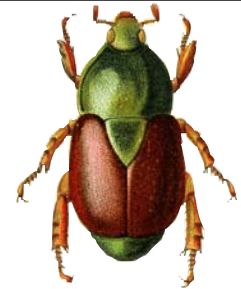


# SCARABS



SWYgaXQgc3RpbmtzLCB0aGV5IHdpbGwgY29tZS4=

Occasional Issue Number 24

Print ISSN 1937-8343 Online ISSN 1937-8351

February, 2008

## WITHIN THIS ISSUE

*Chrysina* of Belize..... 1

In Past Years VI..... 9

## Lavender Blue

### An Annotated Checklist of the *Chrysina* of Belize

by Don Thomas

USDA - ARS - SARC  
2413 E. Hwy 83, Bldg. 200  
Weslaco, Texas 78596  
Donald.Thomas@ARS.USDA.GOV

## BACK ISSUES

Available At These Sites:

Coleopterists Society  
[www.coleopsoc.org/default.asp?Action=Show\\_Resources&ID=Scarabs](http://www.coleopsoc.org/default.asp?Action=Show_Resources&ID=Scarabs)

University of Nebraska  
[www-museum.unl.edu/research/entomology/Scarabs-Newsletter.htm](http://www-museum.unl.edu/research/entomology/Scarabs-Newsletter.htm)

## EDITORS

Rich Cunningham  
Scarab349@aol.com

Barney Streit  
barneystreit@hotmail.com

Bill Warner  
wbwarner1@cox.net



Here is a recent photograph of Don. He is either inspecting oranges for pests or contemplating whether or not it is possible to smoke an orange..

*"Lavender Blue, Lavender Green,  
When I am King, You will be  
Queen!"*

English Folk Song

When I first suggested to my collecting buddy Dave Robacker that we needed to make a trip to Belize he was less than enthused. Dave is as infected with the "green fever" as anyone, but there is only

one species of *Chrysina* reported from Belize, and that species, *Chrysina purulhensis* (Monzon & Warner) would be easier to catch in Guatemala along with a number of other desirable species than they would in the former colony of British Honduras. The deciding factor was the chance to catch some rare species that are only known from eastern Mexico in locales that would be on the way. The third character accompanying us on the trip, Ronay Riley, didn't really care where we went or what



Figure 1:  
*Chrysina halffteri*



Figure 2:  
*Chrysina rodriguezi*

we were after, as long as he got to go along. A descendant of an Irish vagabond, Ronay is Chiapanecan by birth and thus it was a treat for him, and I, when we were joined by relatives on the night we camped in the Selva Negra in the mountains of Chiapas. They knew we were coming and brought a hot meal of tortillas, rice, and carne guisado so we wouldn't have to cook. The visit was brief because this late June night was cold, windy and drizzly and so they departed after a while to seek a warm dry place to sleep. But inasmuch as cold, windy and drizzly is normal cloud forest weather, a pair each of *C. halffteri* and *C. rodriguezi* dropped on to our sheets (Figs. 1 & 2).

Our objective in Belize, *C. purulhensis*, was reportedly a lovely lavender color in life with metallic gold punctures on the elytra, and thus quite unique in the genus where most of the species are shades of green. Described by Bill Warner and Jose Monzon (1993), the types came from the area around Purulhá in the department of Baja Verapaz, Guatemala, except for four paratypes taken in May and June 1990 in the Cayo district of Belize at "Mtn. Pine Ridge, 1000' Falls." Bill confirmed that the latter was a reference to the Hidden Valley Falls near the highest elevations of Belize. The Mountain Pine Ridge area is described as an oak-pine woodland, but thanks to the southern pine beetle, it is more accurately described as a ghost forest. Heavy logging



for hardwoods left long-needle pine as the dominant tree, which imbalance led to devastating infestations of the scolytid and death to nearly all of the mature trees. But on the upside, with all but the remotest stands of hardwood gone, the British government (God Save the Queen) granted the Belizeans their independence. Belize is still a member of the commonwealth and a form of English is still spoken there. For example, the local word for pelican is belikin, and that is also the name for the local beer.

