

Friends of the Entomology Research Museum



Newsletter



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FERM: Friends of the Entomology Research Museum is a UCR campus sponsored support group whose membership is open to students, faculty, staff, and the general public. Annual dues are ten dollars. Membership privileges include the annual meeting, and other occasional meetings and events including field trips and lectures.

Newsletters Online!

Back issues of the FERM newsletter are now available for online viewing! They can be accessed at the following URL:

[http://entmuseum.ucr.edu/
join_us_ferm.htm](http://entmuseum.ucr.edu/join_us_ferm.htm)

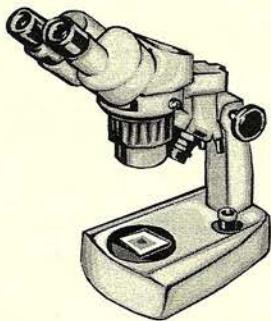
The FERM Newsletter is published approximately quarterly and contains articles written by FERM members. If you would like to submit an article, please send it as a Word/Wordperfect file using one of the following two methods: (1) an attachment via email to the editor (see below) or (2) a hard copy version on disk. Submissions will be published in the order they are received in accordance with space availability and relevancy to the FERM general readership. If you have questions please contact the FERM Newsletter editor, Doug Yanega: dyanega@ucr.edu

The Return of the Collect-A-Thon! June 13-14, 2009

The Friends of the Entomological Research Museum will sponsor its third insect Collect-A-Thon on June 13-14, 2009. The party (if you want to call it that) will be set at the residence of Kurt Leuschner, a FERM member who teaches at College of the Desert. His place is in Pinyon Pines, near Pinyon Flats Campground, in the mountains above Palm Springs and just west of the U.C. Deep Canyon Reserve. Detailed driving directions will be given to those interested in participating, and should take about 1.5 hours driving from Riverside.

This activity is meant as a fun 24-hour collecting marathon for two-person teams of FERM members, students, and staff to see how many families of insects teams of friends can collect. In 24 hours, starting at noon Saturday and continuing until noon Sunday, a hard-core team might collect over 200 families of insects. This location has about 80 species of metallic wood boring beetles in residence alone! Dust off your old Borror and DeLong (for the younger set, you will blow the dust off of your copy of Triplehorn, Johnson, Borror and DeLong). The OFFICIAL list of families is that in the 7th Edition of this standard text; it has changed over the various editions, and copies of the 7th Edition list will be made available to participating teams that do not have their own copy, to use as a checklist. One specimen is all it takes to check a family off the list, and no bonus points are awarded for having multiple species in the same family; that's why it's important that everyone uses the exact same checklist.

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NEWS FROM THE MUSEUM

by Doug Yanega, Senior Museum Scientist

Things have been busy in the Museum lately. Alexis Park and myself have now databased over 50,000 of Timberlake's bees; the UCR Entomology department has generously chipped in to cover a shortfall in the grant money, to support Alexis through the end of June, and I will continue working past that point to get the records all properly georeferenced and put online. Chris Jordan and Sergey Kuzin continue working on the slide-mounted parasitic wasps. Guanyang Zhang worked in the ERM last quarter and sorted all of our unidentified Hemiptera, and Sunghoon Baek is working this quarter to put labels on our backlog of point-mounted material.

With the bees and slides now being databased, the Museum's regular database has now grown to roughly 223,000 specimens, nearly 29,000 specimens having been added since the last newsletter. There have already been a few good field trips this season, and hopefully there will be several more, this being a fairly good season in terms of flowers in the desert; we may not have had a LOT of rainfall, but what there was had a very significant impact.

