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SCARABS

Occasional Issue Number 16

WITHIN THIS ISSUE

H. C. Fall 1
Collecting Trip Archive 7
Fall's <i>Diplotaxis</i> Names 8
Proof Reading Scarabs 13
The Great Dung Debate 14
Latin America Scarab Meeting16

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Mr. Fall & Me

By Arthur V. Evans

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During a field trip to southeastern Arizona in the summer of 1974, it hit me like, well, a ton of beetles. It was then and there that I decided to focus my life-long fascination for insects on just one group: beetles. A year later my passion for beetles became even more finely tuned. I wanted to work on scarab beetles. But my newfound passion for scarabs wasn't just about collecting beetles. I wanted to know everything about them, their distributions, relationships, and natural histories.

At the time I was employed as a student worker at the Natural History Museum of Los Angeles County. There I could indulge my curiosity, not only by scanning one of the largest beetle collections in California, but also by poring over the museum's fabulous library, replete with tomes and scientific journals, many of which date back to the mid-1800s. I was free to wander the stacks at will to peruse, choose, and photocopy articles of interest. As a denizen of the southwest. I decided that it would be most prudent to narrow my literature searches to



The Doctor In All His Glory

the scarab fauna of California and Arizona.

As my research progressed and my collection of scarab papers grew, the names of certain coleopterists, beetle workers to the uninitiated, kept coming up again and again. LeConte, Horn, Casey, and Fall. They were all long gone, but

AMERICAN ENTOMOLOGISTS ARNOLD MALLIS

their writings were still fresh and compelling, as if they had only recently been written. "H.C. Fall, Tyngsboro, Mass." always caught my eye because of the name of the town where he penned his papers. But later I came across some of his earlier works addressed in "Pasadena, Calif." That was quite literally much closer to home.

Nestled in the west end of the San Gabriel Valley, Pasadena is just north of Los Angeles and on the eastern edge of the Arroyo Seco. This seasonal river basin flows out of the San Gabriel Mountains to the north and is better known to millions of college football fans as the home of the Rose Bowl. Upstream lies the Jet Propulsion Laboratory, where scientists and engineers use the latest technologies to remotely control robots on Mars. But in the early days, the Arroyo was only sparsely populated with homes, farms, and orchards. The not-so-insignificant patches of natural riparian woodland and chaparral that remained were the happy hunting grounds for many a bug collector up through the early part of the last century, including Fall. Today, only with considerable effort, you can find remnants of these habitats along roadsides and among the patchwork of tiny green spaces that are peppered along the canyon bottom.

While earning my Bachelors and Masters degrees at California State University, Long Beach, I learned that Mr. Fall was one of the greatest American coleopterists of all time. He described nearly 1,500 new species, many of them from California and the west. Curious to know more about him, I tracked down a copy of Arnold Mallis' American Entomologists, where I found a portrait of Fall and a brief biography. The black and white picture revealed to me a handsome, grandfatherly, and mustachioed gentleman with kind, yet somewhat tired eyes. His short-cropped hair was white, parted to one side, and worn high on his head. According to the biography Fall was born in Farmington, New Hampshire in 1862, the son of Orin Tenney Fall and Mary Ann Hayes Fall. He was interested in nature at an early age, a pursuit encouraged by his mother. His only sibling, Katharine, recalled that his beetle collection literally began when her brother found a longhorn beetle at the age of 16. Thus was the genesis of what would become the largest private beetle collection in the United States, with over 200,000 specimens representing about 15,000 species from America, north of Mexico.

Mr. Fall attended public schools in Dover before entering Dartmouth College in 1880. He graduated at the head of his class in 1884. After a brief stint teaching high school mathematics and physics in Chicago, Fall was forced to move to California for health reasons in 1889. There he took up teaching chemistry and physics, first at Pomona High School, and then later at Pasadena High School. At Pasadena, Fall served as the head of the Science Department, a post he held until his retirement in 1917. He returned to New England in 1918 and lived the rest of his life with his sister Katharine, and her husband, Carl Adams Richmond. I wish I could

have seen Southern California through Fall's eyes, before the valleys and coastal plains were completely sealed over in asphalt and concrete. Much of the native coastal chaparral, riparian and oak woodlands where he and others collected insects has long since been replaced with all manner of exotic plantings that are of little or no use to native beetles and other insects.

From the 1980s to nearly the end of the last century, Mr. Fall and his beetles drifted in and out of my life. While director of the Insect Zoo at the Natural History Museum of Los Angeles County, my nascent interest in the history of entomology in Southern California began to take hold. In August of 1999, on my way to Ottawa, Canada, I stopped in Cambridge, Massachusetts to pay a visit to the Entomology Department of the Museum of Comparative Zoology at Harvard University. The insect collection there is a touchstone for many entomologists studying North American insects. And it is the holiest of holy places for beetles in North America. Here were the collections of John LeConte, the father of American coleopterology, and George Horn, LeConte's friend, colleague, and successor. Mounted on the wall of the Coleoptera Department is a large portrait of Fall, the same one that accompanies his biography in American Entomologists. Here, too, was his collection. Fall bequeathed his beetles and other insects to Harvard where he had spent so much time comparing his specimens to the types of LeConte, Horn, and others. One by one I

pulled out the drawers of the main beetle collection and found beetles from Fall's collection segregated from the others in color-coded trays. Each of Fall's beetles was meticulously mounted and labeled. This did not surprise me since all of his papers were also written in the same careful manner. After moving to Richmond, Virginia in 2000, I began working with Jim Hogue to develop a book proposal for the University of California Press. An Introduction to California Beetles, published in 2004, provides an overview of the state's beetle fauna and their study, including brief biographical sketches of some of the coleopterists who worked in the region, including Mr. Fall. He was the first resident of California to make significant contributions to our understanding of the state's unique fauna. A correspondent and friend of George Horn, Fall was a direct link between the very beginnings of American coleopterology and the researchers of the 20th century. And, he knew the Coleoptera of America north of Mexico as few have known them or, in this day of specialization, ever will. But his most lasting contribution was that through an impressive list of publications and prodigious correspondence, Fall inspired dozens of his contemporaries, amateurs and professionals alike - as well as countless students of entomology - right up until his death. I was inspired by him as well and wanted to know more about his life, his influences, how and where he worked, and his travels across the United States and Canada, But the format of the California beetle book and other pressures dictated that I

In the It's A Small World Department, Editor Barney was born in Pomona; his father attendend Pomona High School.



