

Friends of the Entomology Research Museum



Newsletter



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**In Memoriam: FERM member
Dr. John "Jack" Beardsley**

By Matt Buffington

For those of you familiar with the 'big names' in the systematics of parasitic Hymenoptera, Jack Beardsley is no stranger. Furthermore, some of you may have known this incredible entomologist from his frequent visits to the UCR Museum, wearing his trademark 'Aloha' shirts. I met Jack through his lucid work on the parasitic cynipoid wasps, work so clear I was convinced he *only* worked on cynipoids. Little did I know at that time the breadth of his entomological knowledge.

Jack's research focused on Hawaiian insect fauna. He began living there during WWII, and remained there to get his degree from the University of Hawai'i in Entomology. After graduating, he continued at the University of Hawai'i in conjunction with the USDA. He worked with insects varying from the Oriental fruit fly to mealybugs and their parasitoids. He also had a keen interest in invasive species to the Islands. After retirement, Jack moved to Arcadia, California, where he built a custom lab onto his house and continued describing species from the tropical islands, and this long and productive career led to numerous peer reviewed publications. Jack died at the age of 74 recently while working at the Bishop Museum doing what he loved: studying the insects of Hawai'i.

The FERM Newsletter is published 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:
 Rick Vetter (vetter@citrus.ucr.edu)

FERM
Spring Meeting
Thursday, April 5th
**John Emmel: "Butterflies of the
 Death Valley region"**

Mark your calendars for Thursday April 5th 2001. Our spring meeting will feature guest speaker John Emmel who will speak on butterflies of the Death Valley region, including many life histories.

John Emmel is a native Californian. His interest in collecting insects started when he was a youngster collecting with his older brother Tom (who now teaches at University of Florida). John received a B.A. in Biology from Stanford University in 1967 and a M.D. (in dermatology) from U.C. San Francisco, in 1971. Currently (and luckily for us), John says he is "more interested in butterflies than skin." John has published at least 75 papers and books, many with his brother Tom. One of their early projects, "The Butterflies of Southern California," (1973) has become a classic. John's most recent work, "Systematics of Western North American Butterflies," is a compendium of papers highlighting the butterflies of California and Nevada. Other recent papers include work on the xerces blue, (*Glaucopsyche xerces*), Smith's blue, (*Euphilotes enoptes smithi*) and the Avalon hairstreak (*Strymon avalona*).

Please join us for another great evening. The meeting will take place at 7:00 PM in the Entomology Museum classroom. Light refreshments will be served. Dr. Emmel has agreed to bring along some of his books that will be for sale.



FERM Trip to the Granite Mountains Desert Research Center

We are planning a FERM collecting trip to the Sweeney Granite Mountains Desert Research Center in the Mojave Desert, May 19th and 20th. This is the same Reserve we have gone to before. The trip will be limited to 12 people. The purpose of this trip is to collect insects which will be curated and deposited in the Entomology Museum and also to continue contributing vouchers specimens to the Granite Mountains for their use. It will be intense insect collecting and everyone who goes on this trip must participate in swinging a net or collecting in some fashion, no slackers. Also, we will need to curate the material in a timely fashion, identify the insects, have them entered into the Granite Mts. database and have vouchers returned in the fall. This ain't no party, this ain't no disco, this ain't no fooling around.

For those not familiar with it, the facility is a very nice one, 166 miles from UCR, behind a locked gate so it's safe. Facilities include a kitchen with 2 refrigerators, 2 stoves, microwave, and 2 bathrooms with flush toilets, showers and sinks. You will have to bring your own sleeping gear but bunk beds in the loft of the Allanson center will be our sleeping quarters. Previously we have had the run of the place during our visits, but this time there will be other scientists there as well so we will not have access to the 2 small cottages as sleeping facilities and will have others rummaging around using the refrigerators and kitchen for their own hunter-gatherer episodes. Heavy snorers and light sleepers are advised to bring their own sleeping bags and tents and sleep on opposite ends of the cove, out in the sandy washes. Also, there are no janitorial facilities so we have to clean up the place before we leave and take our trash with us.