The Mountain Pine Ridge is a part of the Maya Mountains which is a disjunct remnant of the ancient nuclear Central American cordillera. The relatively low elevation here (ca. 1000 m sobre nivel del mar) is due to the wear and tear of 300 million years on its aging paleozoic granite. This place was an island when the meteor hit at Chixulub, causing quite a splash I understand. I spent a great deal of time in this area some decades ago for the screwworm eradication program when access to much of the country was by old logging road. But thanks to fears that the Sandanista invasion of Honduras was imminent there is now a reasonable system of paved highways and bridges courtesy of our US Army Corps of Engineers. And what with the Belizean Defense Force augmented by elements of the British armed forces being entirely financed by your Uncle Sam, collecting permits are relatively easy to obtain, at least for Americans.

To prevent illegal activities, such as logging, God forbid, on the Mountain Pine Ridge, the government has placed a locked gate on the one dirt road into the area. There are several eco-tourist resorts back in the dead pineys and so folks without chainsaws are welcome. The guard simply asks a few survey questions before permitting entry. On this occasion we told the guard that we were headed to the Hidden Valley Falls, a well known tourist spot, and we were on our way. The water fall, if not actually 1000 ft high, is a mildly spectacular cascade on the eastern escarpment of the ridge. It was located on private property, the Hidden Valley Ranch (no relation to the salad dressing), but because of its significance as a natural landmark, the falls and the immediate area were acquired by the government under eminent domain. The tourist center consists of a small park-like area situated on the opposing side of the canyon, and hence, the best view of the falls. A grassy lawn and a couple of rustic buildings were the extent of the civic improvements and we found ourselves the only tourists present that afternoon. Nonetheless, and in spite of brandishing our official collecting permits, we were not able to persuade the caretaker to let us spend the night on the property as had been our plan. So, we drove back down the dirt road a couple of miles and set up camp, raised the sheets, and awaited the darkness.

As will occasionally happen in the tropics in June, it rained off and on (at times quite hard) that night. And whether this weather was for better or worse, the lights did coax in one beautiful *C. purulhensis* (Fig. 3). To behold such a creature, alive, crawling in one's hand, is to experience an awe of nature that no waterfall can inspire. Of course, like the treasure of the Sierra Madres, each of us now lived in fear of being murdered in our sleep by the other, because in spite of the advice of King Solomon, no one wants half of a *Chrysina* beetle for their collection.



Figure 3: *Chrysina purulhensis*

To make matters worse, on the way out the gate the next morning, we were scolded by the guard who demanded to know where we had spent the night. I told him we had camped out near the Hidden Valley Falls, just where I told him we would be, whereupon he told us that camping out was against the rules. I explained to him in as

reasonable a manner as possible that inasmuch as we had permits to collect insects and inasmuch as the authorities certainly understood that collecting insects is typically conducted at night, that our collecting permits gave us implied permission to spend the night in the wilderness. He seemed unpersuaded by my arguments and so for the following night we had to promise that we would stay at one of the resorts.

Thus for our second night on the ridge we checked in to the Hidden Valley Lodge, owners of most of the property surrounding the falls. In my personal opinion, one cannot eat enough fresh papaya, nor gawk at sufficient number of well-heeled eco-babes, to justify a \$200 a night per person lodging fee. But at least the management was happy to grant permission for us to set up a light and generator on their property as long as we were well out of sight of the lodge itself. For that purpose we found a dirt road that led to the edge of the eastern escarpment where there was a stand of actually living trees and its own waterfall called King Vulture Falls. Which, in spite of the foreboding name was an enchanting spot and we looked forward to the evenings collecting with great expectations. But the god Scarabaeus was unimpressed by the fact that we had just coughed up \$600 for the privilege of spending this night in Eden and no "plusy's" were attracted to our lights. In retrospect we feel that the elevation here, only 1729 ft by our altimeter, compared to the 2698 ft

at the previous night's spot, might have been the problem.

