

Friends of the Entomology Research Museum



Newsletter



Editor: Rick Vetter

Proofing Editors: G. Ballmer, D. Hawks, D. Yanega

FERM Officers

- President :** Greg Ballmer
- Vice-president:** Jeremiah George
- Treasurer:** Dave Hawks
- Secretary:** Dale Powell
- E-mails:**
- ballmer@citrus.ucr.edu, jergeorge@hotmail.com
- david.hawks@ucr.edu, DAJRPOWELL@msn.com

“Emu, ‘Roo, and Beetles Too”

by Bryan Carey and Dave Hawks

Seven members of FERM from the UCR Entomology Department traveled in Australia and New Zealand for between three and eight weeks during November and December 2002. We all had fantastic adventures. This article is hopefully just the first of a series of Aussie bug stories for the FERM Newsletter and describes the week that Bryan Carey and Dave Hawks spent with fellow FERM members Rob Wepler and Judith Pedler who moved to Horsham (northwest of Melbourne) almost two years ago. Rob, who received his Masters degree in Entomology at UCR, now works as a plant pathologist and Judith is a soil scientist. Both are avid natural historians, and are having a great time chasing insects (especially beetles) and teaching good manners to Erasmus, their energetic and very friendly border collie. Rob and Judith also are expecting their first baby in June, so times are exciting in Australia!

Bryan, Dave, and Rob converged upon the Melbourne Airport on November 22nd. Dave flew there from Perth in Western Australia where he had been collecting with the Pinto and Heraty lab folks for the previous two weeks (a whole ‘nother story!). Bryan (who many of us affectionately call “Jimmy” for reasons clear only to Mike Gates) was just arriving in Australia after his 15-hour flight from LAX. He seemed a bit dopey, but Dave and Rob didn’t believe for an instant that it was from the long flight; Jimmy’s always that way. After washing his hands a few times, Jimmy set out to learn which way to look for oncoming traffic and which side of Rob’s truck is the passenger side (Aussies drive on the left side of the road, so everything’s backwards as well as upside-down; and yes, water does swirl counter-clockwise in southern hemisphere toilets). We took off westward along the Great Ocean Highway and had

(story continued on page 5)



More Entomological Quotes

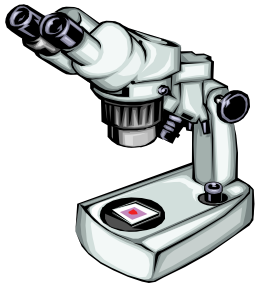
"Don't that beat the bugs a-fightin'?" -
 Wilbur W. (Bill) Mayhew,
 UCR Professor Emeritus of
 Biology

"There is only one thing worse than coming home from the lab to a sink full of dirty dishes, and that is not going to the lab at all."

Chien-Shiung Wu, physicist

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)



NEWS FROM THE MUSEUM

by Doug Yanega

Well, we've had the good fortune to have some very diligent student workers (Deguang Liu, Ali Aliabadi, and Stuart Wooley) assigned to the Museum this quarter, and as a result we've made significant progress on several fronts: (1) all the specimens that were moved out have been moved back, (2) the teaching collections are fully in place, (3) we've got much of the work of labeling cabinets and drawers taken care of, plus a directory that tells people exactly where to find every family in the collection (even if they use a family name that hasn't been used in 50 years), and (4) all the backlog of material in alcohol has been sorted and inventoried, including removing samples from Whirlpak bags before the alcohol could evaporate into oblivion.

Additionally, thanks to some liaison work by Dr. Rick Redak, the Museum also has two data entry technicians (Ryan McCoy and Dwight Arce) working on databasing the Deep Canyon collection so conservationists working in the Coachella Valley area can have access to the information, and so the specimens can finally be integrated into the research collection. We now have over 48,000 databased specimens in the museum, and the authority file now contains over 100,000 species names and nearly 20,000 genera (making it one of the largest privately-maintained electronic catalogs in the world). So, in the span of about two months, we went from a nearly-empty room to a fully functional museum again, and even more: all told, the museum may now be essentially better organized than it ever has been in its entire history, and getting better all the time. Our sole stumbling block at this point is that we weren't able to buy as many new drawers as we'd originally hoped (as part of the compactor grant, which had a shortfall), and we've nearly run out! If we can get about 200 more drawers, this will put us in a much better position to deal with the continuing expansion and integration processes, and we're hoping to get a supplementary grant from NSF to do so. Assuming the Museum and its staff can survive the next round of budget cuts at UCR, the future looks pretty good, right down to the promise of a wonderful field season. Time to get out and get collecting!