Because this trip is limited to 12 people, you HAVE to make reservations with Rick Vetter (yvetter@citrus.ucr.edu, 909-787-3550, fax 909-787-3086, carrier pigeon - ask for Speedy). A waiting list will be made after the first 12 people; there always have been dropouts along the way in the past. There are rules, objectives, directions to the place, and critical details (like who is buying the beer, if any) that need to be discussed at an organizational meeting beforehand. Also, there are usually some restrictions due to other research going on over there as well as restricted sensitive areas we have to avoid. But ya gotta contact Rick before you make any other plans.



WILLIAMSON DRAGONFLY GUN CONFISCATED!

In early February, University of Michigan Dept. of Public Safety and Security conducted an inventory of firearms being stored in the Museum of Zoology. While most of the attention was on the Bird, Mammal and Herp Divisions, it turned out that the only illegal weapon being stored here was in the Insect Division. Yes, you guessed it - the 22-cal. pistol with a soldered-on 26" barrel that E.B. Williamson used to shoot down high-flying Odonata. He used 22 - cal. dust-shot rounds, which were only potent enough to bag small creatures. It is suspected that E.B. subscribed to "walking softly and carrying a big stick" and certainly the weapon in question looks somewhat impressive. Officer Tim Shannon was very apologetic about confiscating the pistol, as it was illegally modified under State law and also illegal under campus policy. However, since the weapon has not been fired in probably 75 years, it will not be a loss in terms of its use. At the museum curator's suggestion, they'll make the pistol inoperable and return it so it can be mounted on a plaque for display. Okay, so you thought dragonflies were harmless. They used to be bigger and a lot meaner, which was why EBW carried the weapon in the field. It is unknown if they ever used dynamite for catching larvae, though.



Summer Meeting: Insect Photo Fair

By Marcella Waggoner

Saturday August 11th is the date planned for our summer FERM meeting. For the summer meeting, we thought it would be fun for members to share some of their favorite insect photos. This will be a great opportunity for members to present their own work and to learn about the entomological activities of other members. Participating members will be limited to showing 10 slides or 10 minutes of video. The expectation is that you will share some of the natural history of the insects rather than just showing pretty photographs. In order to participate, please contact Marcella Waggoner (phone: 560-2282 or e-mail marcella@citrus.ucr.edu), who will schedule speakers.

The August meeting will also be held in the Entomology Museum classroom at 7:00 PM.

NEWS FROM THE MUSEUM

by Serguei Triapitsyn & Doug Yanega



Winter and spring have been relatively quiet in the museum. Michele Eatough has been helping with databasing and loan processing, especially a returned loan of *Dacymutilla* (velvet ants). The Museum database now has records for over 24,000 specimens, including many recent IDs for scarab and longhorn beetles provided by various attendees of the "Beetle Bash" coleopterists' meeting in Santa Clarita. James Munro has been helping sort through trap samples from various locations including Bermuda, primarily to extract micro-Hymenoptera. We've also begun a database exchange program with a few other institutions, to build our taxonomic authority files (an electronic catalog of the taxonomic hierarchy for each species of insect; species, genus, tribe, subfamily, family, etc.) and have already acquired over 10,000 records.

We installed our new explosion-proof freezer, awarded to us by the University of California Genetic Resources Conservation Program so we could store specimens in alcohol for genetic studies. We've also largely finished compiling our statistics on the ERM's holdings, and discovered that of our estimated 3 million specimens, roughly 75-80% are identified to genus or better, with over 50% to species. That apparently gives us one of the best ratios of identified to unidentified material of any major entomology museum. Roughly 25% of our holdings are Hymenoptera, with slightly incrementally lower numbers for Coleoptera, Diptera, and Lepidoptera, respectively.

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. 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 vetter@citrus.ucr.edu, preferably as attachments (not in email text). Additional information is on the front page of this newsletter.



RECENT PUBLICATIONS BY FERM MEMBERS:

(Please submit titles of your recently published taxonomy and natural history articles to FERM editor!)



Babcock, C. S., J. M. Heraty, P. J. De Barro, F. Driver and S. Schmidt. 2001. Preliminary phylogeny of *Encarsia* Förster (Hymenoptera: Aphelinidae) based on morphology and 28S rDNA. *Molecular Phylogenetics & Evolution* 18:306-323.

Ronald D. Cave and David C. Hawks. 2001. "Jewel Scarabs", *National Geographic Magazine*, February: 52-61.