A Quick Review of FERM's 2008 Season

By Gene Drake, FERM President

What did FERM accomplish last season? We had 2 field trips! The first trip was to Devils Punch Bowl Park in Los Angeles County near Lancaster on June 3. Seven or eight hardy individuals were present by Saturday evening. The collecting was poor at park headquarters. However, a drop in elevation to the intermittent stream yielded some interesting insects both aquatic and terrestrial. Your author found some adult Miridae that found their way to Dr. Christiane Weirauch's collection and will probably give up their DNA for the good of science. Two male *Capnia* coyote were found by beating the bushes along the stream. Why male *Capnia* were flying in early June only they will know for sure. If *Capnia* species on an intermittent creek bothers you; fear not they do it all the time. *Capnia* nymphs spend their lives several feet down in the moist sand below the actual flowing water level on any stream. *Capnia* coyote is endemic to what is left of the Mojave River system. If *Capnia* coyote had 4 legs, brown eyes and hair like it's namesake, someone would step forward to propose it as a Rare and Endangered species. It's tuff being an insect emerging in the winter!

Let's see, Greg Ballmer collected and mounted several colorful butterflies that will be donated to the insect display at Devil's Punch Bowl. Some velvet ants wandered into my net along with a small scarab or two will also make it into the collection at Devil's Punch Bowl. Why put insects into a collection at Devil's Punch Bowl? FERM gets a place for group outings and the Devil's Punch bowl gets their insect collection curated – that surely qualifies as an outreach program!

The second FERM field trip for the season went to Wildhorse Meadows off Highway 38 at about the 7,500 foot mark. Your author scored some interesting diapriids that will make it into the ERM Collection. Some medium size ichneumon wasps and several colorful sulfur butterflies as well as a few blue lycaenid butterflies were collected that may make it to Devil's Punch Bowl. Greg Ballmer was busy running from one blue lycaenid butterfly to the next lycaenid butterfly. He actually stayed busy all day chasing lycaenids on several patches of *Eriogonum* sp. with some *Lotus* sp. tossed in for good measure.

One car arrived late on the Wildhorse trip and should have brought their own saddle horse. Two stout folks tried to walk from the highway to Wildhorse Meadows. Somewhere the lost souls tried to telephone the trip leader to say they had aborted their trip. The phone message was received when the trip leader got to the exact point where the message was placed into the telephone system. The wonders of wilderness. No phones! Small foreign-made passenger cars just don't do on rough roads. The best part is that the driver of said small car had the presence of mind to give up before the car was damaged. Trip leaders don't like to drag dead cars out over miles of rough road to get them to where the tow truck will finally take over. Ask me about dragging a Jeep Cherokee out of the back country some night. That puts hair on your chest, after it is pulled from the top of your head. And you thought I suffered from Male Pattern Baldness! Many people have followed me into the wilderness and made really stupid mistakes along the route. At any rate, I hope everyone had at least one good trip into the wilderness in pursuit of a trophy insect.

Coleoptera In All Its Glory

By Adena Why, FERM Vice-President

"That's a beetle? Extraordinary!" If you were at the FERM Annual Meeting on January 31, you might have found a question such as that floating through your mind during the speaker's presentation. Amazing automontage images highlighted Dr. Michael Caterino's presentation that night, entitled "Beetle Diversity of Southern California". Dr. Caterino is the Schlinger Foundation Chair of Entomology at the Santa Barbara Museum of Natural History. There he helps to oversee the Invertebrate Zoology collection, specifically insects and other terrestrial arthropods, with a majority of his efforts being focused on beetles. He also oversees the California Beetle Project, which is an on-going effort to study and catalog beetles endemic to the California Floristic Province.

His presentation was an overview of the California Beetle Project focusing on Coleoptera endemic to Southern California. The project, under the direction of Dr. Caterino, has discovered numerous new species ranging from the "ubiquitous brown beetle" to the exciting and bizarre. The talk included work done on the Channel Islands where Mike and his team, through the support of the National Geographic Society, discovered new beetle species found on the islands and nowhere else. Amidst the military operations and ocean-driven waves and winds, some new species were found to be inhabiting only one island while other species were found to be dispersed on a few islands within the chain.

