

Metaleptea The ORTHOPTERISTS' NEWSLETTER

Vol. 13, No. 2

THE ORTHOPTERISTS' SOCIETY

December 1991

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A MESSAGE FROM THE EDITOR

Compared with the previous issue of *Metaleptea* (Vol. 13, No. 1) which totalled twenty pages, this issue seems small. In an effort to meet the growing interest among membership for news and articles of an orthopterological nature, I ask you to seriously consider writing something soon and sending it to me in time for our next issue, which I hope to publish in March or April, 1992. Collecting trips, observations on the behavior, ecology, or natural history of orthopterans, anecdotes, etc. are all welcome items for *Metaleptea*.

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I have talked with President Dan Otte about the first issue of the Orthopterists' Journal. Progress is being made with a conservative approach taken to ensure producing a very high caliber premiere issue. I urge researchers to send their manuscripts directly to Editor of the Orthopterists' Journal Nicholes D. Jago. There are set procedures for manuscript submission, copies of which were sent out to the entire membership about a year ago. For those who need this information, just request it through Nick or me, and we will be happy to forward the information to you.

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The anticipated upcoming issue of the Occasional Papers Series of the Orthopterists' Society has been cancelled. Two manuscripts were withdrawn, and recent financial constraints on Society's funds makes it too expensive to publish at this time. I regret the change in plans but look forward to seeing the Orthopterists' Journal appear as a regular series, eliminating the need for Occasional Papers (at least in regards to smaller papers).

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The Orthopterists' Society is saddened by the loss of one of its great members, Dr. D. Keith McE. Kevan. Keith was an Honorary Member in the Society since 1981 and was one of the Society's founders at the St. Martin de los Andes Meeting in Argentina in 1976. At times outspoken, he was one of our most colorful and respected members, and we honor him in this issue with an article on his life and contributions.

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I am in the process of relocating to a new office here at the Smithsonian, although my mailing address will remain the same (at least for now). I have many reprints to eliminate from my new office. If anyone is interested in nearly complete sets of papers of either Ashley B. Gurney or David A. Nickle, please let me know as soon as possible; I will be happy to send them to you.

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Finally, I would like to thank once again the help of my technician, Terry Nuhn, for his invaluable time and effort in making this a top quality newsletter. I thank also Ms. Jin Xing-Bao, a former student of Dr. Kevan, for her figure of a Pacific Island tettigoniid. Several more will appear in future issues.

THE EXECUTIVE DIRECTOR'S COMMENTS

S. K. GANGWERE

Membership Statistics The 1992 Orthopterists' Society billing just mailed from the Directorate necessitated, as always, an update of the membership rolls. The results may be of interest. Our current (48th) list includes nearly 300 members from 42 different countries of the world. The USA with 84 members leads the list, followed by the UK with 27, Spain with 20, Canada with 18, Australia with 13, Germany with 11, India with 9, the Peoples Republic of China and Japan with 7 members each, and Argentina, Italy, the Netherlands, and France with 6 members each. All other membership countries are represented by 5 or fewer persons each. These totals are impressive in view of the fact that, worldwide, orthopterists are so few in number, but the numbers are inadequate. I remind you of our goal to represent the world fraternity of orthopterists, something which we cannot do if countless prospective members remain outside of our fold. A vigorous membership campaign is indicated, toward which each member is asked to contribute. Each should consider himself/herself an at-large member of the Membership Committee and hence personally responsible for soliciting new members. This is the intent of routinely enclosing in our mailings a brochure and application blank. I urge you to use them. Give them to your students, to colleagues, and to others who, by virtue of their orthopterological interests, should join our ranks. And bring them to the attention of your library's purchasing agent, with a request for an institutional subscription.

New Billing Statements ... The 1992 billing statement sent recently appears on a new form that requires each member to calculate his/her total annual payment. Institutional Membership (now \$25 U. S. currency) has been brought more into line with rates of other organizations. All other rates remain the same. The society's dues are a bargain, having been kept minimal in hopes of not outpricing the budget of the 3rd world members who especially need access to our services. Active Membership continues to cost \$15 and Student Membership \$7. Honorary and Emeritus Membership continues to be gratis (\$0). All enjoy full benefits of membership and receive our attractive, informative newsletter Metaleptea. There is, however, a supplemental publication charge in effect for the first time with this billing. This \$15 charge entitles a member to receive all numbers of the Orthopterists' Journal and any volumes of the Proceedings published during the year. One or two numbers of the Journal are expected in 1992 and in 1993 in addition to the 6th Proceedings, expected in 1993 or 1994. The Directorate assumes that each member requests all publications unless so informed on the returned billing form. Those members who request the Journal and the Proceedings are asked to include on their statement the \$15 supplemental publication charge. Those who request Metaleptea only should delete the \$15 publication charge and pay only dues in the appropriate amount.