Fernandes, G.W., Price, P.W., Gonçalves-Alvim, S.J., Craig, T.P., Yanega, D. 2000. Response of the galling insect *Aciurina trixa* Curran (Diptera: Tephritidae) to host plant quality. *An. Soc. Entomol. Brasil* 29: 423-431

Vetter, R. S. and J. C. Cokendolpher. 2000. *Homalonychus theologus* (Araneae, Homalonychidae): description of egg-sacs and a potential defensive posture. *J. Arachnol.* 28: 361-363.

Vetter, R. S. and D. C. Hawks. 2000. Heat relief behavior by *Kleidocerys ovalis* (Hemiptera: Lygaeidae) in urban southern California. *Entomol. News* 111:382-384.





PINE: PARTNERS IN NATURE EDUCATION

FERM members are entitled to 20% discounts* on the following UCR Extension field nature study courses:

Flora of Joshua Tree National Park: Wildflowers \$145 (04N28)

[Fri. 6-9 pm, Apr. 6/ Sat. 8 am- 4 pm, Apr. 7/Sun. 8 am-12 pm, Apr. 8]

*****Ecology of the Southern California Butterflies*** \$195 (04N29)**

Taught by FERM members Gordon Pratt and Greg Ballmer

[Wed. 6-9 pm, Apr. 11, 25, May 16, June 6](Three Saturday field trips to be arranged 9 am-3 pm)

A Field Study of Birds: Spring \$185 (04P23)

[Tue. 7:30-9:30 pm, Apr. 17/ Field trips all day Sat. Apr. 21, 28, May 5, 19, June 2]

The Greater Roadrunner: A Natural History \$160 (04N34)

[Fri. 5-8 pm, Apr. 20/ Sat. 8 am-5 pm, Apr. 21/Sun. 8 am-3 pm, Apr. 22]

Introduction to Plant Identification and Ecology \$145 (04N31)

[Fri. 6 am-8 pm, Apr. 20/Sat., Sun. 8 am-4 pm, Apr. 21, 22]

Wildflowers of the Desert Foothills \$145 (04N30)

[Fri. 6-8 pm, Apr. 27/ Sat., Sun. 8 am-4 pm, Apr. 28, 29]

Geology and Natural History of the Eastern Sierra \$140 (04N22)

[Sat.-Sun, 8 am-5 pm, Apr. 28-29]

Venomous Animals of Joshua Tree \$150 (04N66)

[Fri. 6:30-10:30 pm, May 4/Sat. 8 am-5 pm, 6:30-10:30 pm, May 5/Sun. 8 am-12 pm, May 6]

Birds of Joshua Tree National Park \$145 (04N26)

[Fri. 6-9 pm, May 11/ Sat. 8 am-5 pm, May 12/Sun. 8 am-12 pm, May 13]

Reptiles and Amphibians of Joshua Tree National Park \$145 (04N23)

[Fri. 6-10 pm, May 18/ Sat. 8 am- 1 pm, 6-11 pm May 19/Sun. 7 am-12 pm, May 20]

Geology and Volcanic Hazards of Mammoth Mountains \$155 (04N32)

[Sat. 9 am-5 pm, May 19/Sun. 7 am-3 pm, May 20]

Geology and Natural History of Yosemite \$125 (04N19)

[Sat. 9 am-6 pm, June 9/Sun. 8 am-3 pm, June 10]

Birds of Belize \$2,350 (11P24)

[Thur. 7-9 pm, June 21, 28/ Mon.-Sun. 8 am-9 pm (approx. hours), July 2-8/Final exam TBA]

*****Tick Identification Workshop*** \$95 (04P01)**

Taught by FERM member Rick Vetter

[Sat. 9 am-4 pm, June 23]

Wildlife of the San Jacinto Mountains: The Upper Plateau \$185 (11N33)

[Fri. 5-8 pm, July 13/Sat. 9 am-5 pm, July 14, 2001/Sun. 8 am-4 pm, July 15]

The Natural Gourmet: \$60 (11N07)

[Sun. 8 am-5 pm, July 22] [Sawtooth Mountains, Idaho]

Mountain Ecology and Survival \$295 (11N09)

[Mon. 9 am-5 pm, July 23/Tue.-Wed. 8 am-5 pm, July 24-25/Thur. 8 am-2 pm, July 26.]

