantic for this Blitz to be held July 14 to 17, 2006, when we will focus on Flies (Diptera). This is an awesome opportunity to learn more about flies in Maine rather than just how to swat them! The Diptera, being one of our three largest Orders of insects in Maine, contains considerable species diversity. Some species are extremely beautiful and others are really bizarre. Many are parasitic on other insects or serve a role in flower pollination. Others are simply flies and of course there are those that bite. Surprisingly only a relative few are truly pests. Joe Keiper, a Dipterist at the Cleveland Museum of Natural History, has agreed to be our lead systematist and to line up specialists for this event. The Blitz Committee will be developing plans and committee assignments. If you are interested in helping out or participating in this Blitz please contact Dick Dearborn at (207) 293-2288 or modear@prexar.com or Lynn Havsall at (207) 288-5395 or lhavsall@coa.edu. Space will be limited! This is a great time to join us for this unique and educational event and to meet both old and new friends. Hope to see you there.

As a prelude to this Blitz, Joe Keiper will be hosting a Diptera Workshop at the Delta Institute of Natural History in Bowdoin July 11 to 13. For more information on this workshop visit the Delta Institute on the web at www.vfthomas.com/deltahome.htm or contact Tom Vining at (207) 266-5748 or info@vfthomas.com.

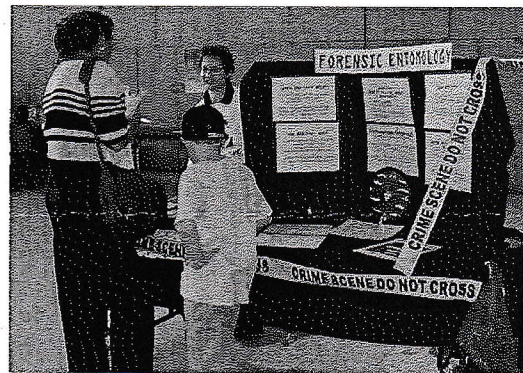
For 2006, the slogan is "THINK FLIES!"

-Dick Dearborn

Bug Maine-ia 2005

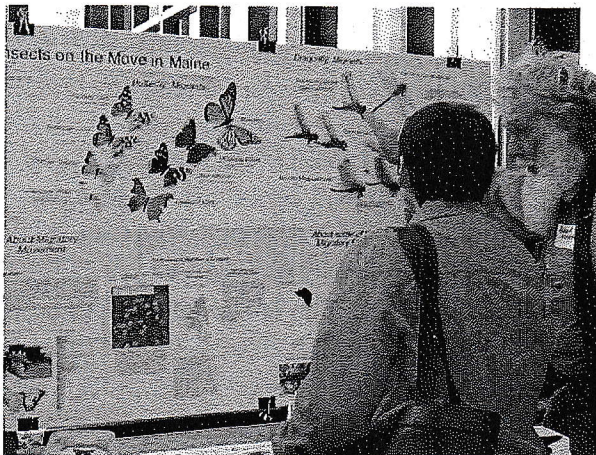


The Maine State Museum hosted its third and largest ever Bug Maine-ia at the Museum September 28. Over twenty groups and individuals supported this midweek event with a wide array of insect-related exhibits. In spite of the workday time of the event, 16 MES members were able to participate, and two additional members attended with school groups. The 1564 visitors who passed by the exhibits represented 62 schools, homeschools, or homeschool groups. In addition, two senior citizen groups were also able to see the displays.



On October 17, the organizers of the event, Jon Bailey and Joanna Torow, wrote to all participants:

"Thank you all for participating in the Bug Maine-ia 2005 celebration at the Museum. It was truly an incredible day with 1564 visitors for the day. The weather could not have been more perfect and all of the participants were going around and enjoying the displays and activities with what seemed to be permanent smiles on their faces.



"This GREAT day could not have happened without all of your work, and we THANK YOU very much. Next year we plan to celebrate Bug Maine-ia 2006 on Wednesday, September 27. I hope that all of you will mark your calendars and plan to participate again.

"Again, Joanna and I, along with all of the other museum staff thank you for making Bug Maine-ia such a great success."

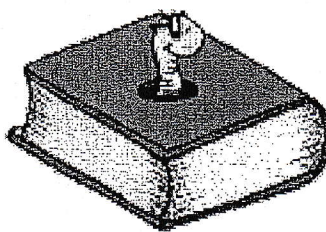
Out of Print Books Live!

