

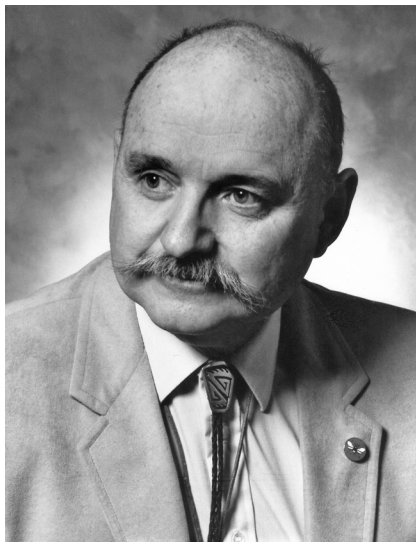


# George E. Ball: Ground Beetles, Mexican Bandits, and a Purple Heart

MARLIN E. RICE

**G**eorge E. Ball is Professor of Entomology Emeritus at University of Alberta and a World War II combat veteran. He was born 25 September 1926 in Detroit, Michigan, where his father worked in a lumber mill. When Ball was 11 years old, his mother died of kidney failure, leaving him as an only child in his father's care.

Ball graduated from Catholic Central High School in Detroit, attended Cornell University briefly, and then, a few weeks before his eighteenth birthday and with his father's permission, he joined the United States Marine Corps. Ball had one major engagement in the Battle of Okinawa as Private First Class with Baker Company, Fifth Regiment, First Marine Division. The Battle of Okinawa was the bloodiest conflict of the Pacific Theater during World War II. The Japanese referred to the battle as "the rain of steel" because of the ferocity of fighting, the intensity of the kamikaze attacks, and the largest amphibious island assault in the Pacific. The battle lasted 82 days and 12,520 Americans were killed or missing in action, plus another 81,000 wounded or psychiatric casualties. Additionally, 77,166 Imperial Japanese soldiers died,



George Ball, Professor of Entomology, University of Alberta, 1970.

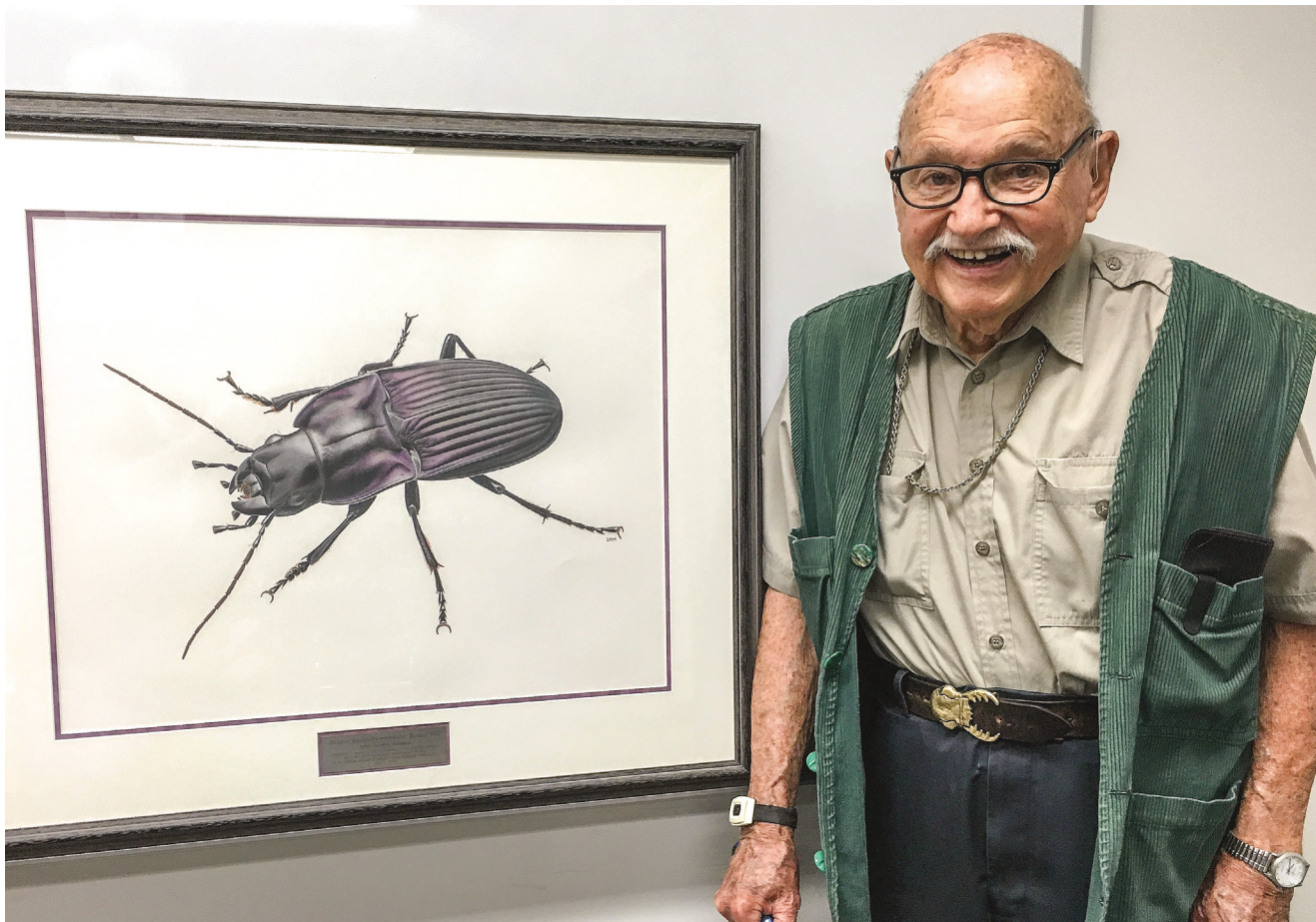
plus tens of thousands of Okinawan civilians that had been forced into Japanese service. Today, the Cornerstone of Peace memorial on the island lists the names of 240,931 children, women, and men killed during the conflict.

