

Phaëton

The Official Newsletter of the Maryland Entomological Society

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FACULTY SPONSORS: Frank E. Hanson and Austin P. (Bob) Platt

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Meeting Announcement

The Maryland Entomological Society's 287th regular meeting will be held Friday, 18 May 2012, at 8:00 p.m., in Room 004 (one floor below the street level), Biological Sciences Building, University of Maryland Baltimore County (UMBC). Bring a friend and specimens, observations, and books to share. Refreshments will be provided. Presentations are scheduled to begin at 8:15 p.m.

Members' Potpourri Night

Speaker: Robert S. Bryant, Maryland Entomological Society Historian

Baltimore, MD

Title: "Slide Presentation of Early and Founding Members of the Maryland Entomological Society from the 1970s"

Maryland Entomological Society (MES) founding member, former Editor of The Maryland Entomologist, and MES Historian Bob Bryant will show historical slides of the founding members of MES and group photos from some of the earliest meetings. His commentary will mention the first officers and how MES was founded in 1971.

Speaker: Fred Paraskevoudakis, Associate Professor

Science Department, Baltimore City Community College, Baltimore, MD

Title: "Observations on the Natural History of Andros Island, Bahamas"

Andros Island is the largest, but yet remains by far the least developed and populated, of the Bahamian islands. Situated southeast of Florida and north of Cuba, the flora and fauna of this extensive island is a mix of Caribbean scrubland, coastal mangrove, as well as pine and mahogany forests. The limestone substrate pocked with sinkholes, coppices, and large "Blue Holes" supports a wealth of botany, birds, and insects and is a naturalist's paradise. Because of the island's unique location on the "Tongue of the Ocean," the surrounding sea is equally stunning in biodiversity and is a scuba diver's mecca. This lecture will present images of the various features, terrain, flora, and fauna of North Andros in a visit from one end to the other, as well as a commentary on the local island life. The undeveloped remoteness of Andros Island allows for great natural history observation, photography, and exploration and makes for an adventurous visit.

Meet for Dinner before the Lecture

If you are interested in meeting for dinner before the lecture, you are invited to join the guest speaker and your fellow MES members at Kibby's Restaurant and Lounge, "Home of Baltimore's Best Shrimp Salad Sandwich." Kibby's is located inside the Baltimore Beltway at 3450 Wilkins Avenue, Baltimore, MD 21229, just 15 minutes from UMBC. Meet at the restaurant promptly at 6:00 p.m.

For more information concerning this meeting, please contact one of the following people:

Annapolis Area: **Harold Harlan** (410) 923-0173 (Home) haroldharlan@comcast.net Baltimore Area: Fred Paras (410) 374-0425 (Home) bugandrockman@msn.com

> Phil Kean (410) 944-4630 (Home)

Frank Hanson (410) 455-2265 (Biological Sciences, UMBC) hanson@umbc.edu **Gene Scarpulla** (301) 464-3170 (Home) ejscarp@comcast.net

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20 APRIL 2012 MES MEETING MINUTES

