## AMERICAN ARACHNOLOGY

Issue No. 2

February 1969

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The backbone of our second issue of American Arachnology is a roster of more than 70 American arachnologists with their positions, mailing addresses, and current research interests. Other items include brief sketches of the three known arachnological organizations in the world, a review of the Levis' new Golden Guide, and a tribute to the late Harriet Exline Frizzell and a bibliography of her published works, ably composed by Wm. B. Peck and checked by Harriet's husband Don Frizzell.

#### ARACHNOLOGISTS OF THE SOUTHWEST

This is the name chosen by a group of professional and amateur arachnologists in southwestern U.S.A. in April 1968. The core of the group consists of about 10 to 20 enthusiastic workers in California who live near enough to each other to meet monthly during the collecting season. Some meetings take the form of collecting trips, but often a speaker or discussion leader focuses attention on a particular subject. At one meeting Dr. B. J. Kaston described his black-widow work; at another, Don Van Dyke presented his data on Pardosa sierra on part of the actual site at which the work was done, a 6,000-ft.-altitude spot in the San Bernardino National Forest. Dr. Kaston is President of the society, Bob Schick Vice-President, and Mel Thompson the Secretary-Treasurer (Eaton Canyon Nature Study Center, 1750 N. Altadena Drive, Pasadena, California 91107). Membership is upen to anyone interested in the group's activities. Annual dues are one dollar.

## BRITISH ARACHNOLOGICAL SOCIETY

This society grew out of the Flatford Mill Spider Group and the British Spider Study Group, started in 1959 with a membership of ten. At the beginning of 1968 membership stood at 100, including 17 overseas workers. The aim of the society is "to promote the study of arachmids, especially spiders, pseudoscorpions, and harvestmen (Opiliones), and to encourage the exchange of information by all suitable means." Field trips are an improtant activity. A mimeographed, copywrite bulletin is prepared quarterly and includes technical contributions of high quality as well as literature reviews, short notes, and news. Non-members may purchase current individual bulletins, of which 40 have now appeared, for ten shillings each. Membership costs one pound per calendar year, and is open to anyone interested in the society's aims, subject to approval of the governing council. The honorary secretary is Mr. D. W. Mackie, 11 Ashmore Ave., Cheadle Heath, Stockport, Cheshire, England. Dr. Eric Duffey is President, Mr. G. H. Locket Vice-President, and Mr. John Crocker (66 Outwoods Drive, Loughborough, Leicestershire, England) bulletin editor.

### ARACHNOLOGICAL SOCIETY OF EAST ASIA

This is our oldest existing arachnological organization, having been founded by a small number of Japanese enthusiats in Tokyo in 1936. The society claims a membership now of 250, with Dr. Tamao Fukui as President. It publishes annually, or semi-annually, Acta Arachnologica, of which the first 13 volumes were published in Japanese, and subsequent volumes in English, or in Japanese with English summaries. Subscriptions are included in the annual membership dues of \$2.00, though foreign members are exempted from payment of dues if, during the year, they offer a paper on arachnid research for publication

in the journal. Director of the society and chief editor of the journal is Prof. Takeo Yaginuma, Biological Laboratory, Ohtemon-Gakuin University, 230, Ai, Tbaraki, Osaka, Japan.

## FOURTH EUROPEAN CONGRESS OF ARACHNOLOGY, Paris, April 1968

More than a hundred arachnologists attended this six-day congress last spring. The presence of only three North Americans was not a reflection of flagging interest, but was due to lack of Government travel support. Highlights of the Congress, which was judged very successful, were published in <u>Science</u> 161: 1033 (1968). The papers given are to be published as the proceedings of the congress.

## BOOK REVIEW

SPIDERS and their kin. Herbert W. Levi and Lorna R. Levi, under the editorship of Herbert S. Zim. A Golden Nature Guide, Golden Press, New York, 1968. 1-160 pp., illus. \$1.00. Reviewed by Beatrice R. Vogel.

American nature libraries have been greatly enriched by the publication of this little pocket book on arachnids. It is illustrated with hundreds of beautiful colored drawings of spiders and their webs, of a quality excelled only, perhaps, by Yaginuma's Spiders of JAPAN. This book is particularly attractive because all the animals illustrated are in color, with only a few black and white diagrams of structure. It is by far one of the best books to be published in the Golden Nature Guide series.

The authors have done a very good job of packing such a vast subject into so few pages in the face of numerous difficulties, especially with illustrations. The first 16 pages contain a general account of phylogeny, structure, biology, arachnidism, and making collections. The next 95 pages

describe and illustrate 48 spider families with most families characterized in "25 words or less", no easy task. Then 38 pages are devoted to other arachnids, myriapods, and terrestrial crustaceans. These groups, which are usually skimmed over, here are given almost the same coverage as the spiders.

Most of the faults one finds with this book could <u>not</u> be corrected within the limitations of space and material. There are, however, three points which I feel could have been handled better. The main character given to distinguish between mygalomorph and true spiders is difficult to use. "Chelicerae attached in front of head" for the former, and "chelicerae attached below head" for the latter is ambiguous and cannot be used by someone who doesn't know the difference. Besides, arachnids possess no true heads. While fang articulation may be a bit more technical, it is a less confusing character when understood. Mention of the term "haplogyne" (pp. 8, 30, 31) without fuller explanation is probably too obscure for this book, and would have been better omitted. Common names are used for many spiders in this book; the layman's various uses of "tarantula" are not explained, and while many of us may not wish to use the word, it is one of the first uttered by many people wanting to know something about spiders.

However, most of the families are fairly treated, and this book should be the introduction for many, many people to the beauty and intricacy of the arachnid world.

#### BOOK NOTICE

The Instituto Butantan has published a three volume work, <u>International</u>

Symposium On <u>Animal Venoms</u>, which totals <u>DS2O</u> pp. and covers all venomous animals, but chiefly snakes, spiders and scorpions. It covers many aspects

of these animals including their systematics, ecology, biochemistry, and pharmacology of the venoms, treatment, etc. All three volumes may be purchased from the Instituto Butantan, Caixa Postal 65, São Paulo, Brazil, for U.S. \$35.00 including shipping charges.

## ARACHNOLOGISTS OF THE AMERICAS

The purpose of this list is to put us in touch with each other. You are urged to read it and to note the people working in your field. Another possibility is that workers of particular regions will contact others near them and perhaps form local groups for field trips and discussions. One of the most exciting results of this effort is the discovery that no less than four universities are offering (or will offer soon) formal courses in general arachnology (see McCrone and Reiskind, Drew, Lowrie, Williams). In addition we find that staff at a number of other universities are both able and willing to supervise graduate students working on arachnids as subjects for thesis research. Some administer grants as well. Further entries for this list are wanted for a future newsletter issue.

