We all know that the ancient Egyptians not only worshiped scarabs (as do our readers), but they made elaborate jewelry for ornaments to wear during life and in the afterworld. They were mostly carved of precious stones such as lapis and turquoise. I am unaware if they ever used the actual beetles in jewelry, although they may have placed them in the sarcophagi. Insect designs were commonly used in ceramics and jewelry by Lalique and Tiffany, but they did not seem to find a way to use the actual beetles. The following epistle is the result of the editors’ requests that I describe my use of scarabs in jewelry and my experiences in teaching the techniques in Guatemala.

I have studied the systematics and biology of scarabs for over 60 years, because of their diversity of form and their great beauty (even Phyllophaga are beautiful to me!). I have difficulty convincing laymen that all the colors are natural in jewels like Chrysina strasseni (Figure 1). About 30 years ago I made a pair of earrings from Florida specimens of the brilliant Phanaeus igneus (Figure 2) for my wife. When she was not wearing them, I put them on display in my jewelry studio at home, just to see if others might be attracted.
was overwhelmed and pleased by the number of requests to make more (she would not let me sell the originals). I offered a variety of such jewelry at the annual Entomological Society of America conventions for several years and have developed a relatively simple technique for creating such gems.

Briefly, it involves hardening (although some species are naturally durable) by evisceration, filling the body with epoxy, and mounting on a suitable substrate. When the body is filled (upside down), it is lamp dried overnight, mounted and positioned upright with a tacky glue (I use E-6000 craft glue), which I also dry overnight. Only a small amount is needed and should not show. The substrate can be any material, but I prefer rare woods such as mahogany, walnut, oak (Figures 3-4), desert ironwood (Figure 5) or stone like obsidian (Figures 6-8), and petrified wood (Figure 9). Jewelry mountings (called findings) of various sizes and shapes are also available for pendants and earrings. I don’t recommend rings, because they get too much rough wear. Then I use a 2-part pouring resin (EnviroTech) to insert around the beetle and cover the mounting. Usually I do not use a coating on the surface of the beetle, because it changes the refraction and often traps a layer of air. For more fragile specimens, like Japanese beetles (Figure 10), I have coated these to enhance hardening. This is again dried overnight, attached to various findings, and the piece.

Figure 2: Phanaeus igneus earrings; a common Florida dung beetle.

Figure 3: Phanaeus vindex bola; a horny male.
is ready to wear soon thereafter. Although the beetles are extremely durable, legs must be tucked under, and horns are precarious. I have never broken a beetle so mounted, but it will not deter dermestids from attacking the external cuticle. It is best to keep jewelry in mothballs when not in use.

On one of his annual visits to Gainesville, to play bluegrass with former colleagues and study Passalidae at the Florida State Collection, my good friend Jack Schuster (Figure 11) bought some of my jewelry for friends in Guatemala. Most of you know that Jack was instrumental in developing the finest insect collection (especially rich in scarabs) at the Universidad del Valle, in Guatemala City. On his
Figure 7: *Chrysina pehlkei* pendant on obsidian, with peridot.

Figure 8: *Chrysina quetzalcoatl* pendant on obsidian with diamond.

Figure 9: *Protaetia pryeri* (Jade beetle) pendant on petrified wood.
next visit he proposed that I come to Guatemala to teach my jewelry technique to some Peace Corps volunteers, so they could pass it on to their Mayan villages as a source of income. I was eager to assist (maybe I was looking forward to some collecting too?), and the Peace Corps enthusiastically supported the project by purchasing all supplies and paying my airfare.

Mention Guatemala, and most entomologists are eager to go. Tourists know it as the Land of Volcanoes, of which there are many (Figure 12), and they are quite scenic. They also know it as a paradise for exploring ancient Mayan ruins, such as Tikal (Figure 13). Few realize
that there are several million Mayans still living in this beautiful country, and many retain their customs and dress. Friends always ask if I feel insecure traveling in Guatemala, but I saw none of the past reputation of political unrest, Mayan uprisings, and government suppression. Entomologists are always protected by their weird appearance, unusual equipment, their crazy actions, and perhaps the old adage “God takes care of fools and naturalists”.

