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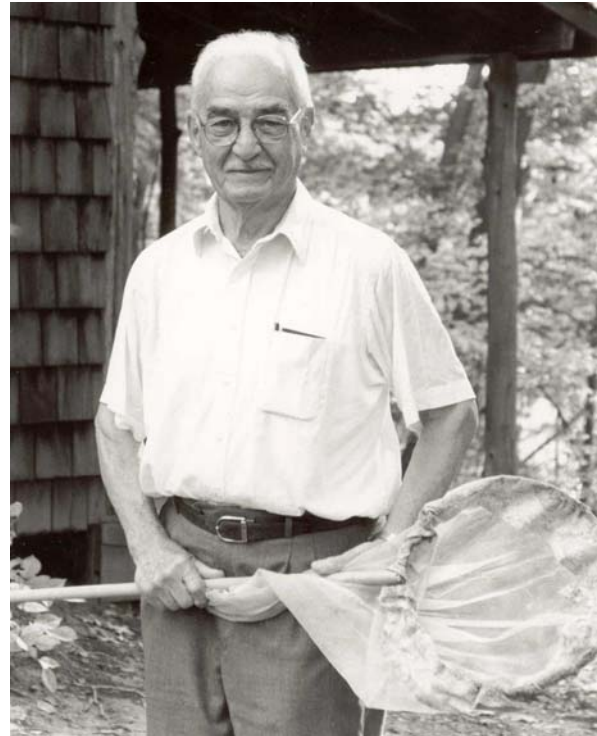
EntNews

The Newsletter of the Department of Entomology

Vol. 20 No. 8/9 Aug./Sept., 2005



Nancy Adams



Karl V. Krombein



Eric Grissell (with Cathy Apgar)



Dan Polhemus

TRANSITIONS:

Nancy Adams lost her battle with lymphoma on August 20. She prepared her own obituary, which is here recorded:

"Nancy Ellen Adams of Reston, Virginia went to serve her Lord and Savior, Jesus Christ, in heaven on August 20, 2005 after a long battle with Lymphoma. Nancy was born in Pensacola, FL on April 21, 1958. She spent her first 20 years growing up on Beachview Drive in Fort Walton Beach, FL where she graduated from Choctawhatchee high school in 1976 and Oskaloosa-Walton Community College with an AA degree in 1978. From there she transferred to Covenant College, Lookout Mountain College, GA, graduating with a BA degree in biology in 1981. She was a teacher/naturalist at the Chattanooga Nature Center and the first teacher/naturalist at Landmark Park in Dothan, AL. In 1983, Nancy started her career in the Entomology Department at the Smithsonian Institution, National Museum of Natural History. During her years there, she enjoyed collecting trips to Canada, Peru, Trinidad and Tobago. On her own, she enjoyed visiting insect collections in London, Mexico, Hawaii and dozens of university collections in the continental US, learning from and sharing from colleagues techniques on insect collection management, data and transaction management. She also enjoyed having two catalogues published on parts of insect collections she managed and has at least eight insects named for her. Nancy enjoyed serving her God on short-term mission trips to other cultures and as an active member of Reston Presbyterian Church. Other joys included canoeing, collecting insects, especially Dragonflies, birding and playing cards. Nancy is preceded in death by her parents Henderson L. and Gladys M. Adams and brother Hugh M. Adams. Brother Roger H.

and his wife Teri A. Adams and nephew, Michael R. Adams and brother Richard W. and his wife Sharon C. Adams and nephews Ryan C. and Travis W. Adams, all of Fort Walton Beach FL, survive her. A memorial service (was) held at Reston Presbyterian Church at 10610 Sunset Hills Road, Reston, VA 20190 on September 10, 2005 at 1 pm. Nancy's

remains will be cremated by Money and King Funeral Home and sprinkled in the Shenandoah River on a summer canoe trip. Memorial donations may be given to the Lymphoma Society, Reston Presbyterian Church, or The Department of Entomology's Improvement of the Insect Collection Fund. (Smithsonian Institution, Entomology MRC - 105, Washington, DC 20013-7012)."