The talk was engaging and informative, which was quite a feat after the potluck dinner FERM members had consumed only a short time before. Fare from a wide range of cuisines and cultures was on hand, as well as a heavily stocked dessert table. Those watching their waistlines were advised to avoid the dessert area as multiple types of cookies, brownies and pies were on display. One could have justified picking up the desserts though, as they were on the same table as a large platter of tangerines. Besides, everyone needed fuel after the talk in order to maintain their stamina for the book auction.

Dr. John Heraty was the night's auctioneer and did a fantastic job! This was Dr. Heraty's second year in a row as auctioneer and he may have missed his calling. FERM raised over \$500.00 from the auction. Book topics ranging from textbooks, morphological keys, apiculture, and field guides were among the items auctioned for fantastic prices. Dr. Caterino donated 20 copies of the "Entomological Guide to the Channel Islands". It was decided that each person who bought a book at the auction would receive the Channel Islands book as an extra gift. This led to some serious bidding between FERM members. Schmitt boxes and pinning boards were also up for bid. Mike Caterino, not to be left out of the fun, got in on the action and walked away with a few choice purchases.

The audience was diverse, including undergraduate and graduate students, professors, botanists, and entomological professionals, as well as hobbyists and longtime FERM members. FERM president Eugene Drake kicked off the Annual meeting with a brief report on FERM activities and the budget. FERM is solvent with over \$1500.00 in the bank. The graduate student association (EGSA) manned a table where they sold departmental merchandise as well as FERM posters, which highlights insects endemic to southern California. If you don't have a FERM poster yet, or didn't know they were for sale, then come on down and pick one up. One can be yours for a \$5 donation to FERM, and they are for sale during normal business hours in the Entomology business office.

For those of us who love Coleoptera, the Annual meeting was a real treat and a reminder of how much we still have left to discover. Not to mention a reminder of how awesome a small, seemingly nondescript beetle looks in an automontage photo! But I digress; Dr. Caterino's talk was fun and interesting on many levels, even to those whose favorite insect order is not Coleoptera. I would like to take this opportunity to thank Dr. Caterino again for being our featured speaker and special guest at the 2009 FERM Annual Meeting.

I hope to see you all for our "Collectathon" and at our next Annual Meeting!

RETURN OF THE COLLECT-A-THON!

(continued from front page)

The rules are straightforward: you can collect anywhere not legally off-limits (i.e., private property) within walking distance, no passive collecting is allowed (no use of traps that kill insects; a pan trap or pitfall trap is off-limits, for example, but a black light that attracts insects where they are then collected by hand is acceptable, as is gathering a litter sample and actively sifting it), and specimens must be sexually mature (no eggs, larvae, nymphs, or pupae). Since we cannot supply a black light for every team, insects coming to black lights are treated as "first come, first served" – hopefully, people can be polite and respectful and not interfere with one another. Teams will not be permitted the use of Berlese funnels; we could potentially only make a limited number available (and even then only with difficulty), and there is no practical way to be fair regarding their allocation, since there is no way to share them. Specimens collected will be processed on-site to the extent possible, but we realize that getting *everything* sorted, mounted, labeled, and identified right away is impossible, so teams will have a week grace period to get everything ready and submitted for the judges' approval (the judges confirm that everything is identified correctly). The winning team will be immortalized in the next FERM newsletter, and each team member will receive a personalized prize.

To make the event work, we will need an e-mail from everyone that wants to get involved, so we know exactly how many people will need to be accommodated. We need to count noses and get through the 24 hours with the same number of noses and then keep our fingers crossed, to get home with the correct number of noses that started the trip. Come out and see how we herd cats!

A few extra pieces of equipment (such as nets) can be provided for those persons not already well-equipped for insect collecting, but we will need to know in advance if you have any such needs, and given our limited supplies, those who make requests first will have priority. There will be basic amenities on site, i.e. water and bathroom facilities, and we may be able to provide a small number of drinks and snacks, but for the most part you will need to provide your own food supplies, and sleeping bags if you wish to take a break during the wee hours.

On this trip carpooling is strongly encouraged. To coordinate this, and indicate your interest in the event, please contact Adena Why or Gene Drake at the following: awhy001@student.ucr.edu or genedrake@earthlink.net.