Those who missed the chance to get Charles V. Covell's *Person Field Guide to the Eastern Moths* before it went out of print will be glad to know that this helpful book has been republished by the Virginia Museum of Natural History and that copies can be purchased for \$40.00 postpaid from the author at: 207 NE 9th Avenue, Gainesville, FL 32601. He can be also be reached at (352) 846-2000, ext. 251 or by email at covell@louisville.edu.

Another recent book offering may be of interest to a range of naturalists concerned with describing the colors of their subjects. Robert Ridgway's *Color Standards and Color Nomenclature* was privately published by the author almost a hundred years ago for the use of ornithologists, but it is in some ways still the handiest guide to the whole topic in supplying actual names for the color samples provided rather than awkward alphanumeric codes, and copies, when available at all, have until now been extremely expensive. This situation has been remedied by Elibron Classics (www.elibron.com; (617) 731-1182), which offers a paperback reprint for \$24.00 and a downloadable or CD version for considerably less.

The original of this reprint, an example from the Moscow State Library, seems to be in a fairly good state of preservation despite its age, and the CD version which I purchased is particularly accommodating in allowing one to zero in on neighboring shades under suitable magnification.

-Tony Roberts



Book Review: Basic Techniques for Observing Moths and Butterflies

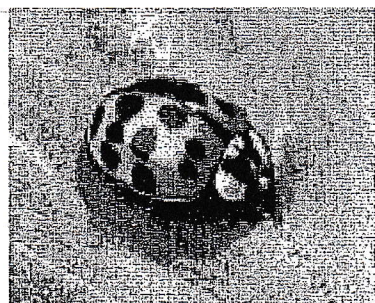
by William D. Winter Jr.
**Memoirs of the Lepidopterists
Society. No. 5. 2000.**

In the President's column of the spring 2000 issue of the Connecticut Butterfly Association Newsletter, Carol Lemmon mentions some of the books she has been reading during the winter. Her first choice is Dave Winter's *Basic Techniques for Observing Moths and Butterflies*. I quickly ordered a copy, which I received (forwarded up to the Maine woods from Massachusetts). The book is a handsome 8"x10" paperback with 444 pages. The book is illustrated with many fine line drawings and a few black and white photographs.

This is a serious book filled with useful technical details and sage advice. It covers, in great detail, just about every aspect of Lepidoptera study – observing, photographing, keeping records, identification, gardening for Lepidoptera, rearing, collecting, preparing specimens, hazards associated with Lepidoptera study, etc. The various categories are covered in enough detail to interest the most serious and experienced Lepidopterists. Beginners will find in this single book everything they need to get started. Entomologists in general, at all levels of experience, will find much of interest. The information regarding chemicals commonly used, details of the various lights used to lure moths, and information regarding butterfly and moth traps are examples likely to be of interest to many.

Besides the vast amount of useful material in the main section, the book also includes 15 appendices, many of them old classics on techniques reprinted from various issues of the *Journal of the Lepidopterists Society*. One appendix I liked is "New Moon Tables." One popular item of Lepidoptera lore is that the best moth collecting occurs in the two weeks straddling the new moon, the New Moon Table gives the new moon dates from 1999-2067. To order this book, contact The Lepidopterists Society c/o Ken Bliss, 28 DuPont Ave., Piscataway, NJ 08854-2435. The price is \$44.00 for non-members, \$29.00 for members, postpaid.

-Richard W. Hildreth



Harmonia axyridis. Photo courtesy of the USDA Agricultural Resource Service.

Harmonia axyridis, its earlier designation of the Halloween Lady Beetle seemed more appropriate this season as hundreds of the orange dots covered objects in and around homes on that scariest of fall festive days, October 31st. Normally such invasions occur in mid-October but cool, wet weather earlier in the month delayed the event until the arrival of warmer weather later in the month. In one case, the "little devils" crawled inside of a carved pumpkin to hide and scared the devil out of several crickets which already taken up residence there!