Karl V. Krombein, senior scientist emeritus with the Department of Entomology, Smithsonian Institution, died on September 06 at the age of 93. He was the elder of two sons, and was born on May 26, 1912, in Buffalo, New York. He gained his interest in insects from his father, a physician and surgeon who collected butterflies as a hobby. Karl first visited the Smithsonian at the age of 13 during a class trip to Washington, D.C. Glass-topped cases with a great variety of insects at the museum further stimulated his interest. His intentions upon entering Cornell University were to pursue medical entomology, but he was captivated by lectures on Hymenoptera by Professor V.S.I. Pate. He began his official career in entomology in 1941 with the U.S. Department of Agriculture where he was hired to identify bees and wasps, working with colleagues in the Smithsonian. His activities were curtailed, however, in December with the U.S. involvement in World War II. He was commissioned as a first lieutenant in the Army, and had several state-side assignments before being appointed commanding officer of one of the Army Malaria Survey Units. His unit served with the Fifth Air Force in New Guinea, Leyte, Luzon and Okinawa, and he remained active in the Air Force Reserve, retiring as a full colonel in 1972. His return to the Museum was on February 1, 1946, where he was appointed leader of taxonomic investigations of Hymenoptera, with a staff of four specialists. He joined the Smithsonian staff in 1965, becoming Chairman of the Department of Entomology. After many years of productive research, Karl retired in 1993 at the age of 80. He continued research at the museum until August, 2000, when his declining health

forced him to curtail his work. During his career at the Smithsonian, he was involved in many areas of research, and notably initiated the "Ceylon Insect Project," which added numerous species to the National Entomological Collections. The project involved many trips to Sri Lanka by various specialists, and more than 100 worldwide taxonomic specialists were project collaborators. Karl published a series of 21 revisionary and behavioral studies, *Biosystematic Studies of Ceylonese Wasps*, totaling more than 800 pages. Ninety-three different arthropods were named for Karl, with many being from Sri Lanka. He is survived by three daughters: Kristen, Kyra, and Karlissa. His wife, Dottie, whom he met at Cornell University and married in 1946, died in 1984.

Eric Grissell retired from service with the Systematic Entomology Lab, USDA, in early September. Eric was hired by USDA in 1979, and has conducted research on families of Chalcidoidea. Foremost in his publications are *Toryminae (Hymenoptera: Chalcidoidea: Torymidae): A redefinition, generic classification, and annotated world catalog of species (1996)*, and *A Handbook of the families of Nearctic Chalcidoidea (Hymenoptera)*, co-authored with Michael Schauff (1997). He has written three books, *Thyme on My Hands*, *A Journal in Thyme*, and *Insects and Gardens*. The last volume was well-received in the literary world, winning at least one important literary prize. Eric has purchased property in Arizona, and currently has a half-finished house, which he says stands on a grassy knoll in full, blazing sun. Eric extends many thanks to his friends and colleagues in the museum who have made it possible to overlook reality.

Dan Polhemus has decided to accept a position as Director of the Division of Aquatic Resources for the State of Hawaii. This position involves biological research and conservation activities related to all freshwater streams, estuaries, coastal zones, and coral reefs in the Hawaiian Archipelago, extending for 1600 miles across the central Pacific Ocean. Included is oversight of a diverse array of ecosystems ranging from the over 350 perennial streams of the Hawaiian

mountains to the atolls of the Northwestern Hawaiian Islands, the latter constituting the largest coral reef ecosystem in the United States. Dan looks forward to the challenge of attempting to preserve elements of the tropical biodiversity that he has helped to document taxonomically for the past 25 years. Dan received his B.S. (1980) in Entomology from Colorado State University and Ph.D. (1984) in Biology from the University of Utah. Since 1983, he has conducted research on aquatic ecosystems in countries throughout the Pacific region, including Indonesia, Australia, East Timor, Papua New Guinea, the Solomon Islands, Fiji, and French Polynesia. He has received particular recognition for his work on the evolution and conservation of native Hawaiian damselflies. He has published more than 130 peer-reviewed articles in scientific books and journals, and has been the recipient of more than 25 research grant and contract awards totaling over four million dollars. In the course of his research he has described and named over 400 new species, including 63 from Hawaii.

ANNOUNCEMENTS:

The staff of EntNews wishes to thank **Jerry Louton** for his suggestions of adding color to the newsletter and for expertly formatting the cover of this issue.

Terry Erwin will be the 2005 Founder's Memorial Award Speaker at the Entomological Society of America's annual meeting, November 6-9, in Fort Lauderdale, Florida.

The 1094th regular meeting of the **Entomological Society of Washington** will convene on October 06 at 7:00 pm in the Cathy Kerby Seminar Room at the National Museum of Natural History. R. Toby Schuh will present the topic "Exploring the Southern Hemisphere: Plant Bug Planetary Biodiversity Inventory Field Work in Australia and South Africa."