The 286th general meeting of the Maryland Entomological Society was held on Friday, 20 April 2012 at UMBC and began at 8:32 p.m. with a welcome by President Fred Paras and then an introduction of the main speaker and program, which is summarized below. Refreshments and informal discussions were enjoyed by all after the main program, and this was followed by a business meeting. The March 2012 MES meeting minutes were read and approved; and the Treasurer's report was given, citing an MES Funds total of \$2601.15, which represents an increase of \$30 since the March meeting. Three items of business were discussed: 1) the Society field trip, 2) the election of officers at the May meeting, and 3) an MES outdoor picnic in September. Field trip locations considered were Savage River State Forest (Garrett County) in July and the New Bridge Road area (Dorchester County) in late July or early August. A final location will be chosen during the May meeting. A call for officer nominations from the MES membership for next fiscal year is issued, and all nominees will be considered during the May election process. For a September Society picnic, potential locations included Gambrill State Park (Frederick County) and South Mountain State Park (Frederick County/Washington County). MES member Mike Turell volunteered to look into permits for specimen collecting and submission of lists of identified species to park offices. There were also several announcements. Mike Turell again offered for sale at reduced prices his colorful nature-themed tote bags, mugs, and T-shirts from the Wild Cotton product line. Proceeds go to Dr. Turell's Frederick, MD 4-H Club. MES member Dick **Smith** announced the start this year of a state-wide, five-yearlong butterfly and moth atlasing project in West Virginia and sponsored by the WV DNR Wildlife Resources Section in Farmington, WV. Details are given later in this newsletter. Three large drawers of moth specimens were displayed by MES member Bob Bryant from his extensive Maryland moth collection. Finally, four large drawers of butterfly specimens from Borneo were displayed by the evening's speaker, including striking Nymphalid specimens from the genera Zeuxidia Hübner and Amathuxidia Staudinger.

Respectfully submitted, Richard H. Smith, MES Secretary

20 APRIL 2012 MES LECTURE

"The Barito River Initiative for Nature Conservation and Communities (BRINCC) Expedition: Biodiversity monitoring and conservation in the rainforests of Central Borneo" – Speaker: Peter R. Houlihan, Department of Behavioral Biology, The Johns Hopkins University, Baltimore, MD and Project Leader – Entomology, BRINCC MES member Peter R. Houlihan is the BRINCC expedition's lead entomology researcher, and he is receiving his Bachelor of Arts degree this spring in the Department of Behavioral Biology at The Johns Hopkins University, Baltimore, MD, which helped to fund Peter's work through the David S. Olton Award.

BioQuip Products sponsored Peter's entomology equipment. The expedition was a 4-month (June to September 2011) effort along Borneo's Murung River, in the upper Barito watershed, where the teams worked with local communities to identify, map, and protect areas of forest that are the most important for local people and wildlife. Peter explained that the BRINCC expedition had two components, a social science team and a biodiversity team. BRINCC also has an education program for school children, which was supported by Dr. Jane Goodall at a workshop in Singapore. The expedition members came from organizations in the United States, Europe, and Indonesia. The teams flew into Borneo, arriving at the Palangkaraya Airport. The study area was in the vicinity of the Tumbang Tujang and Kalasin villages along the Murung River in central Borneo (Murung Raya district) in the province of Kalimantan Tengah. Travel to the study area from the airport required two 14-hour drives on dirt roads and several boat trips, unfortunately crossing large areas of former rainforest with downed and logged trees and burned areas cleared mostly by foreign palm oil companies. Some of the tree trunks measured 2 meters (6.6 feet) in diameter. The social science team was primarily stationed in the villages and collected qualitative data by means of focus groups and questionnaires on the relationship and importance of the rainforest to the needs of the local villagers. The paths of resources from initial collection to final utilization were documented. The team also worked with information gathered from the local people and used GPS and GIS satellite technology to map forest resources, such as hunting and fresh water areas, of value to the inhabitants. Finally the team taught techniques and encouraged local participation of the resident communities in the conservation and efficient utilization of the region's resources. Local villages are culturally diverse, including people from Dayak and Punan groups, as well as several others. The other expedition team, which addressed biodiversity, erected camps at three different sites in the surrounding rainforest. Their work focused on three key research objectives: 1) to provide an estimate of biodiversity across numerous taxonomic groups, 2) to estimate the ecosystem health using indicator species, and 3) to provide estimates of population density of flagship species including primates, large mammals, and birds. The research team consisted of a specialist in botany and specialists in the following six animal groups: gibbons and other primates, amphibians, large mammals, small mammals, birds, and butterflies. Gibbon density was estimated using triangulation, which is a method that records gibbon numbers at three different fixed-point locations within the research area and obtains density from a mathematical formula. In the area, the biodiversity team found 8 species of primates consisting of Borneo Gibbon, Hylobates muelleri Martin; Proboscis Monkey, Nasalis larvatus (Wurmb); Red Leaf Monkey (Red Langur), Presbytis rubicunda (Müller): White-fronted Leaf Monkey (White-fronted Langur), Presbytis frontata (Müller); Crabeating Macaque (Long-tailed Macaque), Macaca fascicularis (Raffles); Pigtail Macaque, *Macaca nemestrina* (Linnaeus); Western Tarsier, Tarsius bancanus Horsfield; and Slow Loris