Henry Clinton Fall (1862-1939)

would have to wait for another time to explore the life of this interesting and productive man.

In December of 2004, feeling the weight of looming deadlines of several book projects, I did what anyone would do who is prone to chronic bouts of displacement behavior. I started a new project! And what could be more rewarding than settling in on a project that probably had few prospects for generating any kind of remuneration! Nevertheless, I needed to sate my curiosity about Fall's life and entomological work and delve beyond the wellchosen words written of him by his contemporaries after his death. What was his childhood like? What did he study in school and at college? Why did he study to become a teacher instead of an entomologist? Why did he choose to teach in Chicago? What was the health issue that drove him to southern California and what did he do there for nearly three years before resuming his teaching career? Where did he live while in southern California? Did any of the places he worked or collected still exist? What might his journals and correspondence reveal about the man himself? And, I wanted to explore a possible family connection. My grandfather, Arthur T. Evans, attended Pasadena High School during Fall's tenure and may have had him as a chemistry or physics teacher. These were just some of the questions I wanted to answer about Mr. Fall.

But I wanted instant gratification, so my first stop was the internet. I Googled Fall's name, expecting to find at least a short paragraph or two on the scarab worker's directory hosted by Team Scarab at the University of Nebraska. But there was nothing. I quickly dusted off an early draft of the brief text I had written about Fall for the California beetle book, reworked it, and sent it off to Brett Ratcliffe for inclusion on the directory. Then I went back to Google and entered every permutation of Fall's name: Henry Clinton Fall, Henry C. Fall, Henry Fall, H.C. Fall, and H. Fall. I even tacked Mr., Dr., and Prof. at the beginning of each of these combinations, but still found very

little and nothing I did not know already. Even on the Museum of Comparative Zoology's website, there is barely a mention of Fall, except for a short paragraph to say that his important beetle collection is deposited there. In spite of the enormity of his contributions and influences in American entomology, there is little to be said of him on the web with regards to his entomological work. So I decided to change tack and pursue aspects of his life before beetles and his work as a high school science teacher. My obsession was born.

I reread Mr. Fall's obituaries, penned by such entomological luminaries as Philip J. Darlington, John D. Sherman, Jr., E. Gorton Linsley, and Theodore Dru Alison Cockerell. They all included the usual biographical information, along with a few other interesting facts. For example, Fall became a Charter Member of the Entomological Society of America in 1906. In 1910 he was one of 16 American entomologists selected as members of the Permanent Committee of the International Congress of Entomology. In 1917 he served as second vice president in the Entomological Society of America and was on the editorial board for the Annals from 1915 to 1917. He became a Fellow of the American Association for the Advancement of Science in 1927, and was awarded an honorary Doctor of Science from Dartmouth College in 1929. Fall was also elected Fellow of the American Academy of Arts and Sciences in 1930. All of these honors were richly deserved but did not enhance his reputation, for he was already

known and respected throughout the entomological world.

Tucked away among these facts and dates were other bits of information that revealed the man behind the beetles from the perspectives of longtime friends, colleagues, and students. These provided clues that led to new and fruitful avenues of research through Fall's immediate family, and his professional and institutional associations. I sent simultaneous inquiries to the libraries in Farmington, Pomona, Pasadena, Dartmouth College, and Harvard University. I also contacted various historical and genealogical societies in southern California, Massachusetts, and New Hampshire.

Within days the responses starting pouring in from archivists, historians, and librarians. In just over a week's time I had pictures of Fall at age 22 taken for his college commencement in 1884. There was another photograph of him taken 10 years later with the ninth grade class of Pomona High School. I had never seen him before as a young, cleanshaven man. Census records traced the movements of Fall and his family from 1870 to 1920 and revealed the divorce of Fall's mother and father sometime in the 1860s. Cemetery records and a family genealogy established that Orin had been married previously to Mary Ann's older sister and that she had died of complications from childbirth. From Dartmouth College came copies of pages from his expense books, and his thesis, along with pictures of Fall posing with his baseball team. An obituary of his father, dated June 1903, recounts the life of a civil war

veteran who made shoes and served in the New Hampshire legislature. The dam had broken!

As I piece together the puzzle of photos, correspondence, articles, and other records to recreate a life that began more than 140 years ago, it becomes readily apparent that the personal life of Mr. Fall is just as compelling to me as his work as a coleopterist. Born during the Civil War, the product of a broken home, and plagued by various physical infirmities throughout much of his life, Fall's keen intellect propelled him at an early age to begin amassing the largest beetle collection in the country, an endeavor that brought him into contact with every important coleopterist of the day and established his reputation as an internationally known scientist. His continually growing beetle collection would serve as the basis for his studies of the beetle fauna over an entire continent for 44 years. Yet, no museum or university ever employed him. Instead, he conducted this work only during his spare time while he attended to a 30-year long career as a high school science teacher. However, his labors and contributions did not go unnoticed by his alma mater or the scientific societies of the day.