GENERAL NEWS:

Gary Hevel was credited by sports-caster George

Michael on a live broadcast of WRC-TV Channel 4 in late August for identification of a wheel bug. The insect had been shown on an earlier broadcast from Redskins Park, and Jim Vance had guessed that it was a stink bug. Gary had responded with an e-mail, saying that the wheel bug could inflict a painful bite, and was best to be left alone.

PUBLICATIONS BY STAFF:

Research papers by members of the combined entomological staff who are retired will be listed, and those will be preceded by a double asterisk.

Durden, L.A. & N.E. Adams. 2005. Primary type specimens of sucking lice (Insecta: Phthiraptera: Anoplura) in the U.S. National Museum of Natural History, Smithsonian Institution. *Zootaxa* 1047: 21-60.

--**abstract**—An annotated list is presented of the 110 primary types (holotypes, lectotypes, syntypes, or neotypes) of sucking lice (Insecta: Phthiraptera: Anoplura) deposited in the U.S. National Museum of Natural History (USNM), Smithsonian Institution, as of May 2005. Annotations for each taxon are listed alphabetically by specific epithet, and are followed by the original generic assignment and (in parentheses) the current family designation. Next, the author, year of description, and original citation are provided. The primary type held in the USNM (with USNM type number, slide number and other relevant data, if these were assigned), original collection data, current taxonomic assignment (if different from the original designation), and additional taxonomic remarks, if relevant, are then given. Brief information on allotypes and paratypes are included if these are mounted on the same microscope slide as the primary type of or if they are otherwise relevant. The types include those of the type species of seven genera (*Abrocomaphthirus* Durden & Webb, *Atopophthirus* Kim & Emerson, *Haematopinoides* Osborn, *Latagophthirus* Kim & Emerson, *Pecaroecus* Babcock & Ewing, *Phthirpediculus* Ewing, and *Sathrax* Johnson) one of which is the type genus of a family (Pecaroecidae). Primary types for five species of Anoplura that have not yet been described, and for another four species that were described in an unpublished dissertation are also deposited in the

USNM. Hosts and collection data for these nine specimens are briefly mentioned after the main list; however, species names are excluded because these names currently have no nomenclatural standing. A neotype specimen is designated for *Haematopinus montanus* Osborn, 1896, a taxon which is currently treated as a junior synonym of *Linognathoides laeviusculus* (Grube, 1851).

Edmiston, J.E. & W.N. Mathis. 2005. A revision of the New World species of the shore-fly genus *Nostima* Coquillett (Diptera: Ephydriidae). *Sm. Cont. Zoology*, Number 623, 108 p.

--**abstract**—Thirty-eight New World species are revised, including 21 new species that are described (type locality in parentheses): *Nostima atriscuta* (Jamaica, Portland: Crystal Springs (18°12.5'N, 76°37.9'W)), *N. cinnamea* (Grand Bahamas Island. Freeport), *N. duaguttata* (Costa Rica. Puntarenas: Rincon (5 km S; 8°42.1'N, 83°30.8'W, 95 m)), *N. footei* (Panama, Canal Zone: Balboa), *N. francisca* (Jamaica. St. Anns: Runaway Bay), *N. lineate* (Dominica: Layou (5 km E)), *N. lucida* (Bolivia. La Paz: Apa (8km S Chulumani; 16°22'S, 67°30.4'W; 1960 m)), *N. lutea* (St. Vincent: Kingstown Botanical garden), *N. maculata* (Argentina. Tucuman: La Cavera), *N. magnifica* (Ecuador, Chimborazo: Naranjapata Chilicay), *N. melina* (Panama. Canal Zone: Kobbe Beach), *N. negruzca* (Grenada. St. John: Concord Falls (12°07.1'N, 61°43'W)), *N. simuliflavida* (Dominica. Cabrit Swamp), *N. spinosa* (Bermuda. Paget Parish: Botanical Gardens), *N. stellata* (Ecuador. Orellana: Rio Tiputini (0°39.2'S, 76°8.9'W)), *N. tresguttata* (Ecuador. Napo: Baeza (17 km S; 1815 m)), *N. velutina* (Mexico. Chiapas: San Cristobal de Las Casas (2160 m)), *N. williamsi* (Costa Rica. Alajuela: San Mateo, Higuito), *N. xenohypopia* (Dominican Republic. Pedernales: Sierra de Baoruco, Las Abejas (1300 m)), *N. xenoptera* (Costa. Puntarenas: Rincon (3 km SW, 9°55'N, 84°13'W, 10 m)), *N. ypsilon* (Costa Rica. Puntarenas: Rincon (3 km SW, 9°55'N, 84°13'W, 10 m)). This study revealed the species-group *Nostima niveofasciata* Cresson (1947) is synonymous with *Nostima canens* Cresson (1941). The cladistic analysis was based upon 10 morphological characters. An analysis using "implicit enumeration"