Donations . . .

The 1992 billing form also includes a line for donations to the Society (recognized by the U. S. Government's IRS as a tax-exempt organization) and a line for member sponsorship. The former is for among other things, a research award to be given on the occasion of the Society's forthcoming 6th International Meeting to be held at Hilo, Hawaii. The latter is for our more affluent members who wish to assist colleagues from developing countries in which the rate of exchange is unfavorable or colleagues from countries in which the economy is restricted, money export being banned or difficult. Sponsored members have all the benefits of membership despite their inability to pay dues personally and, in return, provide their sponsor with reprints, specimens, data, etc.

Pest
Publications
are still
available...

Members needing additional copies of past Pan American Acridological Society or Orthopterists' Society publications (Metaleptea, Proceedings, Occasional Papers) and new members lacking past publications are reminded that a small supply of virtually all volumes and numbers is available at the Directorate. Prices (in U. S. currency) are as follows: Metaleptea \$1.50 per number or \$3.00 per volume, Proceedings \$15 per volume, and Occasional Paper #1 \$2.00. Please advise me of the volumes and numbers desired and send me the remittance: S. K. Gangwere, Orthopterists' Society, c/o Department of Biological Sciences, Wayne State University, Detroit, MI 48202, U. S. A. Orders may also be placed by invoice. Simply ask to be billed.

Field Guides . .

The first numbers of the Orthopterists' Society's Field Guides to the Most Serious Locust and Grasshopper Pests of the World are now available through the untiring efforts of Field Guides Editor Vern Vickery to whom we owe a debt of gratitude. These excellent guides with color photographs, produced through a re-

stricted grant by the Canadian International Development Agency (CIDA), are not regular society publications. In accordance with our understanding with the granting agency, we are obliged to offer them free of charge (\$0.00) to members who specialize in research in the guides' several regional areas. To the extent that copies remain available, they may also be purchased by non regional members and others at the nominal cost of \$0.05 (U. S. currency) per page. Some guides are published in English (E = English text), some in French (F = French text), and some in Spanish (S = Spanish text). Set 1 and the cost of the individual guides of which it is composed includes:

B4E. Food Habits and Feeding Behavior of Locusts and Grasshoppers. By S. K. Gangwere. 56 pp, \$2.80

C2E. The Migratory Locust in Africa and in Madagascar. By M. LeCoq. 28 pp, \$1.40

C3E. The Migratory Locust, Locusta migratoria, and its Asiatic subspecies, By Y.-L. Chen. 34 pp, \$1.70

C5E. The Red Locust, Nomadacris septemfasciata (AudinetServille) in Africa. By J. A. Whellan. 12 pp, \$0.60

C2F. Le Criquet Migrateur en Afrique et a Madagascar. By M. LeCoq. 31 pp, \$1.55

C5F. Le Criquet Nomade Nomadacris septemfasciata (AudinetServille) en Afrique, By J. A. Whellan. 13 pp, \$0.65

C7E. The Senegalese Grasshopper, Oedaleus senegalensis (Krauss 1877), in West Africa. By M. Launois & M. H. Lanois-Luong, 20 pp, \$1.00

C7F. Le Criquet Senegalais, Oedaleus senegalensis (Krauss, 1877) en Afrique de l'Ouest. By M. Launois & M. H. Launois-Luong. 22 pp, \$1.10

C8E. The Variegated Grasshopper Zonocerus variegatus (Linne, 1758). By J. Chiffaud & J. Mestre. 15 pp, \$0.75

C8F. Le Criquet Puant Zonocerus variegatus (Linne, 1758). By J. Chiffaud & J. Mestre. 16 pp, \$0.80 C15S. Pterophylla beltrani (Bolivar y Bolivar, 1942) (Tettigoniidae: Pseudophyllinae). By L. Barrientos Lozano & J. den Hollander. 11 pp, \$0.55

D7E. Locust and Grasshopper Pests of U. S. S. R. By S. Storozhenko. 89 pp, \$4.45

Each individual guide may be purchased at the listed price + \$1.00 surface postage. The essentially English Set 1 (B4E, C2E, C3E, C5E, C7E, C8E, D7E, as well as the Spanish C15S) is valued at \$13.25 + \$4.00 postage = \$17.25 total but may be purchased in its entirety for \$15.00, surface postage included. Set 1 in French, to the extent available, has a comparable cost. Other sets, ready for publication, are to go to press in the near future, and still others are in preparation.