[Sawtooth Mtns, Idaho]

*****Spider Identification*** \$215 (11P02)**

Taught by FERM member Rick Vetter

[Sat. 9 am-4 pm, Aug. 11-Sep. 15 (No meeting Sep. 1)]

Astronomy \$55 (11P66)

[Sat. 5-10 pm, Aug. 11, 18] [San Bernardino Mtns., Children's Forest (near Running Springs)]

For current listing of courses at any time, bookmark

www.unex.ucr.edu/ns/fns1/classes in your web browser. For further information, contact:

Natural Sciences UCR Extension 909.787.5804 909.787.2456 (fax)

*some restrictions apply



Third Annual Winter Meeting Was a Great Success -Thanks to all By Marcella Waggoner

Saturday evening, the 6th of January, 2001, marked the third annual winter meeting and proved to be a festive celebration.

The short business meeting was initiated by our new President Doug Yanega and included the usual animated and boisterous book auction conducted by our own crowd-pleasing auctioneer Rick Vetter. Thanks to both Rick and Doug for their efforts. Special thanks go to the generous and good-natured participants who provided fodder for Rick's antics. The auction resulted in net contributions to the museum fund of \$187. Thanks also go to Ted Fisher for his contribution of books for the auction and to Dave Hawks for his overall help including donation of the colorful jewel scarab posters for door prizes and for finding and presenting our thank-you gift and bouquet to Cissy.

Our guest speaker, Dr. John Alcock from Arizona State University entertained and educated us with his talk on the "The Thrill of Insect Behavior." The talk was lively and included many excellent photographs. We all enjoyed Dr. Alcock's humor and marveled at his story of recalcitrant students who might not be as enthusiastic as we are about insect behavior. Of particular note were the photographs of the Australian desert showing Dawson's burrowing bee in action and scenes of the lek where bee mating activities occur. Thanks Dr. Alcock!

The crowning glory of an already wonderful evening was the scrumptious buffet dinner provided by Cissy Pierce. There were more than 70 dishes served! Dishes included a wide range of hot and cold delights: fruits, salads, meats, cheese, and other finger food as well as savory treats from the Philippines and scrumptious desserts. The edible and morphologically correct butterfly cookies were an incredible accomplishment. The feast was complete with elaborate decorations. I particularly enjoyed the giant cactus arrangement that included insect foragers and hunters. Cissy, thanks ever so much for your hard work!

In addition to Cissy, special thanks go out to all those members who helped her out. Gordon Pratt and Dale and Jun Rong Powell and Bob Van Patten all helped with some of the fixing as well as transporting and setting up the buffet. Thanks also to Bob Luck, Rick Vetter and Greg Ballmer for helping set up before the meeting and for general support.

I hope the point is being made that a successful get together like this cannot come together without the effort of a lot of folks. Thanks to everyone!

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:

Please Check

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"/>

Submit your membership form and dues to:

David C. Hawks, Treasurer
Friends of the Entomology
Research Museum
Department of Entomology - 041
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.)

Notice: Desert Insect Class Weekend of May 18, 19 and 20

California State University, San Bernardino is hosting an extension class at the Desert Studies Center near Baker California. The for-credit class is titled The Natural History of Desert Insects. This class is ideal for beginning entomologists and natural history buffs. Youngsters are welcome to sign up if a parent is also a participating and enrolled class member. The class is to be taught by FERM member Marcella Waggoner. The Natural History of Desert Insects class will emphasize adaptations of insects to desert environments and talks will be illustrated with color slides. To find out more about the Desert Studies Center check out the sight at: (<http://biology.fullerton.edu/facilities/dsc/zzyzx.html>). To sign up for the class please call (909) 880-5979.

FERM COMPETITIVE RESEARCH GRANTS

FERM Collecting Grants

Funds are made available on a competitive basis for collecting trips or travel that will ultimately benefit the Entomology Research Museum (ERM). The primary benefit being a substantial donation of representative material from western North America, or globally in groups of research strengths in the collection. Up to \$750 annually is available for local or foreign travel by FERM members. A one or two page outline of the planned trip, participating personnel, purpose, budget, and expected benefit to ERM can be submitted at any time, but proposals are reviewed and awarded every 3 months, until funds for that year are expended. Only one proposal may be submitted per expedition. Please submit requests to Doug Yanega, Entomology Research Museum, University of California, Riverside, CA 92521. One final stipulation is that funded projects will require the awardee to write a short summary article for the FERM newsletter.

FERM Curation Grants

Awards are available to qualified specialists wishing to visit and curate the ERM collection. Up to \$750 annually is available for travel and per diem. Requests for funds should include an outline of the project, an abbreviated CV, and budget, and be submitted to Doug Yanega (as above).