- ANDERSON, John F., Instructor, Department of Zoology, University of Florida, Gainesville, Florida 32601. Received the degree of Doctor of Philosophy in December, 1968. His dissertation was a study of the comparative rates of metabolism in several species of spiders. This is now being prepared for publication.
- BAYER, Lutz J., Curator, Entomology Museum and graduate student, Russell Labs,
  Department of Entomology, University of Wisconsin, Madison, Wisconsin
  53706. Official duties mainly curatorial relating to the insect fauna
  of Wisconsin, but also collecting arachnids, particularly Thomisidae.
- DEATTY, Joseph A., Assistant Professor, Department of Zoology, Southern Illinois University, Carbondale, Illinois 62901. Current research: (1)
  Microhabitats of spiders on Gibraltar Island, Lake Erie. Begun 1959.
  (2) Distributions of spiders on the islands of Lake Erie. Begun 1968.
  (3) List of the spiders of Eniwetok, Kwajalein, and Majuro Atolls, central Pacific (jointly with J. W. Berry, Dept. of Biology, Butler University, Indianapolis, Indiana 46207). Begun 1968, and hoped to expand into a broad study of the ranges and ecology of Pacific spiders. Curator of large collections (up to 20,000 vials) of spiders from northeastern Ohio and the Lake Erie islands, southern Illinois, North Carolina, Tallahassee and Everglades areas of Florida, southern Arizona, and Mexico, and will lend to workers doing revisions.

not listed in C.I.D. 1.

- BIXLER, David E., Assistant in Medical Entomology, Dept. of Entomology,
  University of California, Riverside, California 92502. Current
  research: (1) Ecology of arachnids of medical importance (mainly
  scorpions) in California. (2) Revision of North American Haplodrassus
  (Gnaphosidae), begun in 1968. (3) Ecology of Lycosidae and Gnaphosidae
  in alpine habitats, begun in 1963. Has quantity of unworked spiders
  in several families to lend, mainly from Michigan, Arizona, California,
  and western Canada. Papers in press: "Atypical Tarantulas in Michigan,"
  Michigan Ent. and "Wolf Spider Ecology & Grand County, Utah,"
  Southwestern Nat. M. Sc. thesis submitted to Michigan State University,
  1967: "Spiders on Isle Royale, Michigan."
- BRADY, Allen R., Assistant Professor, Department of Biology, Hope College, Holland, Michigan 49423. Current research: (1) Taxonomy of North American lynx spiders (Oxyopidae). Paper in press: "The Lynx Spider Genus Hamataliwa in Mexico and Central America," (Bull. Mus. Comp. Zool.).

  (2) Identification of large collection of the genus Sossipus from southeastern United States (with a student). (3) Identification of Michigan populations of Latrodectus (with second student). Would be very interested in getting together informally with other arachnologists in the midwestern region, particularly Michigan, Indiana, Illinois, Ohio, WWisconsin. Other workers in this region please note. How about some competition for the Southwestern Arachnologists? (Editor).
- BRIGGS, Thomas S., Science Teacher at Galileo High School, and Field Associate to the California Academy of Sciences. Home address: 845 Corbett Ave., San Francisco, California 94131. Current research: Systematics of laniatorid Phalangida, particularly the Triaenonychidae and various cave-dwelling groups. Recently published on the genus Sitalcina (family Phalangodidae) (Proc. Cal. Acad. Sci.).
- BROOKHART, Jack, Teacher of High School Biology. 53 Drake, Pueblo, Colorado 81005. Current research: Distribution, ecology, and taxonomy of North American Solpugida. Wishes to receive solpugids from Wyoming, Utah, and New Mexico. Currently working out a species problem in Colorado material.
- BUCHERL, Wolfgang, Institute Butantan, Caixa Postal 65, Sao Paulo, Brazil.

  Current research: (1) Revision of the chilopods of South America.

  Would very much like to receive any papers about South American chilopods written by North American specialists, chiefly the last papers of R. Chamberlin. (2) A study of the interpopulation variations of the female receptacula and male bulbi in the common Brazilian species of Loxosceles.
- CARICO, James E., Assistant Professor, Department of Biology, Lynchburg College,
  Lynchburg, Virginia 24504. Current research: (1) Taxonomy, evolution,
  and ecology of <u>Dolomedes</u> of North America. (2) List of the spiders of
  Virginia.
- CHICKERING, A. M., Associate in Arachnology, Museum of Comparative Zoology,
  Harvard University, Cambridge, Massachusetts 02138. Current research:
  Revision of the genera of Ganopidae in Florida (paper nearly completed),
  Central America (particularly Fanama), and the West Indies. Three papers
  on this family appeared in print in 1968 (Psyche, Breviora), and one on
  Miggrammopes (Uloboridae) (Breviora).

- COYLE, Frederick, Graduate Student, Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts 02138. Current research: Systematics, behavior, life histories, and ecology of the mygalomorph family Antrodiaetidae. Begun 1966. Recent publication: "The Mygalomorph Spider genus Atypoides," Psyche 75: 157-194.
- CRAIG, Patrick R., Senior Scientific Data Analyst, Lawrence Radiation Lab., University of California (home address: 2337 Grant St., Berkeley, California 94703). Current research: (1) Lists of the spiders of (a) Baja California, (b) Colombia, (c) the Galapogos Islands.

(2) Stereophotography as an aid to spider family identification.(3) Computer analysis of stereophotographs.

