METALEPTEA

THE NEWSLETTER OF THE ORTHOPTERISTS' SOCIETY

President's Message

By **MICHAEL SAMWAYS**
President

The 11th Congress of Orthopterology in Kunming, China and organized by Professor Long Zhang, was the largest yet, and immensely successful. There were many stimulating sessions and a great exchange of ideas. Already, this has led to some fruitful new liaisons among several of the delegates. The outcomes of some of these new interactions we will no doubt see unfold at our next Congress in Brazil in 2016.

The Ted Cohn Research Fund

The late Ted Cohn was not only a dedicated Orthopterist, but also an extraordinarily dedicated member of our Society. As well as being a Past President twice, he personally saw that many young researchers were endowed with funds to undertake exciting new research projects. With his sad passing, Ted was extremely generous in leaving a bequest to the Society that has enabled this fund to continue in a vigorous way, and to support young researchers launching their careers with novel research projects. This fund is being chaired by Michel Lecoq to whom all enquiries should be directed.

Farewell to, and best wishes for, our former Executive Director

At the end of 2013, Chuck Bomar retired as Executive Director of our Society from a double term of eight years. Chuck did much for the Society, particularly overseeing membership and Occasional Publications. He also started to move the Society into a truly international organization, especially through the activity of the Regional Representatives. Of course, Chuck is still an active member of the Society and continues to give advice on matters of organization. We wish Chuck all the best in devoting his time to seeing his university Faculty on its way as its Dean. Thanks, Chuck, for all you have done for the Society!

Welcome to our new Executive Director

Our incoming Executive Director as of January 2014 is David Hunter. David is well-known for his long standing commitment to understanding and controlling the Australian plague locust. He has had a long association with the Society, among others, as Regional Representative for Australasia and the South Pacific. David's immense experience and enthusiasm stands him in good stead for crafting new directions for the Society, especially involving new technologies and approaches. Please see David's message in this same issue of *Metaleptea*. Welcome, David!

Regional Representatives

Our Society has an interesting structure in its outreach across the globe and has officially appointed Regional Representatives around the world. This wonderful model is also flexible in that although there are regions that are represented, it does not exclude the possibility of including new parts of regions or even nested regions, where special regional expertise exists and there is great willingness to put a region on the map in terms of its Orthoptera and Orthopterists.

We welcome three new Regional Representatives: 1) Rohini Balakrishnan, who, in Kunming, gave us great insight into the partitioning of song among orthopteran species in the tropical forest canopy, comes to us as a Regional Representative for **South Asia** (principally the Indian sub-continent). From a neighbouring area, we welcome 2) Ming Kai, who represents **South-East Asia** and, finally, we also welcome 3) Claudia Hemp as Regional Representative for **East Africa**. Claudia is a long-term supporter of the Society and an enthusiastic Orthopterist, who for many years, has worked in Tanzania.

The other Regional Representatives are:

- **North America**: Dan Johnson
- **South and Central America**: Marcos Lhano
- **Western Europe**: Fernando Montealegre
- **Eastern Europe, North and Central Asia**: Michael Sergeev
- **Middle East, Caucasus**: Battal Çiplak
- **China, Koreas**: Zhang Long
- **Japan**: Haruki Tatsuta
- **North and Sahelian Africa**: Mohammed Abdallahi Ould Babah
- **Sub-Saharan Africa (excluding East Africa)**: Corey Bazelet
- **Australiasia, including Pacific**: David Hunter

For all members, the Regional Representatives are our ambassadors for your own geographical region of expertise, which may not necessarily be where you reside, but maybe where you do most orthopterology.

Please always feel free to contact your local representative, and do pass on any interesting orthopterological news of whatever nature – on species, field trips, new behaviours, new ecologies, new conservation procedures, new methods of control, among many others. Also, if you have any queries with regards to membership or functioning of the Society, your Regional Representative is your first line of communication.

Wishing all Orthopterists across the world a wonderful 2014!

Introducing our new Executive Director: David Hunter

By DAVID HUNTER
Executive Director

As the new Executive Director, I plan to continue the great work conducted for the past 8 years by my predecessor, Chuck Bomar. First, though, a bit of background as to what I have been doing as an Orthopterist for the past 30 years. After B.Sc. and M.Sc. studies at Simon Fraser University in British Columbia, I completed my Ph. D. (on biting flies, not Orthoptera!) at the University of Queensland. I then worked as Entomologist for the Australian Plague Locust Commission on aspects of the biology of locusts that aid their control. During the late 1990's, I was part of the team that developed a biological control agent for the control of locusts and helped implement its use as part of the APLC preventive locust control program. After leaving the APLC about 10 years ago, I have worked as a consultant in IPM, a major part of which has been the testing and promotion of biological products against acridids and other pests.

I am looking forward to working with other members of the Board to ensure the continuing progress of the Orthopterists' Society. We need to encourage those with any interest in Orthoptera to join our society by demonstrating its value as a way of exchanging information and connecting people to one another. The webpage has a lot of information and is a useful way of making and maintaining contacts, but Facebook is becoming increasingly important, especially if you find an unusual grasshopper that you want identified! You will all no doubt hear from me when I send reminders for membership dues in a month or so, but in the meantime I encourage everyone to use the resources of the society to their maximum benefit.

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The Theodore J. Cohn Research Fund: A call for applications for 2014

(Deadline: March 31st, 2014)

By MICHEL LECOQ
Chair, Theodore J. Cohn Research Fund Committee

Fellow Orthopterists,

It was decided during the last Orthopterists' Society Board meeting in Kunming that the formal name of the research fund of our Society is now "**The Ted Cohn Research Fund**" in honour of the memory of Professor Theodore J. Cohn, founding member, past president for two terms, treasurer for many years, and a very active supporter of research undertaken under the auspices of the Society. We hope that the spirit and vision of Ted will continue to inspire young Orthopterists to undertake new exciting research projects. Over the years, successful grants covered a wide range of topics emanating from many countries. During the past 4 years for example, 25 young scientists from Argentina, Australia, Brazil, China, Germany, New Zealand, UK and USA were funded.

Following a bequest to our Society, I now have the pleasure to announce that it is timely to open a new call for 2014. This research grant is primarily in support of graduate students and young scientists for significant basic research in Orthoptera (*s. l.*). Each grant is limited to around $1,000 per grantee. Proposals should be submitted to the Chair at the address below.

The proposals should be in the following format and restricted to the indicated number of pages:

DESCRIPTION (one page)

1. TITLE
2. SIGNIFICANCE, stressing the new ideas and aspects of the proposal, expected contribution to theory, relation to previous work, etc. (applicants should emphasize the nature and significance of their proposal to provide the judges with the basis for weighing different projects, especially in fields outside their expertise),
3. RESEARCH PLAN, including the particular orthopterans to be studied, methods, logistics, etc.
4. TIMETABLE, even if approximate, to give the judges some idea of feasibility.

CURRICULUM VITAE (half page) including name, full address, present position or years in graduate school, education, number of papers published or completed, citation of selected publications pertinent to the proposal to aid the judges.

BUDGET (half page) including justification of items where appropriate (i. e. why special equipment is necessary unless clearly obvious), other funding for the project, etc. Overheads cannot be provided for Society grants.

The Committee prefers proposals applicable to broad biological problems, even though the actual research may be narrower in scope. Proposals also should include clearly stated hypotheses and aims, and the nature of the evidence to be gathered to test the hypothesis(es) and possible outcomes. Projects which merely involve "finding out what is there" (important as that may be) will not be funded.

Proposals from graduate students must include a simple recommendation from their major professor or advisor. Those not affiliated with an educational or research institution should indicate where the work is to be done.

Important!: A short report will be required from the successful applicants: it shall be written for our newsletter, *Metaleptea*, and be suitable for both orthopterist and non-specialist readers.

Please send your application to Michel Lecoq (lecoq@cirad.fr) by **March 31, 2014.**

I hope this year, as usual, we will receive many exciting research proposals from our young colleagues.

Dactylotum bicolor bicolor *Charpentier, 1843 (Acrididae: Melanoplinae). Mexico, Hidalgo, Near Atotonilco El Grande, December 1st, 2013 (photo credit: Ricardo Mariño-Pérez)*

Symposium Report

By MATAN SHELOMI
Department of Entomology
University of California, Davis

On Nov 10, 2013, at the 61st Annual Meeting of the Entomological Society of America (ESA) in Austin, Texas, a "Phasmatodea Studies Symposium" was held. The moderator and organizer was Matan Shelomi, a Ph.D. Candidate in Entomology at the University of California, Davis (U.C. Davis), who was also there to receive one of the six John Henry Comstock Graduate Student Awards given that year.