So, for our third and final night on the ridge we decided to return to the heights near the falls where we had camped the first night. And inasmuch as we were also convinced that camping next to the road itself would only invite further scolding from those unsympathetic to our task, and perhaps others envious of the contents of our wallets, we decided to make camp as far from the road as possible. With both of our vehicles equipped with 4WD, we selected an overgrown trail which seemed to head in the general direction of the falls which we judged to be no more than a few miles away to the northeast. After a mile or so this trail ended at a clearing. Or rather, after this clearing the trail was so overgrown that it was no longer passable. Because this was our last night on the ridge we elected to run two MV lights: one at the camp in the clearing using an inverter off of one vehicles (requiring the motor idling all night), and the other about a hundred or so yards further down the trail through the bush with the generator and sheets far enough away such that the lights did not compete with one another.

Following our favorite meal of grilled wranglers and baked beans, the evening that closed in around us was warm and still when we cranked on the lights. About 9 o'clock I made my first hike through the darkness to visit the outer light. Words cannot describe the exhilaration I felt when I saw the

green "*Plusiotis*" on the sheet (Fig. 4). Imagine if you will a middle-aged man performing the macarena while rubbing a live beetle against his genital area. I speak rhetorically of course, there being no witnesses.



Figure 4: *Chrysina purulhensis*

Because we would be operating the lights all night we would need to sleep in shifts, so at about 11 PM, Dave turned in. Ronay was already in the sack. I was relaxing in my camp chair watching the sheet when shortly after midnight an all-too familiar odor hit my nostrils. I am blessed with a particularly feeble sense of smell so an odor has to be pretty strong to get my attention, and now I sensed the unmistakable fetid smell of dead animal. As death hung in the still air it struck me as odd because we had been encamped since about 5 o'clock that afternoon, and I had not noticed the smell



before; why now? A rotting carcass means an opportunity for rare beetles without having to set stinky baits so it was not something that would have gone unnoticed. Had the wind changed? No, there was hardly a breeze at all. Inasmuch as dead animals don't get up and walk around, the hairs on the back of my neck stood up as I realized that the one creature that smells like a dead animal, other than the dead animal, is the one that killed it. Big cats will feed off of a carcass for weeks after the kill. Belize has the largest concentration of jaguars in the world, and as a matter of fact, Belize's jaguar reserve was just to the east of the escarpment where we were then camped. Evidently we were not the only ones who appreciated the smell of grilled wranglers!

The realization that the camp was probably being stalked at that moment by one of these predators, the largest in Latin America, would have struck fear into the heart of a lesser man. But I remained calm even as I recalled the story related by my hero, Theodore Roosevelt, on his hunting trip to "the river of doubt" (now the Roosevelt River) in Brazil. His guide on that trip was the famous Candido Rondon. Rondon was the explorer who cut right-of-ways through the western wilderness for telegraph wires into the rubber collecting areas of what is now Rondonia. At night he and his crew would sleep in the forest in hammocks strung between the trees. One night the crew was awakened to hear and see by the firelight that a

jaguar had a screaming man with his head between his jaws. Their shouts and arm-waving eventually scared the jaguar off; but only after the dead man's skull had been crushed. In spite of recalling that incident only a fleeting trepidation passed through my mind because I recalled Roosevelt's words, "Only those are fit to live who do not fear to die." Besides, I knew that even a beast as fearsome as a jaguar has no taste for fecal matter and my drawers were filling up rapidly.

In light of Rondon's experience I was thus less than certain that a hungry jaguar would be reluctant to enter the circle of light around the sheets, but I was reasonably sure that one would not be able to chew its way into the vehicle where I had now retired to gather my thoughts. My greatest concern at this point was for the safety of my companions, Dave and Ronay (Fig. 5), who were going to have to



**Figure 5: The explorers Robacker and Riley**

gas up the generator at the outer light, which service was scheduled for 1 a.m. Separately, I woke them and asked if they could smell anything peculiar and they both agreed there was a smell of dead animal that they hadn't noticed before. I told them that I would feel better if they would carry some left over wrangler dogs with them when they went to fill the generator, which they could toss as a diversion if the cat should appear. I, meanwhile, would be guarding the vehicles. But they were understandably concerned about my being left alone at the camp, and so we agreed on plan B. For future reference, in case the reader should find themselves in a similar situation, we deployed in the Roman military formation known as the phalanx. Basically, we marched back-to-back-to-back with our machetes and beating sticks pointed outwards while uttering the battle cry *E Pluribus Unum*, which is Latin for, "Please don't eat me Mr. Jaguar!" And thus by a combination of blur and bluster we avoided entering the local food chain.