Ball continued his education after the war through the support of the G.I. Bill and finished his A.B. (Biology, 1949),

which had been interrupted by his military service, at Cornell University. He then transferred to the University of Alabama along with his close friend, coleopterist Barry Valentine, to work under the mentorship of Ralph Chermock, a specialist in butterfly classification and evolutionary biology. At Alabama, he became close friends with another student and future entomologist—Edward O. Wilson. More than 50 years later, Wilson would write in *Naturalist*, "Ball and Valentine had come to Alabama explicitly to work with Ralph Chermock. With them they brought the Cornell mystique, the reputation of an entomology department whose history extended back to the great nineteenth-century pioneer John Henry Comstock. Awed by the legends, I felt myself to be in the best of company." Ball earned his M.S. (Biology, 1950) and then returned to Cornell University, where he was awarded a Ph.D. four years later (Entomology, 1954).

After his second graduation from Cornell, Ball joined the Department of Entomology at the University of Alberta as an assistant professor, reaching the rank of professor in 1965. He later served as the department chair (1974-1984). Ball is a world expert on Mexican Carabidae and gained an international reputation for his research on the systematics, phylogeny, and zoogeography of ground beetles. He assembled the most important

This article includes strong language and graphic descriptions of military combat situations that may be disturbing to some readers. Reader discretion is advised.



**George Ball—sporting a tiger beetle belt buckle—next to a portrait of one of his favorite ground beetles, *Dicaelus purpuratus*, 2016 (photo by Marlin Rice).**

collection representing Mexican species from his 40-plus years of fieldwork, which is housed in the E. H. Strickland Entomology Collection (comprising over a million specimens) in Edmonton, Alberta, with more than 150,000 beetles he personally collected. His research discovered important morphological characters that have led to the stable classification of many tribes within the Carabidae, and he named dozens of new species, which resulted in more than 100 refereed research papers and five books. He retired from formal academic service in 1992, but when asked, he continues to encourage and mentor anyone with a passion for beetles.

While in the Marine Corps, Ball received the Asiatic-Pacific Theater Medal, the Victory Medal, and a Purple Heart for wounds received in action. Widely considered one of Canada's most respected entomologists, Ball was elected by his peers as president of both the Entomological Society of Canada and The Coleopterists Society. In 1980, he received the Gold

Medal from the Entomological Society of Canada for outstanding achievement in entomology. He was elected Fellow of the Entomological Society of America in 2005.

This interview initially occurred 24 June 2016 at Ball's home in Edmonton, Alberta. It concluded with a few questions by telephone on 6 October 2016, at which time Ball was 90 years old.

**Rice: As editor of *Quaestiones Entomologicae* in 1980, you wrote, "Perhaps more than any other group of scientists, entomologists revel in writing histories of themselves and their science."**

**Ball:** I wrote that?

**Yes. Let's do that today—write a short history of George Ball. Did you have an interest in insects as a young boy?**

Somehow I became *really* interested in frogs, and that sort of opened zoology to me, and what does one do but follow the route to a zoology merit badge?

**In the Boy Scouts?**

Yeah, so I got into the scouts, and what I wanted was to get that damn merit badge,

but I couldn't get any merit badges until I got a First Class badge. I couldn't get that until I learned to swim. I had everything done for the merit badge and the badge examiner had an insect collection, and I'd *never* thought of making an insect collection. That lit up a light bulb and away I went. In order to get the [Insect Life] merit badge, you had to know something, and to know something, you had to have the merit badge pamphlet. The damn thing cost a dollar. But I had to make that investment. Then something happened and I got interested in other things. A year or so later, I was looking at my books and I had spent a dollar on this thing and hadn't gotten anything for it! [Laughs.] So I got back to the merit badge and then my interest in the person who got me interested in entomology. Well, there were authors on this merit badge pamphlet, so I thought, I'll find out about them. So I wrote to J. Chester Bradley and Bradley—hell, he was 65 at that time—but I got a three-page reply. [Laughs.] And the next thing you know, I was at Cornell [University] living in Bradley's house.