Arachnophobia

By Rick Vetter

In a recent issue of National Wildlife, the general audience magazine published by the National Wildlife Federation, they did an article on tarantulas and UCR's own Tom Prentice was shown in full body photo holding a tarantula in his open hands. Several issues later, the following letter to the magazine was published in their Letters section.

I'm scared to death of spiders. I know it's silly but I can barely even stand to look at a photograph of a spider. So when I came across your article on tarantulas, (Natural Inquiries, June/July 2000), I shut my eyes and quickly flipped the page. Then my husband read to me the paragraph explaining that tarantulas do not harm people. It wasn't much consolation. I'm still afraid. I hope you're not planning to publish any more spider articles soon.

J. E.
Jacksonville, FL



The Official Results of the 2000 FERM Collectathon

by Doug Yanega

On the weekend of September 23, 2000, three intrepid teams entered the Santa Margarita Ecological Reserve (along the Santa Margarita River in Temecula Canyon, near the border of Riverside and San Diego counties) to do battle for the coveted Collectathon Crown. The ground rules were essentially the same as the first Collectathon, held in 1999 (e.g., no immature stages, no passive trapping, and 24 hours to collect) but this time we set the boundaries of the Reserve as the geographic limits for the challenge. The three teams were: Greg Ballmer and Gordon Pratt (G & G), Ken Osborne and Doug Yanega (K & D), and Dave Hawks and Zac Porcu (D & Z). Zac's tale appeared in the last FERM newsletter, and in this issue we reveal the full checklist of families collected by each team, starting on page 7.

List of Insect Families from the September 2000 Collectathon

	G & G	D & K	D & Z		G & G	D & K	D & Z
Archaeognatha:					Cercopidae		X X
Lepismatidae	X	X			Cicadellidae	X	X X
Machilidae	X	X	X		Cixiidae	X	
Collembola:					Coccidae		X X
Entomobryidae	X	X			Dactylopiidae	X	X X
Ephemeroptera:					Delphacidae	X	
Baetidae	X	X			Derbidae	X	X
Isoptera:					Diaspididae	X	X X
Hodotermitidae		X	X		Dictyopharidae	X	X X
Rhinotermitidae		X	X		Issidae	X	X X
Termitidae	X		X		Membracidae	X	
Kalotermitidae			X		Pseudococcidae	X	X
Orthoptera:					Psyllidae	X	X X
Acrididae	X	X	X	Neuroptera:			
Eumastacidae	X				Chrysopidae	X	X X
Gryllidae	X	X	X		Coniopterygidae	X	X X
Tettigoniidae	X				Hemerobiidae		X X
Psocoptera:					Mantispidae		X
Lachesillidae		X			Myrmeleontidae	X	X X
Mesosociidae	X						
Psocidae	X				Coleoptera:		
Dermoptera:					Anobiidae	X	X
Carcinophoridae	X	X			Anthicidae	X	X X
Forficulidae	X				Apionidae		X
Labiduridae		X			Bruchidae	X	X X
Odonata:					Carabidae	X	X X
Aeschnidae	X	X	X		Cerambycidae	X	X X
Calopterygidae	X	X	X		Chrysomelidae	X	X X
Coenagrionidae	X	X	X		Cleridae	X	X X
Gomphidae		X			Coccinellidae	X	X X
Lestidae		X			Cryptophagidae	X	X
Libellulidae	X		X		Cucujidae		X
Embioptera:					Curculionidae	X	X X
Oligotomidae	X	X			Dermestidae	X	X X
Thysanoptera:					Dryopidae	X	X
Thripidae		X	X		Dytiscidae		X
Phloeothripidae		X			Elateridae		X X
Hemiptera (Heteroptera):					Elmidae		X
Anthracoridae	X	X	X		Gyrinidae		X
Berytidae	X	X			Histeridae	X	
Coreidae	X	X	X		Hydrophilidae	X	
Gerridae		X			Lampyridae	X	X X
Hebridae	X				Latridiidae	X	X X
Lygaeidae	X	X	X		Melandryidae		X X
Miridae	X	X	X		Meloidae		X X
Notonectidae		X			Melyridae	X	X
Pentatomidae	X	X	X		Mordellidae	X	X X
Reduviidae	X	X	X		Nitidulidae	X	X X
Rhopalidae	X	X	X		Psephenidae		X
Saldidae	X				Ptiliidae	X	
Scutelleridae		X			Scarabaeidae	X	X X
Tingidae	X	X	X		Scolytidae		X
Veliidae	X	X	X		Staphylinidae	X	X X
Hemiptera (Homoptera):					Tenebrionidae	X	X X
Aleyrodidae	X	X	X	Trichoptera:			
Aphididae	X	X	X		Hydropsychidae	X	X X
					Hydroptilidae		X X

