

SCARABS



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Rain(ing) Beetles

by Robert Anderson

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The author in El Triunfo, Chiapas, México. The Editors cannot see any beetles in this photo, but Bob is definitely dealing something...

You may well ask "Just what the heck is a weevil person doing writing an article in *Scarabs*?" Well, this past summer I had the opportunity to visit the southern state of Chiapas, México and on one fine sunny day high in the mountains I experienced what can

only be described as the scarab collector's wet dream! Let me tell you about it.

For a number of years I have been working in Chiapas in collaboration with ECOSUR, a small college located in San Cristobal de las Casas in the Altos of Chiapas. My project has been surveying the leaf litter inhabiting weevils of mid and high elevation forests. We've been fortunate to visit and sample numerous forests, some only small fragments, and many otherwise inaccessible unless one has proper permission from the indigenous inhabitants. Often this requires meetings with officials from the local ejido, then a town meeting to approve permission. But enough of logistics, let's get to the real story!

One area we have worked is the La Sepultura Biosphere Reserve,



WARNING! Reading the rest of this article could be hazardous to your health. While reading the rough draft of Bob Anderson's submission, Editor Barney overheated, fainted, and fell on the floor. Luckily, our trap designer Anne and our blacklight assistant Charissa heard the thump and came to his aid (after they made sure the floor was not damaged).



The town of Sierra Morena with Cerro Bola in the background.

located about 25 kilometers southwest of the town of Villaflores in the Sierra Madre de Chiapas of western Chiapas. We work out of a small town named Sierra Morena at about 1,200 meters elevation. Sierra Morena sits in a valley between two higher mountains, Cerro Bola to the south and Tres Picos to the north. Cerro Bola (16°.13464 N 93°.60077 W) is just under 2,000 meters and is a nice sharp peak with a definite summit. Leaf litter faunas change as one moves up in elevation so this one day, June 14, we thought it worthwhile to spend the 3 hours to walk up to the peak and take some samples, which we suspected would be quite different from the samples from between 1,400 meters and 1,600 meters we had previously taken.

The day was sunny and the rains had not yet arrived so things were quite dry. Quite a few trees had not leafed out and the litter was dry and sandy. When we arrived at the peak we noticed that the litter here was moister, perhaps due to clouds collecting at the summit and depositing moisture in the form of mist or light rain. Within a few minutes of our arrival my keen coleopterological eye spotted a large green beetle on a leaf about 10 feet up in one of the taller trees right at the peak. I asked one of my much younger, spry and lighter colleagues if he could climb up that tree and fetch me that beetle. "Sure" he said and promptly scaled the trunk. As he reached out for the beetle he commented "There's another one over there" and

pointed to another, clearly visible on another leaf. He then noted as he scanned the upper foliage of the tree that "there are quite a few of these up here." I approached him and peered up to get a better look. Sure enough I could now see about 10 or more beetles clinging to the branches and leaves of the tree. "Why don't I just shake the tree and they should fall down?" he asked. I agreed that this seemed a suitable arrangement, so he shook the tree.

At this point I must suggest that the true scarab enthusiast find a comfortable seat, sit down, close your eyes, relax and try to imagine this scenario. Picture the tree shaking and the large, bright green beetles falling. First one or two, then 10, 20... then a hundred, then hundreds. It was literally raining *Chrysina*!! As they fell, some took wing, some hit the ground and stayed there, some ended up on my clothes and on me, some fell onto lower vegetation. Then a few seconds later, as if on some magical cue they all started to fly. At first I grabbed a few from my clothes but soon my hands were full and being a weevil guy, my biggest vial would only hold half a hind leg of one of these beasts, so employing my quick PhD-given thinking skills, I decided to use one of the pillow cases that I use for bagging the leaf litter samples downhill. Stuffing the ones on my hands into the bag, I collected about 20 or so more on my body and then started picking them off the lower vegetation and ground. In all I must have grabbed about



A bucket of beetles.

75 specimens in about 5 minutes of frenzied collecting! For every one I got, five flew away. Not to mention that the tarsal claws on these guys were like fine needles, easily piercing the skin and drawing blood when one pulled them off your arm or hand. But when one sees hundreds of *Chrysina* within arm's length, pain is not a factor, right?



A handful of Chrysina triumphalis.

By now the reader will be breathing heavily and in need of a cool drink, perhaps if one is of advanced years, even a sedative or a nap. So, let me sum up. Benigno Gómez of México has confirmed the species as *Chrysina triumphalis* Morón.

At the present time, all specimens are still in Mexico. The beetles were not mating and did not appear to

be feeding on the tree. I think it's significant that this was at the end of the dry season and perhaps the beetles had congregated in a moister area to await the onset of rains. Even for a weevil guy, this was a very exciting day, but I can only imagine the range of raw emotions racing through the minds of you scarab collectors at this climactic moment.