After his retirement from teaching in 1917, Fall continued to publish, curate, and identify specimens sent to him for determination and he remained active in these endeavors almost to the very end. Among my researches, I found a letter from his sister, written one week after Fall's death, to his close friend, John D. Sherman, Jr. In this letter, now part of the Smithsonian Institution's archives, she recalls that her brother's health had been failing steadily for several months. On the last evening of his life at the Richmond home in Tyngsboro, Fall suggested a game of Parcheesi with his sister and her husband, Carl. The game was left unfinished as the couple thought that Fall should get some rest. He did not feel up to climbing the stairs to his room. The Richmonds offered to carry him, but Fall decided he could make it on his own after all. Halfway up the stairs, Fall collapsed and had to be carried the rest of the way. A doctor was called, but it was already too late. He died an hour and a half later, on Tuesday, November 14, 1939 at 9:45 PM. The cause of death was reported as "valvular heart disease of many years standing," with a bout of bronchitis listed as "contributory." He was 76.

I suspect that my overwhelming curiosity about Mr. Fall is driven mostly by a desire to understand how this indefatigable man dealt with all of life's uncertainties and inevitable disappointments to create a legacy that survived well beyond his own life. His elegantly written scientific papers and correspondence reveal his intense level of dedication to a life-long avocation. It would have been an incredible privilege to know him, bask in his great knowledge of natural history, and share our passion for all things beetle.

Trip Archives

On September 26, 1992, the odd foursome of Josef Beierl, Rich

Cunningham, Dr. Art Evans, Ph.D. and Barney Streit met at Rich's home for a trip to Glamis. After much in-fighting and belly-aching, it was decided that Josef, who brought more crap than the other three combined, would have to sit in back with Rich, with Barney driving. The entire first leg of the drive consisted of Art whining that we just had to stop at In-and-Out. After a nice lunch at Fosters in Indio, the odd crew were stopped by the Highway Patrol for driving an unregistered vehicle, also known as "cunninghaming." His three buddies watched and listened in amazement as Rich sweet-talked his way out of yet another tight jam with the pretty lady CHP officer.

Lighting at Glamis yielded precious few cerambycids and scarabs, so the crew drove to "the pit" where they were to spend the night. A deep philosophical discussion was held about the higher things in life: God, UFO's, Josef's vision of the perfect woman, and the human mating ritual. A cigar smoking contest was then held. At first, it appeared that the fact there were only five Swisher Sweets to go around would put a severe constraint on the contest. This proved to be untrue. After one cigar, Rich nearly hit his head on the truck bumper, Josef started babbling in German and Barney became catatonic. Art hogged the fifth, and last cigar to win going away.

Because Art won the contest, Barney graciously stopped at In-and-Out on the way home. Art drew a crowd as he gamely downed two Double Double burgers in one sitting. The odd foursome had mysteriously disappeared when the Press arrived.

Editor's Note: The late cerambycid collector *Josef Beierl suggested* creating a log of notes for each collecting trip for the purpose of remembering details that would otherwise be easily forgotten. This was done exactly once, for a trip to the Algodones Sand Dunes near Glamis, California. We were less wise back then, in that we drove Rich Cunningham's Bronco. It seems appropriate to reproduce "Once Upon A Trip to Glamis" here and now.



Josef Beierl in 1991

What's In A Name?

Dispatches from the Diplo Desk - Part 1

by Scott McCleve

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Taxonomists are a bit obsessed by names. We have to remember so many—and spelling counts. Now and then we are called upon to create new ones for new taxa. Then, we have to remember those too. And our friends (and others) keep creating more for us to learn and remember--it just never ends. Some of this naming is just, well, perverse; I am thinking about a semi-unpronounceable name created by one of our editors. *Editor's Note: Would that be Copris maclevei?*

At odd moments possible new names for new species awaiting christening occur on the periphery of the consciousness of one needing to coin new names. And now and then a particularly bold soul will have a little fun—witness the recent bunch of *Gelae* species-- "Jellybelly" and "Jelly-donut" and other such combinations created recently in a jocular fashion by workers in one of the lesser families. (*Coleopterists Bulletin* 2004, 58:466-487)

As someone overwhelmed by the plethora of names—for species or varieties--created over the 168 years since the creation of the genus *Diplotaxis* (hereafter "diplos," for short—or "dips," for really short), I have had cause to reflect on the many names of the included species. Not much levity that I detect in the names, no jokes, no apparent insults, few idiosyncrasies apparent for the authors—except Blanchard seemed to really like loooong names, including one of 14 letters; and a recent author of dip species just had to go and create another 14-letter name. Thanks to the redoubtable Art Evans, we now have a sanctified and authorized list of all the New World Melolonthines (for which I suspect he thought he was to be paid by the pound of the printed version). Ed. Note: Art's Catalog can be downloaded for free from: www.mapress.com/zootaxa/ 2003f/z00211f.pdf . I found 288 Diplotaxis proposed names (but I could be wrong, the number keeps increasing with every count, kind of like the Turkestan cucurachas in my compost pile), including varieties, synonyms, whatever--but not including names proposed a second time [nomena segundums?]—as Robinson's fulva or Blanchard's frondicola. (How many of our fine editors, not to mention our readers, did a little twitch of anticipatory hellish delight, yelped "I knew it!" and went to their dictionary to look up "redoubtable"? It is not for nothing





Scott With His Beloved Diplotaxis

that Art is redoubtable. Some of us need to work on our vocabulary.)

The almost infallible Patricia Vaurie leads with the 65 names she proposed in her revision. (Also, she earlier proposed with second author Cazier, 13 other names giving her a total of 78 names.)