The first speaker was Yu Zeng, a Ph.D. student in the Animal Flight Lab of Robert Dudley at U.C. Davis. His talk, entitled "Wing evolution and flight biomechanics in stick insects" related findings on the spread of winglessness in the phasmid phylogeny and included high-speed videos of phasmids leaping, falling, and flying to show the utility of various-sized wings. Of note was the report of altitudinal gradients in phasmid wing size in the Malay Peninsula with subsequent changes in their escape behavior and dietary breadth.

Next was Dr. Daniel J Funk of Vanderbilt University, who related research he did with Patrick Nosil of the University of Sheffield, UK, out of a lab at U.C. Davis. Entitled "Major ecological shifts both promote and retard speciation in *Timema* stick insects", the talk was on research testing the effects of ecological divergence on reproductive isolation. Found only in California and some neighboring regions, *Timema* are the most basal of the Phasmatodea and appear to speciate parapatrically, with adjacent populations that do not overlap.

Dr. Tara Maginnis of the University of Portland gave her talk on "Legs and Eggs: Autotomy, regeneration, and reproduction in phasmids." Phasmids are known for their frequent dropping of limbs in response to predation or to bad molts, and nearly 25% of wild phasmids will lose a limb during their lifetime. Regeneration takes three molts and the subsequent leg will be about 10-20% shorter than an original leg. Seeking the tradeoffs of this metabolically demanding trait, Maginnis found that wingless phasmids that had to regenerate a limb produced fewer eggs while winged phasmids possessed the same fecundity, but smaller wings.

Ending the symposium was Shelomi, who presented his findings on the "Anatomy of the Phasmatodea Digestive Tract: Enzymes and Appendices." The paper was an updated version of the one he presented earlier this year at the International Congress of Orthopterology in Kunming, China, for which he won first prize. His findings include the presence of endogenously produced cellulase enzymes in the phasmid midgut as well as new insight into the function of the "appendices of the midgut," a series of thin tubules that arise from ampules on the Phasmid midgut and which are found on no other insect. Shelomi concluded that the ampules are excretory, but with a function quite unlike the Malpighian tubules they are too frequently compared with.

Though the list of speakers was small (as expected, given the paucity of phasmid researchers, especially within the United States), a small crowd gathered to hear the talks and the information shared was mutually beneficial. This may even have been the largest amount of Phasmatodea-related talks in recent ESA meeting history. Interest in the enigmatic yet charming order is likely to grow over time, especially given Shelomi's successes in promoting his research via social media. He was interviewed at the conference by Orthopterists' Society member and volunteer videographer, Derek A. Woller, for the ESA's blog, EntomologyToday.org, and his research on phasmids has previously been depicted in an animated "2 Minute Thesis" video by PHD Comics entitled "Mystery Tubes in the Stick Bug's Gut."

Lesina sp. *(Tettigoniidae: Conocephalinae: Agraeciini). (photo credit: Eddy Chong, contributed to the Society's Facebook Page)*

The Orthopterists' Society Grant Reports

Searching for a hope: An expedition in the Brazilian Atlantic Forest

By JULIANA CHAMORRO-RENGIFO
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Departamento de Entomologia
Universidade Federal de Viçosa
Viçosa MG, Brazil

"Esperança" (hope) is the common name given to katydids in Brazil."

It all started with a challenging idea: collect katydids in Conservation Units (CUs) of the Brazilian Atlantic Forests (AF). The mission was hard, but, in the end, we achieved our goal! The AF covers the mountainous Brazilian coast along the Atlantic Ocean, which is known to shelter very high biodiversity and, unfortunately, is one of the most threatened biomes in the world. The AF has a variety of landscapes because of its different gradients of altitude and a very complex and still barely understood biogeographic history. The Brazilian coast is a narrow strip in comparison to the whole country, but it has experienced drastic geological and climatic events, which has affected the history of its current biota. Despite its significance in terms of biodiversity, the AF is also one of the most fragmented forests in the world. Sadly, almost all CUs we visited were surrounded by some kind of plantation.

Figure 1. *Several species of walking leaves (Pterochrozini) live in the AF.*

Due to the ecological and historical characteristics of this biome, I decided to collect katydids in different CUs of the AF. The trip started in November 2011 and it ended in January 2012.

I collected in 14 different CUs, with the aid of colleagues and a field assistant. These CUs were national and state parks, or even private reserves. We travelled to the states of Rio de Janeiro, Minas Gerais, Espírito Santo, and Bahia and stayed three nights in each CU. The forests differ in terms of their conservation status, from frequently interfered to highly preserved.

A total of 1,073 individuals were collected, including immatures and adults. Living individuals were photographed (Fig. 1), and all specimens were processed in the field. From most collected individuals, a sample for DNA extraction (a leg) was preserved in alcohol.

All specimens have been identified, but several belong to undescribed taxa, and it will certainly take a long time to describe them all. Species that had not been recorded in nature for a long time were also photographed, and we now have new and important distributional records for them. Images have been added to the OSF and, simultaneously, images of all morphospecies were made available at http://katydidsfrombrazil.lifedesks.org (lifedesk).

Figure 2. *Female ovipositing in a tree trunk.*

I think that the most fascinating event was when a female suddenly landed in front of us on a trail and quickly put her ovipositor in a trunk of a big tree and left her eggs (Fig. 2). Fortunately, we were ready for recording the moment.

From my experience during this survey, I believe that the katydids of the AF deserve constant monitoring, with more field work, in order to acquire more biological information on the numerous species in order to evaluate their conservation status.

This expedition was made possible through support from my advisor, Prof. Cristiano Lopes-Andrade, who kindly heard my ideas, and Prof. Lúcio A. O. Campos who lent us a car. Financial support was provided by a grant from the Orthopterists' Society

2010, the project "Biota de Orthoptera do Brasil" headed by Prof. Carlos F. Sperber, and my Doctoral scholarship awarded by TWAS-CNPq. I will be forever grateful to Dr. David Eades, because all the pictures I've taken so far is with a digital camera that he gave me a few years ago.

Microbial community structure reflects population genetic structure in an ecologically divergent grasshopper

By TYLER JAY RASZICK
Department of Biology
University of Central Florida

The spotted bird grasshopper, *Schistocerca lineata* Scudder, 1899 (Orthoptera: Acrididae), is a widely-distributed North American species that occurs in highly localized and potentially isolated populations that are often associated with different host plants [1,2]. Some populations have been shown to display ontogenetic specialization in which juveniles are host specific, but adults become more generalist [3,4], and this is likely the general pattern for the species. Although there are a variety of ecotypes, only two (Fig. 1) have very well-characterized ecologies [3,4]. Both found in Texas, the first ecotype is associated with dewberry, *Rubus trivialis* Michx., and is tan in color, while the second ecotype feeds almost exclusively on the toxic wafer ash, *Ptelea trifoliata* (L.), and displays density-dependent aposematism and derives chemical defense from its host plant [4,5,6]. With regards to population genetic structure, *Ptelea*-feeders have been shown to be genetically distinct from the *Rubus*-feeders based on mitochondrial DNA [3].

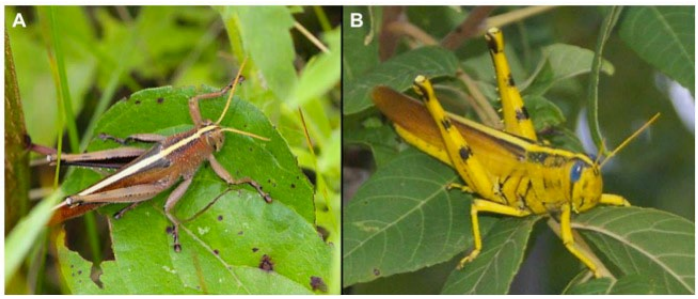

Figure 1. *Field photos of the surveyed ecotypes of Schistocerca lineata: A. Rubus-feeding and B. Ptelea-feeding.*

Bacterial endosymbionts have been shown to help herbivorous insects withstand gut-borne pathogens and may promote rapid evolution and adaptation in their hosts [7,8,9,10]. Additionally, they are also known to contribute to nutrition for insects on suboptimal diets [7,8] and can even metabolize secondary plant chemicals that might otherwise be detrimental to the host [9]. In the desert locust *Schistocerca gregaria*, the gut microbial community is dominated by a relatively low number of species acquired from the diet [11]. Considering that *P. trifoliata* is known to be cytotoxic [12], I hypothesized that *Ptelea*-feeding populations of *S. lineata* will harbor a microbial community different from that of *Rubus*-feeders, who do not need to metabolize plant secondary chemicals.