The Directorate notes with sadness the recent demise of our distinguished Canadian friend and colleague Keith Kevan, an outstanding scientist and a truly prolific Orthopterist to whom the Society awarded, years ago, one of its prestigious Honorary Memberships. Keith leaves a void that will not easily be filled. His obituary appears elsewhere in this number of *Metaleptea*.

The dates August 1 - 5, 1993, have been set aside for the 6th International Meeting of the Orthopterists' Society, to be held at the College of Continuing Education and Community Service Conference Center of the University of Hawaii, Hilo, Hawaii, U. S. A. Please mark these dates on your calendar. You will not want to miss this outstanding event! I shall provide a tentative program of the meeting in a subsequent *Metaleptea* when once I have resolved with the Center the final terms of sponsorship, responsibilities, and finances.

Our checking account balance as of 31 October, 1991, is \$5,363.29 and our savings account balance \$3,972.12, for a total of \$9,335.41 (all totals in U. S. currency). Financial commitments for the first number of the Journal loom, along with some other expenses. If your dues are already paid, please accept our thanks. If not, I hope you will help by prompt payment to Treasurer Roger Bland of any monies owed. These may be paid by personal check, International Money Order, U. S. Postal Money Orders, or cash. Payments may be made some years in advance to eliminate the need to send a yearly money order.

Please note that I) personal checks from non - U. S. banks must be drawn on a bank that has a cooperating U. S. bank whose name also appears on the check, and 2) non - U. S. checks must have a routing code (a series of computer - read numbers) along the bottom margin of the check. We apologize for this inconvenience, but checks not drawn on a U. S. bank or ones that lack the routing code cannot be processed without a prohibitively expensive \$10 - \$30 processing fee. We have no recourse but to return them to the sender with a request that a properly drawn check be issued.

. More on Field Guides

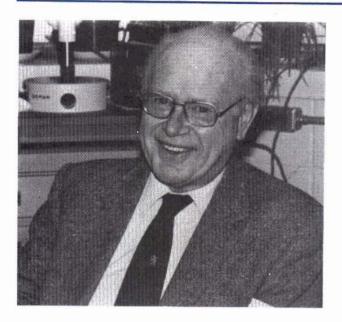
... A departed colleague

. The Meeting in Hawaii

..... More, Finances



OBITUARY



DOUGLAS KEITH McEWAN KEVAN 1920-1991

Keith Kevan's father was a medical doctor and also was one of Scotland's leading conchologists and coleopterists. His mother was a botanical enthusiast. This produced an environment that led him at an early age to study natural history. He began collecting insects about the age of five, and this interest remained with him throughout his life.

He was born in Helsinki, Finland, but all of his formative years were spent in and around Edinburgh, Scotland. His formal education was begun at George Watson's Boys College in Edinburgh, where he claimed to have performed creditably but not outstandingly.

Just prior to entering the University of Edinburgh in 1937, he made a short visit to Canada with a Scottish schoolboy's organization. He did not see Macdonald College then but did visit the Ontario Agricultural College (now the University of Guelph) in Ontario. That gave him at least a glimpse of Canadian agricultural entomology.

He achieved great distinction at Edinburgh University, winning Second-Year Class medals in zoology and botany and the Third-Year Class medal in zoology. He also won the University/Royal Botanic Garden Herbarium Gold Medal. Even at this early age he displayed his ability in innovation by persuading the Faculty of Science to permit him to include in his curriculum all available courses in entomology and parasitology, initiating, in effect, and Honours Entomology program in a "pure science" stream. Prior to this, all entomology was included only in the Agricul-

tural Zoology program.

He graduated in 1941 with First Class Honours in Zoology and was awarded a Vans Dunlop Postgraduate Scholarship and a British Colonial Office Postgraduate Agricultural Scholarship.

At this time it looked as though he would soon be serving in His Majesty's Armed Forces but, fortunately for entomology, the government sent him instead, as an Entomologist Specialist Cadet of the Colonial Agricultural Service, to Imperial College, St. Augustin, Trinidad, for a two-year course in tropical agriculture and related subjects. In 1943,

he was awarded Associateship of the Imperial College of Tropical Agriculture and was granted a short leave.