(ie-) of Hennig86 resulted in a cladogram of minimal length. This cladogram has a length of 16 steps, a consistency index of 1.0, and a retention index of 1.0. From the cladogram (Figure 255) and supporting synapomorphies, the following hypotheses can be made: (1) *Nostima* is monophyletic; (2) *Nostima* and *Garifuna* form a monophyletic lineage (supported by three synapomorphies); (3) *Garifuna* is the immediate sister group of *Nostima*, and *Philygria* forms a clade immediately basal to the common lineage of *Nostima* and *Garifuna*; and (4) New World species of *Nostima* are provisionally arrayed into five lineages. Some of these lineages apparently demonstrate a speciation pattern in which peripheral or isolated species diverted from more widely distributed species. Keys to the tribes and genera of Ilytheinae, as well as to the New World species of *Nostima*, are provided. Distribution maps are also produced for the New World species.

Jaichapor, B., Kengluetcha, A., Rongnoparut, P., Rueda, L.M., Jones, J.W. & Sithiprasasna, R. 2005. Morphological variations of *Anopheles minimus* A in Tak Province, Thailand. Southeast Asian J. Trop. Med. Public Health, 36: 609-615.

Konstantinov, A.S. 2005. New species of Middle Asian *Longitarsus* Latreille with discussion of their subgeneric placement (Coleoptera: Chrysomelidae). Zootaxa 1056: 19-42.

--abstract--The subgenus *Testergus* Weise of *Longitarsus* Latreille is redefined based on the characters of male genitalia and four new species are described and illustrated: *L. borisi* sp. Nov. (Tadzhikistan), *L. danilevskyi* sp. Nov. (Kazakhstan), *L. igori* sp. Nov. (Tadzhikistan), and *L. nadiae* sp. Nov. (Kirgizstan). The lectotypes for *L. fuscoaeneus* Redtenbacher, *L. tmetopterus* Jacobson and *L. murataicus* Palij are designated. A key to the known *Testergus* species from Greece, Caucasus and Middle Asia is provided.

Konstantinov, A.S. & Duckett, C.N. 2005. New species of *Clavicornaltica* Scherer (Coleoptera: Chrysomelidae) from continental Asia. Zootaxa 1037: 49-64.

--abstract--Four new species of *Clavicornaltica* Scherer are described and illustrated, of which two are from China (*C. dali* new species and *C. longsheng* new species) and two are from Vietnam (*C. tamdao* new species and *C. vietnamensis* new species). The wing and metathorax are described and illustrated for the genus for the first time. A key to the newly described species is presented. Male genitalia of *Clavicornaltica australis* Konstantinov are illustrated for the first time.

Konstantinov, A.S. & Duckett, C.N. 2005. Correction to "A description of four new species of *Clavicornaltica* Scherer from Continental Asia." Zootaxa 1042: 64.

Li, C., & R.C. Wilkerson. 2005. Identification of *Anopheles (Nyssorhynchus) albitarsis* complex species (Diptera: Culicidae) using rDNA internal transcribed spacer 2-based polymerase chain reaction primers. Mem. Inst. Oswaldo Cruz, 100(5): 495-500.

--abstract--*Anopheles (Nyssorhynchus) marajoara* is a proven primary vector of malaria parasites in Northeast Brazil, and *An. deaneorum* is a suspected vector in Western Brazil. Both are members of the morphologically similar *Albitarsis* Complex, which also includes *An. albitarsis* and an undescribed species, *An. albitarsis* "B." These four species were recognized and can be identified using random amplified polymorphic DNA (RAPD) markers, but various other methodologies also point to multiple species under the name *An. albitarsis*. We describe here a technique for identification of these species employing polymerase chain reaction (PCR) primers based on ribosomal DNA internal transcribed spacer 2 (rDNA ITS2) sequence. Since this method is based on known sequence it is simpler than the sometimes problematical RAPD-PCR. Primers were tested on samples previously identified using RAPD markers with complete correlation.