I collected 10 first, second, or third instar nymphs from 5 populations of *Ptelea*-feeders and 3 populations of *Rubus*-feeders across Texas directly into 100% ethanol and complete genomic DNA was extracted using the QIAGEN DNeasy Kit. As this kit is non-specific this process also extracts DNA from all bacteria in the sample. I then used 454 pyrosequencing (Research and Testing Labs, Lubbock, Texas) to sequence the bacterial 16S gene for all bacteria in each individual. These sequences were then identified using BLAST, providing presence-absence data for every bacterial species across the dataset. I was also able to infer relative abundances of bacterial species in each grasshopper. Next, I determined bacterial generic richness in each sample using the Shannon-Weiner Index of diversity and compared diversity across populations and across ecotypes. I then carried out a hierarchical cluster analysis (HCA) based on the mean relative abundances of the 12 most abundant bacterial genera and compared the pattern to the known population genetic structure of the two ecotypes.

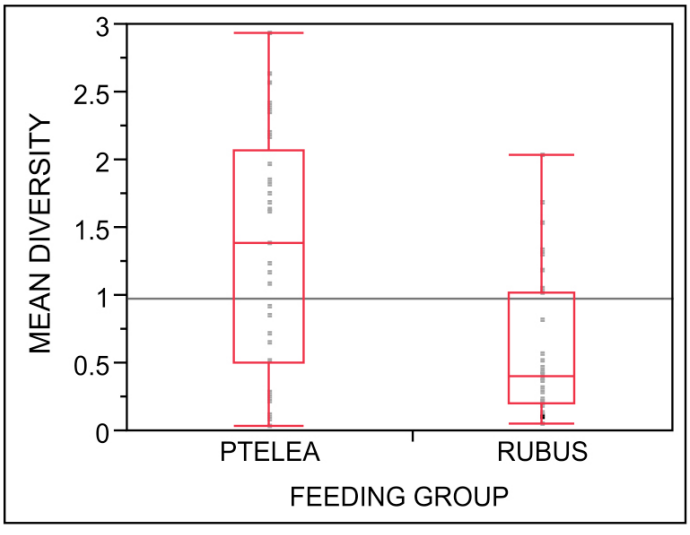

Figure 2. *Mean Shannon-Wiener Diversity of gut microbes for each surveyed ecotype of Schistocerca lineata.*

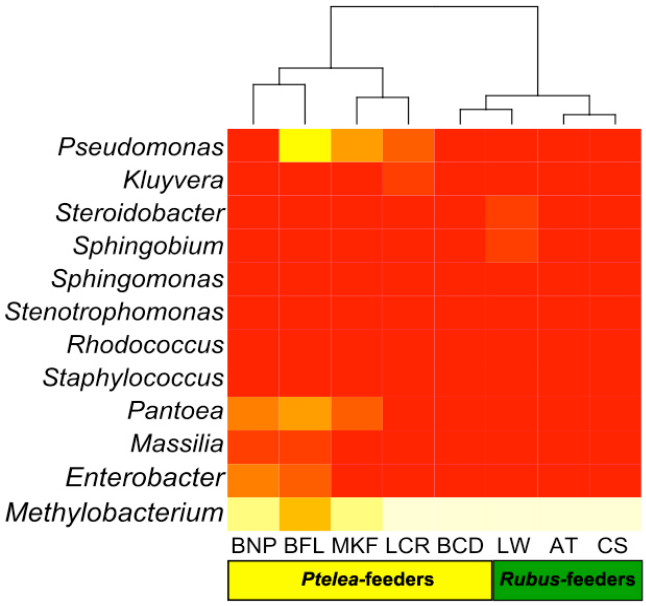

Figure 3. *Hierarchical cluster analysis showing similarity of gut bacterial community structure across populations of the two surveyed ecotypes of S. lineata. Lighter color (yellow/tan) indicates higher abundance.*

I discovered that mean microbial diversity is higher in *Ptelea*-feeders than in *Rubus*-feeders (Fig 2.) and that microbial community composition is distinctly different between the two ecotypes (Fig. 3). Although there is population level variation within ecotypes, when populations are pooled by ecotype, it becomes very clear that microbial community structure reflects the population genetic structure as well as host plant association. One *Ptelea*-feeding population, BCD, does not cluster as expected, clustering with the *Rubus*-feeders rather than the other *Ptelea*-feeders (Fig. 3). One possibility for this, despite the lack of empirical evidence, is that, while collecting, I noticed that BCD was a field site with no canopy cover while all other *Ptelea*-feeding populations were collected in areas with at least some vertical vegetative structure. This suggests that microbial community may be mediated by more than simply host plant association, but also by the local plant community. Nonetheless, our HCA revealed a clustering pattern based on microbial community structure that sorts the eight populations into two groups that reflect the monophyletic clades recovered by Dopman et al. (2002), demonstrating that these two ecotypes are distinct from one another in terms of both genetic divergence and microbial community divergence. This work is part of an ongoing project that seeks to resolve this issue, among others, and to investigate the evolutionary role of the bacterial community in these fascinating divergent lineages.

Funding for 454 pyrosequencing of the bacterial 16S gene was provided by the Orthopterists' Society Research Fund 2011 Award.

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Dracotettix monstrosus *Bruner, 1889 (Romaleidae).*
San Diego County, CA. (photo credit: Bob Parks, contributed to the Society's Facebook Page)

Scattered Recollections: The Sequel

By STAN GANGWERE
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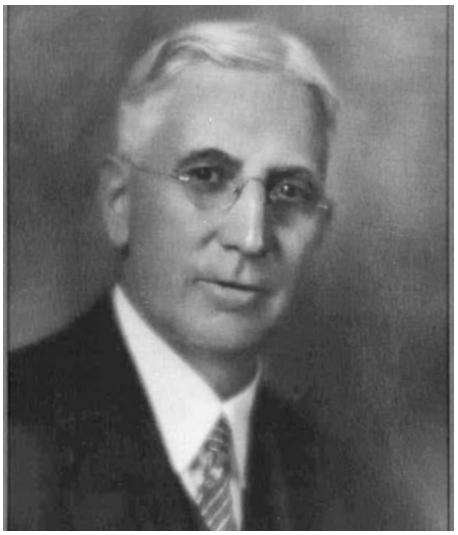
My interest in the orthopteroid insects spans well over six decades during which time I've come to know hundreds of Orthopterists working on all aspects of our economically important insect group. These specialists of yesteryear, now all deceased, deserve not to be forgotten in today's rush toward advancement. Some years ago, I wrote an article entitled "Fifty Years Chasing Orthoptera" (*Metaleptea* 27) and, more recently, one entitled "Scattered Recollections" (*Metaleptea* 29). Today, in my continuing capacity as the Orthopterists' Society's unofficial archivist, I'm providing a follow-up to the latter article with some new descriptions, each based on little more than my personal memory of the deceased individuals (in instances in which I was fortunate enough to have met them in person), as supplemented by documents from my files. These accounts, some of them scant indeed, are offered in hopes of elucidating something of the life, personality, and accomplishments of said persons, the research of many of whom related, directly or indirectly, to my own field of study. I need only add that these accounts do not purport to be full biographies, being nothing more than incomplete vignettes, for which I apologize.

Gordon Alexander *(photo taken from http://ghopclimate.colorado.edu/initial_survey/photos_family.html)*



Frederick B. Isely (photo taken from http://www.isely.info/Fred/fred.html)

G. Alexander & F.B. Isely

I treat this duo together because of their close familial and research relationship, Alexander being the son-in-law and conservator of father-in-law Isely's research materials and, in his own right, a distinguished orthopteran specialist, and Isely, one of the pioneers in the study of orthopteran food habits. I'll treat them in order of mention, Alexander first, then Isely.