He returned to the United Kingdom and, as short as the leave was, it was long enough to court and marry Private Kathleen E. Luckin, Royal Army. Some months later she was discharged to await the birth of their first son, Peter. Later they had two more sons, Martin, born in Kenva. and Simon, born in England.

Keith was posted to Kenya as Entomologist with the Kenya Department of Agriculture. He was promptly attached to the East-African Anti-Locust Directorate and became involved in reconnaissance and control of the Desert Locust in Kenya, Ethiopia, and the Somalilands.

For many years Keith had on the wall of his office a picture taken in Kiambu, Kenya, September, 1945, of himself and B.P. (later Sir Boris) Uvarov. Keith told a story of riding with B.P. in an open truck when a grasshopper flew in and was immediately seized by Uvarov. He looked at it, exclaimed "Obviously a new species" and then threw it out the window. I have a copy of the picture too bad it is only black and white as it does not show the red hair Keith had at that time.

During periods of respite he also investigated cotton pests in Uganda and eggparasites of the Eucalyptus weevil in the Kenya Highlands. During all of his stay in Africa he collected and studied orthopteroid insects wherever he found them.

Keith returned to the United Kingdom in 1948, resigned from the Colonial Service and, at age 27, became the first head of the new Zoology Section in the Faculty of Agriculture of the University of Nottingham.

There he developed undergraduate teaching programs in Entomology and in Agricultural, Forest, and Veterinary Zoology. He directed graduate students in studies of aphids, cutworms and thrips and at the same time, developed his study of orthopteroids, specializing in the Family Pyrgomorphidae and eventually became the world authority on this group of grasshoppers.

He was active as well in Soil Zoology, organizing the first international conference at the university in 1955 and published the proceedings the following year. He also wrote the first edition of his book, "Soil Animals" that year but it was not published until 1962, after he had left Nottingham.

He was directing Ph. D. students so he thought it might be appropriate to have this degree himself and obtained the degree in 1956. His thesis was taxonomic on the genus Chrotogonus in the Pyrgomorphidae.

In 1957 he was offered full professorship and Chairmanship of the Department of Entomology, McGill University, Macdonald College, Ste-Anne-de-Bellevue, Quebec, Canada. He accepted and moved to Canada in 1958. He was elected Fellow of the Royal Society, Edinburgh, the same year.

He served as Chairman from 1958 to 1971, and was also Chairman of the Department of Plant Pathology from 1959 to 1964, a period when the two departments were joined. He gave up the Chair in 1971 for heath reasons.

He directed the research of 22 M.Sc. and 23 Ph.D. students in Canada (plus others in Nottingham), and with 12 Postdoctoral Fellows and Associates. He introduced modem concepts of soil zoology in North America and, as well, taught all aspects of Entomology except Insect Physiology and Economic Entomology, although he had also taught these subjects in Nottingham.

He was an accomplished administrator, always ensuring that funds were available for any requirements for research within the department. As Chairman in Entomology he strengthened the department by adding staff members with expertise in insect ecology, soil fauna and Acarology, and fresh water biology. In 1961 he was instrumental in hiring a professional curator (myself) for the Lyman collections of insects. This resulted in the transfer of the collections from the Redpath Museum on the Montreal Campus to the Macdonald Campus in association with the Entomology Department. This eventually increased in size and scope into the internationally known Lyman Entomological Museum and Research Laboratory. Kevan became Director of the Museum in 1971.

He and the curator jointly established the Memoir and Notes series: 17 volumes of Memoirs and 16 Notes have now been published. These publications enhanced and served to make the Lyman Museum better known throughout the world. The famous reprint file was built up over the years and now comprises about 80,000 titles, most on his favourite group, the orthopterioid insects.

He traveled widely to all continents and was well known to associates in all parts of the world.

Keith Kevan's main accomplishments were in systematics (including experimental taxonomy and cytogenetics), morphology and biology of the orthopteroid insects and on the ecology and biology of soil and litter-inhabiting microarthropods.

In later years he worked extensively in systernatics of the Neuroptera and in "Ethnoentomology" or "Cultural Entomology". At one time he held grants from both the National Research Council (science) and the Canada Council (humanities). He investigated early historical and literary areas of entomology, particularly poetry and verse of all ages and regions in any language that referred to orthopteriod insects (and cicadas, as they were in olden days often confused with grasshoppers as both produced sound). His "Land of the Grasshoppers" was followed by three volumes of "The Land of the Locusts", the fourth and last volume of which will be published in due course.