**So that connection as a young Boy**

**Scout translated into undergraduate school at Cornell?**

That's right. That's exactly what happened. [Laughs.]

**Did your parents encourage your study of biology, insects in particular?**

They didn't discourage it. My mother was dead at the time that question would have been raised. I think my father was thankful I wasn't taking up a life of crime.

**What indication did you give to him that you might engage in crime?**

Nothing very specific. I was eleven when my mother died. And she had been sick the last couple of years of her life.

**You attended Catholic Central High School in Detroit, Michigan. How did that influence your views of life?**

English. One of our teachers was Mr. Crowley. He was quite a broad-thinking individual and introduced us to all sorts of literature, but one of them was a chapter from Darwin's book about natural selection. And that got me started down that path. I talked to my teacher, and he did nothing to dissuade me. It was reading that *damned* chapter in the English course that got me into the evolutionary end of things.

**Was this Darwin's Origin of the Species, and in a Catholic high school?**

Yeah. I thought it was a good school. It was run by the Basilian fathers. The Order of St. Basil. My father arranged for me to go.

**At the age of 18, you served in the U.S. Marine Corps during World War II.****Did you enlist or were you drafted?**

I enlisted. I wanted to enlist when I was 17, but my father wouldn't hear of it. I had to have his signature. So we made a deal—I would go to university for one year and then, before I turned 18, he would sign the papers. And that's what we did. Just days before I turned 18, I was allowed to volunteer and I got in and I've cursed my *damned* luck ever since. [Laughs.]

**Why is that?**

Well, I got in and damn nearly got my head blown off. [Laughs.]

**What weapons did you qualify on during basic training?**

I was not very adept, but the M1 [rifle] was about all. But I did have to qualify,

so I did that. They were in a *hurry* to get us through [basic training]. They needed people in the Pacific [Theater].

**Did you ship out of San Diego?**

Yeah.

**Did you know where you were going?**

We had no idea. The route out went through Pearl Harbor and then Guam. In Guam they made a corps of men. And some went to Saipan and some went to Okinawa. I was in the Okinawa bunch.

**Were you issued any special equipment before you landed on Okinawa?**

Gas mask. Otherwise, you had your rifle and the things you carried to stay alive: canteen and sleeping bag—no, we didn't have sleeping bags! And shelter halves. That was about it.

**Did you receive any special instructions before landing on Okinawa?**

George Ball, Private First Class, U.S. Marine Corps, Tientsin, China, 1945.

Yeah. Going over the side [of the ship] on the landing nets—don't let go! [Laughs.] Actually one guy did and he fell [down] the side of the ship. He was transferred to a hospital, but the rest of us made it down all right.

**You were in the First Marine Division, which replaced the Army's devastated 27th Infantry Division. What was it like during the Battle of Okinawa?**

I went in as a replacement and was there for a month or so. A lot of it was sitting around waiting to do something. One day we were called out to assault a particular ridge. The approach to this ridge went down a valley and at the start of the valley, there were Marine Corp tanks coming out with dead bodies tied on and I thought, "Holy s—! This is going to be the end!" But we had a company commander that was just *tough* as nails, and the colonel told him that the ridge had to be taken. He went out and looked; he said it was *murder* out there. Well, you could see that from the bodies being brought out on the tanks and he said, "The hell with it!" And he wouldn't take us in.

**Your company commander; was he a lieutenant or captain?**

He was a captain, but he wouldn't do it; a decision that was evidently endorsed by our colonel. Then, on the last day of the fighting, we were going up in a similar position, had to go up a valley, and before the assault began, I was resting on the ground, with a dead Marine right above me, right up the slope. He had been killed in a previous engagement, I think, by a flame thrower, [because] the body was still smoking. That smoke was wafting over me. It was more or less like getting a blessing, I guess, because the platoon commander said, "Fix bayonets." [I thought] this is not good! We had gone a certain distance and I thought, *jeez*, and I felt something behind me and *damn*, my cartridge belt was on fire [laughs] and I guess I was hit by white phosphorus [grenade]. So I got out of the belt and got my dungaree jacket off and I thought, "*Jeez*, what is that all about?" Then I got hit and I thought somebody threw a grenade and it bounced off my helmet. Luckily it didn't get me, [but] I was on the ground crawling around shouting, "*Grenade! Grenade! Grenade!*" And [my buddies] said, "What the hell are you doing?" Finally, I got myself back together again and picked up my

cartridge belt that had been burned in half and was taking the clips and putting them in my dungaree jacket pocket and somebody showed me my helmet. Right around the back of my head there was a burn [from a bullet] and there was a hole in one side [of the helmet] and out the other, and the liner of my helmet had a streak burned right around it. [Laughs.]