Gordon Alexander (1901-1971) was Departmental Chairman at the University of Colorado, Boulder, Colorado. My professional relationship with him was, at first, through friend Harry Grant who, for a time, worked under Alexander at Colorado. Grant apparently told Alexander of my monograph on feeding behavior which was then in press in the 1951 *Transactions of the American Philosophical Society*, whereupon Alexander wrote me expressing interest in this work and volunteering to send me copies of his late father-in-Iaw's publications. He later happened upon my 1967 article "A biologist's view of Spain and the Spanish university system" (*Grad. Comment* 10) and requested information on Spanish research workers and institutions to visit on his then forthcoming sabbatical journey to that country. I willingly provided that information but didn't meet him in person until the 1961 American Institute of Biological Sciences meeting in Boulder. He attended my presentation at the Boulder meeting, gave me a tour of the campus, and introduced me to local officials, after which we talked at length about our shared orthopterological interests. He was generous in his praise of my research and, with his warm, pleasant manner, made me feel welcome, as a result of which I can appreciate why he is so affectionately remembered by his former students and colleagues.

Alexander's research ranged widely from development of keys to the grasshoppers of Colorado, to study of the adaptations of organisms living along gradients in elevation, and to work on the biogeography of birds and grasshoppers of the Rocky Mountain and Front Range of Colorado. Upon retirement, he donated to the university his entire collection of 24,000 grasshopper specimens taken from the 1930's onward as well as his 1958-1960 study collection taken in collaboration with John Hilliard during their NSF-funded project on altitudinal distribution. His colleagues, M. D. Bowers and C. Nufio, discussed Alexander's many contributions to the orthopterology of their state in their 2008 *Metaleptea* article.

Frederick B. Isely (1873-1947) was a distinguished, long-time professor at Trinity University, Waxahachie, Texas. He was born on the family farm in Fairview, Kansas, and was educated in that community before moving on to the University of Chicago. His first employment was in college administration, serving as Dean at Culver-Stockton College and then at Texas Women's College, Fort Worth. Then, in 1931, he returned to his first love, *viz*., teaching, at Trinity. He took nominal retirement in 1946, whereupon he was awarded the honorary Sc.D. degree, but he continued work until his death at San Antonio, Texas. His research was on both freshwater mussels (supported by the U. S. Bureau of Fisheries) and Orthoptera (supported by the National Research Council and the American Philosophical Society).

Throughout his life, despite a heavy teaching load, he worked tirelessly both in the field and in the laboratory producing, among other classic publications, the following ones related to feeding behavior: "The relations of Texas Acrididae to plants and soils" (*Ecol. Mon.* 8, 1938), "Researches concerning Texas Tettigoniidae" (*Ecol. Mon.* 11, 1941), "Correlation between mandibular morphology and food specificity in grasshoppers" (*Ann. Entomol. Soc. America* 37, 1944), "Differential feeding in relation to local distribution of grasshoppers" (*Ecol.* 27, 1946), and, co-authored with Alexander, "Analysis of insect food habits by crop examination" (*Science* 109, 1949). An obituary outlining Professor Isely's life and discussing his contributions to our knowledge of the biology of Texas and southwestern United States grasshoppers and katydids was written by Alexander (*Entomol. News* 60: 29-30). As a side note, I might add that, upon perusal of Professor Isely's seminal studies, I was persuaded to undertake similar research on the southeastern Michigan fauna at the onset of my career at the University of Michigan. Unfortunately, however, I wasn't able either to meet him personally or to correspond with him because of his demise occurring well before my time.

M. Beier

The Austrian arachnologist/entomologist, Max Beier, was born in 1903 in Spittal an der Drau and died in Vienna in 1979. During his years at Vienna's Naturhistorisches Museum, he researched pseudoscorpions as well as orthopteroids. With respect to the latter, one need only recall his landmark, two-part treatment of them in "Biologie der Tiere Deutschlands" (1933, 1934) in the revision of which he was actively involved when I made arrangements to visit him years later at the Vienna museum. Unfortunately, I had to postpone that visit because of scheduling difficulties, and Dr. Beier expired before I could reschedule it. I thereby missed an opportunity to meet someone who, in my opinion, was one of the greats of 20th Century orthopterology, though he is not usually so recognized today, his name having lapsed into relative obscurity.

G.Y. Bey-Bienko

I first met Dr. Grigory Y. Bey-Bienko (1903-1971) at the 1964 International Congress of Entomology celebrated in London. I had known of him previously from having perused his 1963 co-authored (with L. L. Mischenko) book "*Locusts and Grasshoppers of the USSR and Adjacent Countries*" (Israel Program Sci. Transl.). In London, he and I discussed his activities in Russia and mine, both in the U. S. A. and in the Iberian Peninsula, and he provided some citations from Soviet Union research with which I wasn't previously familiar. Then, on the occasion of the following world congress held in Moscow in 1968, I wrote to Dr. Bey-Bienko (who was President of that congress) affirming that I would attend, but would arrive a few days later than the others of the American contingent. To my surprise, he personally met me at the gate on my arrival at Moscow Airport, gave me a tour of the city in his chauffeur-driven limousine, and took me to the offices of Dr. E. S. Smirnov, the organizer of the congress, before dropping me off at my hotel. Though understandably busy, Prof. Bey-Bienko stopped by to see me again on the day of my talk, whereupon we enjoyed another extended discussion. I continued corresponding with him afterward until the time of his death. In my opinion, he was not only a scholar but, because of his exceptional kindness and easygoing manner, a gentleman whom I won't soon forget. He was, as noted by T. H. Hubbell, "a down-to-earth person with the relaxed manner of an Iowa farm boy".

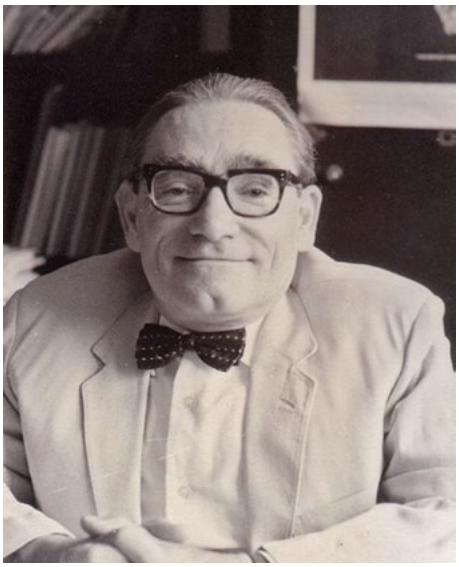
Grigory Y. Bey-Bienko *(photo taken from http://bunyipco.blogspot.com/2013_03_01_archive.html)*

R.F. Chapman

Dr. Reginald (Reg) F. Chapman (1930-2003) is another pioneering Orthopterist whom, with regret, I failed to meet in person though aspects of his research mirrored some of my own, and I often turned to his publications, including his 1964 paper "The structure and wear of the mandibles in some African grasshoppers" (*Proc.*

Reginald F. Chapman *(photo taken from http://entsoc.org/press-releases/angela-douglas-founders-mem-lecture)*

Lucien Chopard *(photo taken from http://gap.entclub.org/taxonomists/Chopard/index.html)*



Vitaly M. Dirsh *(photo taken from http://140.247.119.225/OrthSoc/galleries/Orthopterists/orthopterists_5/orts5.html)*

Zool. Soc. London 142) and his 1957 paper, "Observations on the feeding of adults of the Red Locust (*Nomadacris septemfasciata* [Serville])" (*Br. J. Anim. Behav.* 5), and, for a time, I used his 1969 textbook "*The Insects: Structure and Function*" (American Elsevier) in teaching my course in entomology. He also wrote (co-edited with Tony Joern) "The Biology of Grasshoppers." I served with Reg on the panel of outside experts who, by mail, reviewed Robert Cook's doctoral dissertation, and I talked to him by telephone on occasion including, on our last call, conveying to him the Governing Board's wishes that he run for election to the office of President of the Orthopterists' Society. He turned down our offer cordially, but without explanation; I later learned that our request had been inopportune owing to the fact that he was then so seriously ill that he died shortly afterward.

Dr. Chapman's early activities were with the University of London's Birkbeck College where he lectured and from which he received his doctorate in 1953. His later activities were with the Red Locust Control Service and the University of Ghana's Biological Research Institute. Thereafter, he lectured at the University of Arizona where he shared a productive scientific collaboration with his wife, Liz Bernays, herself a noted Orthopterist. The two of them co-authored a number of important studies on insect feeding behavior, including their 1970 publication "Food selection by *Chorthippus parallelus* (Zetterstedt) (Orthoptera: Acrididae) in the field" (*J. Anim. Ecol.* 39). Dr. Chapman's impressive scientific accomplishments have been reviewed both by Walter Blaney (*Physiol. Entomol.* 28) and by Gregory Sword (*Metaleptea* 24).