Got an idea for a FERM article???

Do you have anything buggy-related that might be of interest for the FERM newsletter? We really would be tickled pinkish if you would send "stuff" in to us. Remember, this newsletter won't have much in it unless we have material submitted from you folks that we can publish. Feel free to send in photos, articles, recent publications related to insect taxonomy or natural history and even stories about how the Entomology Research Museum has assisted you in your bug-related endeavors. Send them to dyanega@ucr.edu, preferably as attachments (not in email text). Additional information is on the front page of this newsletter.



Renew Your Membership and/or Join FERM

Beyond the printing and distribution of the newsletter, your membership helps support travel grants for students and staff. In the past, funds raised by FERM have purchased a microscope for the museum and drawers and unit trays to hold thousands of specimens. We've provided travel funds for students trying to finish graduate degrees, and specialists in various fields of entomology have enjoyed receiving a few bucks from FERM to come visit and help curate the UC Riverside collection. FERM funds maintain a generator and black light available to members for collecting trips. FERM has supported students working part time in the museum, mounting specimens and sometimes databasing important material. There are important collections on ice in the museum's deep freeze waiting curatorial activity (the museum's deep freezes are currently holding enough insect material to keep a technician busy for most of his life!). We would like to be able to put another student to work mounting and/or labeling insects, though we don't expect to retain them for the rest of their life - other student help will follow in their tracks. The bottom line is that money sent to FERM does get put to good use, and is greatly appreciated.

As we stand now, there is not enough money to fund grants for travel or any other function for that matter. It would be nice to get a few dollars ahead. For those following the latest fiscal problems, Entomology Museums don't normally get bailout funds. A few of you have been kind enough to contribute your dues recently, for which we are grateful, and for the rest of you we include below a convenient dues renewal form, which we hope you'll send in soon. Thanks very much!

Friends of the Entomology Research Museum Membership Form

Check here if you are renewing (renew by July each year)

Name _____
Address _____
Interests _____
Telephone _____ Email _____

MEMBERSHIP CATEGORIES:

Basic Membership	\$10.00	<input type="checkbox"/>
Sustaining Member	\$25.00+	<input type="checkbox"/>
Donor	\$100.00+	<input type="checkbox"/>
Benefactor	\$500.00+	<input type="checkbox"/>
Patron	\$1000.00+	<input type="checkbox"/>

Please Check

Submit your membership form and dues to:

David C. Hawks, Treasurer
Friends of the Entomology
Research Museum
Department of Entomology
University of California
Riverside, CA 92521-0314

Dues and other contributions are payable by check to the UCR Foundation, noting "Entomology Museum" on the memo line on your check. (It is very important to note "Entomology Museum" in order for your donation to be deposited in the Friends' UCR Foundation account.)



Photos by G. R. Ballmer ©

Fulgoraecia exigua (Lepidoptera: Epipyropidae)

It is a little-known fact that there is a family of moths, Epipyropidae, that are obligate ectoparasites on other insects; the one known representative of this family in the US is *Fulgoraecia exigua*. The area around Pinyon Flats in the San Jacinto Mountains, the site of this year's FERM Collectathon, is one of the few localities in California where this moth is known to occur, and it may even be an undescribed species (it is quite isolated from the nearest other populations, and it has white hindwings, whereas all other populations known have black hindwings). The larva, shown here feeding on an apparently undescribed species of planthopper in the genus *Dictyssa* (family Nogodinidae, formerly placed in Issidae), attaches to the side of the host's body and grows by feeding on body fluids until it is about 4 mm long - over half the length of the host and probably more massive - at which point it detaches and makes its cocoon. The larva is covered with a white, powdery waxy secretion, and the cocoon is white, both somewhat similar in appearance to the powder-covered "berries" of the juniper bushes this planthopper feeds on. However, the moth also parasitizes other genera and families of planthoppers that feed on other plants, such as oaks, so the resemblance to juniper berries is clearly coincidental; in other places, folks have mistaken them for mealybugs.