No. 2, December 1998

Friends of the Entomology Research Museum

Newsletter

Editors: Connell Dunning and Robert Weppler

Butterflies of Anza-Borrego State Park

- Gordon Pratt

This season I had the pleasure of surveying the butterfly fauna of the montane western edge of Anza-Borrego Desert State Park, California's largest state park. My studies here, involving primarily a survey for the Federally Endangered Quino Checkerspot Butterfly, made it clear to me just how poorly known are the butterfly distributions in this area.

In addition to developing a list of butterfly species found (Table 1), the known range and elevation of the Quino Checkerspot have been increased. It is now known to occur on BLM land about 10 miles south of the town of Anza at 5000 feet elevation. This is about 15 miles east of previously known Riverside County localities and 2000 feet higher in elevation than the next highest previously known population. Initial discoveries led me to become interested in other desert edge portions of Anza-Borrego Desert State Park, much of which is not accessible by the normal paths taken by tourists, but nevertheless provide interesting and spectacular scenery.

At the higher elevations of the northwestern corner of Anza-Borrego State Park, around Combs Peak, much of the habitat is chaparral with *Ceanothus* species, *Quercus* species, *Cercocarpus betuloides*, *Prunus ilicifolia*, and scattered *Pinus coulteri*. Although this area has dense brush, there is an excellent trail that runs through it, the Pacific Crest Trail. A great surprise here was finding a highly isolated population of *Eriogonum umbellatum* (Sulfur Flowered Buckwheat). As far as I can tell, and in discussions with Andy Sanders of the UCR Herbarium, this is a new record for San Diego County. There are some recent lists of plants of San Diego County that we were not able to check at the time. This area is accessible from Chihuahua Valley Road off of Route 79. It is a beautiful area in which to study the insect diversity of the desert edge.

Another seldom explored area along the central western edge of Anza-Borrego is the San Felipe Hills which has a small *Quercus* species (close to *turbinella*), *Juniperus californica*, *Condaliopsis* (now *Ziziphus*) *parryi*, *Prunus ilicifolia*, and *Agave deserti*. This area is just east of Route S2 and north of the famous insect collecting locality, Scissors Crossing. A third area, at the southwestern corner of Anza-Borrego State Park, is just north of Jacumba, and south of I-8. It is quite similar to the San Felipe Hills with many of the same plants. One can get to this area by driving up a dirt road that crosses railroad tracks on the northwest side of Jacumba and heads towards I-8. In 1997, when I last took this route, we came across an old car, which a bunch of us were able to move to the side of the road. I surveyed these three areas by sampling at increasing elevations as the season progressed.

Fifty-one species of butterflies were found at these three desert edge localities of Anza-Borrego Desert State Park (Table 1). I suspect that many of these species, such as the chaparral inhabiting lycaenids (Hairstreaks and Blues) are new records for the Park. This is particularly true of such species as *Icaricia lupini*, *Celastrina ladon*, *Incisalia augustinus*, *Satyrium saepium*, *Satyrium auretorum*, *Satyrium tetra*, *Satyrium californica*, and *Habrodais grunus*. I suspect that among the nymphalids, *Charidryas gabbii*, *Speyeria coronis* and *Adelpha bredowii* are also new. The California Dogface Butterfly, our state insect, is possibly also not previously known from this area.

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20% Discount on UCR Extension Natural Sciences Courses

We are pleased to announce that FERM is now an official member of the UCR Extension's "PINE" (Partners in Natural Education) program. As such, FERM members are entitled to a 20% discount on all natural sciences and outdoor courses listed on pages 164-168 in the Winter 1999 Extension Catalog. These include enticing course titles such as Desert Flora, Wildlife of the San Jacinto Mountains, A Field Study of Birds, Natural History of Insects, Tick Identification Workshop, The Ecology of Southern California Butterflies, and Geology and Natural History of Anza-Borrego State Park. If you do not receive the UCR Extension Catalog and would like to, call 909-787-4105 or 800-442-4990.

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Because my sampling was concentrated in Quino Checkerspot habitat at the desert edge, there are many more desert butterfly species that were not recorded by this survey. In addition, I believed that these mountain/desert ecotone areas would have the highest probability of containing new taxa. The butterfly distributions in lower elevations of the park are better known because these areas are more accessible to visitors.