It was not until the next morning when in the presence of daylight and absence of adrenaline that we realized that the green beetle was the same species as the lavender beetle. Color variants are known for many of the species but these variants are almost always a shade of red or pink (Fig. 6) as opposed to the typical green. But, in the case of *C. purulhensis*, the green color is the variant, while the lavender is the norm, or at

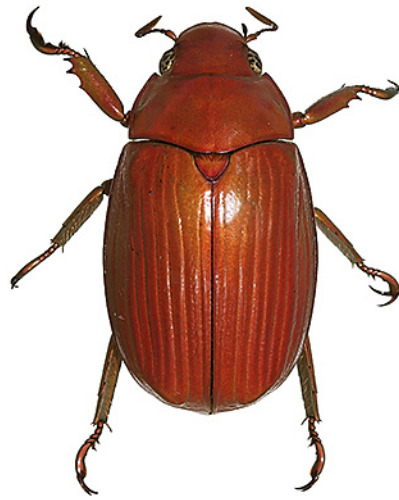
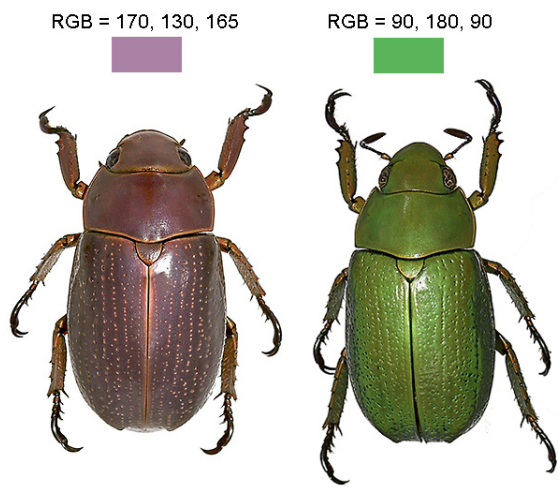


Figure 6:  
*Chrysina beraudi*  
Red form

any rate, the typical color form. So this situation is a horse of a different color so to speak. It appears that there are two color morphs in the Belize population (Fig. 7) and not just an occasional color variant. In total that third night we took eight specimens: four green and four lavender. The genders were mixed so no sexual dimorphism was involved in the color variation and the carapaces were well sclerotized ruling out the likelihood that they were teneral.

As explained by (Caveney 1971), the green color in *Chrysina* beetles is structural rather than a pigment. The transparent chitin in the exocuticle is laid down in thin sheets which contain a small amount of uric acid. The optical thickness of the layers is such that the reflected light has a green wavelength. Hence, the green to red color shift almost certainly involves a change in the optical density. And because it involves uric acid, a waste product from

**Figure 7:**  
*Chrysina purulhensis*  
Both color forms



protein metabolism, the variants may well reflect a dietary deficiency. But the shift from lavender to green, a sort of reversion to ancestral type, is more likely to be genetic. The situation cries out for further scientific investigation (more collecting trips!).

In that spirit I propose that future descriptors of color morphs in *Chrysina* beetles use greater precision in reference to beetle hues. While the word “lavender” is perfectly suitable in the general sense, a more exacting vocabulary might be appropriate. There are several color reference systems available: the CIE color atlas, the MacBeth Patches, and Munsell Hue values. I find the Crayola notation to be useful for manual as opposed to digital illustrations of *Chrysina* beetles: in which case *C. purulhensis* corresponds to the hue “mountains majesty.” But for those who have computers, the trichromatic RGB color coordinate system is useful (and fun). First upload a true color photo of your favorite beetle into PowerPoint. Next to it insert an empty square or circle and fill the space with the

color which most closely matches the color of the beetle. At the fill color tool (looks like a bucket of paint), select custom and a square rainbow appears. By using the cursor on the rainbow one can select the approximate color and then use the fine adjustment arrows to get the right hue. A green value between 175 and 200 with the blue and red each about half that gives a color close to “purulhensis green” (e.g. RGB = 90,180,90). The coordinates for “purulhensis lavender” were RGB = 170,130,165. Being a latent Luddite I prefer the Crayola scale myself.