- VCUTLER, Bruce, Graduate Student, Department of Entomology, Fisheries, and Wildlife, University of Minnesota, St. Paul, Minnesota 55101. Current research: (1) Revision of the Peckhaminae. (2) Revision of Neonella. (3) Biology and potential toxicity of Loxosceles arizonica (with D. B. Richman). (4) Revision of Semiopyla. (5) Description of a fossil Coriarachne from Wyoming. (6) Prey-capture behavior in Coleosoma floridanum. Holds a Predoctoral Fellowship from the U. S. National Institutes of Health.
  - DEVOE, Robert D., Assistant Professor, Department of Physiology, Johns Hopkins Medical School, Baltimore, Maryland 21205. Current research: Electrophysiology of spider vision, particularly in the Lycosidae.
  - DONDALE, Charles D., Research Scientist, Canada Department of Agriculture, Research Institute, Box 367, Belleville, Ontario, Current research: (1) Role of spiders in the control of grassland insects (with A. L. Turnbull). Commenced 1965. Includes work on life histories, mobility, fecundity, activity periodicities, sexual behavior, population dynamics, and feeding behavior of grassland spiders (mainly Lycosidae). Paper in press: "Wandering of Hunting Spiders in a Meadow" (co-authored with 4 others), Proc. 4th Eur. Congress of Arachnology, Paris, 1968. (2) Sex pheromones in Lycosidae. Commenced 1968 in collaboration with B. M. Hegdekar, insect biochemist at Belleville. Paper in press: "A Contact Sex Pheromone and Some Response Parameters in Lycosid Spiders" (co-such nited with B. M. Hegdekar). Can. J. Zool. (3) Revision of Philodromus (Thomisidae) and related genera in North America. Commenced 1959 and continuing.
- DORRIS, Peggy R., Assistant Professor, Henderson State College, Qrkadelphia, Arkansas 71923. Current research: (1) Spiders found in mud-dauber nests in Arkansas and Mississippi. (2) Effects of insecticides on spiders. Received Ph.D. 1967 from University of Mississippi (thesis on the spiders of Mississippi). Papers in press: "Spiders of the Family Salticidae in Mississippi, Jour. Miss. Acad. Sci. (with Y. J. McGaha); "A Preliminary Study of the Spiders of Clark County, Arkansas, Compared with a Five Year Study of Mississippi Spiders," Jour. Ark. Acad. Sci.

- DREW, William A., Assoc. Professor, Dept. of Entomology, Oklahoma State University, Stillwater, Oklahoma 74074. Teaches among other courses, Araneology (Ent. 5004). Current research: check list of the spiders of Oklahoma. Building up extensive, up-to-date collection toward this objective.
  - EBERHARD, William G., Graduate Student, Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts 02138. Current research:
    (1) Evolution of web construction, and spider behavior on the finished web. (2) Behavior of two species of wasp preying on Araneus cornutus. (3) Web structure and web-site selection by Uloborus diversus. Paper in press: "Computer simulation of orb web construction," Am. Zool.
  - FREIRE-MAIA, Lineu, M. D., Assistant Professor, Departamento de Fisiologia da Faculdade de Medicina da Universidade Federal de Minas Gerais, Belo Horizonte, Brazil. Current research: Pharmacology of purified scorpion venom.
- FRINGS, Hubert, Professor, Department of Zoology, 730 South Oval, Rm. 222,
  University of Oklahoma, Norman, Oklahoma 73069. Current research:
  'Acoustical communication and phonoreastion in invertebrates including spiders. Has laboratory equipped for graduate research in this field, and would welcome inquiries from students interested in the production, reception, and reaction to sound in spiders and scorpions. Recent publication: "(Communication in) Other Invertebrates" (i.e., other than insects). Chapter 12 in T. A. Sebeok, ed. "Animal Communication." Indiana Univ. Press, Bloomington, Ind. (with M. Frings). 1968.
  - FRONK, W. Don, Head, Department of Entomology, Colorado State University, Fort Colling, Colorado 80521. Current research: (1) Survey of the spiders of Colorado. (2) Spiders of alfalfa fields.
  - GOODNIGHT, Clarence J., Head, Department of Biology, Western Michigan University, Kalamazoo, Michigan 49001. Current research: Biology and taxonomy of Opiliones (all phases, all groups).
    - HADLEY, Neil F., Assistant Professor, Department of Zoology, Arizona State
      University, Tempe, Arizona 85281. Current research: (1) Water relationships of the hairy scorpion, Hadrurus arizonensis. (2) Effects of temperature and nocturnal rhythms on the spontaneous activity of the scorpion ventral nerve cord. Papers in press: "Nocturnal surface activity in relation to feeding in some North American scorpions,"

      Ecology (with S. C. Williams). "Oxygen consumption of the scorpion Centruroides sculpturatus," Comp. Biochem. Physiol. Would like to archange reprints and notes with others having like interests.
    - HARPER, Charles A., Graduate Student, Department of Zoology, University of Florida, Gainesville, Florida 32601. Current research: Comparative ecology of Lycosa lenta and L. ammophila in southeastern U.S.A. (Ph.D. Mesis).
    - HAYNES, Dean L., Associate Professor, Department of Entomology, Michigan State
      University, East Lansing, Michigan 48823. Current research: Popular
      tion dynamics and ecology of spiders, particularly their role in the
      limiting insect numbers. Can supervise graduate students in this
      field.

- HJEILE, John T., Graduate Student at San Francisco State College (home address: 1640 Kirkham St., #22, San Francisco, California 94122). Current research: Egg parasitism in a lycosid spider by a wasp (M. Sc. thesis). Also acts as curator of the university's arachnid collection.
- HOLMBERG, Robert G., Graduate Student, University of Saskatchewan. Home address:
  Sub Post Office 6, Box 47, Saskatoon, Saskatchewan. Current research:
  Structure and function of the repugnatory glands of Opiliones, including the effect of the secretion on other animals.
- HOWELL, James O., Graduate Student, Department of Entomology, College of Agriculture, Virginia Polytechnic Institute, Blacksburg, Birginia 24061. Current research: Identification, seasonal distribution, and activity periodicities in the spiders of alfalfa fields. Includes the effects of cutting the alfalfa stand, and observations on Acrodastyla quadrisculpta Gravenhorst, an external ichneumonid parasite of Tetragnatha laboriosa Hentz.
- JENNINGS, Daniel T., Associate Insect Ecologist, Rocky Mountain Forest and Range Experiment Station, 5423 Federal Bldg., 517 Gold Ave., SW, Albuquerque, New Mexico 87101. Current research: (1) Association of crab spiders (Thomisidae) with various plant species. (2) Arachnids as predators of forest insects. M. Sc. obtained at University of New Mexico on the crab spiders associated with plants in central New Mexico, 1967.
- JUDD, William W., Professor, Department of Zoology, University of Western Ontario, London, Ontario. Current research: Collection of spiders and harvestmen from unusual habitats, e.g., daisy heads, bog plants, pond surfaces, muskrat houses, etc. These are identified by other workers.
- KASTON, B. J., Professor, Department of Zoology, San Diego State College, San Diego, California 92115. Current research: (1) Life histories of North American widow spiders (<u>Latrodectus</u>). In progress 3 years, partly reported in <u>Ent. News</u> 79: 113-124. (2) Postembryonic development of color patterns, fecundity, chromosomal and biochemical differences, and related work on <u>Latrodectus</u>.
- KLEE, George E., Graduate Student, Department of Entomology, Michigan State
  University, East Lansing, Michigan 48823. Current research: Ecology
  of several species of Michigan Opiliones. Has large representative
  collection of the Opiliones of eastern U.S.A.
- KNOWLTON, George F., Professor Emeritus, Extension Service, Utah State University, Logan, Utah 84321. Current interest: Collection mainly of insects (since 1922), but also takes spiders, pseudoscorpions, millipedes, and centipedes as a hobby of long standing. Material is supplied to active researchers on request.
- LEE, Vincent F., Graduate Student, San Francisco State College. Home address:
  895 Pacific Ave., #638, San Francisco, California 94133. Current
  research: (1) Biology and systematics of Chelonethida (Pseudoscorpionida
  of western U.S.A. (2) Arachnid hemocytes, particularly in scorpions.