I was not aware that Guatemala had one of the largest contingencies of Peace Corps volunteers in the world, and that most were beautiful young ladies. Of course Jack volunteered his sprawling bachelor pad as our “studio”. If I recall, there were 12 of us sleeping there! The classes were well received and, after a week, each participant made several jewelry pieces (some may have been returned to the United States as Christmas presents). The objective was to bring the technology to each of their assigned villages, where monetary income was scarce, but beetles were common (and gratis!). A week of field work with Jack followed, and plans were made for additional projects for other villages. During that visit, I met Cristina Bailey and Enio Cano (Jack’s technicians and co-collection managers) and José Monzón who was an avid scarab collector. Cristina and José (Figure 14) are now married, with 2 children.

The following year, a project was proposed by José to take
the jewelry class to 2 villages (Siete Pinos and Todos Santos) in the remote Cuchumatanes mountain range for “PROCUCH”, his employer (a government assistance organization for the Cuchumatanes in Huehuetenango). As a volunteer, I agreed only if I could get an additional week of scarab collecting. José was instrumental in making it the greatest trip of my life. With José, Cristina, and Shauna Davis (the Peace Corps volunteer from Todos Santos) we immediately headed for the far northeast above Morales. *Chrysina luteomarginata*, *C. karschi*, *C. strasseni* (Figure 1), and the rare *C. ericsmithi* Monzón & Cano

Figure 15: Sample box of Guatemalan scarabs.

Figure 16: *Heterosternus rodriguezi*. This is probably the first photo of a living specimen.

Figure 17: *Heterosternus buprestoides*, a magnificent long-legged Ruteline.
(the type locality) were found the first night!! Space does not permit mention of other fabulous prizes. A box of some specimens is shown in Figure 15 and some other prizes in Figures 16-17.

I was forewarned that Mayans often reject non-traditional ideas, although this project was enthusiastically supported (Figure 18-21). In Todos Santos (population 2,000, elevation 2,450 meters) and Siete Pinos (population a few hundred, elevation 3,500 meters), the Mayan dialect “Mam” was mostly spoken, but with José, Cristina, Shauna, and Jack we were always able to communicate. One of my favorite souvenirs is a thank you note with thumb prints for signatures. Getting there from Huehuetenango (40 km to the south) was always a challenge and, buses often take 2½ hours! Incidentally, the Siete (=7) Pinos are long gone. One late evening, on our return, in misting rain there were hundreds of *Aphodius* flying (above 10,000 feet and cold!).
The class from Todos Santos (Figure 22) was mostly women in traditional clothing, along with their children (no baby sitters there!). The kids were eager learners also and became close friends by course end (Figures 23-24). Lack of regular electricity and high altitudes often retarded drying, but local insects were used for many jewelry pieces. PROCUCH provided resources for findings, but we discovered that Guatemalan pennies (nearly worthless) were an ideal substrate for mountings. We purchased Velcro for fastening collars of beautiful locally woven cloth. Shauna models a large bracelet we made in Figure 25.

Several subsequent trips to a variety of habitats (desert to cloud forest), with Enio Cano, F. Camposeco and the above collaborators, have provided hundreds of thousand of Guatemalan insects for the Florida State Collection of Arthropods. Among others, we visited Ixobel Ecological Reserve, Tarrales Ecological Reserve, San Lorenzo, San Marcos, Chisec, Ixpanpajul, Tikal, and taught another jewelry course to Q’eqchi’ Mayans at Ak’ Tenamit on the Rio Dulce. At the Biotopo Quetzal is a small hotel (Los Ranchitos, Figure 26) where I got the rare *Chrysina purulhensis* (Figure 27) on my last trip. I’m sure most readers would hope to collect giants like *Dynastes hercules*, although even these two “lesbian” females are still searching for a male (Figure 28). During subsequent times, José has become the leading ecotourism
Figure 23: One of the beautiful girls in the jewelry class.

Figure 24: This youngster was intrigued with my scarab bola.

Figure 25: Shauna Davis (Todos Santos Peace Corps volunteer), modeling a scarab bracelet on locally woven material.
guide in Guatemala, specializing in providing fabulous collecting trips for entomologists. Anyone interested in collecting in Guatemala should contact him (dynastes@intelnett.com) or Dr. Jack Schuster (jackschuster@gmail.com). Permits require some prior planning, but are easier to obtain than some other countries.