Chrysina woodi (Horn) is sometimes abundant on the walnut trees in the vicinity of Fort Davis, Texas. This photo was taken in July, 2007 by Barney Streit.

Notes on Four Species of Phanaeus

by Barney D. Streit

Melanistic Phanaeus difformis

Anyone who has perused Dave Edmonds' "Revision of *Phanaeus* Macleay, A New World Genus of Scarabaeine Dung Beetles," Contributions in Science, Natural History Museum of Los Angeles County, 1994, has no doubt been enticed by the colored plate on page 14. It depicts a typical male and female Phanaeus difformis, with reddish pronota and green elytra. Next to them is a photo of an oddball - a female with a green pronotum and purple elytra. I thought to myself, "This is a bug you must have!"

A call was made to Marfa, Texas to Mr. Phanaeus himself. I was told the melanistic difformis are from Texas near the Gulf of Mexico. Next I contacted Ed Riley at Texas A & M, who told me to go to Kenedy County, Texas. He also told me that *Phanaeus* seems to be more common in the spring and fall, sometimes seemingly swarming to dung and flight intercept traps.

There is but one small town in Kennedy County, Sarita, which is in the northernmost part of the county. Highway 77 runs south to Brownsville, so a careful drive was made to check for places to set out dung traps. Both sides of the road had dirt roads running east or west through wonderful habitat,

but all seemed to be blocked by locked gates. I returned to Sarita and stopped for a chat with the local sheriff.

"No," he said, "All roads running off Highway 77 are private ranch entrances, and there are none that are open to the public." Having previously sifted through the *Phanaeus* listings at the Texas A & M web site, I knew that a substantial number of *P. difformis* had been collected 2.7 miles south of Sarita. "That must be what they call Birdland, where birdwatchers go." Then the sheriff really narrowed it down. "That's where these bands of oaks cross the highway. Go set your traps there."

And so I did. There are actually several places where the oaks cross the Highway, and these yielded a few precious purple *P. difformis* which were among numerous red



The bands of oak trees crossing Highway 77, otherwise known as "Birdland."



"Birdland" treasure: melanistic Phanaeus difformis.



The road from Highway 77 to the entrance to Kenedy Ranch.



The typical reddish-green color form of *Phanaeus difformis*.

and green forms. A few more traps were placed due east of Sarita, in open, oak-less habitat. This road extends a few miles before you come to a gate with a guard who will not let you enter Kenedy Ranch. The traps on this road yielded *P. difformis* with the typical coloration.

Ed also had some interesting information on those oaks: "The oak of Kenedy, Brooks, Kleberg counties, etc., is a strange hybrid of the "live oak" complex. There seems to be some differing opinions as to just what name to use for it. Technically - via our latest state plant checklist - it is still just the "live oak" of the southeastern U.S.A., *Quercus virgiana* Mill., but actually the situation is much more complicated than that."

Phanaeus triangularis triangularis is an interesting species that is found in several southeastern states. Robert Woodruff related his collecting experience with this species in Torreya State Park in northern Florida. By the time he had set out his final dung trap, his first traps had filled with specimens. Apparently, this species exhibits swarming behavior when the conditions are right.

This park borders the eastern bank of the Apalachicola River. For some reason not yet understood, *P. triangularis triangularis* is never found very far from the floodplains of waterways.

Traps set in Torreya were disappointing. I think I got two or three specimens.

I returned to the same area a couple years later. This time, I got no specimens at Torreya. The weather was exceedingly cold.

Undaunted (or too stupid to give up), I tried setting dung traps along several other small creeks that crossed the road on the west side of the Apalachicola River. I discovered that the floodplains of even small creeks have *P. triangularis triangularis*. Hopefully, some brilliant graduate student will figure out the connection between this scarab and floodplains.

A special "Thank you" goes to Mr. David Flemming, who owns the Hicks Creek property and kindly allowed me to collect on his land. I would suggest getting permission from him before going there. David can be contacted at:

Neal Land & Timber Company Post Office Box 548 Blountstown, Florida 32424

I should mention that *Phanaeus vindex* was very common in traps set on the perimeter of Mr. Flemming's pasture.

Collecting data:

USA: Florida, Calhoun County, junction Hicks Creek & Highway 71, 4.6 road miles S. Highway 20, adjacent to cow pasture, 5-7/ IV-2007, 1 male, 1 female.



Hicks Creek where it crosses Highway 71, Calhoun County, Florida.



From the same camera position as the above photo, there is a dirt road bordering a pasture, with Hicks Creek to the left. One trap placed on the side of this road attracted *Phanaeus triangularis triangularis*, *P. igneus and P. vindex*.



The specimens of *Phanaeus triangularis triangularis* from west of the Apalachicola River.



The locality mentioned here: Ecuador, Loja, Highway E35, 24 km S. Catamayo [= 3.0 km N. Nambacola] [= 18.5 km N. Gonzanamá] S 04° 08' 8.5" W 79° 23' 36.4" 1,811 meters.