-Dick Dearborn

Halloween Lady Beetles

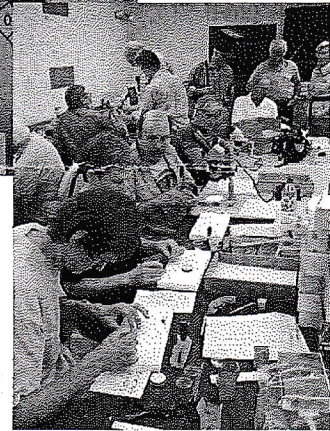
Those pesky lady beetles which have plagued homeowners for a number of years are back in force. Now called most often the Multicolored Asian Lady Beetle, *Harmonia*

Schoodic Coleoptera Blitz 2005



July, a beautiful time to enjoy the coast of Maine. More than 50 entomologists assembled at the Schoodic Education and Research Center (SERC), July 16–18 for a weekend bioblitz

focusing on beetles. The weather was sunny, relatively warm and fog-free, allowing participants to roam over the rocks and through the woods to see how many species of beetles they could find. Although the total numbers found is still being refined as new identifications are made, the current total will be close to 319 species representing 42 families. Of these, 286 have already been identified.



Between 33 and 40 species are expected to be new records for Acadia National Park and some possibly for Maine. This bioblitz was the second such event at Schoodic and was supported by Acadia National Park, Maine Entomological Society (MES), Maine Forest Service, and the University of Maine. There were 26 MES individuals/couples present for the occasion.

A Buggy Crossword for Kids

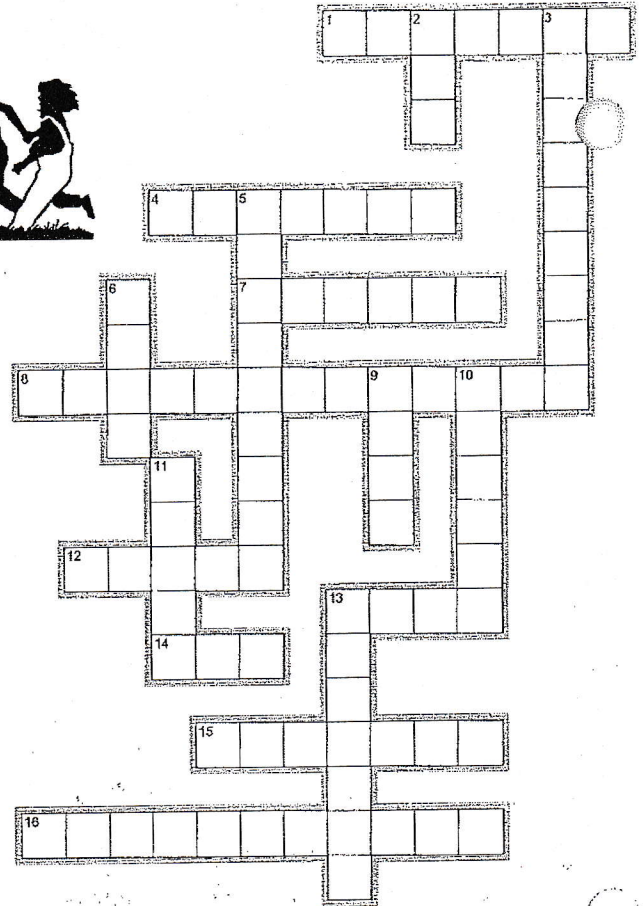
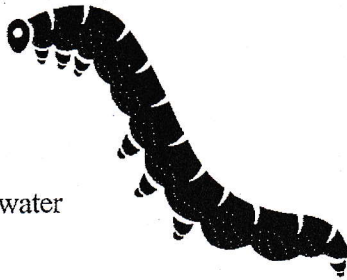


Across

1. I eat milkweed when I'm young
4. Adult insects have a head, thorax, and this
7. Ants herd these for their honeydew
8. Insect development
12. This delicious food is made by bees to feed their young
13. Number of wings on a bee
14. Number of legs a bug has
15. Insects use this to sense their world
16. A young butterfly or moth

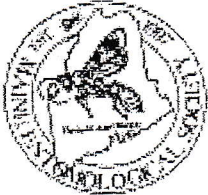
Down

2. Used to catch bugs
3. A cocoon
5. Often seen flying swiftly near water
6. I fly at night
9. A bee's home
10. I have eight legs and build webs
11. Most insects have these for flying
13. Common name for a "flashy" beetle



-Chuck Peters

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