The Universidad del Valle now has a beautiful biological station near Volcan Atitlan, but access is often difficult (although now there is an ATV for the most difficult part). USAID provided funds for construction, but facilities are still limited (Figure 29). José is the manager, but does not live at the station; arrangements to visit can be made through José or Dr. Jack Schuster.

Figure 26: The author at breakfast near Biotopo Quetzal; just after collecting the scarab in Figure 27.

Figure 27: The rare Chysina purulhensis, alive in all its glory.

Figure 28: Dynastes hercules; 2 “lesbian” females on the sheet pole at Firmeza.
Anyone who is interested in learning more about the jewelry techniques briefly described here (or possible purchase) should contact the author at bobsgems@aol.com or 3517 NW 10th Ave., Gainesville, FL 32605.

I leave you with assurances that millions of great scarabs remain there; I was unable to collect everything that came to the sheet (Figure 30)!

Photos in Figures. 11, 18-25 were taken by José Monzón; all others are by the author.
In August I started my second sabbatical year and again, with Anne, planned for a trip “down under”. We were due to leave on August 10th, but the “best laid plans of ...” can go wrong! Packing was finished by noon and we arrived at the Ottawa airport at 2 PM. Shortly thereafter we were told that nothing would be flying to Toronto because of a bomb scare! So, we were back home by 4 PM and went to a movie. The next day started at 4:30 AM, we flew to Toronto to face another 2-hour delay, finally arriving in Los Angeles at 1:30 PM local time. We left that evening, flying first to Hawaii, then, with a brief stop in Fiji, to New Zealand, finally arriving in Sydney, Australia, at 10:30 AM on August 13, having crossed the international date line. The reason for our rather circuitous route was that we wanted to stop in New Zealand and California on our way back.

We were met at the Sydney airport by Geoff Holloway. He helped us get settled and, for three days took us into the Australian Museum. Our last day in Sydney we all went collecting locally. We then left for Perth, Western Australia (WA) and Geoff joined us a week later.

In Perth we were met by James Risdill-Smith, CSIRO, who took us to a motel, then to his lab. He was involved with the Australian dung beetle project utilizing non-native species to dispose of surface dung of cattle and sheep and, thereby, hopefully lowering the bush fly population. Many of the imported species came from South Africa and the procedure involved shipping live, disease-free eggs to Australia, then rearing them in quarantine, thus obtaining enough adults so that a number could be released in northern Australia, then measuring their impact on the bush flies. It was and is very complicated, and long papers have been written on the results, some unexpected.

Dry weather is best for bush flies, but poor for dung beetles; the reverse is also true. In wet weather the dung beetles disposed of the surface dung in pastures, improving the vegetation but also greatly increasing the food supply for the imported Bufo marinus (a large New World toad). The project has been complicated enough, but it may also involve mites carried by the dung beetles that are predators on the eggs of dung feeding flies. If anyone is really interested in this project, write to a CSIRO scientist involved with the project. To return to other mundane activities, not only were dung beetles discussed, I had the chance to examine the collections of the Western Australian Museum, those of the Department of Agriculture and, of course, the Perth collection of the CSIRO.
After three days in Perth, one of the CSIRO workers drove us south to Wilga and the home of Keith and Edie Carnaby. I have already mentioned this pair of great collectors and their wonderful hospitality. They not only housed us in Wilga, but also loaned us an old Land Rover and the small tent trailer that we had used before. A day was spent looking over the Carnaby collection (now housed at Canberra in the CSIRO) and collecting locally. We were lucky the entire trip to have had enough winter rains in the southern third of Western Australia and along the coast to the North West Cape to make wonderful Bolboceratini collecting; localities will be mentioned only when too dry for collecting. The first day at the Carnaby’s we dug four species of Bolborhachium. The next day we picked up Geoff Holloway at a nearby train station, then drove back to Wilga to pack (Photo 1). On our return, Keith found his captive (not pet) emu had escaped from its pen. I knew how powerful a kick these birds could deliver, so I was slow to offer help. Geoff, who should have known better, agreed to help pen the bird and tried to grab it from the side. For those not familiar with an emu, it is similar to an ostrich, but somewhat smaller and reminds me of a dirty dust mop that can deliver a nasty kick. The resulting fray ended with the bird back in its pen and both Geoff and Keith rather battered, Geoff particularly battered, bruised and bloody. I decided that digging bolboceratines was more in my line than catching emus!