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Nycticebus coucang (Boddaert). Also, 37 species of frogs and 223 species of birds were identified, 16 of which were endemic to Borneo. The greatest diversity of bird species was along rivers. Camera-trapping (night sensor flash photos) and track identification was conducted for larger mammals.

Peter carried out the entomological component of the work. Hand netting, fruit bait, malaise and pitfall traps as well as nocturnal insect light trapping were utilized. A total of 23 days of trapping were recorded in the Hutan Desa community forest and 15 days of trapping in the primary forest of the Bora River. Terrestrial leeches were an ever-present nuisance along trails. The DNA of sample butterfly specimens will be sequenced by the Barcode of Life Database (BOLD) in order to provide greater insight into the biogeography and phenotypic variation of Kalimantan's understudied mountain and river valley species. While data analysis is yet to be completed, all results will be collated into a series of academic papers. In total, more than 100 species of butterflies were recorded and will be compiled into a guide addressing the butterflies of the Upper Barito River.

A preliminary report on the expedition is currently available on the internet at: http://www.scribd.com/doc/79567791/BRINCC-Prelim-Report-English.

BRINCC is currently working to encourage local mining and logging companies to carry out thorough Environmental Impact Assessments with community involvement, prior to commencing resource extraction projects that would severely damage the livelihoods of local people and the status of threatened wildlife. Peter and the BRINCC teams are continually developing their future efforts in the Murung Raya district, with another expedition likely in 2013.

Respectfully submitted, Richard H. Smith, MES Secretary

WELCOME TO NEW MEMBER OF MES

MES welcomes the following new member to the Society:

Mark C. Taylor Hebron, MD

WEST VIRGINIA BUTTERFLY ATLAS PROJECT

The West Virginia butterfly atlas project is scheduled to run from spring 2012 through 2016. During the first two years, efforts will concentrate on the Monongahela National Forest because the West Virginia Division of Natural Resources received a grant from the U.S. Forest Service to survey for rare butterflies (following up on Linda Butler's gypsy moth control work from the 1990s). However, I'll be accepting vouchers from anywhere in the state. Definitive live photographic series displaying critical identification features, as well as collected specimens, will be accepted. Although I hope not to have to use purely sight records, I'll be collecting those as well just in case. We'll be looking for all butterflies and for selected moths – Saturniidae (giant silkworm moths), Sphingidae (hawk moths), and state rare species. (To request a list of West Virginia's rare, threatened, and endangered butterflies and moths, please e-mail MES member Dick Smith at richard.smith@jhuapl.edu.) We

were successful using volunteers surveying for *The West Virginia Dragonfly and Damselfly Atlas* (2011), so we're planning on using them again. This atlas is modeled after the Maine Butterfly Survey with similar data forms and protocols. Like any atlas, the primary purpose is the documentation of species accompanied by a date and good location data. For anyone wishing to participate, please contact me first at the address, phone number, or e-mail listed below to receive details on data protocol and policies. (For example, GPS coordinates of each record, which can be obtained after the fact from Google Maps, are required.)