**So a Japanese soldier shot you in the head?**

Evidently. [Laughs.]

**Did the bullet leave a scar?**

No, it didn't. [Laughs.] But it was strong enough to knock me down. Scared the hell out of me. I got a Purple Heart for that.

**I'm sure you did. Was that your most frightening experience?**

It was over before I knew what the hell was happening. [Long pause.] No, I think what was most frightening—we were at another place and it was the first trouble we really got into because I knew what was coming and that was frightening.

**What was that?**

Well, it was these Japanese small arms fire. The evening of the day I was hit, the platoon was holding a steep slope. Well, partways down this damned mountain slope, the ground flattened out. My lieutenant said, in effect, "Okay, two sergeants are down there, sheltering behind that big rock—you go join them." So I did, and the three of us spent the night, alternating between sleep and wakefulness. I had a wooden box of hand grenades and there was a trench in front of us, so I was throwing grenades there every so often to make sure if anybody is crawling up that trench, they'd get it. Toward morning, we spotted a Japanese sergeant major with drawn pistol, making his way behind our position along the cliff face, but he had no idea we were there and he didn't get very far. Then later in the morning, there was a Japanese soldier that started shooting at me and I returned his fire. I didn't hit him and he didn't hit me, but eventually he blew himself up with a hand grenade.

**With all the dead bodies, the smell of decomposing flesh must have been overwhelming and a horrible experience.**

Yes, Okinawa was a smelly conflict. Not only dead Japanese littered the place,

but there was a lot of dead livestock as well. American dead were picked up as rapidly as possible.

**What did you think of your commanding officer?**

[Long pause; tears up.] Our company commander was *unbelievable* and the platoon commander—Harvey Philip Pearce—was the same thing; they were superb men. They had to show courage in front of their men and, *jeez*, did they ever. Just great, great people. He was called "Phil." First names were commonly used for commissioned officers of ranks of lieutenant and captain.

**They got you out alive. How about themselves?**

Yes. We didn't lose many officers, and I don't know why, but many other outfits did.

**Did you have many casualties in your unit?**

I think the percentage worked out to 115 [percent] in our company. Before I first joined the outfit, coming in as a replacement and moving up from the rear, the company I was to join was undertaking an assault on a bunch of caves down in a valley. There were three platoons and each platoon was represented by no more than half a dozen Marines.

**How many marines should be in a platoon?**

Somewhere in excess of 30. Yeah, and that's one thing I'd like to emphasize. Those Japanese, they were fighters. That's all there was to it—they did what they had to do. There were some that maybe were suicidal, but they were fighters. Damn, they were good fighters, and determined. Yeah, I didn't think that highly of them when I was there, but over the years you recall things [differently].

**You had to sleep on the ground every night in mud or dirt.**

Yeah. If you could get drawn up in some position and use your shelter half, but if you had two together, you'd be really sheltered.

**So you're a young 18-year-old Marine.**

By then, I was 19.

**Did you ever do anything for good luck before you went into battle?**

No. In those days, I was a staunch Catholic, so I said a few "Hail Marys!"

**What was your reaction when you saw your first dead Marine?**

Aw, good question. [Long pause.] Well, my first day on the line, [and] they didn't want to assign this to people who fought with these guys, there were three Marines in a slit trench that had been hit with mortars. It was a *perfect* set-up for the Japanese. They knew *exactly* where this slit trench was, and the Marines set up a machine gun and just at *dusk*, the Japanese dropped in the mortars. Bing! Bing! Bing! Bing! Three dead Marines. Okay, these are your first ones you're going to see. I had to get down in that trench in the water, and get these guys out. And so, I had three ponchos and put them up on the edge of the trench. I got the skulls and set them up and then this part of the body [chest] was pretty rotten and I hauled that out and then I got the lower part, the legs. Then I had my breakfast—a can of cold spaghetti.

**You recount that story—without emotion.**

They were terribly dismembered. I had been asked to do my job, so I did it. That was probably one of the worst things I ever had to do.

**Did you lose any buddies in your platoon?**

I had quite a number of them that were wounded. One guy was [shot] and the question was what the hell to do. The lieutenant said, "You don't leave wounded behind," so he and two others went down to where this guy was. In the meanwhile, there was rifle fire going on. One of our own tanks pulled up and got a line on where the Japanese fire was coming from, and I guess he didn't have any ammunition left for his cannon, so somebody opened the hatch and pulled out a machine gun and started firing it. That made it possible to go down and check on this guy—he was dead. Yeah, days of long ago. [Long pause.]

**It was almost exactly 71 years ago, on June 22, 1945, that the Japanese 32nd Army surrendered at the Battle of Okinawa. Where were you that day and what were your thoughts?**

That's what they tell you, but it wasn't over. No, there was still fighting. I was

Serving in the U.S. Marine Corps during World War II, George Ball was wounded during the Battle of Okinawa and received a Purple Heart (photo by Marlin Rice).

behind a flame-throwing tank and, *jeez*, you could feel the back-blast from it. We were facing a cave and [the Japanese] were still at it. Anything in front of [the tank] must have been fried.

