



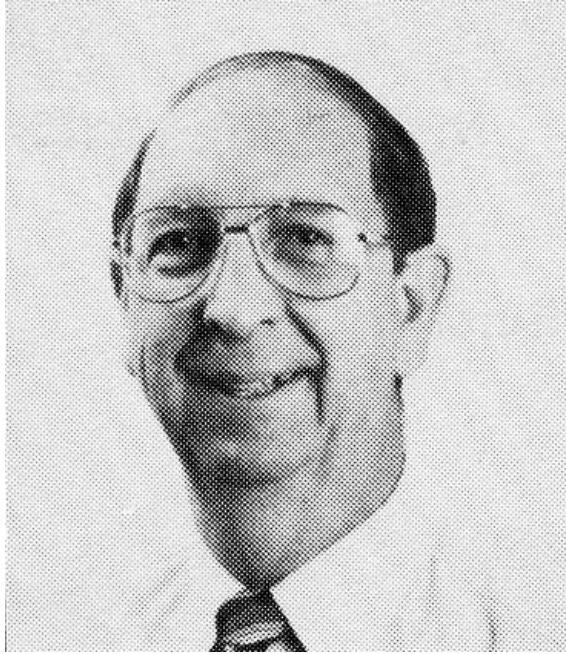
Smithsonian
National Museum of Natural History



EntNews

The Newsletter of the Department of Entomology

Vol. 21 No. 3 March, 2006



Bob Peterson (1928-2006)



Michael MacGamwell



Dave Pollock



Charyn Micheli

Front Page:

The entomological community was saddened to hear of the death of **Bob Peterson**, a former researcher with the Systematic Entomology Lab of the U.S.D.A. Following is an edited obituary that appeared in the *Daily Herald* in Provo, Utah on March 31:

Robert Vern Peterson, Ph.D., born December 16, 1928 in Price, Utah to Evelyn Humphrey and Vern Peterson, and growing up in Park City, passed away March 29, 2006. He received his Doctorate degree from the University of Utah. While a student there, he met and married his sweetheart, Jeannine Foster, on April 29, 1950. They were blessed with a son who died in infancy and three daughters. Bob worked many years in Ottawa, Canada as a Medical Research Entomologist. During his illustrious career he discovered a multitude of new species of insects which he named after his family and friends. He also worked with the United States Department of Agriculture's Systematic Entomology Lab (at the Smithsonian Institution) in Washington, D.C.(approximately 1983-1993), and took assignments with the World Health Organization. Bob became the world authority in his field, and was highly esteemed by his scientific colleagues. He was a gentle man with a fantastic smile, sharp wit, and a generous heart. His sense of humor delighted all who encountered him. Bob was a consummate peace maker, and wrote several volumes of scientific material and creative stories. He was an avid reader and was active in the LDS church, serving as Bishop, MTC Branch President, Stake Counselor, and senior missionary. Bob lead a full and exciting life, and is survived by his loving wife of 56 years, Jeannine, his three daughters, Patricia, Susan and Michelle, eleven grandchildren, and ten great-grandchildren. Funeral services were held Saturday, April 1, in the Edgemont 14th Ward Chapel in Provo, and interment was held in the Sandy City Cemetery. Condolences may be sent to the family at: www.walkerfamilymortuary.com.

Michael MacGamwell recently became a volunteer with Gary Hevel, and will continue until June, when Michael enters Oregon State University with an intended major in entomology.

Dave Pollock is a volunteer/contract worker in the Lepidoptera Unit, currently working with Don Davis.

Charyn Micheli is the featured speaker at the Entomological Society of Washington meeting on April 06 (see below).

(color photos/G.Hevel, bxw of Bob Peterson from 1985 NMNH Staff Directory, formatting of front page/J.Louton).

ANNOUNCEMENTS:

The 1100th regular meeting of the **Entomological Society of Washington** will convene on April 06 at 7:00 pm in the Cathy Kerby Seminar Room at the National Museum of Natural History .

Charyn Micheli will present the program "The Longhorned Woodboring Beetles of Puerto Rico and the Dominican Republic."

GENERAL NEWS:

In the April issue of *Bioscience*, John Losey and Mace Vaughan provide a current estimate of the annual value of insect services in the United States. Insects are food for wildlife that supports a \$50 billion recreation industry. Native insects provide more than \$4.5 billion in pest control, pollinate \$3 billion in crops, and clean up grazing lands with a subsequent savings to ranchers of more than \$380 million. The total value is \$57 billion annually, although author John Losey, associate professor of entomology at Cornell University, explains that this is probably only a fraction of the true value.