There are probably more butterfly species to be discovered in the montane border areas of the park. New potential species could be *Lycaena arota* and *Lycaena gorgon*, due the presence of their food plants, *Ribes* and *Eriogonum nudum, respectively* . I have previously found both *L. arota* and *L. gorgon* just south of Anza, which is very close to the survey area. *Polygonia zephyrus* could also be present along the northern slopes of Combs Peak. Since *Colias eurydice* is present here, it would not be unlikely to find *Epargyreus clarus* which feeds on the same food plants, *Amorpha* species. Finally, there are old records of the rare skipper *Pseudocopaeodes eunus* from the Jacumba area, far from the nearest known extant population.

MUSEUM NEWS

- Serguei Triapitsyn, Principal Museum Scientist

The Museum has been a busy place recently. Come and see it yourself! During November, we had two visiting scientists in the Museum:

Dr. Elisabetta Chiappini, is a specialist on the biology, morphology and systematics of the Mymaridae and other egg parasitoids (Hymenoptera) at the Istituto di Entomologia e Patologia Vegetale, Facoltà di Agraria, Università Cattolica del Sacro Cuore, Piacenza, ITALY. Dr. Chiappini and I are working on the key to the world species of the mymarid genus *Anagrus* Haliday.

Dr. Lubomir Masner (Canadian National Collection of Insects, Ottawa, Ontario) is the world's foremost authority on the systematics of Platygastroidea and Proctotrupoidea (Hymenoptera). Dr. Masner sorted to genus our undetermined holdings of 15+ drawers full of parasitic wasps belonging to three superfamilies of parasitic Hymenoptera, and also did some collecting. Dr. Masner is one of the world's best insect collectors and is willing to share his techniques of using yellow pan traps with anyone interested in serious collecting using this method.

Two graduate students have been assigned by the Department for this quarter to help in the Museum. Michele Eatough has made tremendous progress in labeling and sorting to order thousands of specimens. Liang-Wei Wang continues to mount on pins and points the Museum's backlog specimens. I thank both of them for jobs well done and the departmental administration for support.

Table 1. Butterflies collected along the western boundary of Anza-Borrego Desert State Park.

Blues, Hairstreaks, etc., Family Lycaenidae:	
Behr's Metalmark	*Apodemia mormo virgulti*
Southern Blue	*Glaucopsyche lygdamus australis*
Sonora Blue	*Philotes sonorensis*
Bernardino Blue	*Euphilotes bernardino*
Edwards' Blue	*Hemiargus ceraunus*
Acmon Blue	*Icaricia acmon*
Lupine Blue	*Icaricia lupini*
Marine Blue	*Leptotes marina*
Echo Blue	*Celastrina ladon echo*
Common Hairstreak	*Strymon melinus*
Great Blue Hairstreak	*Atlides halesus*
Skinner's Hairstreak	*Mitoura loki*
Perplexing Hairstreak	*Callophrys perplexa*
Western Elfin	*Incisalia augustinus*
California Hairstreak	*Satyrium californica*
Hedgerow Hairstreak	*Satyrium saepium*
Nut-brown Hairstreak	*Satyrium auretorum*
Gray Hairstreak	*Satyrium tetra*
Boisduval's Hairstreak	*Habrodais grunus*
Brush-footed Butterflies, Family Nymphalidae:	
Painted Lady	*Vanessa cardui*
West Coast Lady	*Vanessa annabella*
Red Admiral	*Vanessa atlanta*
Buckeye	*Precis coenia*
Henne's Checkerspot	*Euphydryas chalcedona hennei*
Quino Checkerspot	*Euphydryas editha quino*
Wright's Checkerspot	*Thessalia leanira wrighti*
California Patch	*Chlosyne californica*
Gabb's Checkerspot	*Charidryas gabbii*
Mylitta Crescent	*Phyciodes mylitta*
Semiramis Fritillary	*Speyeria coronis semiramis*
California Sister	*Adelpha bredowii*
Swallowtails, Family Papilionidae:	
Rudkin's Swallowtail	*Papilio polyxenes coloro*
Anise Swallowtail	*Papilio zelicaon*
Pale Swallowtail	*Papilio eurymedon*
Whites & Sulfurs, Family Pieridae:	
Felder's Orangetip	*Anthocharis cethura*
Sara Orangetip	*Anthocharis sara*
Grinnell's Marble	*Anthocharis lanceolata*
Checkered White	*Pontia protodice*
Alfalfa Sulfur	*Colias eurytheme*
Harford's Sulfur	*Colias harfordi*
California Dogface	*Colias eurydice*
Sleepy Sulfur	*Eurema nicippe*
Dwarf Yellow	*Nathalis iole*
Skippers, Family Hesperiidae:	
Funereal Duskywing	*Erynnis funeralis*
Mournful Duskywing	*Erynnis tristis*
Afranius Duskywing	*Erynnis afranius*
Northern Duskywing	*Thorybes pylades*
Checkered Skipper	*Pyrgus communis*
Great White Skipper	*Heliopetes ericetorum*
Juba Skipper	*Hesperia juba*