Li, C., Wilkerson, R.C., & Fonseca, D.M. 2005. Isolation of polymorphic microsatellite markers from the malaria vector *Anopheles marajoara* (Diptera: Culicidae). Mol. Ecol. Notes 5: 65-67.

Merritt, T.J.S., Yuoung, C.R., Vogt, R.G., **Wilkerson, R.C.** & Quattro, J.M. 2005. Intron retention identifies a malaria vector within the *Anopheles (Nyssorhynchus) albitalarsis* complex (Diptera: Culicidae). *Molec. Phylog. Evol.* 25: 719-724.

Ovruski, S.M., **Norrbom, A.L.**, P. Schliserman & Aluja, M. 2005. Biology and taxonomy of *Rhagoletotrypeta* (Diptera: Tephritidae): a new species from Cuba and new host plant, parasitoid, and distribution records from Northwestern Argentina. *Ann. Entomol. Soc. Am.* 98(3): 252-258.

--abstract—*Rhagoletotrypeta argentinensis* (Aczel) was recovered from *Celtis iguanaea* (Jacquin) Sargent, and *R. parallela* Norrbom and *R. pastranzi* Aczel from *Celtis pubescens* (Kunth) Sprengel fruit (Ulmaceae) in the province of Catamarca, Tucuman, and Salta (northwestern Argentina). All represent new host plant records, and for *R. parallela*, the first host plant record. Mean pupal weight of flies from *C. pubescens* (mean fruit weight 1.2 g) was 5.2 ± 2.3 mg and of flies from *C. iguanaea* (mean fruit weight 1.8 g.) was 7.8 ± 1.3 . Mean degree of infestation (number of larvae/100 g of fruit) was 29.6 for *C. iguanaea* and varied between 18.7 and 50.5 for *C. pubescens*. Most adults emerged after an 8-12-mo diapause period. Sixteen specimens of the larval-prepupal parasitoid *Utetes* sp., near *U. anastrephae* (Viereck) (Hymenoptera: Braconidae, Opiinae) were recovered from all fruit samples (overall parasitization rate was 37.2%). Parasitoids entered diapause that lasted up to 12 mo. We also describe a new species of *Rhagoletotrypeta* from Cuba belonging to the *xanthogastras* species group. *Rhagoletotrypeta cubensis* Norrbom, n.sp., is the only species in this genus known from the West Indies. The distribution records reported here also extend the known ranges for all four species of *Rhagoletotrypeta* known from Argentina. We discuss our findings in light of their taxonomic and ecological significance and with respect to the possibilities they open for the badly needed study of the zoogeography and behavior of flies in tephritid genera of no apparent economic importance.

Polaszek, A., Agosti, D., Alonso-Zarazaga, M., Beccaloni, G., Bjorn, P. de P., Bouchet, P., Brothers,

D.J., Earl of Cranbrook, Evenhuis, N., Godfray, H.C.J., Johnson, N.F., Kreill, F-T., Lipscomb, D., Lyal, C.H.C., Mace, G.M., Mawatari, S., **Miller, S.E.**, Minelli, A., Morris, S., Ng., P.K.L., Patterson, D.J., Pyle, R.L. Robinson, N., Rogo, L., Tavere, J., **Thompson, F.C.**, van Tol, J., Wheeler, Q.D., & Wilson, E.O. 2005. A universal register for animal names. *Nature* 437: 477.

Sallum, M.A.M., **Peyton, E. L.** & **Wilkerson, R.C.** 2005. Six new species of the *Anopheles leucosphyrus* group, reinterpretation of *An. elegans* and vector implications. *Med. Vet. Entomol.* 19: 158-199.

Staines, C.L. 2005. Franz Spaeth: Publications and proposed taxa. *Zootaxa*: 1035: 1-49.

--abstract—Franz Spaeth(1863-1946) was an Austrian lawyer who became an authority on world Cassidinae (Coleoptera: Chrysomelidae). From 1885 until 1961 he published 145 papers in which he described 111 genera and 1212 species. This article presents a brief biographical sketch, a bibliography of his published works, and a list of proposed taxa.