Be sure to check our website to see a photo gallery of *Chrysina* beetles: [www.unl.edu/museum/research/entomology/Guide/Scarabaeoidea](http://www.unl.edu/museum/research/entomology/Guide/Scarabaeoidea).

#### References

- Caveney, S. 1971. Cuticle reflectivity and optical activity in scarab beetles: the role of uric acid. *Proc. Royal Soc. London B*. 178: 205-225.
- Roosevelt, T. 1914. *Through the Brazilian Wilderness*. Scribners, NY.
- Warner, W.B., & J. Monzon. 1993. A new *Plusiotis* from Guatemala and Belize (Coleoptera: Scarabaeidae). *Insecta Mundi* 7: 211-213.

*Editors' Note: Ah ha! A Dave Hawks connection!*



## In Past Years - VI - 1940's - 50's

by Henry F. Howden

henry.howden@rogers.com

---

Early in my college days I had a friend, Romeo, who liked to collect snakes and I enjoyed helping him. At the time we were at the University of Maryland and not far from Cade's Cove on the Chesapeake Bay. The cove area was sandy and covered with dense patches of scrub bushes. Romeo was looking in and under the bushes, while I chased tiger beetles in the more open areas. Some time passed, then Romeo called for my help. He had seen a Black Racer in a small clump of bushes and needed me to watch one side. After I arrived, he crawled into the patch which was too dense to stand up in. Black Racers, while harmless, take after their name, fast and quick to bite. This one was no exception, instead of leaving the bushes it attacked Romeo and bit him on the nose. The result was one very bloody nose, a number of words (some in Italian) questioning the ancestry of the snake, and one escaped snake. For some days after the event, when asked how his nose was or what had happened to it, there were more rude words about the snake!

Back to entomology. At North Carolina State University in Raleigh we all had assistant-ships, mostly helping test insecticides. It was in the days of Endrin and the "thions" and other nasties. Too many people were falling off their tractors after

using Parathion, so they came up with less "toxic" Malathion which smelled like its name, i.e. like something had died. Normally, when coming in after using any of these insecticides, we stored them in a separate building. In rare cases, if very late or lacking a key to the storage building, we would use a small storage room on the ground floor of the entomology building below some of the staff offices.

One evening I stored some Malathion in the small storage area and forgot that I had done so, since I had an early-morning class. After class I was walking down the hall on the second floor when I heard loud noises coming from the professor's office directly over the storage room. Upon investigation, I found him moving jars and books off of numerous shelves looking for the dead mouse or rat that must have died in the office. I helped him look for a few minutes before remembering what was stored below! I quickly came up with a reason to leave and removed the offending material to the isolated storage building. I never mentioned the problem and the professor never found his dead "rat".

On the academic side, North Carolina State was a great place to be at that time, particularly if your interest was in systematics and ecology. Dean Z. P. Metcalf



Paul O. Ritcher.

(Homoptera), B. B. Fulton (Orthoptera), T. B. Mitchell (Hymenoptera - bees), W. Kulash (Elateridae), P. O. Ritcher (Scarabaeoidea - larvae), H. Townes (Hymenoptera - Ichneumonidae) were all there when we (Anne & I) were there. Anne worked with Metcalf, I worked first with Ritcher, and later with Mitchell. There were some interesting times.

Dr. Kulash found himself in the middle of a large field with nothing to stir up a solution of endrin, so used his hand. That night he wound up in the hospital with muscle twitches, but was OK after a day; lots of warnings were posted!

Dr. Fulton had wonderful hearing and could tell what species of cricket was singing as we drove along. He could also locate the exact position of a singing cricket in tall grass, something I never was able to do.

One day we were driving to a collecting site, when he heard a sound he couldn't identify. We couldn't stop at the time but days later he heard it again and we finally located it. The culprit turned out to be the larva of a large *Monochamus* (Cerambycidae) chewing in a fairly dry pine log! He took quite a ribbing about that.