His scientific research produced nearly 400 scientific publications as well as hundreds of others; book reviews, tributes, obituaries, popular and semi-popular articles, published verse, miscellaneous other publications and theatrical productions. There are several more scientific publications in press and others that are complete, or nearly so, that will be submitted very soon.

He was active in many organizations and was honoured by many of them. He was a Director (1963-65) and President (1972-73) of the Entomological Society of Canada, was

made Fellow of the Society in 1977, and received their Gold Medal for outstanding leadership in 1981. The shield bearing the insignia of the Society (presented by the Entomological Society of Quebec) was devised by him.

Other affiliations were: The Royal Society, Edinburgh (Fellow 1958); Royal Entomological Society of London (Fellow since 1942); Entomological Society of Quebec (President, Montreal Branch, 1963-64, Honorary Member 1987); Entomological Society of Ontario; Entomological Society of America; American Entomological Society; Entomological Society of Finland (Honorary Fellow 1975); Acarological Society of America; Canadian Society of Zoologists; Society of Systematic Zoology; Systematics Association; Institute of Biology; Association of Applied Biologists; Association for Tropical Biology (founder-member); Pan American Acridological Society (now Orthopterists' Society) (founder-member and Honorary Member, 1976); Association d'Acridologie (Council 1974-77); International Union for Study of Social Insects; Quebec Society for the Protection of Plants; Society for Bibliography of Natural History; Sigma Xi; Canadian Association of University Teachers; McGill Association of University Teachers; and Watsonian Club of Montreal (President 1973-87).

Together with J.A. Downes and E.G. Munroe, Keith Kevan initiated the drive for the Biological Survey of the Insects of Canada and he contributed extensively to the Survey.

Keith had considerable theatrical talent, acting as well as writing and directing several productions. His sense of humour was quick, sometimes mordant and sometimes biting, qualities that are apparent in his writing (as well as in manner), particularly in verse.

Many of his associates despaired in attempting to decipher his handwriting. At times he gave the stenographers a hard time as his mind raced much faster than his hand and he could not slow down. I finally managed to decipher what he wrote and more than once he brought to me something he had written and could not read. Sometimes I got it - sometimes not.

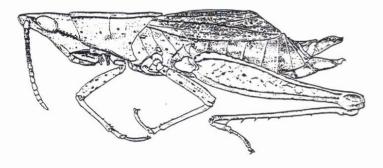
Keith had heart by-pass surgery late in 1976 and afterward made excellent recovery. The heart problem recurred in 1991 when he had to return to Scotland for the funeral of his 97-year-old mother. He had visited her only a few weeks before. He was hospitalized, then released but ordered to remain in Scotland to await another examination before flying home to Canada. He passed away very suddenly a short time later. A funeral was held in Edinburgh and later a Memorial Service was held in his adopted home town of Beaconsfield, Quebec.

He is survived by his wife, Kathleen, and sons Peter (Sherene), Martin, Simon (Brenda) and four grandchildren, Colin, Katie, Jordan, and Andrea.

He was a good friend. We shared many a meeting and discussed many a problem and, after an association lasting more than thirty years, I certainly will miss him. His absence is already being felt by former colleagues all over the world.

His list of scientific and other publications is much too comprehensive to include here. I will, within a few months, produce the complete list, categorized, as one of the Notes series of the Lyman Entomological Museum and Research Laboratory. Notification of availability will be given in a subsequent issue of Metaleptea.

Vernon R. Vickery
Emeritus Curator, Lyman Entomological
Museum and Research Laboratory
McGill University (Macdonald Campus)
21,111 Lakeshore Road
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Canada, H9X 1C0



Pseudopyrgus curtipennis Kevan

IN MEMORIAM

The death of one of the prominent pioneers in research on the control of African locusts, Dr. H. Arnold F. Lea, was brought to our attention by Dr. H. D. Brown of the Plant Protection Research Institute, Pretoria, South Africa, Arnold Lea died on August 25, 1989, at the age of 81. He is best remembered for his research on the brown locust, Locustana pardalina (Walker), and red locust, Nomadacris septemfasciata (Serville), on which he published 27 papers.

An obituary by Brown documenting Dr. Lea's entire career appeared recently in the *Journal of the Entomological Society of Southern Africa*, volume 54, pp. 101-110, and lists his publications.