Rose Engineering relocates to Arizona

Since way back in the 20th century, active FERM member John Rose of Rose Engineering has been supplying entomologists with sturdy entomology equipment, whether it be insect nets and aspirators for the field or pinning blocks and manipulators for the lab. John recently moved to Arizona so we are making FERM members aware of his new contact information in case you were interested in getting stuff from him but did not realize he has relocated. FERM members get a discount on merchandise so be sure to mention that when you order. Locally, Dave Hawks is still acting as the California distributor so you can get neat stuff from him.

John Rose website: roseentomology.com
Rose Entomology
P.O. Box 1474
Benson, AZ 85602

FERM testimonials

Greg Ballmer – "John's entomology gear is always of the highest caliber and workmanship. Whenever I am lost and wandering in the field, I carry Rose Engineering gear with me"

Doug Yanega – "Rose insect nets are made with strong but light-weight alloy frames which hold up well in the field, much better than my ankles"

Ken Osborne – "John's stuff is good but I'm still waiting for him to build a hockey goal-sized net to mount on my car roof for collecting when I'm doing 85 on mountain roads"

Dave Hawks – "I collect big, shiny beetles. I always use sturdy Rose insect nets when I'm collecting. I really like my beetles. See how shiny they are. They're really special."

Rick Vetter – "I really like the stuff. It makes my teeth feel clean and my breath minty fresh"

Note: apparently Rick was very, VERY confused by the question.





PINE : PARTNERS IN NATURE EDUCATION

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

Ecology of Desert Insects [Enroll through The Desert Institute: 760-367-5535]
[Fri. 7-9 pm, Apr. 4/Sat. 8 am-5 pm, 7-9 pm, Apr. 5/Sun. 8 am-noon, Apr. 6]

Introduction to Plant Identification and Ecology \$155 (24P30)
[Fri. 6-8 pm, Apr. 11/Sat., Sun. 8 am-4 pm, Apr. 12, 13]

Geology and Natural History of the Eastern Sierra \$150 (24N22)
[Sat., Sun. 8 am-5 pm, Apr. 12, 13]

A Field Study of Birds: Spring \$185 (24P23)
[Tue. 7:30-9:30 pm, Apr. 15. Field trips all day Sat. Apr. 19, 26, May 3, 17, June 7]

Natural and Cultural History of the Mojave National Preserve: Soda Lake to Kelso Dunes -- The Low Country \$265 (24N32)
[Fri. 8-10 pm, Apr. 25/Sat. 9 am-5 pm, Apr. 26/Sun. 9 am-3 pm, Apr. 27]

Birds of Joshua Tree National Park [Enroll through The Desert Institute: 760-367-5535]
[Fri. 6-8 pm, Apr. 25/Sat. 7 am-4 pm, Apr. 26/Sun. 7 am-noon, Apr. 27]

Reptiles and Amphibians of Joshua Tree National Park [Enroll through The Desert Institute: 760-367-5535]
[Fri. 6-10 pm, May 2/Sat. 8 am-2 pm, 7-11 pm, May 3/Sun. 8 am-2 pm, May 4]

Field Study of the San Andreas Fault: San Bernardino to Palmdale \$95 (24N31)
[Sat. 8 am-5 pm, Apr. 26]

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



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.)

The Brown Widow in Southern California

By Rick Vetter

In February of 2003, specimens of the non-native brown widow spider, *Latrodectus geometricus*, were discovered as part of the Los Angeles Spider Survey being conducted by the Los Angeles County Museum of Natural History. This was an interesting discovery and one that is mostly of scientific interest to southern California arachnologists.

However, the ensuing media attention that was given to the spider has created the false impression that the brown widow is a new danger in southern California. Reports have correctly stated that the spider's venom is fairly potent but because the spider injects so little, it is not of major consequence. Yet one hyperbolic report stated that the spider hasn't killed anyone so far. Well, neither has my cereal bowl, the doorknob on my bathroom door or my left hiking boot. The reason that brown widows haven't killed any one yet is because the brown widow is not a dangerous nor deadly spider. Even though it has venom of high toxicity, this is typically determined with injections of venom into mice or rabbits and conclusions from this are inferred with little real-world relevance. Much more relevant are the effects of **actual** spider bites. A South African medical journal reports on the bites of 15 brown widows in humans (Müller 1993). Only two symptoms of brown widow envenomation were reported in the majority of bite victims: 1) pain while being bitten and 2) a mark where the bite occurred. That's it. Not much more. The bite of the brown widow is about the same as any non-poisonous spider. It hurts and leaves a little mark on the skin. It is no big deal. There are none of the serious, protracted symptoms that one would exhibit when bitten by a black widow.