The next day we drove east with Keith and Edie in their Land Rover and home made trailer; Geoff, Anne and I accompanied them in the borrowed Land Rover and trailer. We drove to Wagin, picking up six species of “bolbos” (this is used for bolboceratines when I get lazy). That evening we were housed by a friend (or relative - I was never sure which) of the Carnaby’s. The lodging was most unusual and has already been described in Number 21 (September 2007, page 13) of Scarabs. Our next stop was 15 km south of Pithara where we set up camp in a sandy area about 4 PM. It was cool and windy, but what made it unusual was that at about 5:30 PM we took a specimen of Bolborhachium nanum flying. It was the only specimen of that genus we had ever seen flying during the day. We also excavated five species of “bolbos” at the same camp site. I will not give a detailed account of our

Photo 1: The Shackelton Bank near Wilga, Western Australia, open 2-4 PM on alternate Tuesdays. The two-door out-house (sexes separate) was slightly larger than the bank! Because of these odd banking hours in the small towns, it was never a good idea to be low on cash.
wanderings, recounting only some of the more note worthy, in my opinion, events. Everywhere we went where it had rained within the last two weeks was great collecting for bolboceratines. On several occasions in one day the five of us dug up over 100 specimens and during the entire trip over 20 species of “bolbos” were collected.

We gradually, over several days (Photo 2), drove to Mount Magnet, which was too dry for good scarab collecting. We stopped there for several reasons, the first being that we all could use a shower. Keith had a friend that had a house in town and had given Keith a key, since he was away for several months. There was the usual wood burning boiler for the hot water; Keith wouldn’t let me near it since the episode at his house where I had sent boiling water all over the roof (as mentioned in an earlier part). We enjoyed cleaning up and then walked around town. It was a short walk in a one-pub town; town size (Photo 3) is often measured by the number of pubs. Banking hours were interesting: open four hours on alternate Tuesday afternoons. On our walk, Keith located the bakery, as he always wanted fresh bread when possible. Early the next morning he went to the bakery and was unhappy that he could only get one loaf, they had not expected visitors! Later we drove north to Cue, which turned out to be too dry (Photo 4), so we turned back and took the road west from Mount Magnet. One of our next stops was a “town” (no pubs) called Yalgoo. We had good...
collecting near there and I have always regretted not naming one of the new species after the town: *yalgooensis*, a name that would not be forgotten!

As we returned to wetter conditions near Mullewa each night our light trap was flooded with a species of *Calosoma* (one that looked somewhat like our common North American ground beetle species and smelled just as bad). For three days, while we moved toward the coast and northward, we were bothered by these smelly ground beetles at our light. Near the small “town” of Yuna (at that time a sparse collection of houses) the *Calosoma* disappeared, but the scarab and buprestid collecting was excellent. In addition to the large species in genera like *Blackburnium*, we collected a number of small species in the genera *Australobolbus*, *Stenaspidius* and *Eucanthus* (Photo 5). On the morning of September 3 we were camped near Yuna and a bouquet of flowers appeared on our table (Photo 6); Geoff had remembered that it was Anne’s and my wedding anniversary. When we asked Geoff how he had remembered it, Geoff admitted that he and Jan had also been married on September 3!

Six days later (Photo 7) we started south along the coast. Collecting was very good, particularly for scarabs, digging (Photo 8) and at light. Buprestids were common on flowers and weevils were everywhere. We stopped
in Geralton to shop, do laundry and have lunch in a restaurant!

We camped at Arrowsmith River, where our digging yielded 10 species of bolboceratines in four genera. At night our light attracted only five specimens of one species; it was cool by 8 PM and the moon was nearly full. Further south (Photo 9), there was less diversity, but we did collect one or two different species.