Top: *Phanaeus lunaris* from the above locality. Bottom: The green form of *Phanaeus achilles*, also from the same locality. However, it was more common at a lower elevation: Ecuador: Loja, Highway E35, 9.5 km S. Catamayo S 04° 03' 53.3" W 79° 23' 1.7" 1,211 Meters.

USA: Florida, Calhoun County, junction Hicks Creek & Highway 71, 4.6 road miles S. Highway 20, forest adjacent to the creek, 5-7/IV-2007, 1 male, 2 females.

USA: Florida, Calhoun County, junction Lois Mill Creek & Highway 69, 0.1 road mile NE. junction Highways 69 & 275= 9.9 road miles SW junction Highway 71), 5-7/ IV-2007, 2 males, 5 females.

USA: Florida, Calhoun County, Highway 69, 7.0 road miles SW Highway 71, 7/IV-2007, 1 female.

Phanaeus lunaris and Phanaeus achilles

In February and March of 2006, I had the good fortune of visiting the southern state of Loja in Ecuador. It was fortuitous that my companions Ian Swift and Frank Hovore stopped at a spot along Highway 35 that was fantastic for cerambycids. This gave me ample time to investigate the cattle pasture seen in the photo on the left.

Phanaeus lunaris was common under cattle excrement, and a couple of the green form of Phanaeus achilles were taken as well. The latter scarab was more common at lower elevations, where it was drier, and P. lunaris was not found.

Occasional specimens of *P. lunaris* were netted while flying in broad daylight, while others came to traps, but most specimens were taken by digging below cow dung.

On both evenings we were at this locality, this beetle exhibited swarming behavior at dusk, from 6:20 to 6:45 PM, in windy, cool conditions. The air was full of these beetles, flying low to the ground and landing on fresh cow dung. The loud buzzing sound made me think I was near a beehive.

It would be interesting to return to this area at dawn and see if this behavior repeats itself.

I suspect the red form of *Phanaeus achilles* at Montecristi in western Ecuador does the same thing. The first specimen I ever saw came to blacklight at dusk! Once I baited dung traps at night and returned the next morning in rainy weather. Nothing was flying, yet, the traps were full. This may indicate crepuscular flights for this species.



A male of *Phanaeus achilles*. This is the typical red form from coastal Ecuador.



About to sumo wrestle a cow... Photo by Ian Swift.



A hand smeared with cow dung. It does not get any better than this! Photo by Ian Swift



Busy and happy. Photo by Ian Swift.

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Polyphylla hirsuta "Un-Rared"

By Bill Warner

Polyphylla hirsuta Van Dyke is a seldom-collected species that has been the target of many soggy and disappointing collecting trips to the Patagonia Mountains for the Scarabs editors. So far as is known, P. hirsuta is only found in this single mountain range east of Nogales, Santa Cruz County, Arizona, but no doubt occurs in Sonora, México on the southern tip of the mountains.

In his 1988 *Polyphylla* Monograph (*Bull. Nebraska State Museum*, 11(2):63), Ron Young reported seeing only six specimens. A scant few specimens have been taken more recently by the editors, Dave Russell, and very few others; the largest series I am aware of was seven, taken by Delbert La Rue a couple of years ago at light on the east slope of Patagonia's between Washington Camp and Locheil.

On July 21st of last year, Blaine Matheson, Charlie O'Brien and I set out for Delbert's spot to try our luck. This was against the advice of the "Senior Editor," who in declining an invitation to join in a "hirsuta hunt" that day,* regaled me with stories of being rained out of the spot time and time again, and pointed out that the entire area was overcast and "threatening." The day started out well, with several Cremastocheilus mentalis Cazier and a single Cremastocheilus lengi Cazier

taken near the Sycamore Wash area on the west side of the Patagonias, as well as a single, dead but perfect specimen of *Gymnetina cretacea* (LeConte) on the road above that spot. When we reached the east side of the mountains, it was still partly sunny, so we continued past Delbert's site to the flats below to see if the tiger beetles would be out.

We stopped in a mostly grassland area where only scattered oaks were present. A large area had apparently suffered a forest fire earlier in the year as most of the oaks were partially scorched and the grass was burned down. We stopped in the burned area just short of where the burn ended. Upon parking the cars, a few minute rain specks festooned the windshield, but the sun was mostly shining and patches of blue sky shown through the clouds. After dismounting, grabbing nets, kill jars and other gear, as we stood at the edge of the road BSing for a second before starting out, I suddenly saw a large, tan scarab flying about two feet off the ground a few yards in front of me. I figured it was Phyllophaga (Triodonyx) bellamyi Warner (which starts flying about that time of day; it was 4:30 PM), and stated such to Charlie and Blaine while chasing, missing, and cussing at the beetle. After boring Charlie and Blaine with a coupleminute description of *Phyllophaga* bellamyi behavior, I saw another one on the far side of an oak tree;

*Editor Bill's note: "Barney: no guts, no glory!" the beetle quickly flew off but a second appeared flying closer to the ground.