Collector's Log: Southeastern Arizona, July, 1998

- Mike Gates

What follows is a day-by-day account of our most recent collecting trip to southeastern Arizona. Attendees were Ken Osborne, Jeremiah George, Jung-Wook Kim, and myself. We departed from the UC-Riverside parking lot at 4:00AM on July 18.

July 18: We decided to meet south of Tuscon at our first collecting locality in the event that we became separated (which we did) on the 6-hour journey eastward. Jeremiah (Jer) and Jung-Wook (Oogie) actually arrived at Rock Corral Canyon south of Tumucacori about 2 hours before Ken and I did (We forgot some supplies). The collecting in the canyon was great for Chalcidoidea (tiny parasitic wasps) that Oogie and I were after. Ken and Jer were pretty excited about some of the Lepidoptera and Coleoptera there. As we slathered condiments on our sandwiches below the overpass, an intense thunderstorm built up to the west and began to soak the area.

We proceeded southeast to our first campsite through rain showers and arrived there (~7 miles SE of Patagonia in Harshaw Creek) in the afternoon and began setting up. This area was phenomenal for general microhymenoptera collecting on desert willow and *Acacia*. Here we ran into my major professor, John Heraty, and fellow labmate, Bryan Carey. By 5:00PM, Ken had selected our campsite in a nice, open valley off the road. Jer and I went down the road and set up 3 mercury vapor lights. Upon our return, the whole valley was suffused in a violet glow from ~10 black lights that Ken had daisy-chained together. It reminded me of an alien landing from the X-Files! The nightlighting was fantastic.

July 19: We awoke at 7AM being roasted like pigs-in-a-blanket in our sleeping bags by the sun. As we had watermelon and coffee, Ken and Jer field-processed multitudes of moths from the 'slaughter' of the night before. Fortunately, I had already caught many of those species and could relax for some morning sweeping and nurse my hangover. We were on the road by 10AM heading east to the Huachuca Mountains, stopping briefly near Sonoita Creek. As we went through the San Rafael Valley (beautiful grassland), we got a bit of rain before making it to Copper Canyon at ~2PM.

The road into the canyon is tricky and I walked ahead to scout it. Jer and I made it in ~0.25 mi. and began setting up under the oaks and pines. Suddenly, we hear a loud pop and someone screaming. Ken had a flat. After changing the flat, Jer went to Sierra Vista to get some gas and the rest of us hiked up into the canyon to collect.

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FERM Field Trip Report - Sweeney Granite Mountains Reserve

- Greg Ballmer

The Friends of the Entomology Research Museum (FERM) visited the Sweeney Granite Mountains Reserve during the weekend of 26-27 September 1998. Participants were Oscar Clarke & Marcia Alexander, Dale & Jun Rong Powell, Cecilia Pierce & Gordon Pratt, Greg Ballmer, Saul Frommer, David Hawks, Bob Van Patten, Rob Weppler, and Laura Merrill. Most of us arrived on Friday evening, the 25th, and stayed until mid-day on Sunday. The primary purposes of this excursion were to collect arthropods from a relatively uncollected area for the UCR Entomology Museum and to identify and prepare an exemplar collection to be housed at the Reserve headquarters.

Rick Vetter, who was unable to attend this event, made all of the initial arrangements. Rick had been surveying spiders and other surface-dwelling arthropods in Granite Cove by means of pit-fall traps for over a year. On this occasion, Dave undertook to check the pit-fall traps.

Dave, Rob, and Gordon set up a black light and two mercury vapor lamps near the visitors' center almost immediately after arrival (ca 9 PM). These light traps, plus two more, were also operated the following evening beginning at sundown.