On March 31, **Gary Hevel** joined Amelia Logan (Mineral Sciences), Gregory McKee (Botany) and Jorge Santiago-Blay (Paleobiology) to provide tours for 38 high school students from France. The students, accompanied by adults, spoke English well, and were later said to have been quite enthusiastic about the presentations. Jorge organized this effort.

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.

Agnarsson, I. and J.-X. Zhang. 2006. New species of *Anelosimus* (Araneae: Theridiidae) from Africa and Southeast Asia, with notes on sociality and color polymorphism. *Zootaxa* 1147: 1-34.

--**abstract**—The cobweb spider genus *Anelosimus* contains species showing various levels of social behavior. American *Anelosimus* are well known and several species have been described from Europe, China, Japan, and Madagascar. However, to date, only two behaviorally unknown species have been described from continental Africa, Southeast Asia, and Australasia combined. In this paper we describe seven new *Anelosimus* species, *A. agnar* n. sp. (Malaysia), *A. biglebowski* n. sp. (Tanzania), *A. dude* n. sp. (Tanzania), *A. linda* n. sp. (Malaysia), *A. monskenyensis* n. sp. (Kenya), *A. nelsoni* n. sp. (South Africa), and *A. sulawesi* n. sp. (Sulawesi) from Africa and Southeast Asia. We also redescribe *A. kobi* Yoshi, 1993 and provide evidence for subsocial behavior in that species. *Anelosimus kobi* shows a marked color polymorphism that is apparently habitat-related, both in populations in Malaysia and in Singapore. Several of the undescribed species were included in previous phylogenetic analyses, and the likely phylogenetic placement of each species is discussed. Based on new behavioral information we discuss the phylogenetic and geographical distribution of temporary and permanent sociality in *Anelosimus*.

Hoffman, R. L., S. M. Roble and **T. J. Henry**. 2005. The occurrence in Florida and Virginia of *Corixidea major*, an exceptionally rare North American bug (Heteroptera: Schizopteridae). *Banisteria*, Number 26: 18-19.

Micheli, J.A. and **C.J. Micheli**. 2006. Reinstatement of *Solenoptera michelii* (Chemsack, 1979) (Coleoptera: Cerambycidae: Prioninae: Solenopterini) as a valid species. *Zootaxa* 1161: 65-68.

--**abstract**-- *Solenoptera michelii* (Chemsak) (Coleoptera: Cerambycidae: Prioninae) is

resurrected from synonymy under *S. thomae* (Linnaeus). Characters and figures are presented to show differences between the two species.

Nearns, E.H. and **W.E. Steiner, Jr.** 2006. A new species of *Plectromerus* Haldeman (Coleoptera: Cerambycidae) from Navassa Island, Greater Antilles. *Zootaxa* 1163: 61-68.

--**abstract**—A new species, *Plectromerus navassae* (Coleoptera: Cerambycidae: Curiini), from Navassa Island, Greater Antilles, is described. Features distinguishing the new species from its congeners are presented.

Nickle, D. A. 2005. Additional notes on the genus *Phlugis* (Orthoptera: Tettigoniidae: Meconematinae) with the descriptions of two new arboreal species from Costa Rica. *J. Orthoptera Res.* 14(1): 57-62.

--**abstract**—Fourteen new species of the predaceous katydid genus *Phlugis* Stal, 1860 (Meconematinae), collected using pesticide-fogging methods, were recently described from northern Peruvian rainforest canopies. This paper reports the presence of 2 new species of *Phlugis* from rainforest canopies in Costa Rica. Although most of our representation of *Phlugis* species in museums consists primarily of easily collected understory species, the occurrence of a very diverse fauna in rainforest canopies, suggests that many species of this genus are yet to be discovered.

Rinkevich, F.D., L. Zhang, R.L. Hamm, G. S. Brady, B.P. Lazzaro and J.G. Scott. 2006. Frequencies of the pyrethroid resistance alleles of *Vssc1* and *CYP6D1* in house flies from the eastern United States. *Insect Molecular Biology* 15(2): 157-167.

--**abstract**—House flies were collected from four dairies in Maine, New York, North Carolina, and Florida, where high levels of resistance to permethrin have been documented. Regions of two genes, *CYP6D1* and *Vssc1*, having alleles that confer resistance to permethrin (and other pyrethroids) were analyzed from individuals at each collection site. The combinations of resistance alleles for *Vssc1* and *CYP6D1* were highly variable between each state. The resistance allele *CYP6D1v1* was found at a high frequency (0.63-0.91) at all sites. Individuals homozygous susceptible for

CYP6D1 were very rare and detected only at the dairy in Maine. In addition to the typical Vssc1 mutation responsible for resistance, kdr (L1014F), we also identified individuals with a L1014H mutation. Although house flies homozygous for the L1014H mutation had a lower level of resistance to permethrin, compared to L1014F, the H1014 resistance allele was frequently detected. No individuals with the super -kdr allele (M918T + L1014F) were detected from the field collections. The intron 3 bp downstream of the kdr mutation was found to be extremely variable, providing an opportunity to reconstruct a phylogeny of Vssc1 alleles. Based on this analysis it appears the kdr-his mutation had multiple evolutionary origins, but that the kdr mutation may have had a single origin. The impacts of these findings on resistance management are discussed.