***I noticed you teared up a little bit when you spoke of your commanding officer. You must have had a lot of respect for him.***

Oh yeah. Unbelievable. Harvey Philip Pearce. I got to see him again in 1990-something. First Marine Division had a meeting and I went.

***What did you do after the war ended?***

We just put in the days the best we could, improving the camp. [Later] in China, our platoon was declared to be MPs (Military Police), but we really weren't. Some of us were street MPs and we did other things, [like] a turnkey jailer.

***So at times you had to lock up your fellow Marines.***

Oh yeah, that's right! You were thankful some of them were locked up! They were frightening guys. They were bank robbers and such things.

***Really? U.S. Marines robbing banks?***

Oh, yes! [Laughs.] In China. Like I said, you were glad they were locked up. We had one escape and he was treated rather badly [by us], so we didn't have any more of that [behavior]. After we got to China, we had an inspection one day and we had to fall out with all of our gear and our helmet liners. The commanding officer was walking behind and he stopped, came around where I was, and said, "Marine, where was your helmet when you got that bullet through it? It looks to me like you have damaged government property." He thought I put it on the edge of the foxhole and fired the rifle through it. I said, "It was on my head, sir." I already had a Purple Heart for that, and I guess he didn't know, because he ordered another one. [Laughs.] In fact, it was never recorded, which I was delighted that he hadn't. I didn't have the courage to say, "I already have a Purple Heart, sir." But mainly because you got *five* more points [for each Purple Heart] toward getting out of the Marines. So I didn't say anything, but I felt guilty. But



those five extra points meant I got home earlier and in time to register for the fall term at Cornell.

***When were you discharged?***

Either July or August, 1946.

***Did you learn anything in the military that you were able to apply in life?***

Mainly, keep your mouth shut and don't volunteer. [Laughs.]

***Do you have any regrets about joining the Marines?***

No. No. In my sober moments, I'm actually thankful to have had the opportunity to serve the country. I feel rather deeply about it. In 1968, one of the other members of the staff said something about Vietnam and turned me right off. So I wrote my

draft board and said, "I'm x number of years old and don't have a hell of a lot left, but if you need another body, I'll go." I got a letter back from the draft board saying, "You made our day!" [Laughs.]

***You just told me you learned to keep your mouth shut and don't volunteer. Now you've confessed you volunteered a second time.***

I didn't learn very well. I was glad they didn't take me up on it. But I would have gone [to Vietnam].

***You returned to Cornell to finish your degree, and then you attended University of Alabama for a master's degree. What prompted you go to Alabama?***

There was a fellow by the name of Ralph Chermock. He was related to the famous

Chermocks, one of the joint discoverers...what the hell was it? Oh, genetics, inheritance. It was after Mendel. Barry Valentine, who was a very good friend, did the same thing [attended Alabama]. His specialty was anthribid weevils.

**Who were your other peers at Alabama?**

Oh, Ed Wilson.

**I heard a legend that you and Edward O. Wilson were involved in a water pistol fight.**

In the biology building. [Laughs.]

**And you were threatened with expulsion.**

Yes!

**Both of you were threatened?**

Yes!

**What was the outcome?**

I think the fact that Ed was involved saved us. That's what I believe.

**Why did Wilson have that influence to keep you out of trouble?**

He was the top of the class. There was nobody else like him. But peculiarly enough, our grades were very similar, except mine didn't mean a damn thing and his did. [Laughs.]

**What prompted you and Wilson to get into a water pistol fight?**

I can't remember, but we went down to the ten-cent store and bought ourselves water pistols. I think somebody had one and fired it and that got it all started. That *bastard* Wilson, he was hiding in the men's room and got in one of the stalls and the *bastard* was filling his water pistol from the toilet. [Laughs.] Oh, boy. That was the day! [Laughs.]

**Who reprimanded you?**

O.J. Walker was the head of the department and he was a bastard, too, but a different kind of one. He sure scared the hell out of me, and Barry Valentine was there too, and half a dozen people. That's why there was water all over the place, including in the hallway. [Laughs.]

**Did you stay in contact with Ed Wilson over the years?**

Not very closely, and as more time went by, the less we saw of each other.

**Then you went back to Cornell University to pursue a Ph.D. Who was your mentor?**

Well, I had a number. To start with, I had William T.M. Forbes and V.S.L. Pate. In fact, it was Pate. Forbes retired before I finished and Pate was shown the door, rather unfortunately, but that's what happened. I had to get other advisors, and one I got was Jack Franclemont and the other was Howard Evans.

**Howard Ensign Evans—author of *The Wasp Farm*.**

Yeah. Howard was a great guy. In 1948, he and I bought a car and toured the West and Howard got some remarkable pompilids.