In response to substantial precipitation (ca 4 inches) in August, many plant species were in bloom. The most abundant flowers in Granite Cove were *Chrysothamnus paniculatus*, *Eriogonum wrightii subscaposum*, *Eriogonum plumatella*, *Gutierrezia microcephala*, *Pectis papposa*, and *Petalonyx thurberi* (sandpaper bush). These plants attracted a great many bees, beetles, flies, wasps, and other insects. In addition to the insects which normally appear in late summer and fall (e.g. Dammers' blue, *Euphilotes enoptes dammersi*), there were some which more typically fly in spring (e.g. Kingston checkerspot, *Euphydryas chalcedona kingstonensis*).

The FERM group was the only one using the main visitors center facilities at Granite Cove. Cecilia supervised breakfast on Saturday morning, after which the group split up to survey different portions of the Reserve. Cecilia, Gordon, Greg, and Laura hiked the Sibyll Allanson Trail (toward Chateau Plateau), while the others drove to the Bunny Club and then onward to the fringe of the Kelso Dunes near the northwestern boundary of the Reserve area. A variety of habitats were explored ranging from creosote bush scrub to Pinyon-juniper woodland.

Sibyll Allanson Trail

It was good hiking weather: clear and pleasantly warm (not hot). The Sibyll Allanson Trail begins where sandy bottom land meets the rocky upper end of Granite Cove. After a gentle initial ascent through rolling terrain,

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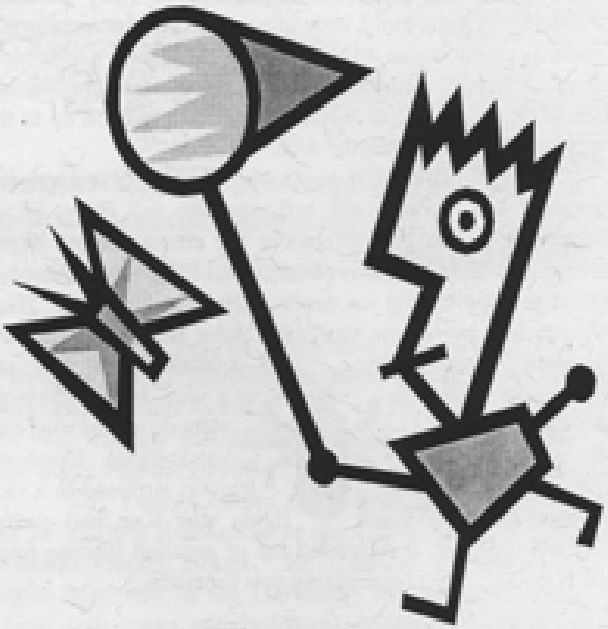
Winter Trip Planned for the Desert Studies Center

by Marcella Waggoner

Date: Our first trip is set for February 19-21, 1999.

Sign up deadline: January 15, 1999

Purpose: **This will be a research oriented trip.** The aim of the field trip is to document the arthropods present in the area (and also the greater east Mojave), provide a list of species for the Desert Studies Center (DSC) and split the specimens collected in order to both enhance the UCR collection and provide specimens for the DSC. It is planned that a continued effort be made toward these goals. Additional field trips will be planned for collecting at different times throughout the year.



Location: Plans are being made for FERM to make a collecting trip to the California State University Desert Studies Center at Soda Springs. The DSC was established in 1976 under a cooperative management agreement with the Department of the Interior. Since that time, it has become part of the Mojave National Preserve. Situated on the shores of Soda Dry Lake, the Center has a rich history. Currently, the DSC is a mecca for biologists, archaeologists, historians and others who use the center for classes and research. The DSC is also a convenient base for excursions to other points of interest in the Mojave National Preserve including the Providence and Granite Mountains, the Kelso Dunes and the Cima Dome volcanic area.

Facilities: The Center has dormitory-style rooms holding two to twelve persons, a multi-station kitchen, a bathhouse with hot showers, indoor eating areas, and a laboratory and two classrooms.

Temperature: Expect cool weather: Max. 69° C, Min. 40° C, Mean 54 ° C. This represents a 4 year average for the month of February (it might be a bit warmer since we'll be there near the end of the month).

Fee: There will be a non-refundable fee for staying at the facility (no camping permitted). Costs will be shared and your fee will be determined in advance. Group meal preparation is being planned.

Reservations: Advanced reservations are required. Space is limited. Please contact Marcella Waggoner by e-mail (marcella@ucr.edu) or by phone at 909-787-5711.

Collecting Permits: The Desert Studies Center is part of The Mojave National Preserve. A collecting permit is required and is being procured through the Desert Studies Center. All collecting must be made in accordance with the stipulations of the permit.