REGIONAL NEWS

COLLECTING OPPORTUNITIES IN MISSISSIPPI

The Mississippi Entomological Museum is conducting a survey of selected arthropod taxa in two unique and threatened habitats during the July, 1991-July, 1992 - the Black Belt Prairie in eastern Mississippi and the loessal hills that border the Mississippi-Yazoo Delta in Grenada Co. The museum is providing a cabin in the loessal hills, a pop-up trailor, prearranged permission from public and private landowners, habitat information, and other logistic support to individuals who are interested in collecting in these areas.

The loessal hills are very rich botanically with an upland mesophytic forest providing a habitat for species characteristic of more northern latitudes and for those that are restricted to rich, undisturbed woods. More than 800 species of vascular plants have been found in the survey area, which has been partially protected from timber harvesting by the steep slopes and deep ravines. Aquatic habitats include seepage areas in ravines, a creek with extensive sandbars dissecting the hills, and the Yalobusha River with oxbow lakes and swamp forest habitats in the adjacent Delta.

The Black Belt Prairie once was one of the largest prairies in eastern U.S., extending on the Cretaceous Selma chalk from north Mississippi to near the Alabama-Georgia border. Although most of this prairie was lost to agriculture by the early 1900's, several small remnants, 150-500 acres each, have survived in natural condition, other than lack of fire and encroachment of junipers. The flora, which includes species of Bouteloua, Silphium, Liatris, Petalostenum, Blephila, and other genera characteristic of prairie

habitats, has flowering peaks in mid-June and mid-September. Five very good prairie remnants have been located within 30 miles of Starkville, Mississippi. The arthropod fauna includes species that have not been recorded from east of Oklahoma/Texas and other species not recorded west of the Atlantic Coastal Plain.

Other unique and rich habitats in Mississippi include the coastal savannah, which has one of the highest densities of plant species in the U.S. (25 species/0.25 square m), the Ragland Hills (similar to Red Hills in southern Alabama), Jackson Prairie, which originated later than Black Belt Prairie, several bogs, and the bottomland forest between the Mississippi River and its levee.

The cabin in the loessal hills is located in the Malmaison Wildlife Management Area and will be available at no cost to interested researchers/collectors until July, 1992. The cabin has gas, water, and electricity, bathroom, two bedrooms with seven beds, refrigerator and range, and several work tables. The pop-up trailor, which can be loaned for use in other areas of Mississippi, can be towed with any automobile having a ball hitch; the tent encloses two double beds and a work table.

In return for logistic support, the Mississippi Entomological Museum would like to obtain a list of species in the researcher/collector's speciality group or duplicate specimens that are collected in Mississippi. Please contact Dr. Richard L. Brown or Terry L. Schiefer, Mississippi Entomological Museum, Drawer EM, Mississippi State, MS 39762 (ph: 601-325-2085) for cabin/trailor reservations and additional information.

Schistocerca americana: Becoming a pest in Florida

Heavy infestations of the American grass-hopper, Schistocerca americana, have been reported in the news since May of this year in central Florida. Centered in Pasco and Hernando Counties near Tampa the infestations initially covered an area of about 52,000 acres, causing extensive defoliation to citrus and other crops. According to a news report by Neil King, Jr. of the Tanpa Tribune (August 23), this year's infestation was reported to be the biggest in 40 years and could seri-

ously affect Florida's \$7 billion dollar citrus industry.

More than 310 landowners in the area have requested state assistance since the beginning of August to help eradicate these pests. Florida State Department of Agriculture has responded with several treatments of malathion amounting to about 1300 gallons on 18,000 acres as of the end of August.

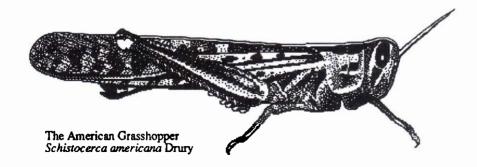
It is unlikely that the current situation will continue indefinitely, however. Outbreak populations have occurred infrequently in the past, as was the case in 1950-1951. L.C. Kuitert and R.V. Connin (in Florida Entomolo-

gist 35: 22-33) blamed that outbreak in part on a succession of unseasonably mild winters. The current outbreak follows a similar pattern (the last two winters have been mild).

In Florida the American grasshopper has two generations per year. The heavy infestations are the progeny of an unusually large population of the first generation, which matured in early February. The second generation began to make its appearance in late June-early July.

Besides Schistocerca americana, three other species are found in the same region: S. alutacea, S. ceratiola, and S. damnifica. To date, these species have never reached pest proportions.