- IEECH, Robin E., Graduate Student, Department of Entomology, University of Alberta, Edmonton 7, Alberta. Current research: Revision of nearctic Amaurobiidae (Ph.D. thesis). Commenced 1966. Requests notification of pertinent collections, immature or adult.
- LEVI, Herbert W., Professor, Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts 02138. Current research: Revision of Araneus and related genera in North America. Recently completed a 16-year study of the genera and species of Theridiidae in the New World, and commenced a similar treatment of the Araneidae. Recent publications include a revision of Argione and Gea (Bull. Mus. Comp. Zool. 136: 319-352. 1968), "Spiders and their Kin," Golden Nature Guide, Golden Press, New York. 1968 (with Lorna R. Levi), and a translation and adaptation of Kaestner's Invertebrate Zoology, of which Vol. 2 treats arthropod relatives, chelicerates, and myriapods (with Lorna R. Levi, 1968). Supervises graduate students in various phases of arachnology, and curates the large invertebrate collections in the MCZ. Requests information on the whereabouts of representatives of the small species of Araneidae. As of the time of writing, has an open postdoctoral fellowship for the spring of 1969 to work on spider systematics.
- LOWRIE, Donald C., Professor, Department of Zoology, California State College, 5151 State College Drive, Los Angeles, California 90032. Current research: (1) Revision of the mackenziana group (mackenziana (Keys.), uncata (Thorell), dorsalis Banks, uintana Gertsch, hetchi Ch. & Ivie) of the genus Pardosa. Work begun on this boreo-alpine group in 1967, could be completed soon if enough pertinent material, particularly if accompanied by microhabitat data, were available on loan. (2) Characterization of western Pardosa spp. by carapace pattern and microhabitat. (3) Evaluation of the sweep net for sampling spider and insect populations, based on literature and on collections made in Florida. (4) Life histories of western Pardosa spp. (jointly with Don Van Dyke). (5) Effects of temperature, humidity, light, and feeding rates in Pardosa spp. (jointly with various graduate students). Offers graduate course in araneology, and has graduate teaching assistantships for promising students as well as limited funds for technical assistants.
- MARINKELLE, C. J., M.D., Professor, Universidad de los Andes, Calle 18-A, Carrera 1-E, Apartado Aereo 4976, Bogota, D. E., Colombia. Current research:
  (1) Toxicology and assay of scorpion venoms. (2) List of the scorpions and spiders of Colombia (material identified by other workers) Working space is available for interested foreign students "any length of time, any time of the year."
- McGrone, John D., Associate Professor, Department of Zoology, University of Florida, Gainesville, Florida 32601. Current research: (1) Systematics, biology, and toxicology of Latrodectus. (2) Systematics and ecology of Lycosidae of the southeastern U.S.A. (with H. K. Wallace). Initiating a graduate course in arachnology (with J. Reiskind) in spring, 1969. Has just accepted a position as Associate Dean of the Graduate School and Director of Research at the University of the Pacific, Stockton, California 95204 effective June 15, 1969. Will continue work on Latrodectus on a limited basis with support of current NTH grant.

- MESIBOV, Bob, Graduate Student, Department of Biochemistry, University of Wisconsin, Madison, Wisconsin 53706. Maintains serious amateur interest in spider collecting and biology. Member of "The Arachnologists of the Southwest," and interested in formation of group with similar interests in his area.
  - MORGAN, Paul N., Research Microbiologist, General Medical Research, Veterans Administration, Little Rock, Arkansas 72206. Also holds positions of Associate Professor in the University of Arkansas (both Medical Center and Graduate School). Current research: Effects of spider venom in human tissues. Paper in press: "Preliminary Studies on Venom from the Brown Recluse Spider, Loxosceles reclusa (Toxicon). Addressed, in 1968, the Association of Clinical Scientists, Washington, D. C., Nov. 8-10 on a method of extracting pure venom from spiders, and on envenomization by the Arachnida. Developed a strong interest in the brown recluse and its venom after seeing a patient die several years ago following the bite of this spider. Plans soon to study the components of venom.
  - MUCHMORE, William B., Associate Professor, Department of Biology, University of Rochester, Rochester, New York 14627. Current research: Systematics and distribution of pseudoscorpions, particularly those of eastern U.S.A. and those of caves throughout North America. Begun 1955 and reported in series of 19 descriptive papers dealing mainly with new genera and species. Notes the great need for work and workers on American pseudoscorpions.
  - MUMA, Martin H., Professor, University of Florida. Home address: 1517 Avenue F, N.E., Winter Haven, Florida 33880. Employed on the biology, taxonomy, and natural enemies of citrus pests, but pursues other arachnological subjects in his own time. Current research: (1) Biology of Tarantula marginemaculata (Cambridge) (Amblypygi) in the laboratory. Commenced 1966. Parallels a study by Dr. Peter Weygoldt in Germany. (2) Synopsis of the Solpugida of North and Central America and the West Indies. Commenced 1967 and nearing completion, it consists of diagnoses and type depositories of all known species. (3) Compilation of a list of Florida spiders. Commenced in 1965 with McCrone, Field, Anderson, and Stone. (4) Comparative study of the cursorial spider populations in various Florida habitats, e.g., citrus groves, dunes, suburban areas. Commenced 1965. Request for information: location of Mello Leitao's types of Mexican and Central American solpugids urgently needed to complete paper for publication.
  - NEAL, John W., Instructor, Department of Entomology, University of Maryland, College Park, Maryland 20740. Current research: Survey of predators (including spiders) in relation to alfalfa weevil infestations.
  - PEAKALL, David B., Senior Research Associate, Langmuir Laboratory, Cornell University, Ithaca, New York 14850. Current research: (1) The regulation of protein synthesis in the silk glands of Araneus. (2) Amino acid "pools" in relation to these glands. (3) Orientation of silk protein molecules to form strong fibers.