Swinging at the beetle (successfully this time) I could tell that it was actually the object of our trip, not a Triodonyx. Celebration about doubling my holdings of *Polyphylla hirsuta* (I had only taken a unique in several trips before that), coupled with a few minutes of fruitless searching ensued, after which we started wandering about the open grasslands, collecting non-scarabs such as the large tenebrionid Gonasida--normally a fall beetle—that were feeding on *Pogonomyrmex* ant mounds, and checking the nest areas (unsuccessfully) for Cremastocheilus. By this time (perhaps 5:00 PM) it had been sprinkling for a few minutes and had become overcast, with hard rain and lightning a few miles away. Given we were getting cold and wet, thunder and rain was closing in, and I was carrying a metal net pole (and having no wish to "do a Hovore"), we collectively decided to bag the trip and started back toward the trucks.

As we neared the road I happened to look up between a pair of oak trees at the road's edge (we were downhill, so the view was at about ground level) and screamed to Blaine and Charlie at the sight of what seemed like dozens (actually perhaps 10) *Polyphylla*, backlit as they flew about a foot off the ground beneath the trees. Even









July 28, 2007. Fred Skillman (cerambycids) and Bill awaiting a flight that never happened - it never rained!



July 12, 2008. Annie Ray (cerambycids), Sandra and her husband Barney netting and watching *Polyphylla* in a drizzle.



Bill and Barney

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an overweight buffalo of a guy like me can move pretty fast at a target like that! Scrambling, hooting and wild net swinging followed for several minutes as more P. hirsuta flew across the road, under the oak, and into our nets. Note that it was light out (though overcast) and drizzling rain. After we had caught a dozen or so specimens, we started watching individuals to see if we could locate any females. The *Polyphylla* seemed very attracted to the leaf litter beneath the oaks, flying back and forth close to the ground, occasionally landing, walking a few inches and flying again. But, no females were found, no "mating clusters" of males, no shallowly buried females even after scraping off the leaf litter and soil in the areas over which the males seemed to concentrate. After several minutes, males were only occasionally coming under the pair of oaks, so I wandered down to check other trees, catching one or two beneath a couple trees, then finding other trees with several. Given the rain had become a "hard sprinkle" with water dribbling off my hat brim (and the thunder getting louder, reminding me about that metal net pole), standing under the trees was the most comfortable option, and it gave time to survey the area: *P. hirsuta* were scattered about the grasslands every 50-100 yards, flying about a foot off the ground from tree to tree. By simply standing under the right tree, we could intercept one to three specimens as they flew up

to the tree every minute or two. Also, they tended to be less net shy, flying purposely back and forth beneath the trees. Out in the open, they were difficult to net unless approached from behind, and then one only had a single chance; a miss and they would quickly swerve and fly away. Polyphylla hirsuta is surprisingly agile for a relatively big scarab! After an hour of this fun, now definitely cold and wet (with weevil collector Charlie having the brains to sit inside his truck instead of chasing bugs in the rain), we decided that light collecting would not be in the cards that night, and a celebratory steak dinner in Amado was a much better idea. The time was 6:00 PM, still a couple hours from dark. The total take: 64 for me, 18 for Blaine, and perhaps a dozen for Charlie—not a bad afternoon in the rain! To top off the trip, as we were leaving I even found a single female Conscinocephalus cribrifrons (Schaeffer) crawling on the road females are rarely taken except a few this way. As we were driving west back up the mountain, we saw occasional *P. hirsuta* flying across the road for a mile or two back towards Washington Camp.

Four days later, Delbert La Rue and Fred Skillman returned to the area and caught a few specimens just at dusk and at light that night. Apparently, the big burst of activity the week before was the big emergence. A few *P. hirsuta* have definitely been taken at light on rainless days; it remains to be seen if the mass emergence we lucked into turns out to be "normal" behavior, and that *P. hirsuta* is

actually a "rain beetle."

Barney's post script:

On July 12, 2008, I returned again, this time with Bill, my wife Sandra, Ian Swift and Annie Ray. There was a long flight in a constant drizzle. Most of us followed the males instead of netting them. Nonetheless, no females were found. Thanks go to Ian Swift for the fabulous photographs.

Ian's photo's were taken at a 6" square of ground that perhaps 20 males were attracted to over time. Bill called him over to the spot after seeing at least a half dozen land and walk over the spot repeatedly, and then finally move away after several minutes of him clicking pictures (with more beetles coming to that same small spot). After we left, Bill stopped and dug up the spot at least 6 inches deep for a 2-foot square, but found no females.

Barney and Sandra returned to the same spot on July 16, 2008. They waited quite awhile without seeing any beetles fly. Then, at 5:00 PM, it began to drizzle. Again, *Polyphylla hirsuta* were everywhere. At 5:10 PM, when the precipitation ceased, the scarabs vanished!