**How far west did you go?**

I should be able to tell you that, right to the mountain range. We got as far as Tucson, so that means we were up in the southern ranges.

**So you would have been in the Santa Ritas or Santa Catalinas?**

Yeah. Santa Cats is what I was thinking.

**How many months was this road trip?**

We left Ithaca—it must have been sometime in June—and we were back in August in time for the fall semester.

**What was the highlight of that trip?**

**Any unusual experiences?**

Oh, we got those flightless tiger beetles out there. I think that was the high point of the trip.

**The flightless tiger beetles; were those *Amblycheila*?**

Yes, exactly. The big black ones. This was in Arizona. The Huachuca Mountains. We drove up, and both Howard and I were pretty much cowards going up this mountain road at *night*. It was raining like you wouldn't believe and anyway we got up to the top and there was a cabin. Nobody was in the cabin, [but] there was food in there, so we just moved in! [Laughs.] We had a very warm night and the next morning we got these damned *Amblycheila*. But Mont Cazier at the American Museum [of Natural History] paid us for tiger beetles.

**What did he pay for a specimen?**

It was some [stingy] amount; not very much. [Laughs.] But it was all a part of

the training experience. It was invaluable.

**When you returned to Cornell, you chose the carabid tribe *Licinini* for your doctoral research. What was the appeal of that group of beetles?**

It was strictly aesthetic to begin with; I was really struck with the beauty and large size of *Dicaelus purpuratus* (see photo, page 9).

**What do you consider some of your major research findings on that tribe?**

At the population level, my work documented geographical variation, particularly among licinine species inhabiting the Nearctic Region. This work can serve as the basis to extend further knowledge of this topic. Along the way, a few new species were discovered. Other morphological work that I conducted, particularly on the mandibles, led to discovery of a system of classification and a phylogenetic hypothesis for this worldwide group of snail-eating beetles.

**Were you a good graduate student? Did your classes and research come easy for you?**

Yeah, I think it was, now that I think back on it. I managed to take courses in subjects that interested me, so I did not have trouble passing them. Similarly, my research was on a group of beetles of my choosing. I enjoyed doing it, so again, I guess it came easy. And I got through the qualifying exam without too much trouble. I did have to sweat to pass German and French, but I did it. Overall, I feel that I had not done a very good job, other than with the thesis—with that, I was satisfied. In fact, I made graduate school disturbingly easy by finding and taking short cuts. I certainly did not cheat, but I took courses that were easy for me, and did not try to learn any more than I had to—the thesis excepted. Damn it, I'm not sure I answered the question!

**After receiving your Ph.D. at Cornell, you accepted a position as assistant professor at University of Alberta.**

Right here and never left.

**What possessed you to come to Edmonton in 1954?**

My wife, Kay (Ph.D., Ornithology, Cornell), was a Canadian and, to her relief, when I started to look for a job, she hoped I would seek employment in Canada. She wrote

to one of her undergraduate professors at Western Ontario University, and she had heard of an entomology position at the University of Alberta. She told Kay, and she told me, and I applied for and was offered the position.

**What was your starting salary?**

It was \$4,000, which at the time was not bad. It was in the range where \$10,000 looked enormous. And I thought, if I ever get in the position where I get \$10,000, then that's going to be it! Ed Wilson and I had talked about \$10,000 at the University of Alabama, and the hopelessness of ever getting a salary of that amount. [Laughs.]

**In Andrew Nikiforuk's book, *Empire of the Beetle*...**

Yeah, it's right down there. [He points to a stack of books near his coffee table.]

**...he quotes you as saying that ground beetles "taught me about life's great diversity and gave me a sense of wonder." Is that still true?**

Yeah, it is.

**But consider the curculionids, scarabs, chrysomelids, and cerambycids: why the enthusiasm for ground beetles and not one of these other more flamboyant groups?**

Well, there's a rather mundane answer to that: when I first started collecting insects, the only damned thing I could find were ground beetles. [Laughs.] By the time I learned something about them, I was hooked. But then, I was also inspired by Phil Darlington at Harvard, who was a great ground beetle specialist. And Carl Lindroth came over to North America and put the Carabidae on their feet. Carl and I got along so well together. He was a distinguished professor at University of Lund in Sweden.

**You are considered the world expert on Mexican Carabidae.**

There aren't many others. [Laughs.]