- PECK, William B., Assistant Professor, Department of Biology, Central Missouri State College, Warrensburg, Missouri 64093. Current research: (1) Review and possible revision of Chiracanthium in America. Begun 1967. (2) Comparative biology of representative Gnaphosidae. Begun 1968. (3) List of the spiders of Arkansas and Missouri (from notes and collections of the late Harriet Exline). (4) Preparation for publication of a revision of Pirata in North America by the late Harriet Exline. Supervises graduate students working toward M. Sc., for which graduate assistantships up to \$4050 are available. Maintains the Exline arachnid collection and library. Interested in exchanging duplicate personal copies of Bibliographia Araneorum and Simon's Etudes Arachnologiques (1872-1903) for wanted items.
  - PLATNICK, Norman, Graduate Student, Department of Entomology, Michigan State
    University, East Lansing, Michigan 48823. Current research: Revision
    of Ebo (in part) in North America (M. Sc. thesis). Would appreciate
    knowledge of any collections of this genus available on loan. Possesses
    general spider collections from West Virginia and Michigan.
  - RANDALL, Winnifred C., Fostdoctorate Researcher, Department of Biology, Case Western Reserve University, Cleveland, Ohio 44106. Recent research: Ultrastructure of the scorpion circulatory system. Not now working on arachnids, but hopes to resume that work soon.
  - REISKIND, Jonathan, Assistant Professor, Department of Zoology, University of Florida, Gainesville, Florida 32601. Current research: Clubionid ant-mimicking spiders of the New World. Paper in press: The Castianeirinae of North and Central America. Initiating a graduate course in arachnology (with J. D. McCrone) in spring, 1969.
  - RENAULT, Thaddee R., Research Technician, Forest Research Laboratory, P. O. Box 4000, Fredericton, New Brunswick. Current research: Biology and population dynamics of the spiders of the spruce-fir forest, particularly in relation to the spruce budworm in the Green River watershed of New Brunswick. Preliminary results include an illustrated key to 102 species of arboreal spiders (Internal Report M-32, Forest Research Laboratory, Fredericton); population level summaries of spiders in several large, aerially-sprayed and unsprayed forest plots, which show, among other things, that the important family Dictynidae is virtually eliminated by repeated applications of DDT.
  - RICHMAN, David B., Undergraduate Student, College Station P. O. Box 3463, University of Arizona, Tucson, Arizona 85700. Current research: (1) Biology of Loxosceles arizonica (jointly with B. Cutler). (2) Revision of the genus Fellenes. In preliminary stage only.
  - ROBINSON, Michael H., Smithsonian Tropical Research Institute, P. O. Box 2072, Balboa, Canal Zone. Current research: (1) The predatory behavior of various web-building spiders including Nephila clavipes, Eriophora sp., and Argiope argentata. (2) The so-called social behavior of Anelosimus sp. (3) Analysis of prey captures by Argiope argentata during a year on Barro Colorado Island (with B. Robinson). (4) The stabilimentum in the

web of Argiope argentata (with B. Robinson). Paper in press: "The Predatory Behavior of Argiope argentata (Fabricius)," Am. Zool. The S.T.R.I. affords excellent laboratory and field facilities for thesis and postdoctorate research (see "Research Opportunities," Smithsonian Institute, Washington, D. C. for details of application and available funds).

- ROSIN, Ruth, Student, 16 West 82nd St., New York, New York 10024. Permanent home address: Beit Oved, Israel. Recent work in Israel dealt with scorpions and Amblypygi (papers in print, in press, and in preparation).
- ROTH, Vincent D., Resident Director, Southwestern Research Station of the American Museum of Natural History, Fortal, Arizona 85632. Current research: (1) Agelenidae of Africa. (2) Illustrated key to North American Agelenidae. (3) List of the spiders of the Galapagos Islands. (4) Redescription of the spider Desis. Curates an identified collection of some 240 species of spiders from the Portal area. Other arachnids except mites are also collected.
- ROVNER, Jerome S., Assistant Professor, Department of Zoology, Chio University, Athens, Ohio 45701. Current research: (1) Mechanisms controlling copulatory behavior in spiders, begun in 1968. Preliminary results in press (Am. Zool. 8(4)). (2) Sound production during courtship display in Schizocosa saltatrix. Recent publications on Lycosa courtship (Anim. Behav. 16: 358-369), and on territoriality in Linyphia (Z. f. Tierpsychol. 25: 232-242).
- SAUER, Richard J., Assistant Professor, Department of Entomology, Michigan State University, East Lansing, Michigan 48823. Current research: (1) Revision of Ebo (Thomisidae) of North America. (2) Population dynamics and ecology of spiders, particularly their role in limiting insect numbers. Recent publication: "Two New Species of Crab Spiders from North Dakota," Can. Ent. 100: 1148-1150. Ph.D. received 1968. Title of thesis: "The Crab Spiders of North Dakota." Requests information on the location of Ebo collections.
- SCHICK, Robert X., Research Zoologist, Department of Zoology, University of California at Los Angeles (home address: 18745 Plummer St., Northridge, California 91324). Current research: Isolating mechanisms, phylogeny, and biogeography of Thomisidae, with special interest in <u>Misumenops</u>.
- SCHLINGER, Evert I., Professor and Chairman, Department of Entomology, University of California, Riverside, California 92502. Current research: Biology and systematics of internal spider parasites. Publications on Acroceridae available on request. Currently supervising 11 students proceeding toward Ph.D. in systematic entomology (including 2 on spiders). Recently collected, with a student, some 20,000 spiders in Chile and Patagonia. These when sorted will be available on loan basis to interested persons.