So even though the non-native brown widow is virtually harmless, it is getting all this publicity and people are concerned about it. The hyperbolic response of the media and the general public to this new resident of southern California is ludicrous considering there are millions (maybe billions) of native black widows, *Latrodectus hesperus*, all over southern California, which have a far more poisonous venom than the brown widow, and pose a much greater potential danger (due to their great numbers and venom toxicity) than the brown widow could ever hope to pose. Black widow bites do occasionally happen, no one dies, people see black widows all the time, kill them, and are not particularly concerned about them. Yet you don't see media articles about the black widow because it isn't "news".

The brown widow is not a spider of medical concern and is not likely to become one. It isn't dangerous where it currently lives and there is no reason to believe that all of a sudden it will become dangerous now that it is in southern California. The native black widow is still the major spider of potential medical importance in southern California, always has been and always will be here.

Reference:

Müller, G. J. 1993. Black and brown widow spider bites in South Africa. South African Med J. 83:399-405.

*****The brown widow is also the subject of this issue's Bug o' the Issue. The story above is also available online at <http://spiders.ucr.edu/brownwidow.html> in a slightly different form (i.e., the snide comments are not there.)

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.



*****Deadline for submission of material for next Newsletter is June 15th*****

(continued from page 1)

some spectacular views of the Southern Ocean looking south towards Antarctica and southeast towards Tasmania (Look! It's a Tasmanian Devil! Oh, wait, it's just Jimmy). The rest of this travelogue is a commentary by both of us, and we'll identify ourselves as Bryan (**BC**) or Dave (**DH**) as we go along. Also, we emailed an earlier version of this to Rob and Judith, so a few of their comments appear, identified by **RW** or **JP**.

BC: In Australia (also called "Oz" by the natives), the day was November 22, though to me it actually felt like the longest November 20 (when I left Riverside), followed by the shortest (i.e. nonexistent, due to crossing the international date-line) November 21. After 15 hours, my Qantas flight touched down in Melbourne, Victoria, Australia. Dave claims that several years ago Qantas Airlines had air-sickness bags that featured a kangaroo vomiting into her pouch, but I didn't see any of those (shucks). Customs was quick and convenient, and, unlike my previous travels in Brasil, Costa Rica, and Texas, at least here in Australia I could count on a mostly understandable dialect of English.

So, after washing my hands only once (Dave exaggerates my hand-washing fetish) Rob and I had time to explore the fabulous metropolis of Melbourne before meeting Dave's flight in the afternoon. Outdoor markets, a big train station, and my inability to know which way to look first when crossing streets provided plenty of entertaining moments. Hunger soon overtook all thoughts, so we tried a Malaysian cuisine place, which was closed. We opted for a place named "Ghurka" (after the famous warriors) which featured food from Nepal. While dining, we noticed that the Malaysian place was open now that it was noon.

DH: They claim that "timing is everything", but who are "they"?

BC: In the early afternoon, Rob and I wandered around Lygon Street, which had no end of attractive sidewalk cafes, bars, and the occasional trappings of a SoCal strip mall (McDonald's and Starbucks). A brief visit was paid to the free entry section of the Natural History Museum of Victoria, which exhibited a number of interesting displays of invertebrate and vertebrate animals, like adorable stuffed wombats.

Eventually, it was time to head against the flow of traffic (thankfully) and rescue Dave from the Melbourne Airport, and then begin the multi-hour drive to Horsham. After only a few minutes of blundering around the baggage claim, Dave spotted Rob and me before we had any idea that Dave had already arrived. Dave actually seemed happy (or at least not too dis-

turbed) to see me, as well as Rob. I noticed it looked like Dave had shaved less than twice in the previous two weeks while traveling in Western Australia, but who am I to judge another's field fashions? So we hopped into Rob's truck, after I forgot again which was the passenger side.