A not distant second is Henry Clinton Fall (1862-1939), who proposed a total of 61, by my latest count: 53 in 1909, and 8 in 1932. (All other authors are alsorans, including LeConte, who created 30-but LeConte has pride of place in having created the only synonyms for the genus Diplotaxis-3 of 'em.) Most of Fall's species are found, in at least part of their ranges, in the U.S. or Canada. So, when I started determining species about 30 years ago, mainly U.S. species at first, I naturally noticed how often Fall was the author of these species. It's a nice short simple name, three

letters, one doubled. One syllable, pronounceable in many languages, but unfortunately, not so in Spanish. (OK, you try it.) Fall is responsible for 61 of 288 names, or 21% of the total (actually 0.2118055 is as far as my calculator goes on this issue).

Over the years it slowly dawned on me that Fall used the letters of his name abundantly in the names he came up with for dips. I used the word "slowly" advisedly. I used to be fairly swift, but decades of staring at dips takes its toll on the neurons. Also, the years are piling up. I taught remedial reading to high school kids for way too long. And, I am no longer able, for instance, to run down, on foot, my wiener dogs. Slowing down..... Where was I?

Oh, yes—thanks Dear. (You perhaps should know my wife, Annie—many of you know Annie--is editing this for me before it gets Editor's Note: Would it be Diplotaxis persisae Cazier, named for the wife of Frank Parker? to certain other.....um.....editors. and waking me up from time to time. She is also the only currently living person for whom a diplo was named. Betcha can't name the other species that is a patronym for an Arizona woman.) Back to Fall and his diplo names. Like I said, over the years I noticed certain things, and I eventually developed some--like, tests—to check if Fall was doing something funny with his diplo names. Please keep in mind that Fall created 21% of diplo names—saying it out loud a couple times may help you through what follows—21%, 21%--like that. We will consider the letters of Fall's name in sequence, i.e., "f" then "a" then "l". Plus "ll". And then all 3 letters together.

Test 1: How many names start with an "f"? And what percent of these were proposed by Fall? I count 14 names that begin with an "f." So, 21%, or 2.94—round up to 3.0-of those we would expect to be Fall's names; this test passes, but not by a convincing margin, as 4 names (29%) that begin with "f" are Fall's names: fimbriata, fissilabris, fossipalpa and futilis. Maybe he did not want anyone to catch on to his ploy too quickly? This test passes with maybe a B-, maybe a C+. Hmmm? Could I be just full of..... um....it?

Test 2: How many names contain an "f" but do not begin with that letter--and how many of these are Fall's names? I count 17 names with an interior "f." So, 21% of these—or about 3.6—should be Fall's names; actually, 6 of these names are his: *belfragei, conformis, confusa,* *rufiola, schaefferi* and *semifoveata*. So, the actual number is close to double the expected number. An A+.

Before we go on, I would like to bring up the ethics of insinuating one's own name into the taxa he is describing. At first, this seems reprehensible, selfish, egotistic, self-important (one colleague suggests crypto-compulsivenarcissism for such behavior). I looked at Fall's names for his four species of Ochodaeus and counted the following: "f"=0; "l"=0; "a"= 4. It seems like he went out of his way to avoid the consonants in his name, and used the vowel, "a," about as often as necessary. So, why the contrast with *Diplotaxis*? I believe that he probably meant the recurrence of the letters of his name as a mnemonic device to assist future workers—including myself—in memorizing which names he authored. That would be helpful in such a monster genus as diplos, but of negligible help in Ochodaeus. (The only Fall papers I possess are the 2 on Diplotaxis, and the 1 on *Ochodaeus*.)

Test 3: How many names contain at least one "a," like the "a" in Fall? (Time out while I count these—this is getting kind of tedious.) There are 178 diplo names using the letter "a" one or more times, in any position. Of these Fall created 39. We expect just as an average that he would have created 21% of the total, or 37 names. So 39/178=22%, or just a little over expectations if he were ignoring this letter of his name. This looks like he was ignoring this vowel—give this test a

DNA, for "Does Not Apply."

Test 4: How many names contain a single "l" with or without others? There are 91 such names, 73 by other authors, and 18 by Fall: atlantis, belfragei, fissilabris, fossipalpa, levicoxa, futilis, lengii, levicosta, mentalis, peninsularis, parallela, pinalica, planidens, polita, pumila, rufiola, cephalotes and sulcatula. Since there should be 19 of these names created by Fall (21% of 91), this test comes out almost exactly as chance would dictate: 18 (20%) vs. an expected 19. I do not know what this means-my statistics class never got that far, or I forgot. I think this test gets a DNA: "Does Not Apply." That's my story, and until something better comes along, I am sticking to it.

Test 5: I think the first clue that I had that Fall might be doing something funny with his choice of letters was the double "l"-it seems to have been my semiconscious recognition that his name contains this "ll" and many diplo names also contain it. I began to suspect that this might be a way he inserted his own name piecemeal into the names of the beetles themselves. In alphabetical order, Fall described these "ll" species: densicollis, dentella, illustris, marginicollis, misella, parallela, parvicollis, villosa and villosipes (9 names). Other authors were responsible for *brevicollis*, *transversicollis*, cribraticollis, foveicollis, falli, hallei, impressicollis, metallescens, nitidicollis, puncticollis, rockefelleri and simillima (12 names). Since Fall created 21% of diplo names,

we would expect him to have named 21% of all the 21 names containing an "ll," or 4.4 names-whereas he has actually named 9 of 21, or 43% of all such names. That is a little over double what one would expect. This test passes with an A+. (Please note that Saylor named a dip for Fall himself [to wit, "falli"]. It hardly seems fair to count this name and lower Fall's percentage, but what is one to do? It's bad enough that *D. falli* Saylor is a synonym. Shouldn't there be a diplo species named for Fall? Maybe there is, in a sneaky kind of way—see test #7 below).