Partly because I had classes with Dr. Fulton and partly because of my interest, I built up a fairly good local orthop collection. It was stored in 4 glass topped cases and placed on top of a bookcase that stood on the back of my desk. As often true of grad rooms, things were crowded

and a new student had his desk backing on mine. One day he decided to put a book case on the back of his desk and in doing so caught the back ends of my orthop cases. These then fell first on my desk top and then to the floor. Broken glass and parts of orthops went everywhere. Thus ended my orthop collection. It was just lucky there were no beetles involved! Still, there were a few harsh words exchanged.

The professor that both Anne and I got most involved with was Dr. Henry Townes. While he wasn't on our committees, our mutual interest in systematics was enough. We went on local trips together and even wound up baby-sitting the Townes' two children.

After Anne had finished her MS and I had finished my prelims, the Townes invited us to go on a two week camping trip to Florida. We said yes! They had a tent trailer that opened out to a double bed on each side and we hung a "modesty sheet" down the middle of the trailer. Did we learn a lot! Henry Townes was totally unflappable. In the pine woods of northern Florida we found a small bar (local watering hole) that had a great blue florescent beer sign in its window. There were lots of good beetles coming to the light, so Anne and I started to quietly pick some up. That wasn't good enough for Henry. He opened the bar door and yelled "Anyone wondering what we are doing at the window, we are collecting beetles." We then had lots of unwanted help and some drunken "There goes one." That was only the beginning. We had great collecting while camped near Interlachen,

Florida, and I learned that not all geotrupines were dung feeders.

We then moved on to camp near Tampa. One night it rained hard and Henry decided that we should stay in a motel and eat in a restaurant. We learned that it wasn't two Scotch-men who invented copper wire by pulling on each side of the first penny, one of them had to be an ancestor of Henry Townes. The four of us, Henry and his wife and Anne and I, went to a restaurant and had a good meal. A basket of bread was put on the table and when we were done there were several rolls left. Henry told his wife to put them in her bag, which she did. The restaurant owner made a mistake and tried to embarrass Henry by asking if he would like some more bread. Henry said yes and the owner had to fill the basket and then see Henry fill our pockets.

At the rather run-down motel that Henry picked, he bickered with the owner (?) for ten minutes before a price was agreed upon. It was no bargain! We had separate rooms. As soon as Anne and I turned out the lights there was a fluttering noise, then a splat. Lights were turned on, nothing visible. We turned the lights on and off twice before we found out that the noise was caused by large cockroaches that dived between the floor boards (no carpets) when the lights were on. Our solution was to leave the lights on all night! At least we stayed dry as it rained all night.

Our collecting trip went south to Key Largo where we stopped, the

road then became a toll road which was too much for Henry, particularly as our time was limited - more travel = less collecting. All in all it was a great trip and we arrived back in Raleigh ready to do it again.

On another occasion Henry drove a state car and took Anne and I plus one other grad student to one of our first Entomological Society of America (ESA) meetings. After the meeting, which was in Ohio, we needed gas. Henry had been given a White Rose credit card; a brand that was uncommon at that time (and perhaps more so now). We drove for some distance with the gas gage registering empty; no White Rose station. So Henry pulled into an Esso station and asked for half a gallon of gas; a gallon at that time was \$0.25. The attendant sarcastically asked if Henry wanted 12 or 13 cents worth as he had no half cents (no self service at that time). Henry agreed that 13 cents was OK, meanwhile the grad student helped himself to a set of free road maps. Anne and I made ourselves as inconspicuous as possible. A mile later a White Rose station appeared. Henry's parsimony did not extend to Entomology; later he established and endowed The American Entomological Institute.

By the mid 1950's, Metcalf, Mitchell, and Fulton had retired, Ritcher left to head the Entomology at Oregon State and the Townes family were off to the Philippines. We stayed in touch with the Townes and after they returned from the Philippines we visited back and forth. On my first sabbatical from Carleton University, the Townes stayed in our house in Ottawa while we went to Australia.



That year Henry thought that the winter was lasting too long, so he shoveled the snow off of the garden, planted spinach and peas, and left on a collecting trip; the garden was doing well when he returned.