Rob suggested that we head down south to the scenic, coastal drive before cutting inland to Horsham. It sounded like a fun idea to Dave and me, so, after stopping for a light supper (good but weird pizza) in a nearly unpronounceable town (Kargoolie?) (**RW:** actually it was Geelong), we were off. As Dave described above, we caught glimpses of the Southern Ocean looking green-blue and tranquil, but, due to jet lag, I don't think I behaved anything like a Tasmanian Devil, thank you very much.



One of the authors on vacation in Australia

The sun soon went down, and Rob began to realize that his scenic tour had added plenty of time to our trek. It was quite dark and cold by the time we detoured for a stop at a temperate-rainforest park, with less than three insects showing up at the impromptu blacklight set-up. I faded in and out of consciousness for the remaining three hours of the trip, but by about 1:30 AM, as we traversed the dirt roads, I was awakened by Rob and Dave to catch my first glimpse of wild kangaroos hopping away from the headlights and grazing along the roadside. Judith, groggily, but happily, made her way out to the garage for greetings as the three California natives rolled out of the truck.

DH: The next morning (or rather, later the same morning after the sun came up) we awoke to the pattering sounds of Erasmus racing around the veranda and the varied squawks of numerous rose-breasted cockatoos (a.k.a. galahs) in the fallow grain fields that surround the house, and to the prospects of eating vegemite for breakfast. Vegemite (salty, gooey, dark brown stuff in a jar that is a beer-brewing by-product — say that ten times fast) is fairly nasty stuff but it grew on me to the point that I might willingly eat some again someday. I don't think Bryan ever got up the nerve to try it. Maybe that's why we call him Jimmy. Rob and Judith have a great 80+ year-old farmhouse with very high ceilings and a covered veranda running the complete circumference. They moved in in June 2002, and the yard and 30+ acres of property were pretty bare when Bryan and I

were there, partly because of the extreme drought that most of Australia has been experiencing and partly because Rob and Judith were just getting started with landscaping, etc.

That first day, we mostly hung out around the house, played with Erasmus (who constantly wants you to throw something for him to retrieve), took a dip in one of the reservoirs on their property, tried to throw Rob's boomerang (it's a good thing we already knew where our next meal was coming from), looked at Rob's growing collection of Aussie insects, and prepared for the big Thanksgiving BBQ that was planned for that evening. Rob and Judith had invited a bunch of their friends and neighbors (and any and all dogs) to a pseudo-

American-style Thanksgiving celebration complete with turkey burgers, but also including the finest, lean kangaroo steaks — the best marsupial fare I've ever had! Actually, kangaroo is a very nice meat, hard to describe (since I don't really remember what it tasted like), but not the least bit weird or gamy. Jimmy even tried it and liked it! The party was lots of fun, and Bryan and I drank Victoria Bitter and other regional beers (nobody in Australia drinks Foster's, and they know you're an idiot if you try to claim that "Foster's is Australian for beer" — we agreed that Cooper's Ale is the best Aussie beer), and brushed up on our Aussie phrases like "goodonya" which basically means "ya done good" and "fair dinkum" which means "the genuine article" or "the truth". And they do really say "g'day" (or however you'd spell that), and they definitely do not say "put another shrimp on the barbee" because that's not what they call those familiar crustaceans, they're called "yabbies". **JP:** actually we call 'em prawns, yabbies are what you Yanks call crawdads!
mus.
picture.)



Judith, Jethro Bodine, Jimmy and Erasmus (Erasmus is the attractive male in the

BC: Before the BBQ, a sortie into town was made in the afternoon to take care of errands and buy stuff for the BBQ and the field trips that we were planning for the next few days. We were introduced to additional new and exciting Aussie terms. Petrol was acquired for the truck (us Yanks call it gasoline), and food was acquired for the humans of a form novel to me. This included the British Empire phenomenon known as pasties and pies. However, there is no key lime or chocolate silk here, as found at Denny's or Coco's. Instead, the choices include steak and potato, steak and curry, chicken, ham and egg, occasionally vegetable curry or tuna and vegetables, and the all-time classic steak and kidney pie. They left our mouth watering for more, except the kidney.

An interesting thing about Australia is the creativity used in their car license plates. The various states of Australia have sayings, similar to U.S. state slogans (e.g., California: "The Golden State"; Idaho: "Famous Potatoes"). But the difference is that they keep changing depending on who's in office. Victoria, where Rob and Judith live, is currently "The Place to Be". South Australia is the "Garden State", not to be confused with the U.S. "Garden State" (New Jersey).