It appears that *Polyphylla hirsuta* is indeed a rain beetle.

In Past Years - XIV 1970-1974

by Henry F. Howden

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During the last week of July, 1973, Anne and I and our youngest daughter left to attend ICEB (International Congress of Evolutionary Biology) at Boulder, Colorado. We packed up a large tent to use in a camp ground near Boulder; along with all our other equipment it made quite a load. We drove first to Columbus, Ohio, where we visited Barry Valentine and saw his and the University's collections. From there we went to Lincoln, Nebraska, where we visited the Ratcliffe kingdom, and got directions for collecting localities in the Nebraska sand hills. After a day in Lincoln, we spent several days camping in the sand hills, and collected both Eucanthus and Bradycinetulus, as well as many other scarabs and weevils. We left rather reluctantly and drove on, with frequent stops, and arrived



Photo 1: Part of railroad bed that now is used as a road to Rawlins Pass, Colorado; Robert Gordon on left, Barry Valentine in middle, Anne on right.

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in Boulder on August 2nd. At the camp ground a few miles west of Boulder, we set up our tent which consisted of two large rooms and a canopy that would fit over a picnic table. The large size of the tent was the main reason why we didn't do more camping on our way out or when headed back to Ottawa. That evening we set out our black light near our tent. The catch consisted of a few Serica and Diplotaxas and a surprising number of entomologists! Unfortunately I didn't make note of all the people that appeared that night, but among them were Robert Gordon, Barry Valentine, who camped in our outer "room", and Walter Wittmer, from Basil, Switzerland, with his wife and daughter. The latter was unexpected and welcome, as he had visited us in Ottawa several years before and his daughter was the same age as our youngest. The camp ground turned into a small coleopterist meeting nearly every night; it was great and as enjoyable as ICEB itself. There were several free days before the meeting started and we first went collecting near Ward and Nederland at an elevation of between 9-10,000 feet. Several Aegialia and Aphodius were collected, some in mud puddles in a dirt road, along with a few cerambycids on dead wood. On one of our free days we left our daughter with the Wittmer's daughter, acquired several other

beetle addicts and left for Rollins Pass at 11,600 feet; the dirt road up was the old railroad bed (Photo 1). The Pass was quite an historic area. There were pictures of the early trains with banks of snow higher than the train and stories of trains stuck in snow and the problems of trying to keep the tracks free of snow or landslides. We were over 11,000 feet and some nearby slopes were higher and still had large areas of snow. On one of the snow patches some late season skiers were stupid enough to try their luck. Most of them did OK, but one forgot that the snow patch ended and he ran into a pile of rocks. The other skiers helped the rockbasher back to their car and left. Meanwhile we turned rocks (Photo 2) and looked under tufts of grass in the tundra-like conditions, finding only a few *Aphodius*. We returned to different things like meetings, and collected locally near Boulder. All in all we had a great time, but we found the collecting in that part of Colorado rather disappointing. We gradually worked our way back to Ottawa, with a brief stop in Lincoln to bother Brett Ratcliffe. By then it was late August and the end of collecting for 1973.

During our usual Spring Break in February 1974, we went with 48 others to Leticia, Colombia, which I have already written about. In May, Stewart and Jarmila Peck and Anne and I went to Cucuta, in northeastern Colombia, adjacent to Venezuela. We were interested in the low pass (Photo 3) along the border between the end of the Colombian Andes and the east-west chain of mountains on



Photo 2: A hopeful Robert Gordon looking for his pets at Rawlins Pass.



Photo 3: Part of low valley between the mountains of Colombia and Venezuela.

the north coast of Venezuela. Were the beetles the same or different on each side of the pass? We started first on the Colombian side, going daily to the high country just south of Cucuta (Photo 4). Car rental was very costly and we found it far less expensive to rent a taxi and driver for 12 or so hours a day; it was also good that the driver knew the roads, none of which were sign posted. We spent nine days collecting near Cucuta, going up to 9,000 feet in one area of wet, scrub forest with roots so dense that no soil was visible. Stewart had to chop the roots to put in carrion traps. I was skeptical that

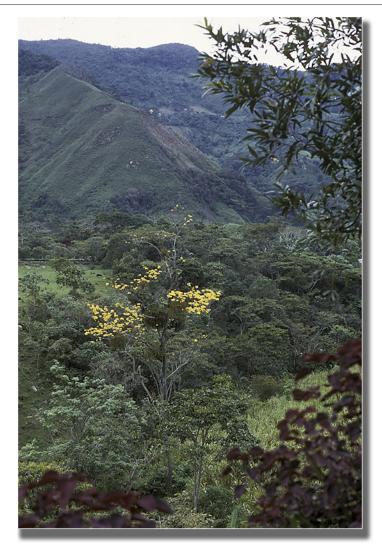


Photo 4: View of mountains in Colombia near Cucuta.