Lepidoptera:	G & G	D & K	D & Z	Hymenoptera:	G & G	D & K	D & Z	
Arctiidae	X	X	X	Andrenidae		X	X	
Coleophoridae	X			Anthophoridae	X	X	X	
Gelechiidae	X	X	X	Aphelinidae		X	X	
Geometridae	X	X	X	Apidae	X	X	X	
Hesperiidae	X	X	X	Bethylidae	X	X	X	
Lasiocampidae	X			Braconidae	X	X	X	
Lycaenidae	X	X	X	Ceraphronidae		X		
Lyonetiidae		X		Chalcididae		X	X	
Nepticulidae	X			Colletidae	X	X	X	
Noctuidae	X	X	X	Cynipidae		X		
Notodontidae	X	X	X	Diapriidae		X		
Nymphalidae	X	X	X	Dryinidae		X		
Oecophoridae	X	X		Encyrtidae		X	X	
Pieridae	X	X	X	Eulophidae	X	X	X	
Pyralidae	X	X	X	Eupelmidae	X	X	X	
Sphingidae	X	X	X	Eurytomidae	X	X	X	
Tineidae	X	X		Formicidae	X	X	X	
Tortricidae	X	X	X	Gasteruptionidae		X		
Diptera:				Halictidae	X	X	X	
Agromyzidae		X		Ichneumonidae	X	X	X	
Anthomyiidae	X	X	X	Megachilidae	X	X	X	
Asilidae	X	X	X	Mutillidae		X	X	
Bombyliidae	X	X	X	Mymaridae	X	X		
Calliphoridae	X	X	X	Ormyridae	X			
Cecidomyiidae	X	X	X	Platygastridae		X		
Ceratopogonidae	X	X	X	Pompiidae	X	X	X	
Chamaemyiidae	X	X		Proctotrupidae	X	X	X	
Chironomidae	X	X	X	Pteromalidae		X	X	
Chloropidae	X	X		Scelionidae	X	X	X	
Conopidae		X		Sphécidae	X	X	X	
Culicidae	X	X	X	Tiphidae	X	X	X	
Dolichopodidae	X	X	X	Torymidae	X	X	X	
Drosophilidae	X	X	X	Vespidae	X	X	X	
Empididae	X							
Ephydriidae	X	X						
Lauaxaniidae		X						
Lonchaeidae		X						
Milichiidae	X	X						
Muscidae	X	X	X					
Neriidae	X							
Otitidae	X	X	X					
Phoridae	X	X						
Pipunculidae		X						
Psychodidae		X						
Sarcophagidae	X	X	X					
Scatopsidae	X	X						
Sciariidae		X						
Sciomyzidae	X							
Simuliidae	X	X						
Sphaeroceridae		X						
Stratiomyidae	X	X	X					
Syrphidae	X	X	X					
Tachinidae	X	X	X					
Tephritidae	X	X	X					
Tethinidae	X							
Therevidae		X						
Tipulidae		X	X					
Trixoscelididae		X	X					
				Total	187	135	160	114

The Crown went to Ken & Doug, with 160 families collected. The combined total list of all three teams is 187 families, which is quite amazing for a single 24-hour period from one locality. There were some common families that, just by chance, weren't collected by any of the teams, such as Papilionidae, Danaidae, Saturniidae, Mycetophilidae, Sepsidae, and Silphidae. Only a few families showed up that were particularly rare or unusual, such as Eumastacidae, Mantispidae, Psephenidae, Neriidae, Trixoscelididae, Dryinidae, and Ormyridae. Vouchers of many of the taxa collected have been deposited with the kind folks at the Reserve (and we'd like to thank them again for hosting the event), and the rest have been databased and are being incorporated in the ERM collection. We'd like to give a collective pat on the back to all the participants, and extend an invitation to other FERM members to consider joining in the fun in 2001!