Book and Reprint Recycling

- Rick Vetter

Give us your old. Give us your tired. Give us your haggered. No, we aren't talking about your grad students. Recently, it was decided that another nifty function that FERM would serve is as an information recycling vehicle. We are hoping that folks who are throwing out papers, reprints and books of general entomological or taxonomic interest would consider donating them to FERM for dissemination. We would sift through the pile to pull out items that may be of interest to FERM members (this would mostly be taxonomy and life history since those things don't change much over time; I don't know if articles on things like "Pesticide Control of Grasshoppers in Central Iowa in 1913" would have an current relevance). The material will be placed on display at general meetings or at programs of FERM such that members could peruse them and take them, if desired.

This idea was spawned by the recent discovery of about 10 University of California Publications In Entomology that were left in the hallway. What once were never-perused volumes taking up shelf space in a professor's office were quickly set upon by entomological vultures and several volumes found loving homes. We hope that by offering this service, books and reprints which are only gathering dust in dark drawers can be placed in the hands of those who would find the information useful. This is meant to function not only for professional and amateur entomologists, but also FERM members who might be teachers or docents. This latter group might readily find useful some texts which others consider outdated.

For items of higher value, we might attempt having an auction (if legal). For example, one FERM board member received from a local resident a copy of the classic, An Introduction to Entomology by J. H. Comstock. Now this in general would not excite too many folks, however, the book is from the library of G. F. Ferris (famous Stanford University scale insect entomologist) and the book is enscribed, "To G. F. Ferris, with compliments of the author, J. H. Comstock". Because of the special nature of a Comstock autographed tome, it was felt that this might find a more cherished home in some private entomological library (especially if obtained for a price).

Contact Rick Vetter 909-787-3550 or vetter@citrus.ucr.edu if you have anything to contribute.

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Further up the canyon is an abandoned mine shaft and a stream-fed cistern where the butterflies congregate. The mercury bulbs were set up by the mine, at our camp and at the canyon mouth. We got some nice beetles and moths, particularly after the brief rain we had at 11PM.

July 20: It seems we leave later and later each day by the time we head out to Sierra Vista at 10:30AM. Ken was speeding along nicely before we noticed Jer & Oogie weaving madly and honking. It was only then that we observed a large plume of smoke issuing from Ken's rear tire well. Apparently, the brake pads had locked onto the disc during our descent from the Huachucas. The aroma of water on hot asbestos was unforgettable. Henceforth, Ken nursed his brakes at the expense of his clutch. We spent ~3 hours in the Sierra Vista Wal-Mart parking lot as Ken searched for new brake pads and tire. Fortunately, Oogie and I went to a nearby abandoned lot to collect Chalcidoidea on the legumes and annuals there. Not bad!

We finally went to our next destination: the classic wash east of Gleeson. Although we got great 'doids (tanaostigmatids, etc.), Jer was the only one who got a *Plinthocoelium* (green cerambycid) between us and the other three collectors we saw there. From there, we went east through Douglas on our way to Guadalupe Canyon in the Peloncillos. Situated on the Mexico/New Mexico border, this canyon has spectacular scenery including monstrous cottonwood trees along the wash. Again, we share a few beers with John Heraty and Bryan Carey, who arrived before us. We camped by an old corral 2 miles in and set up 2 mercury bulbs and a few black lights. A few black witches and one *Automeris randa* came in to the lights.

July 21: Chalcidoid collecting was great in the morning near the mouth of the canyon in the Chihuahuan scrub. From here, we travel north into the Chiricahua Mountains and do a bit of collecting at Sunny Flat on our way up and over to the west. We encounter fantastic thunderstorms as we reach Willcox for lunch and drive through puddles 6 inches deep! We continue west on I-10, but eventually turn south to go into the Sant Rita Mountians to Box Canyon for our final night. It has recently rained here and the vegetation is quite lush. We set up camp near the dam and put a couple of lights in the area. Oogie and I cook up some deluxe macaroni and cheese with turkey at dusk… Mmmm! The night is perfect, no moon and overcast, and we get a flood of large *Strategus antaeus* (including 3 nice males).

Jer and Oogie leave in the morning and Ken and I are completely soaked as we break down the light setups in a downpour. No collecting this morning! We decide to hit one last locality and proceed north through the rain. Gradually, Ken's wipers slow to a stop and his lights dim – something was drastically wrong! It was interesting driving to Tucson without wipers as we search for a mechanic. Fortunately, it was only the alternator belt. We cut our losses and head home.