the traps would yield anything, but I was wrong. The traps did quite well, including a new species of Cryptocanthon. Nearby there was a place where dirt had been taken from an embankment to fill up parts of the dirt road. In the dug-out disturbed area, I found several typical geotrupine push-ups. Each burrow yielded a Neoathyreus, and by looking in similar areas I collected a small series of the genus. I saw several similar burrows in nearby forested areas, but roots always prevented me from finding out what was at the bottom. Generally we had

good collecting. The taxi driver was quite happy to stay after dark while we ran lights, as he spent most of his time making repairs to his rather antique cab. It was really an interesting arrangement. The day driver we had said he owned half of the vehicle, the front half I believe. If we were to get anything to eat we needed to be back in town by 9:30 PM. Our day driver picked us up about 8 in the morning and when we returned in the evening the other driver took over for the entire night. Since our driver had time to work on the cab while we collected and also guarded our cameras, etc., which we did not want to carry all the time, it was a happy arrangement for everyone! While collecting, Jarmila had the unfortunate experience of brushing against a newly hatched egg mass of seed ticks. Many of these dug into her arm near the elbow and caused a swollen, inflamed arm that oozed blood and was a real bother for over a week. Our time was spent collecting until the day before we tried to cross over to Venezuela.

Relations between Colombia and Venezuela were somewhat strained at the time and it took us and many others several hours to get exit visas. The next day we took a taxi to cross the border to the San Antonio airport where we were supposed to pick up a rented Volkswagen. It took us nearly an hour just to get our passports stamped, and another five hours to get the rented car. We then drove to San Cristobal, our base until we returned to Colombia. We finally found a hotel in town and got

something to eat, our lunch having been peanuts and a Coke. The next morning we were rudely awakened at 6 AM by church bells just outside of our window. Bells chimed or clanged intermittently during the day and evening. After a second day of this we moved to a motel at the edge of town.

Much of our high elevation collecting was done approximately 45 miles northeast of San Cristobal near a road junction called Parador Zumbador at elevations between 8 and 9,000 feet. The conditions were different from those on the Colombian side: much of the land was fenced or cleared and seemed a little drier than similar elevations where we had been (Photo 5). We reached scrub forest, but not paramo. There were enough differences in the beetle fauna to make us think that the low area might present a small barrier to dispersal, but the ecological differences ruled out any conclusion. Collecting was good enough to satisfy all of us and we did turn up species that we hadn't taken before. One day we took the road south through the pass into the Orinoco drainage and the edge of the llanos (Photo 6), about 60 miles from town. Anne had some interesting collecting for her weevils, but no really interesting scarabs turned up. We spent several more days in the mountains northeast of town, then packed up and drove back to Cucuta, Colombia. We revisited the 9,000 foot elevation where we had collected Cryptocanthon, but found no more and shortly thereafter we were rained out. On our last day we



Photo 5: Mountains near El Zumbador, Venezuela.



Photo 6: Edge of llanos south of San Cristobal, Venezuela.

went to a new location southwest of Pamplona at an elevation of 11,000 feet; near there I collected one large *Dichotomius* and a scarab which I couldn't put to genus. The next day we flew to Bogota, overnighted, and returned to Ottawa the next day.

In June of 1974 four of us from Carleton, Herb Nesbitt (mites), Brock Fenton (bats), Stewart Peck (beetles) and I, had the opportunity to visit Papua-New Guinea (PNG). It was not the best time for collecting beetles as it was their winter and supposedly dry season, but with an offer of some help from the CSIRO

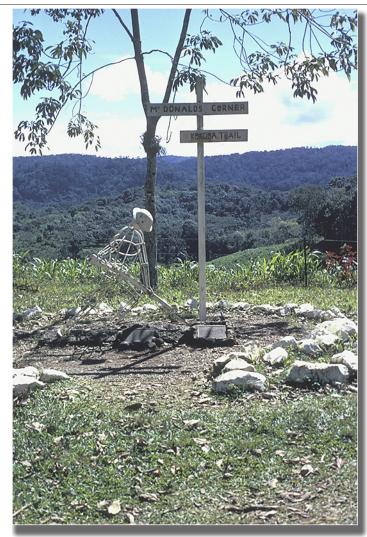


Photo 7: Parts of leftover soldier marking where Japanese were stopped above Port Moresby, PNG, during World War II.



Photo 8: Town of Wau, PNG, showing combination landing strip and golf course; club house at lower end of strip.