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- SCHMOLLER, Ronald, Assistant Professor, Dept. of Zoology and Entomology,
  University of Tennessee, Knoxville, Tennessee 37915. Current research:
  Influence of microhabitat on spider and phalangid distributions. Ph.D.
  received 1968. Title of thesis: "Ecology of Alpine Tundra Arachnida
  and Carabidae in Colorado." Possible future sites of research include
  several high-altitude habitats like grassy "balds" and spruce-fir
  forests of the Great Smokles, alpine tundra of the Rockies and Sierra
  Nevada, and Oak Ridge.
- SEIDEL, D. R., Science Cataloger, Library of Congress, Washington, D.C. Home address: 234 Grant Ave., Takoma Park, Maryland 20012. Current research: Ethology and ecology of spiders, with particular interest in Salticidae and Dysderidae. Begun 1968 and continuing as time and equipment permit.
- SHEAR, William A., Graduate Student, Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts 02138. Current research: (1) Evolution of social behavior in spiders. (2) Revision of the millipede family Cleidogonidae. Requests notification of the whereabouts of millipede collections, particularly the Order Chordeumida. Will identify millipedes of eastern U.S.A. in return for "the taxonomist's tax."
- STAHNKE, Herbert L., Director, Poisonour Animals Research Laboratory, Arizona State University, Tempe, Arizona 85281. Current research: Biology and taxonomy of scorpions. Can supervise graduate students in this field. Paper in press revising the genus Hadrurus, and manuscript completed on the family Diplocentridae. Joint work in progress on the scorpions of Venezuela and of India.
- STEWART, Kenneth W., Assistant Professor, Department of Biology, North Texas State University, Denton, Texas 76203. Current research: Life history and behavior of Loxosceles reclusa. Begun 1965. Paper published on life history of L. reclusa jointly with N. V. Horner in Texas J. Sci. 19: 333-347. 1967.
  - TRIPP, John R., Graduate Student, College of Biological Sciences, 1735 Neil Ave.,
    Chio State University, Columbus, Chio 43210. Current research:

    Descriptive embryology of the mygalomorph Antrodiaetus, with observations on postembryonic development. John collected his living material in North Carolina, and hopes to submit his work as a Fh.D. thesis this year.
  - TURNBULL, A. L., Professor, Department of Biology, Simon Fraser University, Burnaby 2, British Columbia. Current research: (1) Role of spiders in the control of grassland insects. Commenced at Belleville, Ontario in 1962. Joined by C. D. Dondale in 1965. (2) Revision of Tetragnatha of North America. Commenced 1968. Requests information about the location of main collections, identified and otherwise. Also lectures in animal ecology and population dynamics at S.F.U.

- ~ UNZICKER, John D., Curator, Illinois Natural History Survey, Urbana, Illinois 61801. Current research: Revision of the spider family Mimetidae in North America. Begun 1967.
  - VALERIO, Carlos E., Assistant Curator, Museo de Zoologia, Universidad de Costa Rica, Ciudad Universitaria "Rodrigo Facio," Costa Rica, America Central. Current research: (1) Curation of the museum arachnid collections.

    (2) Biology and ecology of two egg parasites of Achaearanea tepidariorum.

    (3) Revision of the genus Scytodes in Costa Rica. (4) Revision of the Sicariidae in Costa Rica. (5) Collection and identification of the Opiliones of Costa Rica. Paper in press on the genus Scytodes in Costa Rica with description of a new species (Rev. de Biol. Tropical).
  - VOGEL, Beatrice R., Independent Researcher, Texas Memorial Museum, 24th & Trinity, Austin, Texas 78705. Current research: (1) Preparation of a list of Texas spiders. (2) Comparative anatomy of the palpus of male entelegyne spiders, begun about 1966. Ph.D. received 1968. Thesis in press in two parts: "Apparent niche sharing of two Pardosa species,"

    Ecology, and "Taxonomic revision of sternalis and falcifera groups of Pardosa," Pub. Texas Memorial Mus. The wife of Dr. C. J. Durden in private life, Bea acts as C.I.D.A. correspondent for central U.S.A. and recently published "A List of New North American Spiders 1940-1966,"

    Mem. Amer. Ent. Soc. 23, 1967.
  - WALCOTT, Charles, Associate Professor, Department of Biological Sciences, State University of New York at Stony Brook, Stony Brook, New York 11790. Current research: Sensory physiology of spiders, particularly the vibration receptors and their role in the life of the spider. Current "tool" is Achaearanea tepidariorum. Will supervise graduate students, and administers assistantships, etc. The University also has an active program in ecology under Dr. L. Slobodkin.
  - WALLACE, H. K., Chairman, Department of Zoology, University of Florida, Gainesville, Florida 32601. Current research: (1) Systematics and ecology of the spiders of E. S. George Reserve in Michigan. (2) Systematics and ecology of the Lycosidae of southeastern U.S.A. (with J. D. McCrone). Plans to relinquish his present duties in June, 1969 and begin full-time research.
  - WHITCOMB, Willard H., Professor, Big Bend Horticultural Laboratory, Box 539,
    Monticello, Florida. Expects transfer July 1, 1969 to Department of
    Entomology, University of Florida, Gainesville, Florida 32601.
    Current research: (1) Life history of Lyssomanes viridis. (2) Seasonal
    history of the spiders associated with Magnolia grandiflora and the
    ecology of spiders of the North Florida beech-magnolia hammock.
  - WILLTAMS, Stanley C., Assistant Professor, Department of Biology, San Francisco State College, San Francisco, California 94132. Current research:
    (1) Systematics and zoogeography of the North American scorpion fauna. In progress for 5 years. (2) Origin, distribution, and phylogenetic affinities of the scorpions of Baja California. (3) Scorpion species diversity in relation to environmental complexity and insular isolation.

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- (4) Effects of ecological disturbance on arachnid populations and community structure. Joint work in progress on population structure of Vejovis mesaensis (with W. K. Fox), analysis of habitat, web design, and egg sacs of Diguetia (with M. Bentzien), synchrony of insect parasites with their spider hosts (with J. T. Hjelle), Pacific coast pseudoscorpions (with V. Lee), scorpions of coastal Pleistocene islands (with W. Butterworth), biology of Uroctonus mordax (with K. Lucas), and thermal regulation in Uroctonus mordax (with J. Spencer). Also offers course in General Arachnology.
- WITT, Peter N., M.D., Director, Division of Research, North Carolina Mental Health Department, Raleigh, North Carolina. Main interests are the factors involved in production of orb webs. Recently co-authored a book, "A Spider's Web: Problems in Regulatory Biology" (with C. F. Reed and D. B. Peakall), Springer-Verlag, Heidelberg, 1968, and is editor of an AAAS Symposium on web-building spiders to appear in February '69 issue of American Zoologist. Accepts students for thesis work either at the Dept. of Zoology, North Carolina State U., Raleigh, or the Medical School, U. of North Carolina, Chapel Hill. NSF support available. Earlier worked at Tuebingen, Germany, Bern, Switzerland, and Syracuse, N. Y. Current research includes experiments involving transfer of spiders to webs that are in earlier or later stages of completion (with P. Peters), anatomy and function of the spider tarsus (with R. Foelix), and changes in the orb during development of the spider (with C. F. Reed).

The following arachnologists have asked to have their name on the mailing list, but have not submitted an account of their current research.