The genus Schistocerca was revised by V.M. Dirsh in 1974, and listed 11 subspecies and 24 synonyms under the species americana. Many systematists have disagreed with his arrangement, though, and a recent re-evaluation of some of those subspecies led Andrew Harvey in 1981 to list six species. Schistocerca migratoria, the desert locust, which was assigned subspecies status by Dirsh, was elevated once again to full species status by Harvey.



NEW MEMBERS

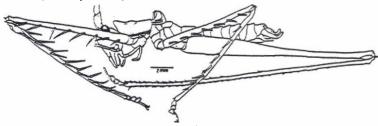
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c/o Dr. Klaus-Gerhard Heller
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A new species of productions ketydid from New Guines to be described by Jin.

CHANGES OF ADDRESS

Dr. N. L. Anderson 5845 Marymac Drive, S. W. Port Orchard, WA 98366 USA Dr. Robert G. Bellinger 311 Lancelot Drive Clemson, SC 2961-2130 USA Dr. Gary E. Belovsky Department of Fisheries & Wildlife College of Natural Resources Utah State University Logan, UT 84322-5210 USA Herr Reinhard Ehrmann **Entomologisches Institut** Asternweg 3 W-3300 Bramschweig, GERMANY Mr. Kenneth J. Goeden P. O. Box 733 Hermiston, OR 97838 USA Ms. M. Devries Hendrick J. de Ridderlaan 128 1780 Wemmel BELGIUM

Dr. George B. Hewitt P. O. Box 705 Cottonwood, AZ 86326 USA Dr. Carlos E. Lange USDA Rangeland Insect Laboratory c/o Montana Stata University Bozeman, MT 59717-0001 USA Mr. John Paul Wellcome Trust Research Lab. P. O. Box 43640 Nairobi, KENYA Dr. Shiva Sastry 52388 Swanson Drive Southbend, IN 46635 USA Dr. Sherilyn G. F. Smith Department of Biology Siena College Loudonville, NY 12211 USA Librarian CSIRO 88 00008805 Black Mountain Lib. GPO Box 109 Canberra

ACT 2601 AUSTRALIA

WANTED: INSECTS FOR A MUSEUM

I curate the insect collection at the Orma J. Smith Museum of Natural History (CIDA), of Idaho, Caldwell, ID 83605 USA. Our holdings in Orthoptera are poor. I would appreciate any duplicate and determined material that anyone might wish to send. I can return your shipping boxes and replace pins if you request. Thank you very much. We are interested in world-wide reference material. — William H. Clark, Assistant Director & Curator

NEWS NOTES FROM OUR MEMBERS

After four years of hard work, Jin Xing-Bao obtained her Ph.D. degree under the supervision of D. K. McE, Kevan at McGill University, October, 1990. Her thesis, "Taxonomic Revision and Phylogenetic Study of the Tribe Phisidini (Grylloptera: Tettigonioidea: Meconematidae)", has been accepted by Teses Zoologicae and hopefully will be published soon. Currently she is working on orthopteroids of the South Pacific Islands as her postdoctoral project. She is also compiling an index-catalog of Chinese Tettigonioidea which is one part of a cooperative project with the Shanghai Institute of Entomology, Academia Sinica. In order to do a thorough revision of Chinese Tettigonioidea, she hopes to examine the types of Chinese Tettigioidea deposited in various world museums, including the Academy of Natural Sciences of Philadelphia, British Museum (Natural History), London, Museum d'Histoire Naturelle, Geneva, Naturhistorisches Museum, Vienna, U.S. National Museum of Natural History, Washington, D.C., and Zoologischeskii Institut, Academiya Nauk SSSR, St. Petersburg, U.S.S.R.

Roger K. Butlin: At present my research is centered on mating behavior between Chorthippus parallelus subspecies in a hybrid zone in the Pyrenees. This includes work on acoustic signals and on cuticular hydrocarbons. I am also working on the Chorthippus biguttulus group in Europe and on the genus Chitaura in Sulawesi, Indonesia.

C. V. Durden: I am involved in research on fossil orthopteroids and blattoids from the Carboniferous and Permian of Texas, New Mexico, and Colorado. Fieldwork is mainly in Permocarboniferous redbeds of north-central Texas, I have been collecting and photographing modern fauna in Texas and central Rondonia, Brazil also.

K.H.L. Key: The new 2-volume edition of *The Insects of Australia* is now available from the Melbourne University Press. It contains separate chapters on each of the orthopteroid orders, including the Phasmatodea one by me.