**The National Science Foundation awarded you a grant for an 18-month beetle expedition to Mexico.**

That is right, and I am indebted to the National Science Foundation. They essentially funded it and I had a graduate student with me, Donald Whitehead. Don and I traveled all over that country in a camper that we bought with National

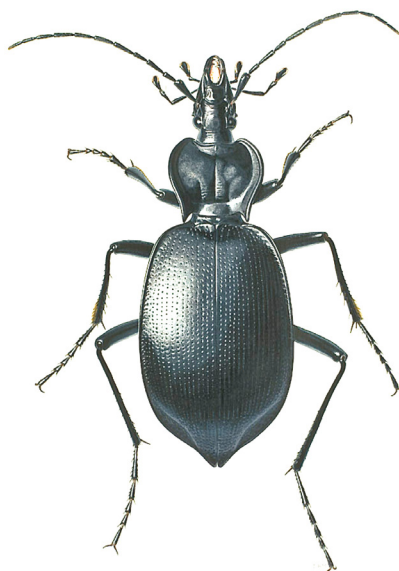
Science Foundation funds, and you are supposed to be careful when you are driving a camper. You're not supposed to be in the back sleeping, because if anything goes wrong you're going to get smeared all over [the road]. Anyway the person who wasn't driving would get in the cab-over and sleep there and [we] never thought of the danger. When we were tired, we would just pull off and stop there. I'm sure we were never safe. Anyways, we made out all right.

**You mentioned safety. Mexico is not considered a safe country.**

No. I wouldn't even *dream* of going down there now and doing that.

**Were you ever accosted by bandits?**

In 1993, I think it was, my wife and a dear friend, Scott McCleave from Douglas, Arizona, and me, we were up in the Sierra Madre Occidental on the ridge between Sonora and Chihuahua. We had camped up there and were driving along. All at once, there were two guys standing beside the road with a horse, and one guy had a rifle and a pistol in his belt. The other guy had a rifle and they invited us to stop. Scott was driving and he said, "What should I do?" And I was looking at those weapons and I said, "I think we better stop." And so we did. Immediately thereafter, I regretted it because I thought they were going to kill us. They lined us up along the side of the



The snail-eating ground beetle, *Scaphinotus petersi kathleenae*, was named by Ball in honor of his wife.

camper with our hands on the camper and made us empty our pockets. We did that, then one of them got into the cab and started rooting around trying to find things. The next thing we knew, we could hear a truck coming and I thought, "Uh-oh, what's going to happen now?" Being "good honest" Mexicans, and this truck was coming from their village, they really took a fit and told us to get our hands down and get back into the truck and go. But Scott said, "What about our wallets?" But they wouldn't let us take them back, and they left, and that was the end of that. [Laughs.] I lost my certificate of discharge from the Marine Corps—I really valued that. My wife lost her wedding ring, which in the end cost me an engagement ring, because she reminded me she had never gotten an engagement ring from me.

**For the replacement, you had to buy both a wedding ring and an engagement ring.**

Right.

**There is a legend that while collecting beetles in Mexico, you were mistaken by the locals as a Catholic priest.**

Yes.

**And to get through this awkward moment, you made up some kind improvised blessing.**

Yes, yes. Exactly. That's right. It was raining, and boy was it raining. I had my raincoat; it looked like a black cassock that a priest would wear. That's what contributed to the priestly appearance. We were at the base of a big mountain [Zitlaltepēt], about 13,000 feet [high], and we wanted to go up there and collect. It was Sunday and there were people going up, but we weren't allowed for some time. They came up and kissed the hem of my garment. I didn't know what the hell to do. That's when I blessed them. I mumbled something. I can't remember exactly what it was I said. [Laughs.] Later, we got part way up, about 10,000 feet. The pilgrims were carrying chickens, ducks, and turkeys up this sacred mountain and they were going to sacrifice them on top. One of these guys had a bottle of mescal, so being a good Christian, he passed the mescal around and everybody had a swig of it. I thought, this is too good to let go, so I said, "Do you have another one of these bottles?" And he did, so he sold us a bottle of mescal. Well, at 10,000



George Ball hunting for ground beetles on Cerro de Neblina, Venezuela, 1983 (photo by Terry Erwin).

feet with powerful alcohol, you begin to feel it. I was with my dear friend, Bruce Heming, a distinguished thysanopterist and developmental morphologist, and we were slightly sozzled, but we carried on. But the wind and the rain were just coming horizontally, but we got some very good beetles and some new species. Then we got down to the village, I said to the *alcalde*, and my Spanish was not very good, but I said to him, "What religion is this?" And he looked at me, "Ca-tow-lee-co!" Catholic. I think, my god, this must be one of the far-out branches! [Laughs.]

**Do you have a favorite ground beetle?**

I get so excited at almost anything. [Laughs, long pause.] Oh, that's not so hard. It was a snail-eating beetle I got in the Santa Rita Mountains and named it after my wife—*Scaphinotus petersi kathleenae*.

**Legend is that when collecting in the field, every afternoon at four o'clock, you'd stop what everyone was doing and take a martini break.**

[Laughs.] That's a latter-day development. When Don Whitehead and I were together, we would take a mescal or tequila break and finish off a bottle—just occasionally, not every day. Sometimes we'd have olives and sometimes we wouldn't.

**Legend is that you once helicoptered onto the top of a Venezuela tepui (table-top mountain), spent three days collecting with Terry Erwin, and didn't collect a single ground beetle.**

That's right.