Test 6: Let's see who has been paying attention: what do all of these 13 names have in common? Belfagei Fall, falli Saylor, femoralis Vaurie, fissilabris Fall, flexa Vaurie, fossipalpa Fall, frondicola (Say), frontalis LeConte, fulgida Cazier, fulva (LeConte), pilifera (Burmeister), rufiola Fall, and *superflua* Vaurie? You probably noticed that all 13 contain all three letters of the name "Fall." Five of these are Fall's names, or 4 out of 13. That is 31% rather than the expected 21%. However, if we discounted those five published after 1909, when Fall published all five of his, then his percentage would be 4 out of 8, or 50%. It kind of gives one pause; but a moment's reflection brings the realization that with time, all of these percentages, generally in favor of the inference that Fall deliberately used the letters of his name in naming his diplos, will fall lower and lower in the future. Conversely, if one were to go back and recalculate the figures for

	these several tests, and discount all names coined after the last Fall name in each set, Fall's percentages would rise. For example, the grade for this test today is perhaps a B, but in 1909 it would have been a solid A+.
	Test 7: True or false?—Fall never named a species after himself. You may have noted the species, <i>Dipotaxis falli</i> , mentioned above under test 5. But that is a Saylor, not a Fall, species. (Incidentally, Fall lived to see this 1935 patronym published, and Fall was about 21 years dead when Mrs. Vaurie synonymized it under <i>insignis</i> LeConte.) So, one might expect that the assertion that Fall never named a species after himself is true. But that assertion could be flawed. Consider the species <i>Diplotaxis cephalotes</i> Fall, 1909, based on a single specimen. Do you see it? Or rather, do you hear it? Say the species name out loud: seh-fal-O-teez. How about that second syllable? Spelled "phal" but pronounced "fall"! Could the sound-alikes phal and fal just be a coincidence that Fall himself did not even notice? A distrust of coincidence is proverbially sagacious. So, opting to be among the sagacious, let's say: Has to be an A+.
12	By the way, the convolutions of inferences and possibilities tangled up with this <i>cephalotes</i> —the name, Fall's own name, the specimen itself, an earlier LeConte species, the collector who sent it to Fall, the bogus locality, and whatever unexplained accident that befell the unique typewill be revisited

in a future dispatch—(unless enough friends beg me not to). For those who like homework, see Fall's 1909 description—p. 67—and Vaurie's remarks--Part 1, p. 366-368, especially p. 368; and Fall's 1909 remarks on LeConte's D. tenuis, p. 91-92; and Vaurie's remarks on same—Part 2, p. 413, and you will have the whole thing before you. Then, if you like Latin, and crave punishment, you can see what LeConte had to say in his 3-line description of *tenuis* and one paragraph of English remarks in vol. 10, p. 47, of the splendid LeConte papers prepared by Alan Hardy.

Let's just pause to summarize our tests: #1=B- or C+; #2=A+; #3=DNA; #4=DNA; #5=A+; #6=B; #7=A+. The preponderance of evidence seems to support the thesis: Fall used the letters of his own name to coin the names of his *Diplotaxis* species and varieties. And some of these scores would be more impressive if the calculations had been made as of 1932 when Fall bid his adieu to the genus, before all the Vaurie and Cazier and others' coinages diluted his influence.

Fall seems not to have been a loud or pushy or self-important fellow. Was he a trickster? Any kind of eccentric—other than having a certain attraction to this difficult and unpopular genus? Not that I know of. But the several tests above suggest a certain degree of deviousness, a playfulness, a gentle degree of inserting himself into posterity—perhaps to help his benighted followers into diplo systematics to learn and remember the authors of the hundreds of species—even if they do not realize why they remember which species he authored. Was there a quiet smile, maybe a private inaudible chuckle, a sympathetic nod to his unknown-unborn-unnamed colleagues in posterity while he penned some of these names? It would be so nice to think so. Would it have helped if a certain other author preferentially used the consonants "l-c-n-t" for his species? Or if we had names that frequently used the consonants "vr" or "b-t-s" or "c-z-r" or "m-s-r" "or "s-c-h-f-r" or "d-l-g" or "s-y-lr"? How about "b-l-n-c-h-r-d"? If, on some future occasion, you see a new diplo name, purportedly a "whimsical combination of letters," such as *Diplotaxis clemvec*, don't be too trusting: it could be another crypto-compulsive-narcissist trying to sneak into posterity.

Editor's Note: Using his almost perfectly developed analytical genius, Scott hopes to contribute an expose on Area 51 for a future issue.

How This Newsletter Is Edited

Hear at the corporate offices of *Scarabs*, we have been deluqed with a litany of inguires regarding are editorial process. "How can their be no typographical or grammatical errors, especially considering who the three editors our?"

After an article is submitted, each of the three editors compares notes. More often than not, we agree on what editorial comments need to be made. Next, the content is laid out on InDesign CS2 on the Mac. Hard copy is printed, and the chore of flushing out the last of the errors is left to Editor Barney and his chums from the office.

Below is an action shot of the actual final editing of *Scarabs* 15.



Jennifer, Editor Barney and Sonja At Work

The Best Bait Debate: Will It Ever End?

by Paul E. Skelley

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Paul Hard At Work at the SEM



Although rarely appearing in print (*Scarabs*, Occasional Issue Numbers 2, 3), a debate continues on what dung is the best to use in baited pitfalls. Numerous papers comment on the issue of dung beetle preference and specificity. However, easy availability of a good general bait prevails in our choice of substances. I will go no further into the science of scatology, nor continue to argue which bait might be best. My purpose here is to give advice about using easily available baits.

Knowing that I have interest in experimenting with different excrements and trapping techniques, a recent visitor (who shall not be named to protect the innocent) brought me a gift stating "I know of your interests, so here is something you have not tried as bait. Enjoy."

I was not aware that anyone was actually marketing dung of unusual animals. While the Canadians may want to increase their national productivity, marketing specialty dung to collectors seemed a bit risky. (*Editor's Note: not to mention the legal concerns of international shipments.*) I have never heard of any institution or private collector with a reference collection of animal droppings. Surely, this product was geared for some other market, maybe to be consumed as a bait for beetles!