D.C.F. Rentz: Some recent happenings: 1. Submission to the publisher of volume 2, Monograph of Australian Tettigonimae. This volume covers the Phasmodinae, Zaprochilinae, and the new endemic subfamily Austrosaginae. 2. Another new species of Cooloola has been discovered, this one from a continental island off of MacKay, Queensland.

BOOKS AND NOTICES

THE ORTHOPTERISTS' SOCIETY

The Orthopterists' Society (formerly Pan American Acridological Society) is an international scientific organization devoted to facilitating communication among those interested in Orthoptera and their allies. Research and publication are fostered in all aspects of the biology of these insects from ecology and taxonomy to physiology, endocrinology, cytogenetics, and control measures.

The Society was founded in 1978 by some 50 orthopterists meeting at San Martin de los Andes, Argentina. Its constitution and by-laws were adopted in 1979, and it was accorded tax-exempt status by the United States government shortly thereafter. The meetings held since San Martin have been at Bozeman (United States), Maraccy (Venezuela), Saskatoon (Canada), and Valsain, Segovia (Spain). The next meeting will be August 1-5, 1993 at Hilo, Hawaii (USA).

Symposis, round table discussions, and research papers presented at the Society meetings are published in the *Proceedings of the Orthopterists' Society*, and a newaletter, *Metaleptea*, is issued semi-annually. Information regarding these publications can be obtained from the editor, Dr. D. A. Nickle, USDA, c/o National Missaum of Natural History, NHB-163, Smithsonian Institution, Washington, D.C. 20560, USA.

The 1990-1994 Governing Board comprises President Daniel Otte (United States), President-elect R. F. Chapman (United Kingdom), Past President V. R. Vickery (Canada), Tressurer Roger Bland (United States), Regional Representatives Aiols Richards (Australia), Al B. Ewen (Canada), and E. Bacetti (Italy), Executive Secretary S. K. Gangwere (United States), Editor, D. A. Nickle (United States), and Editors, Delitor, D. A. Nickle (United States), and Editors (United Kingdom).

Society business and finances are handled by the Executive Secretary, Prof. S. K. Gangwere, Department of Biological Sciences, Wayne State University, Detroit, MI 48202, USA.

All correspondence relating to Metaleptes or the Proceedings of the Orthopterists' Society should be addressed to the Editor, Dr. David A. Nickle, USDA, Systematic Entomology Laboratory, c/o U.S. National Museum of Natural History, Smithsonian Institution NHB-168, Washington, D.C. 20560 USA.

Correspondence and information regarding the new journal series, Orthopterists' Journal, should be addressed to Dr. N. D. Jago, Overseas Development Administration, Tropical Development and Research Institution, College Hone, Wrights Lane, London W8 SJS, United Kingdom.

MEETINGS: Meetings of the Orthopterists' Society are held on a triennial basis, in the United States, Latin America, Canada, or other location, worldwide, in rotation. Symposis, gesearch papers, and business conducted at the Meetings are published in the Proceedings of the Orthopterists' Society.

MEMBERSHIP: Membership is open to anyone expressing an interest in Orthoptera and related orders. Annual dues for members are US \$15 for Active Members, US \$7 for students and US \$25 for institutions. Members receive all publications of the Society.

PUBLICATIONS: The Society's publications include a newsletter, Metaleptea, which is published as news becomes available, but on at least a biannual basis, the Proceedings of the Orthopterists'

besis, the Proceedings of the Orthopterists' which is published triennially in conjunction Meetings, Occasional Papers, an irregularly published journal for medium- to large-slazed papers dealing with research on any aspect of Orthopterists' Journal, a referried journal devoted to research articles of a small to medium size. For information regarding any of these publications, contact the Editor, Dr. David A. Nickle, USDA, Systematic Entomology Laboratory, c/o U.S. National Museum of Natural History, Smithsonian Institution NHB-168, Washington, D.C. 20560 USA.



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NOTICE

Members needing copies of past PAN AMERICAN ACRIDOLOGICAL SOCIETY or ORTHOPTERISTS' SOCIETY publications are reminded that a small number of virtually all volumes and numbers is on hand at the Directorate. Prices (in US currency) are as follows: Metaleptea @ \$1.50 per number or \$3.00 per volume of 2 (two) numbers, Proceedings @ \$10.00 per volume, and Occasional Papers No. 1 @ \$4.40. Please advise of the volumes and numbers desired and send remittance to: S.K. Gangwere, Executive Director, Orthopterists' Society, c/o Department of Biological Sciences, Wayne State University, Detroit, MI 48202, USA. Orders may also be filled by invoice; simply ask to be billed.