Along with clever or gauche license plate phrases, Australia has some very entertaining public health billboards, store names, and road signs. A sign in Melbourne gave compelling, visual evidence of the dangers of smoking. One store presumably filled with classic junk food items was called "Yummies". A chicken restaurant in Horsham was named "Tender Breasts". And anywhere you travel in Australia, their highway department puts up cheerful reminders about road hazards, such as a sign with the profile of that famous, hopping marsupial to indicate "Kangaroo Crossing". One is also reminded of the dangers of falling asleep at the wheel with cheerful, alliterative, and catchy signs such as "Drowsy Drivers Die" (**RW:** Usually just before a convenient town where you can stop and spend money!).



DH: The next day, we headed out on our first collecting trip. **BC:** Our intrepid FERM journeymen and woman drove southwest to Ngarkat Conservation Park, just inside the state of South Australia. We got rained on, but not before a fair night's work at the mercury vapor and blacklight set-ups. There were scarabs, various neuropterans, ants, and some very scary tarantula-like spiders related to the infamous, highly toxic Sydney funnel-web spiders. They were rather quick moving as compared to our tarantulas, and it seemed that they could see us from at least 5 feet away! Even at that distance, they would rear up on their hind legs and threaten with their fangs. **DH:** I had to save Jimmy from these vicious arachnids several times that night. They had huge, venom-dripping fangs, and I had to throw myself between Jimmy and one of the spiders and then, with lightning fast reflexes, grab the spider tightly by the cephalothorax so that it couldn't twist and turn to stab those dagger-like fangs into my hand or face or neck — it was a close call! **BC:** I was frozen in fear for several minutes at a time as I watched these formidable mygalomorphs. In fact, between the rain and the spiders, all four of us decided to camp in the truck. My paranoia was contagious, it seemed.

The next morning, we headed toward Adelaide, the capital of South Australia. As we drove westward the topography changed, and there were hills, and plants that weren't suffering from drought, and I saw a sign for Mount Barker, the world famous eucharitid wasp collecting locality (yes, John Heraty has brainwashed me into loving these naughty little parasites), and then we got to the top of the pass, and Adelaide, with a moisture laden current of air, green landscapes, and tall buildings, awaited.

Before arriving in Adelaide, Rob and Judith had made plans for us to visit with a few of the curators and researchers at



the South Australian Museum. We enjoyed visiting and having lunch with Shelley Barker [of buprestid, or “jewel beetle” (not Jewel Scarabs) fame], and Eric Matthews who has published a very useful series of books on the beetles of South Australia. Dave bought the entire series at the Museum bookstore and had Dr. Matthews autograph the volume on Scarabaeoidea. Dave was as excited as his beagle Clover when someone gives her a doggy treat! Dave and Rob had fun going through the scarab collection and identifying some of the specimens they had collected, while I discussed ant distributions in Southern Australia with a nice man named Archie who was something of an honorary staff member and hobbyist ant specialist. He helped me identify some of the species we'd caught the previous night in Ngarkat. That night, in a small reserve south of Adelaide, we tried to collect again, but mostly got drenched by a genuine “Down Under downpour”

Inexplicable botanical religious ceremony practiced by the primitive native peoples of Australia

The next morning, it was back to Horsham. Dave bought a bag of Burger Rings at one of our petrol stops. They look and taste like hamburgers, yet they are made of soy or other textured vegetable protein parts. So vegetarians need not worry! They are safe to eat, just like Twinkies! As Dave says, they are something like a cross between an onion ring and a hamburger. And I thought the Aussies had reached the pinnacle of culinary inventiveness with Vegemite and Marmite! After a great Thai meal Rob and Judith made when we returned, we made a dash to collect at night at Mount Arapiles which, by California standards, is a hill. Beautiful scenery, but not very many insects at the lights. However, this final jaunt of the day made sure we all were tired enough to fall asleep that night. But we had to humor Erasmus some more after teasing him with our short pre-dinner visit.

After a good night's sleep, we went out for a day of collecting in the Grampians. The Grampians are the highest and most extensive mountain range in Rob and Judith's part of Victoria, and they are, indeed, very impressive. It was interesting to us to see how drastically the vegetation types changed with only a small increase in elevation. The Grampians are not very high (about 2000 feet at the highest point), but they certainly felt and looked higher than that when we were traveling through them. The Grampians are famous for supporting an unusually large number of endemic plant species (probably a ton of endemic insects too, but these have not been as well surveyed). We had fun collecting cerambycids for Rob and scarabs for Dave on the various blooming trees and shrubs. I also collected ants, and somehow ended up with a eucharitid wasp in my net, the Australian genus *Orasemorpha*. For those of you keeping track (approximately two people worldwide) that's three continents where I've caught eucharitids, plus it's my second genus in the subfamily Oraseminae! But now Dave should tell you more about the scarabs we found.....