I have never used polar bear dung before. While I suspected there were no beetles in Florida that specialized on polar bear dung, I was excited about the possibilities of using the gift. So, I waited for the peak of Florida's winter and set traps baited with the newly acquired attractant. Needless to say, I caught nothing.

Next, I took it to Utah and tried it in an alpine habitat that more closely approximated the subarctic area preferred by polar bears. Here too, it attracted nothing. Why were no insects attracted to this substance? After all, don't bears usually dump in the woods? Surely even the common introduced European species would be attracted.

I was actively writing the supplier to complain about a faulty product when I realized a confirmation of the material's identity was needed if I wanted to press charges. Close

Editor's Note: the coleopterist lives in Ottawa

Page 14

examination of the material itself raised some questions about its consistency (a bit creamy on the outside with a solid middle) and its aroma (sort of tropical and sweet) was a bit unusual for something a bear might leave behind.

Luckily, I have access to laboratory facilities that do molecular analysis for identification. I figured with all that is known they could surely confirm what the substance was and what animal produced it. The results came back as an "... unidentifiable accumulation of complex molecular materials. But, based on the current literature it was probably the sister group to the scarabs." It took several days to recuperate from that bit of news.

With the failure of molecular analysis, few avenues were left to be used in identification. It looked and felt like dung, although it did not smell like any dung I was familiar with. It produced no audible sound, other than the expected 'plop' when it was dropped. All that was left was to taste it.



After lining my stomach with sterilant (a good whisky works great), I took a bite. The creamy exterior was surprisingly pleasant and familiar, while the interior was a bit nutty. I had eaten one of these before, but where? I finally realized they could be purchased as chocolate covered nuts.

Closer examination of the original packaging of the "Canadian Polar Bear Dropping" revealed some fine print stating 'Acajous au Chocolat' or Chocolate Coated Cashews.

In the United States there are laws against false advertising. Leave it to a Canadian to sink so low as to market fake dung to those of us who might actually buy specialty animal droppings. In spite of this educational and troublesome experience, I might buy more "Canadian Polar Bear Droppings" for festive occasions!





Again, here is solid evidence that not all animal droppings are alike. Always be aware of the properties and origins of your bait. Some are more attractive than others, while some are simply marketing ploys to make a profit. Editor's Note: The bait Paul prefers, lovingly called 'Gainesville Gold', will never be available for sale as it is known to be explosive and shipping it might be considered an act of feco-terrorism

Editor's Note: This reminds of a well-known poem:

There was a dung baiter named Pete, Who had a quite dexterous seat. Mason jar in one hand, He could make his "bait" land, Swirled up like an ice cream cone treat

VI Reunión Latinoamericana De Scarabaeoidologia

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The "almost-every-two-year" meeting of Latin American scarab workers was held 10-16 October 2004 at EARTH University in the warm Atlantic lowlands of Limon Province, Costa Rica. Previous meetings have been held in Guatemala, Mexico, Ecuador, Colombia, and Brazil. The next meeting is tentatively planned for Bolivia in 2006.

The Costa Rica meeting was organized by Bert Kohlmann (EARTH University) and Ángel Solís (INBio), and they did a spectacular job of making everything run smoothly and efficiently. Transportation to and from the airport in San José was provided, and the accommodations, food, and the meeting venue at EARTH University were outstanding. The facilities at EARTH were modern, ultra-clean, comfortable, and surrounded by lush tropical vegetation. Kiskadees greeted you each morning with their song on your walk to the dining hall, and crickets and frogs bid you good evening each night . . . well, actually, they were advertising for sex, but you get my meaning about the ambiance. And what better ambiance for a scarab meeting than to have elephant beetles (Megasoma elephas) flying to the street lights at night!

Adding to all of this was the genuine collegiality of all in attendance who shared a common interest in all things scarabaeoid. For some, their work was a beginning Master's thesis and for others a lifelong, professional passion. Regardless of age, experience, or nationality, language barriers melted away when talking about scarabs. Cerveza and Cuba libres each night assisted with translations.

There were 45 registrants for the meeting from 13 countries (Mexico, Guatemala, Costa Rica, Colombia, Bolivia, Canada, United States, South Africa, Germany, France, United Kingdom, Spain, and Belgium). There were 40 presentations (most in Spanish, some in English) on Monday, Wednesday, and Friday. PowerPoint presentations accompanied each talk. On Tuesday, nearly everyone went on a field trip to INBio on a chartered bus to study collections and tour the institute. On Thursday, there were tours of the very large EARTH University campus that included a banana plantation and processing plant (as a banana connoisseur, I learned a LOT that I did not know) as well as a 400 hectare rainforest preserve. During our several hours of walking in the preserve, we saw numerous

insects, spiders (giant orb weaver and tarantulas), snakes (including a fer-de-lance), lizards, frogs, and monkeys (howler, spider, and white face). I have been told that a couple of insects accidentally fell into small vials, but I disclaim any firsthand knowledge of this.

One night, there was a group dinner at an outdoor restaurant in nearby Guapiles where reservations had been made. The restaurant was so overwhelmed with the size of our group that the evening turned into a comical circus. Conversely, an incredibly good farewell dinner was held at EARTH University on Friday, our last evening, and it was a memorable occasion with white linen, wine glasses, and silverware table settings in "country club-inthe-jungle" surroundings, free bar, excellent food, and tremendous conviviality.

All participants at the Reunión received a briefcase, hat and Tshirt, all emblazoned with the scarab logo for the meeting, printed program with abstracts, and two CDs with the abstracts, participant contact information, short videos about EARTH University, and photos from the meetings. This has to be one of the best meetings I have ever attended, and it sets a high standard for all of those to follow.