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and PNG Agriculture we couldn't refuse! We left on June 22nd, and after stops in Hawaii, Nandi and Sydney, landed in Port Moresby three days later. While in Port Moresby the PNG Department of Agriculture furnished us with a car and driver-interpreter, which was necessary as we neither knew the back roads nor the local pigeon language, not to mention the dozens of other languages spoken in isolated areas. I found the customs of the native people as interesting as the beetles - something that I didn't admit to at the time. The day after we landed we were driven to the highlands 34 miles to the east of Pt. Moresby to Ower's Corner at about 1,500 feet elevation. Near there the Australians had stopped the Japanese invasion in Word War II and an unusual marker was near by (Photo 7). We collected in the area for several hours, getting three species of Onthophagus and a few other dung beetles along with the largest tree frog that any of us had ever seen. On our way back we went to Brown River Reserve 30 miles north of town, but found nothing of great interest, so we returned to our hotel and sampled the local beer. The next day we flew to Wau and the Bishop Museum Field Station founded by the Gressitts. Our plane was a twin engine Cessna and our white pilot had a familiar accent. Bert Nesbitt asked him where he was from and he said "Canada". He was asked where in Canada and, somewhat grudgingly said "Ontario"; then growled "Ottawa". Burt, whose family had been native Ottawans for generations, asked where in town? We thought we

had really irked our pilot, but he replied "Baseline, near Fisher". Bert then asked him "Does your house have a green roof"? It turned out that Bert knew the pilot's family, it was a more cordial flight after that. The air strip at Wau was interesting; we buzzed it several times to chase any animals off and to warn the golfers as it made up part of the local golf course (Photo 8). That done, we landed going up hill; the strip had about a ten degree slope. We then got local transport to the field station and settled in what is best described as a hostel. The station was in the remains of an old coffee plantation with small patches of young native plants. The area was not as dry as we had expected, and there was rain before and during our stay in the country. Every night during our eight day stay at the station we ran lights, both black and MV, on the second floor balcony. A surprising number of beetles were taken at the lights, including some lucanids and many small scarabs. The day after we landed, we rented the Land Rover from the station and went up the adjacent Mt. Kaindi (top elevation about 7,500 feet). The one lane, narrow, rutted dirt road was used mainly for the start of logging on the top of the mountain, which had a wonderful stand of old trees at that time (Photo 9). The mountain top was wet with tree ferns, thick moss on the trees, and amphipods in the moss. We collected some of the well documented oddities, such as the walking sticks, weevils with lichens on the elytra and others that I couldn't name (Photo 10).



Photo 9: Forest near summit of Mt. Kaindi adjacent to Wau; starting to get cut then; now?

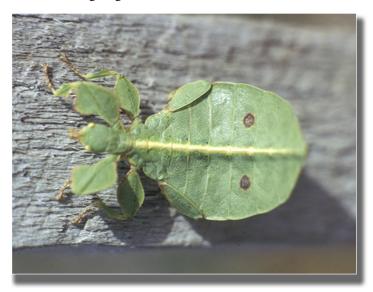


Photo 10: One of the odd, "darned if I know", insects (phasmid) collected on Mt. Kaindi.

Natives that we met generally ignored us, but a fellow with filed teeth, red from chewing betel nut, was willing to have his picture taken (Photo 11). That was fine, but when I tried to get him to smile and to show off his teeth, I had no luck. Sign language was our only way of asking for anything, and the little pigeon that I learned seemed to be, for the most part, rather crude. For example, the grass skirts worn by either sex was referred to as "grass belongum ass". Less crude examples



Photo 11: Local who was glad to have his picture taken, but would not smile to show off his filed teeth and very red, betel nut stained gums.

referred to such things as nasty dogs (Photo 12) or stores, etc. At night when running our lights, we would often hear the locals on the mountain side playing a type of flute made from bamboo; the sounds drifting down to us made for an interesting evening. Back in 1974, there was little robbery or problems between whites and natives; whites were mere objects to be mostly ignored. One day the car got stuck and a group of natives helped us out. They then demanded a shilling each, which we didn't have. Things got a little nasty until I remembered that we had a pack of

cigarettes for trade. One cigarette was given to each of our "helpers" and all was well. The cigarettes were promptly put in their mouths and chewed and they went away happy. It saved us from real trouble and was a cheap solution. Just before we left, Stewart and I took some great pictures of several kinds of Birds of Paradise; we are often asked how we did it (Photo 13)!

After eight days at Wau, we took off downhill over the golf club house and flew to Lae on the northeast coast. The town was wet and the vegetation was in great shape, so we expected to see lots of insects at the lights that night. Disappointment - only three beetles turned up, and those were found in a small park under tree bark. The next day, when flying to Mt. Hagen, I sat beside a salesman that said he liked Lae because he sold so much insecticide to the city to control their bugs! Was human life expectancy lowered as well? At Mt. Hagen we had reservations in a rather old lodge, and once settled, we went out to the Kuk Experiment Station. They were growing various varieties of tea along with local vegetables, and native vegetation was in short supply. Despite this, they offered to set up a 500 watt MV light at the station that night. I was not optimistic, partly because of the lack of trees, but also because that night there was a full moon. I didn't collect much, but did get Xylotrupes (Photo 14) and a good series of a large rhyparine. Collecting for the next several