L. Chopard

I was unsuccessful in meeting one of Eugenio Morales' close friends, the famous French Orthopterist, Lucien Chopard (1885-1971). In response to my inquiry on the occasion of one of my annual trips to the continent some years after his retirement, I received an enthusiastic invitation to visit him at his offices and see his collections housed in the Muséum national d'Histoire naturelle in Paris. Unfortunately, he expired shortly before my scheduled visit was consummated. Dr. Chopard was one of his museum's most prestigious scientists, having served as its Subdirector and, in 1931, having been President of the Société zoologique de France. He published numerous papers and several books on the French, Mediterranean, and general orthopteroid fauna; notable among them are his 1938 "La biologie des Orthoptères" (*Encycl. Entamal.,* Lechevalier), his 1943 " Orthoptéroïdes de l' Afrique du Nord" (Larose), and his 1951 "Faune de France" (Pt. 56, Orthopteroides) (*Encycl. Entamal.*, Lechevalier). If one were to assess his career based solely on his numerous, excellent publications, one would necessarily conclude that he was another of the greats of 20th Century orthopterology, notwithstanding reservations expressed about him by the irascible J.A.G. Rehn (as explained in the original "Scattered Recollections").

V. M. Dirsh

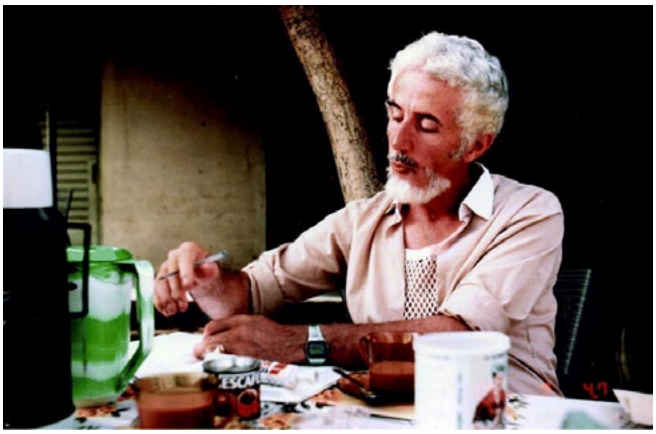
Much of Vitaly M. Dirsh's early life history in the Soviet Union is clouded in mystery, but the little that is known is this: he escaped to Austria from his country of birth and wandered about in Vienna for a time. His compatriot, B. P. Uvarov, finally rescued him, appointing him to a research position in the Anti-Locust Research Centre (ALRC), where he worked until his retirement in 1971 and his death some

years afterward. Among Vitaly's significant publications were his 1975 "The African genera of Acridoidea" (ALRC), his 1975 "Classification of the Acridomorphoid Insects" (Classey), and his 1956 "The phallic complex in Acridoidea (Orthoptera) in relation to taxonomy" (*Trans. R. Entamal. Soc. London*).

I first met him at the 1964 International Congress of Entomology in London and found him to be extraordinarily affable and informative. He and I conversed extensively on that day, and he wrote to me afterward apologizing for his failure to see me on subsequent days of the congress inasmuch as he had become stricken by a viral infection. I corresponded with him regularly thereafter, availing myself of his expertise in handling the various Spanish and other acridoid taxonomic problems that confronted me, the solutions for which were found with Dirsh's invaluable assistance. He later visited us in Michigan on which occasion he demonstrated a prodigious capacity for the consumption of alcoholic beverages. He could drain much of a bottle of vodka in one sitting and then walk away; an impressive feat indeed!

N.D. Jago

I was familiar with Nick Jago's early research in East Africa but knew little else of him until, in 1968, he became Curator of lnsects at the Academy of Natural Sciences in Philadelphia, whereupon I began corresponding with him on routine matters such as outside review of doctoral dissertations, etc. Then, in 1970, he left behind the conventional life of a museum taxonomist for a career at the Anti-Locust Research Centre in London. That move entailed undertaking locust control projects in Mali and other developing-world countries, activities which don't appeal to most western academicians, but he thrived on them. I first met Nick in person at the meeting of the Pan American Acridological Society (the Orthopterists' Society's precursor) in San Martín, Argentina, and was impressed by his knowledge of orthopteroids, enthusiasm for field work, and mastery of the English language. He attended all of the early meetings of the Orthopterists' Society, gave excellent, well-received papers at each, and was persuaded to deliver the Valsain, Spain meeting's keynote address.



Nick Jago *(photo taken from Harvey, A.W. 2005, JOR 14(2):175-178)*

I last conversed with Nick in person at the meeting of Orthopterists held at Siena, Italy, upon the conclusion of which I was fortunate enough to return to London with him. We transferred for our connecting flight at Pisa where I lunched with him at a modest outside restaurant in the shadow of the famous leaning tower of that historic city. The two of us then continued discussing our current activities on the Pisa-London return trip, and our conversation was so engrossing that the flight seemed over almost as soon as it began. I corresponded with him regularly thereafter but never again had the pleasure of conversing in person with him. There is little else I can say. His colleague, Andrew Harvey, of the United Nations' Food and Agriculture Organization (FAO), has written movingly of Nick's professional life, his personal interests, his vintage motor cars, etc. Those who wish additional information may tum to Harvey's tribute (*JOR* 14).

D.K.McE. Kevan & V.R. Vickery

Keith Kevan and Vernon Vickery were well-known Orthopterists who worked as a team on the Macdonald Campus of McGill University in Quebec, Canada, so it seems appropriate to treat them together, as I do below. I had known little about Keith Kevan or his work until 1958 when I addressed the Entomological Society of Canada at Guelph, Ontario. After I had finished showing my motion picture presentation on the use of orthopteran mouthparts during feeding and reading my paper on that subject, Keith questioned me at length about some of the specifics of my paper and also told me of Dr. Popham's publication on earwig feeding, viz., "The feeding habits of Dermaptera" (XVth Congr. Zool.). At first, I found Keith's manner imperious and overwhelming, but the two of us exchanged correspondence, met on numerous occasions thereafter, dined together many times, and became friends. At one such meeting I remember someone asking: "What, precisely, Dr. Kevan, is the proper definition of an Orthopterist?" Keith answered definitively, with the certainty that only he could muster, that such a person is a taxonomist who researches taxa from among the orthopteroid insects. I disagreed with that definition, pointing out to the group that many entomologists (including myself) who do no taxonomic research at all nevertheless devote their lives to the study of one aspect or another of the structure, function, or behavior of orthopteroid insects, and they, too, are deserving of the appellation.

My close friend and distinguished Spanish Orthopterist, the late Eugenio Morales, spoke admiringly of Keith except for his handling of the Institu-

Keith Kevan *(photo taken from http://140.247.119.225/OrthSoc/galleries/Orthopterists/orthopterists_3/orts3.html)*

Vernon Vickery *(photo taken from http://140.247.119.225/OrthSoc/galleries/Orthopterists/orthopterists_5/orts5.html)*

to's cherished grasshopper specimens; he always talked about him as the "the specimen breaker," and, as much as he enjoyed receiving him in his laboratory at Madrid, he shuddered at the thought of all of the broken legs, missing antennae, etc., resulting from Keith's whirlwind visits. A decade after our first meeting, I invited Keith to address both our Biology Colloquium at Wayne State University and our monthly meeting of the Detroit Branch of the Michigan Entomological Society. He came and delivered excellent, well-received talks. His early research consisted largely of taxonomic and faunistic studies on various Old World tropical taxa, such as the genera *Atractomorpha* and *Chrotogonus*. Among his early papers was his 1964 "Methodes inhabituelles de production de son chez les Orthopteres" (*Ann. Epiphyt.fasc. hors serie*), a work that I found useful. His later research, including his 1983 study of Canadian millipedes (*Canad. J. Zool.* 61) and his discussion of that country's terrestrial arthropods (*Biol. Surv. Canada*), was undertaken in Quebec while he served as Chairman of Entomology at McGill University's Macdonald College. He carried out this non-orthopteroid research while also undertaking ambitious studies on Orthoptera, writing, for example, "A Monograph of the Orthopteroid Insects of Canada and Adjacent Regions" and "Land of the Locusts."