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the trail criss-crosses the moist and well vegetated (lots of *Baccharis sarothroides*) bottom of a steep canyon. Water was still flowing in the creek, where a few tadpoles were observed. At a point where rugged boulders and dense vegetation hinder further passage, the trail rapidly ascends dry exposed slopes through scattered pinyon pines, cactus, and agave. After perhaps a mile, the trail passes through a small, but dense grove of golden cup oaks (*Quercus chrysolepis*) in a relatively moist area high on the mountainside. The trail then continues westward, below the ridgeline on a south-facing slope, through drier scrub dominated by patches of *Krameria*, *Haplopappus*, and occasional pinyons. Everywhere along the trail, Dammers' blue and Mormon metalmark (*Apodemia mormo mormo*) butterflies were found in association with Wright's buckwheat (*Eriogonum wrightii*), which was in full bloom.

Ambiguous trail markers and insufficient time (and perhaps the distractions of bug collecting) prevented attainment of our ultimate objective, Chateau Plateau; we shall save that for a future visit. Nevertheless, the sweet pure air and spectacular views of Granite Cove and major portions of the southern and eastern Mojave Desert (plus several outstanding entomological finds) made the effort memorable and rewarding.

Bunny Club and Kelso Dunes

Dale and Jun Rong, Saul, Rob, Bob and Dave spent most of their collecting effort in the wash south of Granite Cove and eastward around a prominent rock formation called "White Fang", and then northward to the Bunny Club. The Bunny Club is a fantastic, multilevel structure built on and within huge granitic boulders in the 1960's by UC Santa Cruz field biologists and students. Collecting was especially productive in the wash where numerous wasps and bees visited several blooming composites and sandpaper bush; robber flies and bee flies also were common.

In the afternoon, Dave's group visited the Kelso Dunes located just north of the Granite Mountains. Collecting was not particularly productive, although these dunes are home to many interesting and endemic insects usually found during the spring. Dave's group's final collecting site was a very productive area near the northeast edge of the Granite Mountains where blister beetles and numerous flies and wasps were common on blooming *Gutierrezia* in a small, rock-walled canyon.

Saturday night

A sumptuous feast was enjoyed by all Saturday evening. Mercury vapor lights were set until late in the evening. A large number of the uncommonly collected Neumoegen's buck moth (*Hemileuca neumoegeni*) and the more common, but very attractive, pink, gray and black painted tiger moth (*Arachnis picta*) came to the lights soon after dark. Many other moths and a variety of small insects also were collected.

Most of the arthropods from this trip have been mounted and labeled and are in various stages of identification. Some of the most interesting (and probably least well known) organisms were found in soil and leaf litter samples; these largely remain in alcohol and will take longer to process. Oscar Clarke collected leaf duff samples from beneath *Acacia greggii*, *Haplopappus cuneatus*, and *Prunus fasciculatus* in Granite Cove. Greg and Gordon also collected smaller leaf duff samples beneath *Pinus monophylla* and *Quercus chrysolepis* at higher elevations. These samples were processed through Berlese funnels to collect small arthropods. Among the many species collected were several apterous ceraphronid wasps identified by Lubomir Masner as representing a species previously unknown to science.

Douglas Yanega selected as new Senior Museum Scientist

- Dave Hawks

In November, Dr. Douglas Yanega was selected as the new Senior Museum Scientist (the position formerly held by Saul Frommer until his retirement on July 1st). Dr. Yanega will officially begin work in the Museum on 22 February 1999.

Dr. Yanega comes to us from his most recent post as Visiting Researcher at the Universidade Federal de Minas Gerais, Brazil. He received his PhD with Charles Michener at the University of Kansas, and has worked with many entomological collections, including those of the Snow Entomological Museum, Illinois Natural History Survey, Canadian National Collection, American Museum of Natural History, Field Museum of Natural History, and the Bohart Museum at UC Davis. Dr. Yanega has truly impressive qualifications and abilities, including sight identification of over 400 families of terrestrial insects and almost all world bee genera, a photographic and encyclopedic memory, diverse curatorial experience, and a great deal of experience with insect collection management including databasing and web page design.