DH: Ahem, so now that Jimmy's taken up the whole newsletter, I'll just point out that the really important insects collected on this trip are the various diverse and delightfully dandy scarab beetles! Just before climbing into the Grampians, Jimmy spotted a dried-up, but still stinky, road-kill kangaroo carcass, which yielded *Omorgus australasiae* (a trogid, or skin beetle) and a few other scarabs. We also found many flower-feeding scarabs of several genera. Since returning to Riverside I have sequenced DNA from many of the scarab species given to me by Rob or collected during the week we were there. Interestingly, many evolutionary patterns (some previously proposed based on morphological evidence, others brand new) are emerging, and I wish I could tell you about them, but Jimmy has about 143 more pages to add now about our fine dining experiences in Adelaide and Melbourne (oh, wait, I already edited that part out...). But seriously, it's fascinating that many of the assemblages of scarabaeoids (melolonthines, rutelines, lucanids, trogids, etc.) are Gondwanan in distribution (South America, Australia, New Zealand, and Africa). In other words, these lineages developed before the continents separated and traveled to their present locations. Furthermore, additional scarab beetle lineages, closely related to but distinct from their counterparts in Chile and Argentina, developed after Australia became a continent on its own. The DNA sequences of these scarabs demonstrate this Australian radiation as well as the "deeper" Gondwanan patterns.



Lizard telling Dave and Jimmy what it thinks of Yank shutterbugs

BC: In addition to really fine scarabs (ha!), we also saw emus and a few more species of wallabies and/or kangaroos. At one spot on the road we encountered a foot-long and very fat lizard called a Shingle-back or Blue-tongue Skink that would make a heck of a chimichanga or burrito. It decided to flash us its warning display by sticking out its huge bluish-black tongue while Dave and I fawned over it with our cameras like we were photographers at a modeling show. After we got back to Rob and Judith's house, it was time for more insect sorting and labeling, playing with Erasmus, and another delicious "Thanksgiving," Australian style, prepared by Judith and Rob.

The next day was our last day, and we all agreed that the week went by much too quickly! We left behind our favorite, tattered t-shirts in order to make room for our bugs. We made numerous stops along the road through the Grampians to collect those last few specimens, and played peek-a-boo with some wallabies for photos.

We drove past a camping area called "Jimmy Campground" (I posed for a photo in front of the sign), and just a little ways further down the road Dave exclaimed with glee "A lek! A lek!" for the 10,000 bright green *Diphucephala* scarab beetles congregating on *Leptospermum* bushes, evidently representing mating swarms. A little further down the road and Dave spotted the only snake that we saw during the week.

DH: And I, once again, saved Jimmy from certain death by throwing myself between him and the snake, grabbing the snake tightly by the head to keep its fang-filled, venom-dripping mouth closed, and then yelling "crikey!" at the top of my lungs — it was a close call! **BC:** Uh, sure, uh, well, luckily it wasn't a sea-snake, a tiger snake, a taipan, or any of the other assortment of the world's 10 most poisonous snakes that make their home in Australia (**RW:** Are you sure?? Most snakes in Oz are extremely poisonous, some don't bite very often, but with Bryan's record...?). **BC:** Um, maybe I should change the topic now, but, um, of course there are all those other notorious Australian things that can kill you, and you can read all about them in the book I bought at the South Australian Museum entitled "Bites and Stings"!

At that same locality, I caught my first Mecoptera (scorpionflies of the family Bittacidae). Rob got more beetles for Dave and more jumper and bulldog ants for me. Dave got more bulldog and other fascinating ants for me plus cerambycids for Rob. I wish I could collect better. Now realizing a three hour drive was still ahead of us with the sun almost set, the fearsome foursome headed off towards Melbourne, through greener pastures than in the entire Horsham region. We kept our spirits high by singing tunes from the band "They Might Be Giants". A late night was capped by locating a hotel, getting dinner at 11 PM, and polishing off the night with chocolate cheesecake, Guinness, Cooper's Ale, and catching a cab back to the hotel.



All in all, a fun-filled, and occasionally insect-filled week "Down Under"! (And many thanks to Rob and Judith for being wonderful hosts!!)