Steiner, W.E., Jr. 2006. New species of darkling beetles (Coleoptera: Tenebrionidae) from San Salvador Island, Bahamas. *Zootaxa* 1158: 1-38.

--**abstract**—In preparation for a survey and annotated checklist of the Tenebrionidae of San Salvador Island, Bahamas, nine new species of darkling beetles are described. All are so far known only from the island and probably endemic. The majority of them are flightless. All inhabit maritime sand scrub habitats. The new taxa, in the sequence described herein, are: *Trientoma jilae*, n. sp., *Trientoma voegeliiorum*, n. sp., *Branchus geraceorum*, n. sp., *Adelina Bacardi*, n. sp., *Blaptinus kalik*, n. sp., *Diastolinus this*, n. sp., *Diastolinus that*, n. sp., *Nautes guanahani*, n. sp., *Lobopoda deyruipi*, n. sp. Digital images of the holotypes are included. Diagnoses of the new species, with comparisons among related ones, are provided, and notes on habitats and collections are given. One species, *Blapstinus humilis* Casey, is brought out of synonymy under *B. fuscus* Casey and provisionally recognized as valid, pending further revisionary work.

VISITORS:

Robert Aronheim from Oakton, Virginia, visited Robert Robbins and the Butterfly Collection on March 29.

Tessa Bauman from the U.S. Forest Service visited Natalia Vandenberg and the Coleoptera Collection March 03-07.

Matt Bertone from North Carolina State University, a graduate student working on the phylogeny of crane flies, visited the Diptera Collection on March 30-31.

Fenja Brodo from the Canadian Museum of Nature began a visit with Wayne Mathis and the Alexander Crane Fly Collection (at the Museum Support Center) on March 31 and will continue until April 05.

Massimo Cristofaro from Rome, Italy visited Alexander Konstantinov and the Chrysomelidae Collection March 20-23.

Lloyd Davis from Gainesville, Florida, visited Ted Schultz and the Formicidae Collection on March 25.

Netta Dorchin from Bucknell University, Lewisburg, Pa., visited Ray Gagne on March 25 to study specimens of Cecidomyiidae and confer on gall midges.

Jon Gelhaus from The Academy of Natural Sciences in Philadelphia visited Wayne Mathis and the Tipulidae Collection (at the Museum Support Center) on March 31.

Ed Harper from Fairfax, Virginia, visited Robert Robbins and the Butterfly Collection on March 29.

Luke Jacobus from Purdue University will visit David Furth and the Ephemeroptera Collection on April 04.

Kojun Kanda from Cornell University visited Warren Steiner and the Coleoptera Collection March 20-21.

Sergey Kazantsev from the American Museum of Natural History in New York City visited Gary Hevel and the Cantharoidea Collection March 20-23.

Delano Lewis from the University of Florida visited Patricia Gentili-Poole and the Geometridae Collection March 13-15.

Owen Lonsdale from the University of Guelph, Canada, visited the Clusiidae (Diptera) Collection March 30-31.

Joel McMillen, thought to be from the U.S. Forest Service in New Mexico, visited Natalia Vandenberg and the Scolytidae Collection on March 08.

Bob Rabaglia, formerly from the Maryland Department of Agriculture and now with the U.S. Forest Service, Forest Health Protection, Washington Office, was a visitor with Natalia Vandenberg and the Scolytidae Collection March 07.

Jose Luis Salinas Gutierrez from Colegio de la Frontera Sur Ecosur, Chetumal, Mexico began a visit with Robert Robbins and the Butterfly

Collection March 22 and will remain through April 20.

Ursula Gollner Scheduling from the Humbolt Museum in Berlin, Germany visited Thomas Henry and the Hemiptera Collection March 21-23.

Terry Wheeler from McGill University, Canada, visited Norman Woodley and the Diptera Collection March 03-06.

Brian Weigmann from North Carolina State University, lead scientist for the Diptera Tree of Life Project, visited the Diptera Collection March 30-31.

TRAVEL BY STAFF:

Robert Robbins will conduct research in Brazil April 06-17.