**Two of the world's ground beetle experts and you zero out?**

[Laughs.] That's right. I couldn't believe it.

**Was there any alcohol in this three-day collecting trip?**

No, there was not.

**So you can't blame alcohol for getting skunked.**

Oh, boy. That whole trip, even down below, we barely got any beetles.

**You published with the great chemical ecologist Thomas Eisner on the defensive spray of a bombardier beetle from New Guinea. What did you learn from that research that surprised you?**

I had three specimens and they wouldn't die, so I sent them to Tom. And he published a paper on it and put my name on it. Well, he didn't need to do that, but it's the only work I ever did with him. Some years earlier, he and I were at the American Museum [research] station in Arizona. Tom made a real hit with my boys, but not enough where they went into biology.

**How many graduate students did you mentor?**

Thirty-nine.

**Forty. I checked.**

Right! [Laughs.]

**When you selected a graduate student, what personality traits would you desire?**

I was looking for somebody with a problem they were interested in and that was it.

**The science philosopher David Hull wrote in his book, *Science as a Process*, that he was curious about "enthusiasts" and their influence on science. He chose insect systematics and surveyed students of Robert Sokal, Gareth Nelson, and yourself, who were all at the forefront of systematics. Hull noted that those who know you professionally noted you as open-minded, humorous, and outgoing. Was that correct?**

All favorable, I guess.

**And that you treated your students as intellectual equals. But at the other end of the spectrum, you also were judged as creative, strong-willed, and aggressive.**

Oh! Certainly not me. [Laughs.]

**One of your former students says that you have mellowed through the years.**





Right. I think that's true. I do admit in retrospect that I was rather harsh. Or I expected people to do more than anybody should have been expected to do.

***But you also had a soft side. I learned that you and your wife financially assisted graduate students that had young families.***

That's true. We gave them money. And then I paid for people to visit museums if I didn't have the grant.

***Legend is that you never had a female graduate student.***

That is true. I don't know *why*, something about the way I did things. I didn't get any applications. And I certainly was not opposed to having them.

***When I was in graduate school, the tiger beetles were their own family—the Cicindelidae. Somebody has lumped them in with the carabids. Is that right?***

Oh sure. When you get down to it, and find out the real diversity of tiger beetles, it seems impossible that they're not the same family. You get character after character that run right out [to Carabidae]. There are other ground beetles that are equally difficult to put in with Carabidae.

***If you could be anywhere today collecting beetles with pry bar in hand, turning over rocks or at a light sheet pushing back the darkness, where would that place be and why?***

I'd be in someplace where it was fairly warm and cozy and I'd set my pry bar down on the bar and order a drink.

[Laughs.] Well, you know I saw a weevil walking around in the bathroom. I can't even stoop down to pick the darn thing up. If I did get down there, I couldn't move. The one thing that never occurred to me would happen—that I wouldn't be able to stoop down and pick up a beetle.

***If you live long enough, you get old.***  
That's right.

***Do you have any wisdom for today's generation of entomologists?***

I'll think about that; you should get a good answer from me on that.

***Everybody has a favorite story to tell. What is a favorite that you like to recount?***

I think you reach an age where you've told all your stories so damned many times you can't even remember them. [Laughs.]

***If you could resurrect any deceased entomologist and spend an evening over dinner, who would be that person and what would be the focus of conversation?***

Oh, boy! That's a humdinger. I think probably Carl Lindroth and what we'd talk about is what has been achieved since he died in 1970.

***What about any of the old European coleopterists?***

Oh! [Long pause.] That's a good question. That's a really good question. That's a good one for a candidacy exam. [Long pause.] Baron Maximilien de Chaudoir. Yes. I'd certainly love to talk to him. He was brilliant.

***How would you like to be remembered?***

I guess as a systematist who didn't make too many errors. [Laughs.] It's rather a trite answer.

***Now to your legacy. What will be the long-term impact of your career?***

I hope there will be one! [Laughs.]

***Certainly you have had a number of students that excelled in the science of entomology.***

Yeah, and as a matter of legacy, they will carry it far beyond.

***Well, George, we've gone through all my questions and I greatly appreciate the time you've given for this interview.***

Oh, I hope you don't think I put these fineries [jacket and tie] on because of the interview, but because of our dinner after [at the University of Alberta Faculty Club]. The drinking starts at six o'clock. We'll have about 20 colleagues and spouses at dinner, just for this occasion [of the interview].

***What is your favorite drink before dinner?***

I'll tell you what it's going to be; I'm going to have a martini. [Laughs.] But I'm not going to indulge until I get there, but would you like a scotch?

***Okay, you talked me into it.***

### **Acknowledgments**

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### **Additional Reading**

Wikipedia. 2017. Battle of Okinawa. [https://en.wikipedia.org/wiki/Battle\\_of\\_Okinawa](https://en.wikipedia.org/wiki/Battle_of_Okinawa)



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