On September 14 Geoff left us to return to Sydney, while the rest of us drove on to the house of Carnaby’s son (Fred) at Kellerberrin. Fred and his young wife, Diane, had been expecting us to join them for “tea” (equals dinner) and Diane had made a “new” (for her) desert for the Canadian visitors - a blueberry cake. When it was brought out we all thought it was delicious, but Fred refused to eat it. He said it looked like the floor of a sheep shearing shed. It was the first time he had seen blueberries, and to be truthful, the large imported blueberries did vaguely resemble sheep droppings. The rest of us greatly enjoyed the cake, including the elder Carnabys, and we were all horrified when Diane tossed out the rest of the cake because of Fred’s remark. We all had been counting on it to go with breakfast the next morning!

The next day we drove, with several stops, to about 10 miles south of Marvel Lock (Photo 10). Soil types in the area varied from clay to a reddish sand and we collected 10 species of “bolbos”, nearly half of

Photo 8: Bolborhachium tricavicolle Lea, one of a number of species excavated near Yuna.

Photo 9: Coastal heath near Mt. Horner. Just why it was called “mount” was not clear; except for a small hill there was no mountain within 100 km or so.

Photo 10: In southern WA south of Marvel Lock washings laced with cyanide from a gold mine was dumped in the open, killing nearly everything in sight! Great for the environment.
them new for the trip. Four days were spent collecting within a 30-mile radius of Marvel Lock. We then moved to Wave Rock (Photo 11) campground (Photo 12).

The weather on September 23 had turned cool and windy, with some frost at night, and the area had not had any rain for several weeks. Nothing came to our black light, so we had an early evening, our sleep being interrupted by kangaroos feeding under and near our trailer. The next morning one roo was still nearby and welcomed hand-outs from our breakfast. We moved for three days to the Lake Grace-Lake King area, then eastward along a dirt track to 90 Mile Tank, a place we had been before on an earlier trip. Two days were spent at the Tank (Photo 13); days turned warm and sunny but nights were still cool. Lights attracted one bolboceratine and numerous melolonthines, but not much else. During the day Anne did very well collecting numerous Amycterinae (Photo 14), an odd group of weevils. On the morning we were leaving, I discovered that our old Land Rover had developed a leak in the hydraulic system affecting the brakes and gear-shift. By pouring brake fluid into the system I could get the car going but after a minute could neither shift gears nor brake. Stopping was simple - turn off the motor. Starting required more brake fluid; fortunately I had several cans. We drove eastward along the tract about 45 miles until we came to the north-south paved road extending from Norseman south to Esperance. Since Norseman was larger and on
the main east-west highway, we turned north after stopping and using more brake fluid. Arriving in Norseman, we were told that the repairs needed could only be done in Esperance, so, after buying several more cans of brake fluid, we drove the 70+ miles south to Esperance. Fortunately there was only one small town on the way and we only had to stop once. We found the repair shop and a nearby caravan park for our trailer. Leaving the car, Anne sat at a small table fixing supper under a large shade tree when one of the bellicose bull ants dropped into her hair and stung her. This slowed supper and caused the table to be moved. There was no lasting harm done, except to the bull ant (similar in its sting to a large wingless wasp). The next day we were mobile again and headed east toward Cape Arid. We finally made camp at Thomas River in the Cape Arid National Park (Photo 15).

In the little time left before dark a different undescribed species of bolboceratine was excavated and other burrows seen. That night it turned cold and very windy and for the next several days it rained and stayed windy. All of us sat in our tent trailer and played scrabble, Keith complaining when we used an American spelling, for example leaving the “u” out of color. Finally the weather cleared and warmed up somewhat. The camp area was marked by a series of flat stones that had been brought in, since there were no similar stones in the area. Anne found that several species of amycterine

Photo 13: At 90 Mile Tank, dirt track going toward Norseman, WA. In the two days we were camped there one car drove past. We didn't worry about traffic!

Photo 14: One of Anne's amycterines, Gagatophorus draco (Macl.) Sunning on a twig; the only specimen we found off of the ground.