Contact Information: Susan Olcott, Wildlife Diversity and Technical Services Unit, WVDNR Wildlife Resources Section, PO Box 99, 1110 Railroad Street, Farmington, WV 26571, (304) 825-6787, fax (304)825-6270, susan.p.olcott@wv.gov

EDEN MILL BIOBLITZ VOLUNTEERS NEEDED

The Natural History Society of Maryland will be hosting a Bioblitz on 23 June 2012. Come join other naturalists and nature enthusiasts at Eden Mill Nature Center, 1617 Eden Mill Road, Pylesville (Harford County), to search and inventory all of the natural findings in one day. Experts like you are needed to lead groups throughout Eden Mill to identify flora and fauna. Ideally, we would like one expert for each group (e.g. birds, mammals, insects, plants, herps, etc.) An Eden Mill volunteer who is familiar with the grounds will be paired with each expert.

Not an expert, but still want to help out for a shift? We will need some volunteers to help direct participants and keep track of groups' schedules. If interested, please contact Kristine Styer at Kritterbuggg@gmail.com or (302)-562-5186 and provide the following information: name, expertise, shift hours (e.g. 6 a.m. – 8 a.m., 12 p.m. – 2 p.m.), and contact information.

EARLY SPRING INSECT PHENOLOGY

Butterflies: We observed a fresh-looking very orange Sleepy Orange, *Abaeis nicippe* (Cramer) (Pieridae), not "washed out" yellow, seen in flight and sitting in a sunlit forest gap, ~ 55° F. We got good looks at it but with no net or camera, only that. I think of this species as being a late summer/fall migrant in Maryland, maybe able to get a brood through, but not surviving winter. But "south" is moving northward so it's really no surprise, only that it may be an earliest flight record so far and more evidence for it becoming resident in Maryland. Here are the locality data: MARYLAND: Prince George's County, Cheverly (Euclid Woods), 38°55'23"N, 76°54'23"W, 20 February 2012, W. E. Steiner, J. M. Swearingen, et al.

Some other casual observations this spring...Zebra Swallowtail, *Eurytides marcellus* (Cramer) (Papilionidae), were flying on 19 March (long before pawpaw, *Asimina* sp. Adans. (Annonaceae), was leafed out) along the Maryland side of the Potomac River, Carderock area (Montgomery County), and saw a Red-banded Hairstreak *Calycopis cecrops* (Fabricius) (Lycaenidae), on the Billy Goat Trail, Chesapeake & Ohio Canal National Historic Park (Montgomery County) on 7 April. Falcate Orangetips,

Anthocharis midea (Hübner) (Pieridae), flying at the North Tract of Patuxent Research Refuge (Anne Arundel County) on 26 March (not too unusual) but also saw a Pearl Crescent, *Phyciodes tharos* (Drury) (Nymphalidae),---seems way early.

Darkling Beetles: On 13 March (after record high day temperatures earlier than ever) I ran the blacklight in Cheverly (Prince George's County), at tree canopy level, and got five species of Tenebrionidae, all known to hibernate as adults, but the earliest flight records for sure. Afternoon temperature reached 79°F and at dusk was 75°F when the light was turned on; sheets were tended until 11:00 p.m. Ten *Neomida bicornis* (Fabricius), 2 each *Platydema ruficorne* (Sturm) and *P. teleops* Triplehorn, and single *Adelina pallida* (Say) and *Rhipidandrus paradoxus* (Beauvois) were observed or collected. But spring emerging species were early also, e.g., the flightless *Helops aereus* Germar, first found on 25 February near Crofton (Anne Arundel County), about 4 weeks earlier than typical.