More about Doug Yanega and his goals for the Entomology Research Museum will be the subject of a future FERM Newsletter article. In the meantime, please join with me in welcoming Doug to the Museum. I'm optimistic that he will be able to provide unique and outstanding benefits to the Museum as part of its "renaissance".

A Conversation with Lubomir Masner

by Dave Hawks

The Entomology Research Museum has been honored recently with a three-week visit by Dr. Lubomir Masner from the Canadian National Collection of Insects (CNCI) in Ottawa, Ontario, Canada. Dr. Masner (known as Lubo by his friends) is one of the world's most highly acclaimed curators and the foremost authority on three superfamilies of parasitic wasps: Proctotrupoidea (11 families), Platygastroidea (2 families) and Ceraphronoidea (2 families). During his stay at UCR, Dr. Masner has curated the Museum's extensive undetermined collection of these wasps to at least the generic level, made several valuable discoveries in the field, and made a number of new friends among the students, staff and faculty.

Dr. Masner's extensive experience and insight about such topics as the importance, priorities, goals and mission of museums and their curators make him the ideal subject of an interview for a museum-related publication such as the FERM Newsletter. His ideas will be of interest and value to the Friends of the Museum, and are of great importance for consideration by those faculty and staff who will lead the Museum into the future. Some of us closest to the UCR Entomology Research Museum believe that our Museum is beginning to experience something of a renaissance thanks to increased interest and financial support from the Department and increased use, interest and dedication from taxonomists and the community in general. In addition to benefits to the Museum and Department indicated above, I feel that Dr. Masner's visit was especially timely and provided positive reinforcement for this "renaissance".

Lubo was born in 1934 in Prague in the (now) Czech Republic. He attended Charles University, Prague, and received his Ph.D. in 1962 from the Academy of Sciences, Prague. In 1969 he was hired as a Research Scientist at the CNCI, where his responsibilities until his retirement in 1997 included research, identification and curation. He served for five years as Chairman of the Curatorial Committee of the CNCI.

In 1982 Lubo co-founded the International Society of Hymenopterists, and was its first President for two terms. He has served on the National Science Foundation's Panel of Judges for the past 17 years. He is an Honorary Associate of the CNCI, the American Museum of Natural History and the Museo de Historia Natural Santo Domingo (and now a member of the Friends of the Entomology Research Museum!). Lubomir has taught workshops on the systematics of parasitic Hymenoptera to over 600 students during the past 20 years. As a "hobby", he has helped to train nine graduate students, eight of these to the level of Ph.D.

Lubo began his entomological endeavors at age 14 as a coleopterist, and by the age of 18, had amassed a virtually complete collection of central European beetles of the family Histeridae. In 1952 he switched his attentions to the hymenopteran superfamily Prototrupoidea because "these wasps were so completely understudied, and because they reminded me of beetles: very sturdy, and they didn't shrivel-up like chalcidoids".

Dr. Masner has published about 100 papers, mostly taxonomic revisions of his favorite "critters" (as he calls them). However, he considers his greatest accomplishment to be his building of the world's largest and most complete collection of proctotrupoid wasps. Beginning with a CNCI procto collection contained in only 15 museum drawers in 1969, he has built the collection to its present size of 26 cabinets (approximately 750 drawers) holding about 400,000 specimens representing all valid world genera.

Lubomir Masner has many and varied ideas and concerns about museums. He describes a natural history museum as a "vehicle of taxonomy", whose primary function is as a permanent repository of materials representing many "milestones of human accomplishment". Such a museum is also the "historical preserver of a nearly endless number of baselines, many of which have not yet been conceived". In other words, the potential research and other values contained in specimens and their associated locality, host, seasonality, and other kinds of data are extensive and should not be underestimated or jeopardized just because they are not presently in use.

Dr. Masner recommends that all museums define their own mission, and that "edited acquisitioning" guidelines be established to help determine acceptability of donations and goals of exploration and biodiversity inventories. Efforts should concentrate on the traditional strengths of the museum (for the UCR Entomology Museum, this includes parasitic wasps, arthropods of the Southwest, etc.), and inventories should begin in "one's own backyard." A challenge to all museums is to disprove what Lubo calls "Jerry Powell's Law" which predicts that no taxonomist wants to work on anything that lives within 100 miles of home. This suggests an excellent challenge to those collecting-oriented FERM members since most arthropods found even in the immediate vicinity of Riverside definitely have not been adequately inventoried! As part of its mission, museum staff must fight the idea that the sole purpose of the museum is to benefit other disciplines. Serving other disciplines inarguably is a portion of a museum's function, but a museum must maintain its own identity with defined goals and priorities, regardless of who uses its resources.