Photo 15: Camp at Cape Arid; we were lucky to have a thicket of scrubs sheltering us from very strong winds.
weevils had taken shelter under the stones and was busy turning the smaller rocks. There were numerous weevils and the odd small grayish 8-10 inch snake. The latter were grabbed by the tail and thrown into the nearby bushes; they were too cold to complain! Edie saw what Anne was doing and said “Don’t do that, those are Tiger Snakes and their bite could kill you”. After that warning Anne was a little more careful and quicker to throw the snakes into the bushes, but skeptical that something that small could be very dangerous. Fortunately she avoided being bitten while collecting a satisfactory number of weevils. Scarab collecting was also very good, five species of “bolbos” being dug up in the area. During our time in the Park, we never saw another camper and asked the ranger as we left about this. He told us that the main use was during the fishing season in the summer, otherwise it was often deserted. It was isolated and hard to get to.

In early October we started west toward Wilga, enjoying wonderful collecting of our favorite beetles along the way. At Lake Grace on October 13 we finally collected our first Australian bolboceratine larvae, after over a total of a year looking for them! Eggs and first instar larvae were collected in individual cells (Photo 16). Most cells were at the sand-clay interface about two or three feet deep. The eggs were huge when compared to the size of the adult; I know of nothing to equal them.

Photo 16: Egg and adult of *Bolborhachium anneae* H. in partial cell at Lake Grace. The egg seems too large for the beetle, but all species so far found (3) have extremely large eggs.

Photo 17: Anne and the Carnabys at the base of one of the big trees in the Valley of the Giants, WA.
among the scarabs! Development initially was very rapid, going from first to second instar in two or three days. Because we were traveling we could not rear them beyond that stage. Subsequently the species was described as *Bolborhachium anneae*. Another species in the same genus was found near Wilga. Recently Dr. Terry Houston, Western Australia Museum, Perth, has taken a larger larva, probably belonging to a different genus.

We continued collecting in the south-western corner (Photo 17) of WA until the end of October when we reluctantly said farewell to the Carnabys. We made our way back to Perth and from there flew to Adelaide, South Australia (SA). The night before we left was unusual. We learned that our hotel was closing for good the next day and that a large farewell party was taking place. Unfortunately our room was just above the party and, since we were tired and had an early plane to catch, we were glad to hear them sing “God Save The Queen” and other farewell songs at midnight. Unfortunately the drinks had not run out and this was repeated at 1 AM, again at 2 and finally, with some very off key singing, it ended at 3 AM. When we left at 7 AM, we were not the happiest travelers.

In Adelaide we were met by Eric Matthews and taken to a good, downtown hotel that Eric assured us would not be closing in the near future. The next day Eric took us on a tour of the newly renovated SA Museum were he worked. While I had been there in 1972, I had not been taken on a tour of the place at that time. Both Anne and I found the various departments interesting and Anne saw, in Herpetology, a tank containing several small, live grayish snakes that looked like the ones encountered under the stones at Thomas River. She asked the curator what they were; the answer - “tiger snakes”. She then asked if ones that size would hurt a person, the answer - “sure, they would most likely kill you”. It was just as well she didn’t know that when collecting the amycterines at Thomas River!

After several days at the museum, we left with Eric for a four-day collecting trip to the Yorke Peninsular, mostly in and around Innes National Park. We had rather good general collecting, with *Trox*, *Onthophagus* and melolonthids being common. The only bolboceratine collected was an *Elephastomus* (Photo 18). Eric

Photo 18: *Elephastomus proboscideus* from the Yorke Peninsula area in SA.
had an interesting trap consisting of two 8- to 10 foot-long pieces of polished metal perhaps 10 inches high, each with a slot at the middle so that they fit together making an X. These were sunk into the ground, leaving about 6 inches exposed and at each end on each side and in the middle he placed small pit fall cups. In this trap he collected a surprising variety of beetles, including several myrmicophilus histerids. These days it might be difficult to carry this type of trap on an airplane! We returned to Adelaide and the next day Anne and I flew to Canberra.