ABALOS, J. W., Dr., Facultad Ciencias Exactas, Fisicas y Naturales, Departamento de Zoologia, Velez Sarsfield 299, Cordola, Argentine.

BARRERA, Alfredo, Dr., Museo de Historia Natural de La Ciudad de Mex., Nuevo Bosque de Chapultepec, Apartado Postal 18-845, Mexico 18, D.F.

BENTZIEN, Michael M., 425 Vernon Street, San Francisco, California 94132.

BUCKLE, D., Lady Lake, Saskatchewan, Canada.

BUTCHER, Mary (Mrs.), Master's Lodgings, University College, Oxford, England.

CAPOCASALE, R., Duranzo 1907 BIS, Montevideo, Uruguay.

CRAWFORD, F. T., Dr., Florida State University, Department of Psychology, Tallahassee, Florida 32306.

EDGAR, A. L., Dr., Department of Biology, Alma College, Alma, Michigan 48801.

FOWLER, D., Dr., Department of Biology, Western Michigan University, Kalamazoo, Michigan 49001.

FOX, I., School of tropical Medicine, San Juan, Puerto Rico 00905.

- GERSCHMAN de Pikelin, Mme B.S., Museo Argentino de Ciencias Naturales, "Bernardino Rivadavia", Av. Angel Gallardo 470, Buenos Aires, Argentina.
- GORHAM, J. R., Dr., National Communicable Disease Center, Atlanta, Georgia 30333.
- HITE, J. Maxine, Dr., Department of Biology, P. O. Drawer WW, Arkansas State University, Jonesboro, Arkansas 72467.
- JOHNSON, Bob D., Dr., Biology Department, Arkansas State University, Jonesboro, Arkansas 72467.
  - MacMAHON, J. A., Dr., Department of Biology, University of Dayton, Dayton, Ohio 45409.
  - ELIEZER, Martin F., Apartado Postal 18-845, Mexico 18, D.F.
  - MAURY, E. A., Museo Argentino de Ciencias Naturales, "Bernardino Rivadavia", Av. Angel Gallardo 470, Casilla de Correo 10, Buenos Aires, Argentina.
  - MONTELEONE, Muriel (Miss), 2140 W. 108 St., Los Angeles, California 90047.
  - MOODY, Marjorie J. (Miss), 3030 Verde St., Apt. 7, Bakersfield, California 93304.
  - MOORE, Frank J., The Ohio State University, 1735 Neil Ave., Department of Entomology, Columbus, Ohio 43210.
  - PINTER, L. J., The Biological Laboratories, Harvard University, Cambridge 38, Massachusetts 02138.
  - SCHIAPELLI, R. D., Professor, Museo Argentino de Ciencias Naturales, "Bernardino Rivadavia", Av. Angel Gallardo 470, Casilla de Correo 10, Buenos Aires, Argentina.
  - SPIELMAN, A., Dr., Department of Tropical Public Health, Harvard School of Public Health, 25 Shattuck St., Boston, Massachusetts.
  - STONE, Karl J., Dr., Citrus Experiment Station, P. O. Box 1088, Lake Alfred, Florida 33850.
  - THORN, E., Provincial Museum, Victoria, British Columbia, Canada.

## HARRIET EXLINE FRIZZELL, AN APPRECIATION OF HER LIFE AND WORK

The wit and wisdom, the generous eagerness to help, and the unassuming dignity that many of us knew in Harriet Frizzell were as much a part of her as her dedication and devotion to spiders and science. But it was her warm acceptance and genuine appreciation of humanity that really endeared her to colleagues, friends, and acquaintances alike. Her death in February, 1968, cannot diminish the influence that she left upon her chosen science nor upon the many people with whom she associated.

Harriet's long career in araneology had a rather casual beginning she always claimed. She had entered Reed College at the age of sixteen planning to study language and literature but was lured into the sciences by a burgeoning interest in chemistry and biology. According to her own account, an adviser suggested that an investigation in spider taxonomy would be an appropriately lady-like undertaking for an undergraduate thesis problem and thereupon launched a lifetime interest. She often remarked, when beset with some taxonomic problem, that she struggled alone with spiders for more than six years before she ever met another person who was seriously involved with a similar study.

With typical modesty she also insisted that her entry into graduate study was simply a matter of circumstance. A graduate assistantship carrying a stipend was merely the most attractive opportunity available during the depression years of the early 1930's. These casual beginnings of a scholarly career that she professed seemed rather unlikely to those of us who were exposed to her brilliantly analytic, scientific attitudes in later years. The depth and breadth of knowledge and wisdom which perforce showed through the simplicity of her characteristic demeanor tended to suggest that there was more direction in her life plan than she cared to admit.

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The six years that she spent in graduate study at the University of Washington, with summers at Friday Harbor Biological Station, seem to have been especially rewarding for her personally. They provided an opportunity to continue and expand her spider studies in a region in which the fauna was then virtually unknown. She also published a paper on the pycnogonids of Puget Sound during this time. After completing her Fh.D. in 1936, she was awarded the Sterling Fellowship at Yale to pursue postdoctoral research in arachnology with Professor Petrunkevitch, apparently the first woman ever to have received this fellowship. She and "Pete" had much in common beyond arachnids and became lifelong friends. After his death in 1964, she undertook to organize and edit his unpublished notes and manuscripts, and the results of these efforts are pending publication.

In 1938, Harriet was married to Don L. Frizzell, a fellow scientist, in Guayaquil, Ecuador, and the couple remained in Ecuador and Peru for the next five years, individually and jointly continuing their research interests in arachnology and paleontology. After a brief return to the University of Washington to teach navy premedics during World War II, she rejoined her husband who had accepted a place on the staff of the University of Texas. Harriet worked as guest researcher in spiders in the Department of Zoology during their three years in Austin.

The Frizzells moved to the University of Missouri at Rolla in 1948, and thereafter Harriet continued her spider research largely independently. With typical devotion to their work, the Frizzells modified their home to provide a separate laboratory in it for each of them and to accommodate an underground, concrete vault in which Harriet could safely store the vast spider collection that she had accumulated through the years. Though working independently, she was at this time named a Fellow and Research Associate of the California Academy

of Sciences, an association which she continued until her death. She was also appointed taxonomist and consultant for a National Science Foundation project in spider biology conducted at the University of Arkansas from 1960 to 1967.