LIST OF PRESENTED PAPERS

Los Escarabajos Fruteros (Scarabaeidae, Cetoniinae) de Costa Rica. Ángel Solís. Instituto Nacional de Biodiversidad (INBio), Heredia, Costa Rica.

El Género *Canthidium* en Costa Rica. Ángel Solís y Bert Kohlmann. Instituto Nacional de Biodiversidad (INBio), Heredia, Costa Rica.

Biogeografía de los Scarabaeinae de Costa Rica. Bert Kohlmann, Ricardo Russo, Ángel Solís, Ortwin Elle, Xinia Soto y Gina Reyes. Universidad EARTH, Guácimo, Costa Rica.

El Río Tárcoles de Costa Rica. Una Frontera Biogeográfica inducida por Tectónica de Placas. Bert Kohlmann y Justine Wilkinson. Universidad EARTH, Guácimo, Costa Rica.

La Cápsula Genital Masculina en el Género *Phyllophaga* Harris (Coleoptera: Melolonthidae: Melolonthinae); Complejidad Estructural, Morfometría y Evolución. Miguel Ángel Morón. Instituto de Ecología, Veracruz, México.

Satellite Images as Primers for Dung Beetle Field Surveys as Means of Forest Management Sustainability Evaluation Tools. Naikoa Aguilar-Amuchastegui, University of Nebraska, Lincoln, USA.

Comparación de la Diversidad de Escarabajos Copro-Necrófagos, Ranas y Murciélagos en Bosque de Niebla y Cafetales con Sombra, Veracruz, México. Escabar Jorgo M. Joho, Conzolo Half

Federico Escobar, Jorge M. Lobo, Gonzalo Halfter. Instituto de Ecología, Veracruz, México.

Variación Latitudinal de la Comunidad de Escarabajos del Estiércol (Scarabaeinae) en Montañas Neotropicales. Federico Escobar, Jorge M. Lobo, Gonzalo Halfter. Instituto de Ecología, Veracruz, México.

Revisión Taxonómica, Notas de Comportamiento y Relaciones Filogenéticas de Zonocopris Arrow. Fernando Vaz-de-Mello. Instituto de Ecología, Veracruz, México.

Estudio Filogenético de los Hopliini (Coleoptera: Scarabaeioidea). Hortensia Carrillo-Ruíz y Miguel Ángel Morón Ríos. Instituto de Ecología, Veracruz, México.

	Sénsulos Antenales de Hembras y Machos de <i>Phyllophaga obsoleta</i> Blanchard (Coleoptera: Melolonthidae). Ángel Alonso Romero-López, René Arzuffi, Jorge Valdez y Miguel Ángel Morón. Instituto Politécnico Nacional, Yautepec, Morelos, México. Caracterización Morfológica de la Terminalia Abdominal de <i>Phyllophaga obsoleta</i> Blanchard (Coleoptera: Melolonthidae). Ángel Alonso Romero López, René Arzuffi, Jorge Valdez y Miguel Ángel Morón. Instituto Politécnico Nacional, Yautepec, Morelos, México.	 <i>Cryptomeigenia</i> sp. (Diptera: Tachinidae) como Parasitoide de <i>Phyllophaga rufotestacea</i> (Moser, 1921) (Coleoptera) en Chiapas México. Concepción Ramírez- Salinas, Cutberto Pa- checo-Flors y Adriana E. Castro Ramírez. El Colegio de la Frontera Sur, Chiapas, México. Fauna de Melolóntidos (Insecta: Coleoptera) Asociados al Maíz (Zea mays) en los altos de Chiapas. Adriana E. Castro-Ramírez, Hugo Delfín González, Victor Parra Tabla y Miguel Angel Morón. El Colegio de la Frontera Sur. Chiapas, México.
	A Faunistic Survey of the Dynastine Scarab Beetles of Mesoamerica. Brett C. Ratcliffe, University of Nebraska, Lin- coln, USA.	Eficacia de dos Tipos de Recolecta de Melolón- tidos (Coleoptera) en San Cristóbal, Chiapas, México. María de J. Méndez-Aguilar, Cutberto Pacheco- Flores, adriana E. Castro-Ramiírez y Concep- ción Ramírez-Salinas. El Colegio de la Frontera
	Evolutionary Biology of <i>Pachysoma</i> Desert Dung Beetles: Adaptation and Reversals in Adversity. Clarke Scholtz, James Harrison and Catherine L. Sole. University of Pretoria, Pretoria, South Africa.	Sur. Chiapas, México. Los Ciclos Reproductivos de Algunas Especies de Escarabajos del Estiércol (Coleoptera, Apho- diinae: Aphodiini) de México. Imelda Martínez Morales. Instituto de Ecología.
	Biología Reproductiva de <i>Eurysternus mexica- nus</i> (Coleoptera: Scarabaeinae: Eurysternini). Carmen Huerta, Rosario López y Gonzalo Halffter. Instituto de Ecología, Xalapa, Vera- cruz, México.	Veracruz, Mexico. Archivo de Autoridad Taxonómica de los Escarabajos Coprófagos (Coleoptera: Scarabaei- nae, Aphodiinae) de la Región Andina Colom- biana. Luz Astrid Pulido Herrera y Raúl Antonio Rive-
	Diplogastrid Nematodes on Scarab-Beetles: Association and Co-Evolution. Matthias Herrmann, Werner E. Mayer and Ralf J. Sommer. Max Planck Institute for Develop- mental Biology, Tübingen, Germany.	ros Cañas. Alexander von Humboldt, Bogotá, Colombia. Preliminary Phylogenetic Analyses of the Dung Beetle Genus <i>Phanaeus</i> using Morphological
	<i>Acantepheira stellata</i> (Walckenaer, 1805) (Ara- neae: Araneidae) como depredador de <i>Phyl-</i> <i>lophaga</i> spp. (Coleoptera).	Data. Dana L. Price. Rutgers University, New Bruns- wick, NJ, USA.
	cutberto Pacheco-Flores, Adriana E. Cas- tro-Ramírez, Miguel A. Pinkus y Concepción Ramírez Salinas. Colegio de la Frontera Sur. Chiapas, México.	overview of the Anomalini (Rutelinae): Discov- eries and Difficulties. Mary Liz Jameson. University of Nebraska State Museum, Lincoln, NE, USA.
	Balance de Nitrógeno por Cuatro Especies de "Gallinas Ciegas" (Coleotera: Melonlonthidae) Alimentándose de Composta. Adriana E. Castro-Ramírez, Concepción Ramírez-Salinas, Miguel Angel López-Anaya, Ma. Guadalupe Pérez Escobar, Cutherto	A New Species of <i>Neoscelis</i> Schoch from Jalisco, México (Coleoptera: Scarabaeidae: Cetoninae). Alan D. Mudge, Brett C. Ratcliffe, Richard L. Westcott and Felipe Noguera. Oregon Depart- ment of Agriculture, Salem, Oregon, USA.
	Pacheco-Flores y Manuel de Jesús Anzueto. El Colegio de las Frontera Sur, Chiapas, México. Nuevo Registro de <i>Phyllophaga (Phytalus) ru-</i> <i>fotestacea</i> (Moser) 1918, (Coleoptera: Scarabae-	Biodiversidad de los Escarabeidos Saproxílicos y Fitófagos de los Bosques de Niebla del Sureste Mexicano. Estafanía Micó, Beningo Gómez & Gómez y Eduardo Galante. Centro Iberoamericano
Page 18	oidea) para México y Chiapas. Cutberto Pacheco-Flores y Adriana Castro- Ramírez. El Colegio de la Frontera Sur, Chiapas, México	de la Biodiversidad. Universidad de Alicante, Alicante, España.