At Canberra we were met and housed by Ev Britton. Most of our time was spent at the CSIRO, looking at beetles and talking to John Lawrence (all beetles) and Elwood Zimmerman (weevils). Light trapping yielded almost nothing; evenings were cool and the moon was almost full. We sent some of our collected specimens back to Ottawa along with specimens borrowed from the CSIRO. Sydney was our next stop where, as usual, we were met by Geoff Holloway. The next day we went with Geoff to the cabin of Cortney Smithers, 48 km north of Shacklton, NSW, at an elevation of 750 meters (2,500 feet). As we arrived, rain, hail and thunder greeted us; the evening was wet and cold - no beetles. The area was a mix of eucalypt sclerophyl and rain forest. We spent two days collecting, finding some very different beetles, including some scarabs, but no bolboceratines. I later regretted not using flight intercept traps in the area as, subsequently, FIT’s collected a number of *Australobolbus* in similar habitats.

On our return to Sydney we spent part of our one full day there taking a tour of the harbor on a new hydroplane. It shortened the tour by several hours. Since it was a new ride, we wondered about its safety. Just before we left, a priest boarded; Geoff and I simultaneously said “We will be right now” (Australian for “all right”), and the three of us burst out laughing. The other passengers probably thought we were crazy. It turned out to be a safe and interesting tour.

On November 17 we left Australia and went to Auckland, New Zealand where we were met by Brenda and Victor (Vic) May and driven to their home in Huia. Brenda's research was on weevil larvae and Anne, while working on the Australian amycterines,
had discovered a number of undescribed larvae. So, weevils were the subject during our visit, leaving Vic and me to discuss plants, weather, etc. The May’s home was in a lovely scrub forest with many tree ferns and overlooking a bay on the west side of Auckland (Photo 19). For a day we collected nearby (Photo 20), then went in to the then DSIR (Department of Scientific and Industrial Research) where Brenda worked. We spent the day looking at their extensive collection and talking with Willie Kuschel, Beverly Holloway and Charles Watt. The evening was windy and cold, nothing came to our black light at Huia. Another day collecting locally yielded a few melolonthines on flowers and a fair number of other beetles. I did find a few lucanids under logs, but did not expect to find any bolbocertines as they were not known to occur in New Zealand (and don’t as far as I know). I will not discuss this lack of Bolboceratines on New Zealand except to say that the lack of the group seems odd when one considers that such an old group that has radiated extensively in Australia has not dispersed to New Zealand.

After three days, the Mays and Howdens drove north to Waipoua and obtained a cabin in the Park. That night we saw luminescent dipterous larvae hanging in their webs under overhangs in a road cut. We also heard kiwis in the forest, but never saw one. Also in the forest and in our cabin we encountered lots of mosquitoes, which was an unpleasant surprise, because earlier we had seen almost none in New Zealand. Daytime collecting was good, particularly for lucanids under logs and dynastines, several of these on a nearby beach (Photo 21). Dung traps yielded at least three species of *Saphobius*. Later we collected other species at Huia near the May’s home. Several years later, with two drawers full of New Zealand dung beetles in several genera, a revision was contemplated, but it was mentioned that a professor at Christ Church was already doing one. To date there is no recent published revision and the extensive material in the Canadian Museum of Nature is only now being worked on!
On November 27 we left New Zealand and flew to Los Angeles, California. There we bought tickets to fly to San Diego and later to Sacramento. One day was spent at the L. A. County Museum where we met Roy Snelling. Charlie and Lois O’Brien were also there and we competed for space as the museum used compactors and the aisles for scarabs and weevils could not be opened at the same time. Because of this none of us saw as much as we would have liked in the time available, but I was able to examine the main groups that interested me and did not find any unusual geotrupines. The next day we went to San Diego for the Entomological Society of America (ESA) meeting. The meeting was great, but I wish I had a tape recorder for some of the after-hour tall tales told over drinks! It seemed that Anne and I lived a dull life.

After the meeting we went with Alan Hardy and Fred Andrews to Sacramento to see the Department of Agriculture collection. The first day Alan drove us to Chico to meet Dave Kistner and see his impressive establishment. Dave works mainly on termitophile staphylinids, but every now and then he turns up a really odd scarab. His collection is world wide and with impressive data; we had a great time. The next day was spent at Sacramento looking at the beetle families that interested us, and the following day, December 7, we returned to Ottawa.

Photo 21: Beach north of Waipoua State Park, New Zealand; several dynastids are found on or near beaches in New Zealand.