Tuell, M.J., O'Gurinn, M.L., Jones, J.W., Sardelis, M.R., Dohm, D.J., Watts, D.M., Fernandez, R., Da Rosa, A.T., Guzman, H., Tesh, R., Rossi, C.A., Ludwig, G.V., Mangiafico, J.A., Kondig, J., Wasieoski, Jr., L.P., **Pecor, J.**, Zyzak, M., Schoeler, G., Mores, C.N., Calampa, C., Lee, J.S. and Kleing, T.A. 2005. Isolation of viruses from Mosquitoes (Diptera: Culicidae) collected in the Amazon Basin Region of Peru. *J. Med. Entomol.* 42(5): 891-898.

Yang, Z-Q., Strazanac, J.S., **Marsh, P.M.**, Van Achterberg, C., & Choi, W-Y. 2005. First recorded parasitoid from China of *Agrilus planipennis*: a new species of *Spathius* (Hymenoptera: Braconidae: Doryctinae). *Ann. Entomol. Soc. Am.* 98(5): 636-642.

--abstract—The first reported parasitoid reared from *Agrilus planipennis* Fairmaire, *Spathius agrilli* n. sp., is described from China. *S. agrilli* was reared from *A. planipennis* in China attacking a *Fraxinus* species native to North America, *Fraxinus velutina* Torr., and one endemic to the region, *Fraxinus mandshurica* Rupr. Life history observations of *S. agrilli* in the field and laboratory indicate it is a gregarious idiobiont

ectoparasitoid and has up to four generations per year. Parasitism rates in the field ranged from 30 to 90%, with one to 35 *S. agrilli* eggs associated with a single host. From a host larva 1-18 adult wasps (average of 8.4) were reared. Based on laboratory rearings, the emerging adult female to male ratio is 3:1.

Zang, J., Yang, D. & W.N. Mathis. 2005. A new genus and species of Ephydriidae (Diptera) from the Oriental Region. *Zootaxa* 1040: 31-43.

--**abstract**—A new genus and species of the tribe Dagini (subfamily Ephydriinae), *Sinops sichanensis*, are described from specimens collected in China (Sichuan: Emeishan Mountain), and three species formerly comprising “the *fluvialis* group” of *Psilephadra* Hendel are transferred to the new genus (*S. fluvialis* (Miyagi), *S. kaskiensis* (Mathis) and *S. nepalensis* (Mathis)) as new combinations. A cladistic analysis of the new genus with related genera in the tribe Dagini is presented and discussed, and keys to the genera of Dagini and to the species of the new genus are presented.

VISITORS:

Hideaki Goto from Kyushu Research Center, Kumamoto City, Japan, is currently visiting Natalia Vandenberg and the Platypodidae Collection for curation purposes, having arrived September 30, and will be leaving after October 11.

Midori Goto from Kyushu Research Center, Kumamoto City, Japan, is currently visiting Natalia Vandenberg and the Platypodidae Collection for curation purposes, having arrived September 30, and will be leaving after October 11.

Naoto Kamata from Kanazawa University, Ishikawa, Japan, is currently visiting Natalia Vandenberg and the Platypodidae Collection for curation purposes, having arrived September 30, and will be leaving after October 05.

Ximo Mengual from Centro Iberoamericano de la Biodiversidad, Alicante, Spain, is visiting Chris Thompson and the Flower Fly Collection, September 20 through October 02.

Tiago Quental from Harvard University visited Bob Robbins and the Lepidoptera Collection on September 30.

Claudia Isabel Rodriguez-Flores from Universidad Nacional de Colombiano Herbario Nacional, Bogota, Colombia visited both the Department of Botany and the Department of Entomology, August 22 through September 22.

Barney Steit, D.D.S. from Tucson and scarab enthusiast, visited Gary Hevel and the Coleoptera Collection on September 23. In particular, he sought to view paratypes of a species of *Phanaeus* that he had collected. The paratype specimens were found easily, thanks to the collection attention by Nancy Adams.

Roger Vila from Harvard University visited Bob Robbins and the Lepidoptera Collection on September 30.

TRAVEL BY STAFF:

Terry Erwin spent several weeks in September conducting fieldwork in Argentina, returned briefly in early October, and is presently in Ecuador for fieldwork. He is expected to return in the middle of October.

Vichai Malikul lectured at a Scientific Illustration Workshop from September 6-12 at Queen Sirikit Botanical Garden in Chiangmai, Thailand. His butterfly illustrations, “Painting

Wondrous Wings” was on exhibit there, September 9-23. He and his wife Nit will be on vacation in Thailand until October 01, and he will return to work on October 03.