After we graduated, Anne and I moved to Knoxville, Tennessee, where I taught for 8 months a year and then worked the summer months at Oak Ridge Institute of Nuclear Studies first, then the Ecology Unit. The university taught me just how gullible some students could be. I taught part of the large introductory zoology class. One lecture was on naming animals, so I made up a story about finding a new diamond-headed earthworm in the Himalayan Mountains that bored through solid rock and how it should be described. Several (not just one) students came up to me after class and started asking when and where I had been in the Himalayan Mountains! Enough said.

Oak Ridge taught me about unions. One day, when driving a company jeep, we heard a rattling under the hood. We needed gas anyway, so pulled into the repair yard that also had gas. I started to put gas in the jeep while one of the others lifted the hood and found that a nut had come off of the holder for the battery. He started to screw it back when this guy came running across the yard yelling "Don't do that, it's my job." My friend took the nut back off and handed it to the guy, who then told us that the union (Oak Ridge contracted Union Carbide to run things at that time) would shut the place down if we were caught

doing his job again! I thought he was just paranoid.

The following week I started to pull some nails out of an old packing crate that I wanted to use to hold some flower pots when I was seen by another union member. That time I caused a major uproar, and the only thing that saved the plant from being shut down was that I was just part time and, therefore, didn't know better. I did spend some time being told "the rules".

Bureaucracy also taught me a lesson. To work at Oak Ridge one needed a "Q" clearance. I thought that was fairly high, but learned otherwise when we were introduced to a special project and warned that we couldn't discuss it with anyone, including my wife, who did not have clearance! About a month later I saw the entire project on a light weight reactor written up in *Life Magazine*. I then asked if I could talk to my wife about it and was told "NO", it was still on the secret list. So much for that; I will say more about bureaucracy at another time (one of my favorite gripes).

Shortly after moving to Knoxville, I started to get some small grants to support field work. The first one allowed me to take a two week camping trip to southern Texas, accompanied by a grad student. The Texas trip was a first as far as acacias went, I had never encountered "cats claw" or similar thorny plants. I took two nets which was sufficient for the south east coast. The first day that I saw beetles on an *Acacia* I tore the bottom out of my net on

the first swing. I missed a number of beetles. After that I was more cautious but still ended the trip with my second net full of holes.

In 1956 Anne and I plus our two very young children went to the Southwest Research Station near Portal, Arizona. The station had just opened. We arrived July 1st and the director at that time, Dr. Mont Cazier, asked us why we had picked that time. I told him that I had looked up weather records

the toilet with interesting results. More interesting was an assistant that was the son of one of the staff at the American Museum. He was supposed to drive when needed and to help with some collecting. When asked to drive, he mentioned that he only went forward, never having learned to back up! Mont then learned that he didn't have a drivers licence, so he was put to digging ditches.



**The Southwestern  
Research Station near  
Portal.**

and wanted to get there before July 15 when rains usually started according to past records. He just laughed and said the rains might not start until August and went away shaking his head. There was more head shaking when the rains started on July 15!

Anyway we settled into our cabin and found that the station still had some work to do. For example, the hot water line was connected to

A few days later he came to show Mont a rare find! He said he had found "a pair of Siamese Twins". His find turned out to be a pair of mating crickets. Several days later he was sent back to New York.

There was lots else that happened that summer, but not much that would be of general interest. For example, who really cares that our two young daughters got hold of one of our killing bottles and ate

some rare beetles including one clerid never collected by us again! Or that I left the car key in the car one day with the daughters in the back; some how the eldest (3-years old) got hold of the key and threw it out in the desert near Portal. I spent an hour or so looking for it, then had to walk several miles back to the station for a spare. Funny, NO.

On our way back from the Southwest Research Station we camped in the “Basin” of Big Bend National Park. The camping area has changed since then, but at the time there was one ablution block, half for men, half for women. Lights were on all night, so some

good beetles could be picked up. Anne found several specimens of a clerid that I never found on the men’s side. Later, when Joe Knoll visited us in Knoxville, he was very excited to see the clerid and learn where it was collected. The next year he wrote to tell us that his wife had taken several more of the same species on the women’s side, but none were found on the men’s side. He didn’t say whether they were male or female clerids!

The following summer we moved to Canada to work for Canada Agriculture, full time on beetle systematics.



**Left to right: Mont Cazier, Frank Young, Minter Westfall, unknown grad student, Oscar Cartwright.**