Overall, I admired Keith's wide scope of interest, his firm grasp of general orthopterology, and his drive and enthusiasm, though some of his ideas were controversial. An example of this was his 1976 draft scheme for "Suprafamilial classification of orthopteroid and related insects, applying the principles of symbolic logic" (*XVth Intern. Congr. Entomol.*, Washington, D. C.). He also wrote an article for *Metaleptea* that discussed his collection of entomological figurines and thereafter labeled himself an "ethnoentomologist." I have an extensive collection of such items myself, but I hardly feel that I am a qualified ethnoentomologist.

Vernon Vickery (Vic) (1921-2011) served for 38 years at the Lyman Museum before retiring as Emeritus Curator of that institution in 1986. His less pretentious, more "down-to-earth" behavior and speech marked him as different from his mentor, the smoother, more loquacious, English-born Keith Kevan. I had met Vic previously during his earlier visits to the University of Michigan campus, but really didn't know him well until the society's San Martín, Argentina, meeting, one which Keith wasn't able to attend owing to illness. Vic was a hard-working, serious individual totally dedicated to his science and to the welfare of his institution. He was given to voicing strong opinions from which he was not readily dislodged, but he was always a gentleman. He faithfully attended all of our meetings and was elected President to preside over the Valsain, Spain, 1989 meeting. He and I started planning for the Valsain meeting some years earlier. We first visited FAO Headquarters in Rome in hopes of securing funding for his ambitious "Handbook of Locust and Most Serious Grasshopper Pests of the World." We then began several days of discussion with Meeting Organizer, Eugenio Morales, and his associates in Madrid before adjourning to the University of Michigan museum and my house in Ann Arbor. Retirement notwithstanding, Vic continued working for his institution after 1986, faithfully attending its bee hives (resulting in his book on honey bees), conducting research on the crickets, mantids, and stick insects of Baja California, and completing Kevan's unfinished projects, including Part 4 of the latter's "Land of the Locusts." Unfortunately, by 1999, he was so disabled by prostate, hiatal hernia, and other medical complaints that he left the museum and retired to a bungalow in his place of birth, Nova Scotia, where he hoped to complete some unfinished manuscripts, but, alas, his health did not permit much and he died some years afterward.

R.A. Ronderos

I worked closely with Ricardo Ronderos (1928-1995) for several decades and knew him well indeed. Our first meeting took place during 1966-1967 when I was a Fulbright Senior Research Scholar working in Eugenio Morales' laboratory at the Instituto Español de Entomología, Madrid. I remember clearly one day when Morales (whom I discussed in the original "Scattered Recollections" [*Metaleptea* 29]) entered my office to tell me that the Argentine acridologist, Ricardo Ronderos was soon to visit. I knew relatively little about the South American investigators of the time, but I had heard of Ricardo and

looked forward to meeting him. He was not a disappointment. He proved to be a mustachioed, exuberant, extraordinarily affable, and handsome Latin American. He was highly experienced, having served, at one time or another, as Professor of Arthropods and Head of the Department of Entomology of the Universidad de La Plata, as Director of the Center for the Study of Parasitology at La Plata, as Vice-Dean at La Plata, and as Assistant Director of the governmental Institute of Limnology. Despite handling all of these important responsibilities at various times, he somehow found the time to publish extensively on several orders, especially the acridomorph Orthoptera.

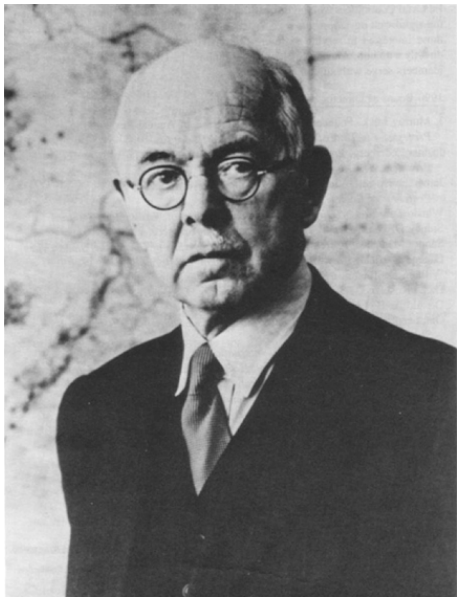
He and I became friends and began a close professional relationship that lasted until his death in 1995. In 1973, I received a Fulbright Senior Research Scholarship to work in Ricardo's laboratory in La Plata. During that year, Ricardo, his associates, and I carried out field work throughout Argentina resulting in the publication of our co-authored 1975 paper "A synopsis of food selection in Argentine Acridoidea" (*Acrida* 4). Then, during his visit to the United States following mine to Argentina, we wrote our co-authored review article "The current status of New World acridology " (*Interciencia* 3) and planned our acridological conference to be held in San Martín, Argentina. As mentioned above, the 1976 conference, implemented on the basis of my NSF award and his matching CONICET grant under provisions of the U.S.- Argentina Cooperative Science Program, led to the creation of the Pan American Acridological Society which, in tum, evolved into today's Orthopterists' Society upon the demise of the Association d' Acridologie. The San Martín meeting brought together a good-sized contingent of Central and South American, North American, and European investigators and was followed by meetings in Bozeman (USA), Maracay (Venezuela), Saskatoon (Canada), Hilo (USA), Valsain (Spain), Montpellier (France), Cairns (Australia), and other venues leading up to the present.

Ricardo Ronderos *(photo taken from http://140.247.119.225/OrthSoc/galleries/Orthopterists/orthopterists_4/orts4.html)*

In my capacity as President and, later, Executive Director of the Society and Ricardo's as President-Elect for the Valsain meeting, we continued working on the affairs of our rapidly burgeoning organization during his 1975 Fulbright - U.S. Government *per diem* award. Ricardo hoped that the latter award, by his research visits to the main repositories of its types at the National Museum in Washington, D. C., the Academy of Natural Sciences, Philadelphia, and the University of Michigan, Ann Arbor, would contribute to a better understanding of the long - neglected South American Ommexechidae. While in Ann Arbor, he stayed in my house and also worked in my Detroit laboratory at Wayne State University. I've discussed these things in depth in my memoirs, and our colleague, the Uruguayan acridologist, Carlos Carbonell, has written a detailed account of Ricardo's life and achievements ("Obituary, Ricardo A. Ronderos: 1928 - 1995," [*JOR* 5], 1996).

B.P. Uvarov

Boris Petrovich Uvarov (1889-1970) was born in Uralsk, Southeast Russia. His father, a bank manager, was in the habit of taking the family on regular summer vacations, and it was during these trips that Uvarov became interested in insect study. He joined the Department of Agriculture in St. Petersburg, whereupon he began writing papers on the Orthoptera of Transcaucasia, but, with the rise of Georgian nationalism and the Russian revolution, he found life increasingly difficult to the extent that, in 1920, Uvarov, wife, and young son emigrated to the United Kingdom upon acceptance of a job offer from the Imperial (Commonwealth) Bureau of Entomology. By 1921, he had observed that certain true locusts exist in two different phases, the so-called *gregarious phase* and the *solitary phase*, each separable from the other structurally, physiologically, and behaviorally and each so distinct from the other that earlier taxonomists had regarded them as separate species. Uvarov's reputation quickly became such that the British Government placed him in charge of a new organization, the Anti-Locust Research Centre (ALRC), with responsibility over the empire's entire international insect control effort. He was exceptionally prolific, writing 465 publications distributed about equally between the periods of his life. His scientific contributions were so important that many different nations bestowed special medals, commendations, and other scientific honors upon him, and his adopted country, Great Britain, knighted him. Among his significant publications were his 1928 "Locusts and Grasshoppers" (*Imp. Bur. Entomol.*), his 1929 "Insect nutrition and metabolism" (*Trans. R. Entomol. Soc.*), his 1931 "Insects and climate" (*Trans. R. Entomol. Soc.*), his 1938 "Ecological and biogeographical relations of Eremian Acrididae" (*Mem. Soc. Biogeogr.*), and, of course, his 1966 Vol. 1 of "Grasshoppers and Locusts" and his posthumous 1975 Vol. 2 (*COPR*). Uvarov's colleagues, N. Waloff and G.B. Popov, published his obituary (*Annu. Rev. Entomol.* 1990,



Sir Boris Uvarov *(photo taken from Waloff, N. & Popov, G.B. 1990. Annual Review of Entomology 35:1-24.)*

no. 35: 1-24).