With regard to the increasingly popular idea of databasing museum collections, Dr. Masner recommends that

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most entomological museums should consider databasing only at the family level, especially as related to a collection profiling effort. He warns against getting trapped in databasing at the specimen or species level except as part of specifically defined, separately funded projects, or for cataloguing primary Type collections. Overly ambitious databasing efforts eat time and resources that should be dedicated to more important tasks, as often they cannot be maintained and may create more of an annoyance than a benefit, as has recently been observed at the California Academy of Sciences. As for bar-coding specimens, Lubo believes this should be used primarily for specific projects.

Lubo defines a good curator as one who is completely dedicated to curatorial duties and with advancing the mission of the museum. A curator must be thoroughly convinced of the mission, and cannot succumb to pressures from unrelated distractions (at least not to a great extent). A curator must be "part watch dog and part beaver" because the collection must constantly be guarded from threats while at the same time being busily built (a static, non-growing collection is not very interesting, and is not likely to receive much support). In a related vein, a qualified curator is a "good immigration officer" who can weed out trashy and useless specimens, thereby freeing-up drawer space and liberating increasingly valuable insect pins for use with important specimens. Lubo believes that good curators are born, not made, and that they are driven by curiosity and a complete devotion to what they are doing.

Furthermore, a good curator is effective at public relations and must participate in at least some extension or outreach. A curator must be good at making friends and allies since "a bunch of dead bugs on pins don't foster much support on their own". Similarly, Lubo recommends that a worthwhile goal of museum staff, associates, and supporters (such as FERM members) is to "make friends of those who are indifferent, and occasionally convert our enemies". While maintaining good public relations, a curator must also be alert to all activities going on in the museum, and not allow practices which jeopardize specimen quality and scientific value.

One of our own systematic entomologists and part-time "good curator" is UCR Assistant Professor of Entomology, John Heraty. John owes some of his early interest in parasitic wasps and systematics to his interactions with Lubo Masner. Lubo recalled for me the occasion, about fifteen years ago, while John was still a technician at the University of Guelph. John "peered over my shoulder" at some "wonderful little critters from Trinidad with incredible thoracic spines" (these were wasps of the genus *Kapala* in the family Eucharitidae). John asked if he could have a few (the CNCI had just received a large sample of these and other insects from Trinidad). Then, some days later, John came back to Lubo and said, "I really like these *Kapala*, can I have some more?" Not too much later, John visited Lubo again and announced that he was going to pursue a graduate education in systematic entomology, and that wasps of the family Eucharitidae would be the subject of his research. The rest is history. John's collection and knowledge of the bizarre, ant-parasitizing eucharitid wasps is foremost in the world. I could tell that Lubo is very pleased.

Dr. Masner has some incredible natural history stories about his own favorite "critters", such as the ones that mimic and live with ants, the ones that use their wings as propellers (looking like tiny penguins) as they swim underwater in search of aquatic bug eggs to parasitize, the ones that hitch rides on a female dragonfly and then jump off when the dragonfly deposits her eggs, or the ones that have huge, grappling-hook claws so that they can crawl underwater in fast-flowing streams to parasitize water penny beetle larvae. But those are other stories ...

1999 FERM Annual Meeting

Friday, 29 January 1999, 7:00 PM

BUSINESS MEETING

- **President's Report**
- **Treasurer's Report**

PROGRAM: David Hawks: "*Plusiotis* Beetles, Gems of the Neotropics"

For over ten years, Dave Hawks has been collecting and studying about 100 species of the scarab beetle genera *Plusiotis*, *Chrysina* and *Pelidnotopsis*. He has studied them extensively in their rain forest and cloud forest habitats, especially in Costa Rica and Honduras. He has described several new species in these genera and has several more in the works. *Plusiotis* beetles (and the other two genera which will be "lumped" for the purposes of his talk) are best known for their exquisite iridescent and metallic colors including silver, gold, green, pink and purple. Dave claims that their beauty is unrivaled within the animal kingdom (of course, he also admits to being shamelessly biased).

Dave will provide us with a narrated slide presentation on the systematics, life histories, and ecologies of these colorful scarab beetles. He will especially highlight his recent National Geographic Society funded research on these beetles in Honduras (before Hurricane Mitch!).

Refreshments will be provided.