days in the vicinity of Mt. Hagen yielded aphodiines and a number of species of Onthophagus. On Sunday we went to the local native open market which was enclosed by a rail fence, with a large sign at the entrance saying that chewing betel nuts in the compound was forbidden. I wondered about that until reminded that the practice produced lots of red spit which was not pleasant to step on. In the market, men often wore the typical "grass belongum ass" while the women wore colorful robes which were often put on just outside of the compound. It was a colorful place and the "chief" men (Photo 15) often wore native symbols of their "high" class. Nearby native housing was something else. Low, long huts housing adults, children and the valuable pigs all stayed in the same huts and one wondered how the colorful market attire was kept clean. Later, when Papua New Guinea gained self rule, t-shirts and blue jeans were said to be the usual attire and crime became common in the more settled areas. Fortunately, we saw none of that. After a few days we moved to the Baiyer River Bird of Paradise Sanctuary near Mt. Hagen. It was a relatively small piece of mature forest on level ground, rare in places we had been. There were some tailored tracks and a narrow dirt road running through the forest. One of the tracks was guarded by a female cassowary (Photo 16); she had a nest with eggs beside the path and would not let anyone near. Cassowaries can be dangerous; while not as



Photo 12: Sign translated reads: Look at the picture, watch out for large dog.



Photo 13: The easy way to take pictures of Birds of Paradise! Be sure that they are well mounted.



Photo 14: One of many scarabs and lucanids that came to sap flows, a *Xylotrupes*.



Photo 15: High society at the Mt. Hagen market showing prized head ornaments.



Photo 16: Cassowary that furnished us with one egg that fed four of us.

large as an emu, they are noted for their powerful kick and have been known to kill a person. There was no male in the Sanctuary (natives consider a cassowary a great meal), so the eggs were infertile. The ranger kindly gave us a freshly laid one and the four of us each had a good portion of scrambled cassowary egg for breakfast. Shortly after we arrived, a tailored path with a few steps made with logs held in place with metal pegs did me in. A metal peg caught the heel of my boot and badly twisted my ankle. So for the rest of the time at Baiyer River I collected by driving our Land Rover down the dirt tract. I would limp over to a trap or stand for a period at a very productive sap flow on a tree by the tract. The sap flow attracted lucanids, some scarabs and numerous nitidulids, not to mention many butterflies that got in the way! Collecting was great, but would have been better if I had been more mobile.

On our return to Mt. Hagen, I went to the local hospital to have my foot looked at. A native, who spoke only pigeon, used a very old, battered X-ray machine to take a picture. I told him to get behind a nearby shield to avoid radiation to no avail. I mentioned this to the doctor, who said that the native did what he wanted, not what he was told! Anyway, my ankle bone was chipped and I acquired a "walking cast". The next day we went up Mt. Hagen itself to about 8,000 feet and were surprised to see frost damage (Photo 17). Once every 20 years

or so there were frosts in the area and for the next year food had to be flown in, as crops were the main source of food. We collected only a few beetles that day and my cast started to buckle at the top of my foot. The next day we returned to Port Moresby and I went to a local doctor to get the cast repaired. He started to cut off the old cast and I said "you are cutting me". He said the little circular saw wouldn't cut me and held it against his hand to prove it. When he took the cast off, I had a very bloody foot and he said that hadn't happened before! I wound up with a bandaged foot,

because he was afraid a cast might allow an infection. We then went collecting at Brown River, a reserve near town. Collecting was quite good, with a number of different scarabs. When we left New Guinea we had collected over 50 species of Onthophagus and many other genera of scarabs and lucanids. It was a great trip, except that on the return I had an aisle seat in order to extend my bad foot; nearly everyone using the aisle managed to kick my foot anyhow! My foot was OK after several weeks back in Ottawa, and sorting and mounting kept me busy in my spare time for the rest of the year.



Photo 17: Frost damage on Mt. Hagen, not much of a picture, but rarely seen; pandanus is one obvious survivor.

Late Entry - Horniest Beetle Contest

From the Files of Bruce Gill



Onthophagus babaulti d'Orb.



Onthophagus (Proagoderus) rangifer Klug.



Proagoderus elgoni.

Last night I took up the challenge and dived into my *Onthophagus* drawers. I submit *Onthophagus* (*Proagoderus*) rangifer Klug and *Onthophagus babaulti* d'Orb. as candidates for the World's Horniest Beetle Contest. These are well-known members of the African dung beetle community. I also submit *Proagoderus ceratotherium* and *Proagoderus elgoni*. I am toying with plans for an eastern Congo expedition in the next year or two, to bag some of these trophies! Head and shoulder mounts will look very impressive over the fireplace at Rancho Uroxys...

I fear it will be tough for our dear Scarabaeines to compete with the likes of *Golofa porteri*; hopefully Team Nebraska will be caught sleeping and will miss the submission deadline. Please be sure to take lots of pictures of the judges, as they agonize over their deliberations...

Editors Note: Sorry Skippy, the judging was done behind locked doors and we were not allowed in, so it was not possible to photograph them.



Proagoderus ceratotherium.