My personal interactions with Sir Boris extend back to October, 1960, when I wrote him saying that I was scheduled to lecture in Valencia, Spain and he responded, suggesting that, if at all possible, I go also to Madrid to work in Eugenio Morales' laboratory. In March, 1963, he acknowledged my papers on feculae and periodicity, saying that he had already inserted mention of both into the manuscript of his new book "Grasshoppers and Locusts," but asked for clarification of certain portions of my temperature data. In 1964, I met him in person at his ALRC in London, and Eugenio Morales and I lunched with him at that year's International Congress of Entomology. In March, 1965, he commented on my paper on the alimentary canal, invited me again to his laboratory, and apologized for his inability to send me a presentation copy of his new book, though I hadn't asked for one. In Jan., 1966, he acknowledged having received my mouthpart reprint but recommended changes in the mouthpart terminology I had adopted. In March, 1966, he reviewed my biting paper. Then, in October of the same year, after having perused my Tunisian paper (with Morales), he asked for habitat information and advice on facilities for a possible trip there. In April, 1967, he commented on my *Atlanticus testaceus* paper, but questioned my conclusions on the insect's oviposition habits before, in June, 1967, acknowledging that I was right based on the proof I sent him a month later. In Aug., 1967, he was critical of my Iberian biogeography paper (coauthored with Morales) when he reviewed it. In Feb., 1968, to my surprise, he wrote me of his plans to attend the then-forthcoming XIIIth International Congress in Moscow, a visit that I know materialized because I talked to him there despite the circumstances of his departure from the Soviet Union so many years earlier. Sir Boris died some years afterward, and I heard nothing further from his laboratory until July, 1975, when ALRC Librarian Joan Salter asked permission to use figures from some of my publications in his posthumous Vol. 2.

The lengthy preceding paragraph indicates at risk of tedium the breadth of correspondence that Sir Boris, the acknowledged founder of modem acridology, and I shared, but the reader should remember that I was only one of many orthopterists from throughout the world who consulted with him, others possibly in a similar manner and depth. For my part, I found him to be a gracious, soft-spoken, analytical person meticulous to a fault in all that he did, and I noted that his comments were generally *a propos*. For example, in March, 1965, when queried about the demise of J.A.G. Rehn, his erstwhile competitor, he affirmed that, yes, Rehn had done a tremendous amount of work on Orthoptera but, in his opinion, he had relied too much on his personal experiences while ignoring advances made by others. Then, a year later, in March, 1966, when commenting on the untimely demise of Rehn's young successor at the Philadelphia Academy, Harry Grant, he said it was an unfortunate development because he thought Harry to be a fine entomologist who promised an improved future cooperation between the Academy and his ALRC. Moreover, I detected a jocular note in some of his correspondence. For example, when reviewing my orthopteran phylogenetic paper, he supported my conclusion that the mandibles of the fossil *Rhyniognatha* are insectan and not just arthropodan, a position contested by F.M. Carpenter, the American paleoentomologist who was then the world expert. Sir Boris told me: "Rest assured, Mr. Gangwere, no *living* authority will ever prove you wrong."

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Erucius sp. *(Chorotypidae: Eruciinae) from montane forest in Perak, Malaysia. (photo credit: Kurt Orion G, contributed to the Society's Facebook Page)*

In Memoriam: Theodore J. Cohn
(1930 - 2012)

By STAN GANGWERE
Professor Emeritus
Wayne State University
Detroit, MI, USA

With sadness, I report today the demise of friend, colleague, and Orthopterists' Society Past President Theodore J. ("Ted") Cohn who succumbed at the University of Michigan Hospital in Ann Arbor, Michigan, on November 25th, 2012 following a prolonged illness.

Ted was born in New York where his father was a highly successful attorney, and, as a member of one of that community's prominent families, his early life was one of comparative affluence. I'm not sure when and how Ted first became attracted to insect study, but during his pursuit of the baccalaureate at Cornell University in Ithaca, New York, he became a confirmed Orthopterist. Upon graduating from Cornell in 1952, he joined the United States Army as a Second Lieutenant and served in the Vietnam War. Upon completion of military service, he matriculated at the University of Michigan to study under the renowned Professor T. H. Hubbell, who supervised the Insect Division's orthopteroid collection, one of the largest, most complete assemblages of those insects in the world.

As for myself, upon returning from a 10-day southeastern United States collecting trip, I found that I was now sharing the tranquility of my office with a brash, irrepressible, impossibly enthusiastic new student; it was Ted! That's how we met, and we were to be confined together in the same room! Never were two people more unlike than the two of us! I'm perhaps thought of as an over-fastidious "neatwit" (hopefully not nitwit!), as opposed to Ted who operated in clutter, but somehow successfully executed whatever complex study next garnered his attention. Despite our personality differences, we became friends, and he spent many, many hours with me and my wife in our Ann Arbor apartment, introducing us, for example, to lox and bagels and other ethnic food stuff with which we previously weren't familiar. Ted's father had died some years earlier, but his mother, a warm, friendly, down-to-earth person, visited him from time to time, on which occasions the four of us dined together. These were busy, happy days that we remember fondly. Soon, however, I completed my doctoral research and departed for Wayne State University leaving Ted to spread out in the confines of our once-joint office.

Two momentous events occurred in Ted's life at about this time. One was his affliction with poliomyelitis. Upon completion of an especially exhausting collecting trip to Mexico in pursuit of katydids of the genus *Neobarrettia* (= *Rehnia*), he collapsed just as he reached the museum parking lot. Fortunately, he was one of the lucky ones who, after months of hospitalization, recovered from that debilitating disease, though it left a lasting physical impact on him. Thereafter, he was frail of body, and his walk took on a permanent limp. The second major event in his life was the introduction into it of Jean, an incoming ornithology student who was soon to become his wife. Ted eventually completed his research, received the Ph. D. in 1961, but remained on campus in Ann Arbor until, in 1964, he was appointed Assistant Professor at San Diego State University. The life of the happy couple, Ted and Jean, then took on a familiar pattern. They split their time, devoting the months of the

Ted Cohn *in Montpellier, 2011 (photo taken from http://140.247.119.225/OrthSoc/galleries/Orthopterists/orthopterists_6/orts6.html)*

academic year to San Diego where Ted advanced steadily through the ranks until he was appointed Professor of Biology, but spending the summer months either collecting in Mexico/the western U.S. or working at the museum in Ann Arbor (which appointed him Adjunct Professor). At San Diego, he taught the usual courses for an insect academician, including general entomology, invertebrate zoology, evolution, taxonomy and systematics, and biogeography. He worked this way until, in 1993, ill health forced him to retire from San Diego as Professor Emeritus, whereupon he relocated permanently in Ann Arbor.

After that time, declining health, blindness, and, above all, the death of Jean in December, 2011, took a toll on him, though he persisted in going to the museum almost daily. Fortunately, he was able to complete his last major study, a collaborative one on *Dichopetala* that is now in press. Ted's overall productivity of about a dozen major publications in over five decades of research is, on its face, not an impressive total, but total is not everything, and who are we to evaluate the merit of his studies? I know that I, a non-taxonomist, am not competent to do so, but I am aware of the hours and hours of meticulous work that he devoted to everything that he did, of his relentless search for new material, and of the countless revisions that he wrote because he was never satisfied, all of which suggests that his research is of high quality.

Perhaps an event of some decades ago will illustrate Ted's general attitude toward research and the compelling role it played in his life. For some years he importuned me to redirect my attention, at least temporarily, from the feeding behavior of Iberian orthopteroids to that of his Mexican southwestern United States katydids. I eventually agreed with the stipulation that he would provide an adequate supply of living *Neobarrettia* to be used in cage experimentation. The result was a 1990 paper published in the Bol. San. Veg. Plagas 20. He reviewed it and pronounced it as excellent, but declined co-authorship saying that he wasn't comfortable having his name on a work in which he hadn't participated personally and that his sole concern lay in furthering our understanding of the biology of his beloved katydids.