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Although spiders were Harriet's first and consuming love and she devoted enormous amounts of her time to encouraging and helping whoever showed the faintest interest in them, her other interests and activities were diverse and many. She was an inveterate gardner who was neither dismayed nor hampered by adverse weather or recalcitrant soil. She was continually frustrated from April to October, however, because a mere 24 hours a day was an entirely inadequate amount of time for the proper care of both her flowers and spiders. And still, in her resourcefulness, she could find time to attend garden club meetings and most of the concerts, recitals, and art exhibits that were available, to trade her plants and specially prepared dishes with neighbors and friends, to commiserate and counsel with lonely or disoriented students, to make pickles and can vegetables, to attend to the needs of her assortment of semi-domesticated cats, to read all the new "who-done-it's" and to go fishing.

She also carried on a voluminous correspondence with arachnologists throughout the world, made innumerable gifts and loans from her collection continually, and served as Correspondent to the Centre International de Documentation Arachnologique. But all the while she firmly maintained that she was first a wife and a home-maker, and only somewhat as an after-thought, a sometime contributor to the expanding realm of knowledge.

Aside from the loss that araneology will suffer by her death, we who knew her have also suffered a deep personal loss. Such was her personality that each of us must like to think that he had a special and privileged place in her affection. And no doubt we did. So great were her energies, compassion, and generosity that she could and did embrace us all.

# Bibliography of Harriet Exline (1909-1968)

- 1934. (and Hatch). Note of the food of the black widow spider. J. New York Entomol. Soc. 42:449-450.
- 1935. Three new species of Cybaeus. Pan-Pacific Entomol. 11(3):129-132.
- 1936. A new species of <u>Cybaeus</u>. (Araneae: Agelenidae). Entomol. News. 46(10):275-286.
- 1936. Pycnogonids from Puget Sound. Proc. U. S. Nat. Mis. 83(2991):413-422.
- 1936. New and little known species of <u>Tegenaria</u> (Araneida: Agelenidae). Psyche 43(1):21-26.
- 1936. Nearctic spiders of the genus <u>Circurina</u> Menge. Am. Mus. Novitates 850:1-22.
- 1937. The Araneida of Washington: Pholcidae, Argiopidae, Agelenidae, Hahniidae, Attidae. Univ. Washington Publ. Theses Ser. 2: 717.
- 1938. Gynandromorph spiders. J. Morph. 63(3):441-472.

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- 1938. The Araneida of Washington: Agelenidae and Hahniidae. Univ. Washington Publ. Biol. 9(1):1-44.
- 1939. (and Petrunkevitch). List of species, suborder Mygalomorphae. in Petrunkevitch, 1939. Catalogue of American spiders. Trans. Connecticut Acad. Arts. Sci. 38:191-338.
- 1945. A new group of the genus Conopistha Karsch, 1881. Trans. Connecticut Acad. Arts. Sci. 36:177-190.
- 1945. Spiders of the genus Conopistha (Theridiidae, Conopisthinae) from northwestern Peru and Ecuador. Ann. Entomol. Soc. Am. 38(4):505-528.
- 1948. Morphology, habits and systematic position of <u>Allepeira lemniscata</u> (Walckenaer) (Araneida: Argiopidae, Allepeirinae). Ann. Entomol. Soc. Am. 41(3):309-325.
- 1950. Conopisthine spiders (Theridiidae) from Peru and Ecuador. in Studies Honoring Trevor Kincaid. Univ. Washington Press. p. 108-124.
- 1950. Spiders of the Rhoicininae (Pisauridae) from Western Peru and Ecuador.
  Am. Mus. Novitates 1470:1-13.
- 1951. Tegenaria agrestis (Walckenaer), a European agelenid spider introduced into Washington State. Ann. Entomol. Soc. Am. 44(3):308-310.
- 1955. (with D. L. Frizzell). Micropaleontology of holothurian sclerites. Micropaleontology 1(4):335-342.

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- 1956. (with D. L. F.). Monograph of fossil holothurian sclerites. Univ. Missouri, School Mines & Metallurgy Bull., Tech. Ser. 89:1-204.
- 1957. (with D. L. F.). Holothurians. in Ladd, H. S. (editor), Treatise on Marine Ecology and Paleoecology. Geol. Soc. Am. Mem. 67:983-986.
- 1957. (with D. L. F.). Revision of the family Synaptitidae, fossil holothurian sclerites (Echinodermata, Holothuroidea). Soc. Geol. Peru Boletin 32:97-119.
- 1958. (with D. L. F.). Crustacean gastroliths from the Claiborne Eocene of Texas. Micropaleontology 4(3):273-280.
- 1958. (with D. L. F.). Fish ossiculiths: unrecognized microfossils.

  Micropaleontology 4(3):281-285.
- 1960. Rhoicinine spiders (Pisauridae) of Western South America. Proc. California Acad. Sci. 4th Ser. 29(17):577-620.
- 1962. (and Levi). American spiders of the genus <u>Argyrodes</u> (Araneae: Theridiidae).
  Bull. Mus. Comp. Zool. 127(2):75-204.
- 1962. Two gnaphosid spiders from Arkansas. Proc. California Acad. Sci. 4th Ser. 32(4):70-85.
- 1963. (and Whitcomb and Hite). Comparison of spider populations of the ground stratum in Arkansas pasture and adjacent cultivated field. Arkansas Acad. Sci. Proc. 17:1-6.
- 1963. (and Whitcomb and Hunter). Spiders of the Arkansas cotton field. Ann. Entomol. Soc. Am. 56:653-660.
- 1965. (and Levi). The spider genus <u>Synotaxus</u> (Araneae: Theridiidae). Trans. Am. Micros. Soc. 84(2):177-184.
- 1965. (and Whitcomb). Clarification of the mating procedure of Peucetia <u>viridans</u> (Araneida: Oxyopidae) by microscopic examination of the epigynal plug. Florida Entomol. 48(3):169-171.
- 1966. (with D. L. F.). Holothuroidea Fossil record. in Moore, R. C. (editor), Treatise on Invertebrate Paleontology. (Univ. Kansas Geol. Soc. Am.) vol. 2:646-672.

### EDITORS' NOTE

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Some have inquired regarding the means of producing this newsletter, a few generously offering help of various kinds. This is much appreciated. The greatest need now, however, is for completion of the listing of ourselves and

our current research interests, and for news, open letters, and discussions of particular topics to include in future issues. The present arrangement, as decided by about 25 arachnologists at the New York meeting of the Entomological Society of America in 1967, is that C. Dondale act as first editor and J. McCrone provide additional editing plus the mimeographing and mailing of the issues as material becomes available. Costs are borne by the respective employers of these men, though the future could bring the necessity of assuming our own expense. The opportunity before us is, as the Editors see it, full and ripe.