The Scarabs in the Hope Entomological Collections: A Neglected Resource? Darren J. Mann. Hope Entomological Collections, Oxford University Museum of Natural History, Oxford, United Kingdom.

Community and Seasonal Differences of Coprophagic Scarabaeidae in Three Forest Types in the Bolivian Andes.

Caroli Hamel, Darren J. Mann, Sebastián Hertzog and Ben A. Woodcock. Hope Entomological Collections, Oxford University Museum of Natural History, Oxford, United Kingdom.

Medida del Estado de Conservación de Selvas Neotropicales a través del Análisis de la Comunidad de Coleópteros Escarabaeidos: El Caso de la Selva de los Tuxtlas, México.

Mario E. Favila, Eduardo Galante y Alfonso Díaz Rojas. Instituto de Ecología, Veracruz, México.

Escarabajos Pleurosticti (Scarabaeidae) de la Selva Baja del Bosque Pluvial Tropical, Chocó, Colombia.

Jhon César Neita Moreno, Jesús Orozco y Brett Ratcliffe. Universidad Tecnológica del Chocó "Diego Luis Córdoba" Bogotá, Colombia.

Escarabajos Copronecrófilos (Coleoptera: Scarabaeidae: Scarabaeinae) de la Selva Baja del Bosque Pluvial Tropical Chocó, Colombia. Jhon César Neita Moreno, W.D. Edmonds, Helbert olaya Cuesta y Mario Mosquera Zúñiga. Universidad Tecnológica del Chocó "Diego Luis Córdoba". Bogotá, Colombia.

Diversity and Composition of Dung Beetle Communities on an Andean Latitudinal Gradient in the Bolivian Yungas.

Caroli Hamel, Sebastián K. Herzog and Darren J. Mann. Asociación Armonía. Santa Cruz de la Sierra, Bolivia.

A Phylogenetic Análysis of the Oniticellini and Onthophagini (Scarabaeidae: Scarabaeinae). Keith Philips. Western Kentucky University, KY, USA.

Sex Attractants and mtDNA: Implications for Discerning Relationships within the Genus *Phyllophaga*.

Paul S. Robbins, Cornell University, Ithaca, NY, USA.

Síntesis del Género *Vindex* (Coleoptera: Passalidae) para México y Centroamérica. Jack Schuster, Enio Cano, Donald Leiva, Lorena Lobos y Víctor Flores. Universidad del Valle de Guatemala, Guatemala. Análisis de la Composición de los Escarabajos Coprófagos (Coleoptera: Scarabaeidae: Scarabaeinae) en Dos Bosques Andinos de Colombia (Serranía de los Churumbelos, Putumayo, Cauca y Picos de Fragua, Caquetá) Colombia. Luz Astrid Pulido Herrera. Alexander von Humboldt, Bogotá, Colombia.



Ángel Solís and **Bert Kohlmann**, organizers of the meeting

All Photos Courtesy of Brett C. Ratcliffe



Open air dining hall at EARTH University. Surprisingly, no mosquitos.



Jhon Cesar Neita (Colombia) giving his presentation.



Miguel Morón (Mexico), **Ángel Solís** (Costa Rica) and **Francois Génier** (Canada) at INBio.



Fernando Vaz-de-Mello (Mexico) and Dave Edmonds (USA) at INBio.



Fernando Vaz-de-Mello (left) and Francois Génier in the rainforest preserve.



Eduardo Galante (Spain), **Mary Liz Jameson** (USA), **Estefania Mico** (Spain) and **Brett Ratcliffe** (USA).



Alan Mudge (USA) with *Megasoma* friends. He is *very* happy because he had never held live beetles of this size before. Size *does* matter.



Carmen Huerta (Mexico) giving her presentation.



Stylized sketch of **Mary Liz Jameson** (USA) by **Patrick Arnaud** (France).



Megasoma elephas asking for a ride in a conference satchel.