There is yet another dimension to Ted's life to be mentioned. He came onto the entomological scene from a position of comparative wealth which, together with shrewd business investments, netted him a more-than-comfortable retirement income, though one would not have known it from his casual dress and unassuming behavior, and Jean, too, came from a well-to-do family from which she also inherited. Inasmuch as the two of them had simple interests, lacked children, and had few living relatives, money was never a problem for them, and the only question was what was to be done with it upon their demise. Ted's intent was to, therefore, make bequests to the Theodore J. Cohn Foundation in La Mesa, California, to Michigan's Insect Division, and to the Orthopterists' Society. I can only assume that these wishes were honored and that the bequests were implemented upon his death. Ted was also a proud sponsor of the San Diego Opera Company, and, through the years, tried never to miss one of that organization's productions. Not surprisingly, he intended to make a generous bequest to it as well. Money aside, those of us belonging to the Orthopterists' Society will miss Ted for his warm, engaging presence, his unmatched enthusiasm for everything that he did, and for his obvious zest for life. He was a fine man whose disappearance from the academic scene makes our world a poorer place. May he rest in peace.

*** Editor's note:** This obituary was originally submitted to *Metaleptea* on April 19, 2013, but its publication was delayed because the last issue was dedicated to the International Congress. I feel that Dr. Gangwere's contribution is quite fitting for this issue in light of his other article as well as our announcement of the Ted Cohn Research Fund. Although *Metaleptea* has already published the obituary of Ted Cohn in a previous issue [33(1)], I think we can all appreciate Dr. Gangwere's unique perspective, which is why it's published here.

Pseudophylline nymph *(Tettigoniidae) from Borneo. (photo credit: Zestin Soh, contributed to the Society's Facebook Page)*

Treasurer's Report

By PAMM MIHM
Treasurer

The Statement of Assets as of December 31, 2013, and Cash Summary are shown below. The largest cash activity was in support of the Orthoptera Species File. This is funded by an allocation of endowment income from the University of Illinois. The second largest use of cash was publishing the *Journal of Orthoptera Research*, which operated at a $3,300 deficit in 2013. Additionally, the Orthopterists' Society received a very generous gift from the Estate of Dr. Theodore Cohn in the initial amount of $400,000 with more expected to come later. The money has been invested, so that the income from the investments can be used to fund research grants and assist with operating expenses. However, the Society has a tight budget, so it is very important for you to pay your membership and publication fees each year. Please watch for a 2014 billing in late February or March and also please update your information on the Society website, so that your billing will be accurate. If you have any questions, you can contact me at p.mihm@regencyapartments.com.

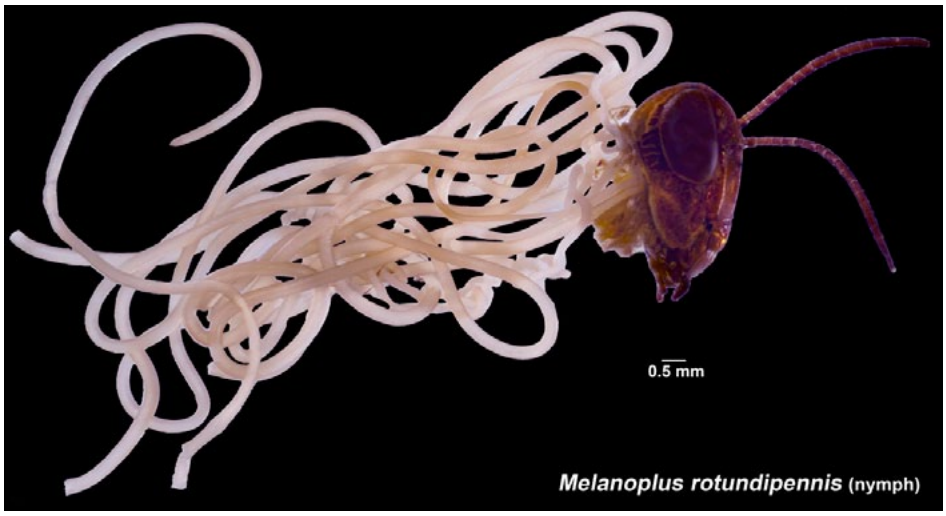
Orthopterists' Society
Statement of Cash Receipts and Expenditures
(1/1/13 through 12/31/13)

Cash Receipts	
Dues	$6,935.00
Publications	7,024.54
Page charges	2,070.37
Royalty and revenue sharing	15,975.25
Other	233.85
Donations	10,230.00
University of Illinois allocation	79,916.00
Transfer cash from investments	6,500.00
Proceeds from T. Cohn's Estate	400,000.00
Interest income certificate of deposit	32.88
Total Cash Receipts	$528,917.89
Cash Expenditures	
Publisher JOR	$7,413.42
JOR assistance	21,000.00
Research grants	4,740.00
Executive director-remuneration	1,500.00
Ed. Metaleptea remuneration	500.00
Webmaster remuneration	300.00
Maintenance of Orthoptera Species File	73,486.56
Travel-Int'l Congress Orthopterology	10,545.31
Uvarov award	1,500.00
Shipping books to Brazil	925.25
Professional fees (income tax preparation)	985.00
Other	777.06
Total Cash Expenditures	$123,672.60
Excess of Cash Receipts over Cash Expenditures	$405,245.29
Beginning Cash Balance	5,933.54
Ending Cash Balance 12/31/13	411,178.83
1/9/14 Invest proceeds from T. Cohn's Estate less $15,000 for working cash	(385,000.00)
Cash balance after investing Cohn gift	**$26,178.83**

Orthopterists' Society
Statement of Assets
(As of December 31, 2013)

Cash	
Paypal cash balance	$405.28
Chase Bank	410,773.55
Total cash at 12/31/13	411,178.83
1/9/14 Invest proceeds from T. Cohn's Estate less $15,000 working cash	(385,000.00)
Cash balance after investing Cohn's gift	$26,178.83
Investments at market value	
Vanguard:	
Grants (Note 1)	$25,757.61
Operating (Note 2)	51,749.42
Wells Fargo:	
AAAI (Note 3)	10,862.96
Endowment (Note 4)	23,023.43
Operating (Note 2)	8,909.77
Total investments at 12/31/13	$120,303.19
Investments from Ted Cohn's gift 1/9/14	
Vanguard:	
Grants (Note 1)	$200,000.00
Operating (Note 2)	185,000.00
Total investments from Ted Cohn's gift	$385,000.00
Total investments after Cohn's gift	$505,303.19
Total assets	**$531,482.02**

Note 1: This fund is restricted and can only be used for research grants.
Note 2: This fund is nonrestricted.
Note 3: This fund can only be used for the Uvarov Award made at each int'l meeting.
Note 4: The income in this account is available for Society expenses; can extract capital but must have a plan for repaying it within 3 years.



A PHOTO OF THE HORROR

This is a photo of the horror I found hiding within a number of the nymphal members of a population of *Melanoplus rotundipennis* from a pine flatwoods habitat within Rock Springs Run State Reserve in Central Florida. I brought back quite a few live specimens to observe in the lab and the youngest kept dying suddenly, so I decided to dissect some. This is my first encounter with an internal parasite (a nematode of some sort, in this case) and, at first, as I peeled back anatomical layers I thought its inner organs were just maturing abnormally. Then, I removed everything and could not believe my eyes! I am not sure if this is a single nematode or multiple ones, but I have no idea how this nymph (or any other) was still functioning. Remarkable and bizarre! Since this realization I have discovered a number of cases of this issue in other populations and within other species of the small, brachypterous group with which I work: the Puer Group. (Photo credit: Derek A. Woller)

Editorial

By **HOJUN SONG**
Editor, ***Metaleptea***

Thanks to all of you who have contributed to *Metaleptea*, this issue turned out to be a fine-looking piece. I would like to especially thank Dr. Stan Gangwere for his wonderful stories about the giants in our field. It is very important to archive these stories for our future generations.

I would also like to thank those who allowed me to use their wonderful images. Many of them were posted in our Facebook page and I must say that the quality of these macro photos of our favorite creatures is outstanding! I would like to highlight these talents in the upcoming issues.

Also, I cannot do this job without the help of our associate editor, Derek A. Woller, so thank you, Derek!

To be published in *Metaleptea*, please send me any articles, photographs, or anything related to Orthoptera at song@ucf.edu with a subject line starting with [Metaleptea]. I am always especially interested in receiving for regional reports and OS grant reports. As for the format, a MS Word document is preferred and images should be in JPEG or TIFF format with a resolution of at least 144 DPI. The next issue of *Metaleptea* will be published in May 2014, so please send me content promptly. Also, please do not hesitate to send me feedback regarding *Metaleptea*. I look forward to hearing from you soon!

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