Submitted by MES member Warren Steiner

SPRING OCCURRENCES OF SLEEPY ORANGE ABAEIS NICIPPE (CRAMER) (PIERIDAE)

I don't believe Sleepy Oranges overwinter in the chrysalis stage here in northern Virginia. Their food plant, a tall senna species, Senna Mill. (Fabaceae), is usually quite deteriorated by mid-September in the natural habitat and there is little food for the caterpillars to feed on after September. I had often wondered about this, wondering why there is a full brood in September and early October, with adults quite active in a field here in Leesburg (Loudoun County), Virginia, even after the plants have completely lost their leaves and seed pods are brown and popping open. There is practically nothing left to lay eggs on. Yet, there they are, in early spring! After reading some guides on the subject, it became evident that Sleepy Oranges overwinter in the adult stage in the south, so why not here? So in fall 2010, I captured an adult male in October and placed him in a small container inside a box, in my garage for the winter. He went right into hibernation all winter. Slight misting about every week but he never seemed to feed, even when exposed to daylight and slight warmth for a bit. Just sat there. In very early spring, I exposed him to sun on a warm day, fed him hummingbird mixture, and off he flew!

I am now convinced they overwinter as adults. I have seen several *A. nicippe* in different locations in March of this year plus I recorded one at Cedarville State Forest near Waldorf (Charles County), Maryland in late March. These are not migrants but local emergers that have hibernated.

I do not believe they overwinter as chrysalids except perhaps if a late larvae is feeding on the last bits of available host plant in late September and then if it quickly gets cold, perhaps the chrysalis might hold off until spring. The butterflies appear to be quite long-lived despite their frailness. I note that there is a very early spring "flight" in our region which appears to be the overwintering adults coming out early. These don't have anything to lay eggs on until early May, so must be flying

around until then. The resulting adult offspring emerge in July. The offspring of the July flight, in turn, take quite a while to produce the September-October flight. That flight overwinters. The earlier (September) ones are summer form (yellow ventral hindwing), and as the weather gets colder and days shorter, they start to emerge as the overwintering form (reddish ventral hindwing). The last ones to emerge are very reddish beneath (October) and in the following spring it is those that are usually seen

This year, I have seen them as early as late April in West Virginia. I have also seen them up at Reddish Knob (Augusta County), Virginia in mid-May in past years.

Submitted by MES member Harry Pavulaan

YORK COUNTY, PA 4-H ENTOMOLOGY CLUB

The York County, Pennsylvania 4-H Entomology Club will be in the Green Ridge State Forest (Allegany County), Maryland on 15-18 June 2012. If any of the MES membership would like to visit with the kids and possibly help guide them to find some new insects for their 4-H entomology projects, please e-mail me at Info@RyanTheBugMan.com and let me know. Also, my website is http://ryanthebugman.com/ Thanks. Ryan Bridge, "The Bug Man"

OVIPOSITING TWIN-SPOTTED SPIKETAIL IN EDGEWATER, MD DOCUMENTED ON VIDEO

Once again, Tyler Bell from the Smithsonian Environmental Research Center (SERC), Edgewater (Anne Arundel County) has submitted another interesting video that he filmed at SERC, this time of a female Twin-spotted Spiketail, *Cordulegaster maculata* Selys (Odonata: Cordulegastridae), ovipositing in a stream off of Cumberstone Road on 10 April 2012. The video can be viewed at:

http://www.flickr.com/photos/8671193@N08/6919350480/in/photostream

USF&WS LISTS MIAMI BLUE AS "ENDANGERED" & THREE OTHER BLUES AS "THREATENED"

Effective 6 April 2012, the U.S. Fish and Wildlife Service (Service) formally listed the Miami Blue, *Cyclargus thomasi bethunebakeri* (W. Comstock & Huntington) (Lepidoptera: Lycaenidae), as "Endangered" throughout its range. Under the Endangered Species Program, "it is illegal to kill, harm or otherwise 'take' a listed species, or to possess, import, export, or engage in interstate or international commerce of a listed species without authorization in the form of a permit from the Service."

The Service also listed the populations of Cassius Blue, *Leptotes cassius theonus* (Lucas); Ceraunus Blue, *Hemiargus ceraunus antibubastus* Hübner; and Nickerbean Blue, *Cyclargus ammon* (Lucas), as "Threatened" within the current and historical range of the Miami Blue due to their similarity of appearance to the Miami Blue.