#### AMERICAN ARACHNOLOGY

1ssue # 6 October 1971

Editor: B. R. Vogel, Texas Memorial Museum, 24th & Trinity, Austin, Texas 78705

In this Issue - AMERICAN ARACHNOLOGISTS

AMERICAN ARACHNOLOGY # 6 contains news about many arachnologists, a new book notice, a movie review, a report from a participant in the 5th International Arachnological Congress, and, what we all have been waiting for - a Directory of American Arachnologists. It includes more than 170 names of persons who receive this newsletter. We have indeed expanded from the 32 who replied to Dondale's questionaire in 1968 that they were interested in a newsletter. American Arachnology is still distributed without charge to all who are interested in receiving it.

Our thanks to all contributors to this issue, and a special thanks for your patience at our slow answering. We would like to send individual replies to all, but just haven't time. Please continue to send your news, and especially reports of work in progress. Above all, don't feel that no answer means we ignore you. Unless mis placed, your news item appears in the very next issue after receipt.

A reminder that the CUT-OFF DATE for AA # 7 is the end of March, 1972, but you need not wait until the last minute to send your information. Do it during winter break. AA # 7 will contain a recapitulation of Arachnology Courses.

# NEW BOOK

Studies on the Cavernicole Fauna of Mexico. James Reddell & Robert Mitchell, eds. \$ 8. Can be purchased from the Association of Mexican Cave Studies, Box 7672, University Station, Austin, Texas 78712.

Contains: a paper by Gertsch describing over 70 new species of spiders, as well as many records for other species; a paper on ricinulids describing 3 new species; a paper on opilionids by Goodnights with many new species; a paper by Roland describing a new genus and 6 new species of schizomids; and many non-arachnid papers.

# C. J. D. A.

Centre International de Documentation Arachnologique annually publishes a list of all arachnological (except acarine) publications of the world. If you are not yet registered with them, it is to your advantage to do so. Address: C.I.D.A, 61, rue de Buffon, Paris, 5eme, France. They ask a contribution of 15 French francs, about \$ 2.60 U.S.. Check and see if you have sent your contribution this year. C.I.D.A. also asks for 2 reprints of your publications.

Also, NOW is the time to send a list of your 1971 publications to your regional C.I.D.A. correspondent. This information must be forewarded to Paris before December 1. Correspondents for the Americas are:

[ see Directory for addresses not given here]

ARGENTINA: Prof. R. D. Schiapelli

BRAZIL: Dr. J.L.A.Feio, Museu Nacional, Quinta da Boa Vista, Rio de Janeiro D.F.

CANADA: Dr. C.D.Dondale

MEXICO: Dr. L. Mazzotti, Calle 19 no 109, San Pedro de los Pinos, Mexico 18 D. F.

UNITED STATES:

Eastern: Dr. W. J. Gertsch Central: Dr. B. R. Vogel Western: Dr. D. C. Lowrie

Opilionids: Dr. C. J. Goodnight

Pseudoscorpions: Dr. C. C. Hoff, Dept. of Biology, Univ. of New

Mexico, Albuquerque, N. M. 87106

Scorpions: Dr. H. L. Stahnke

## ARACHNOLOGY JOURNAL ?

Several people, but especially Don Lowrie, have expressed interest in seeing the development of journals for arachnologists. Many feel it would be nice to have our own journal for North American arachnid papers. One suggestion is that American Arachnology expand to include scientific notes as well as news items. Another suggestion is that this newsletter remain as it is and the Notes of the Southwestern Arachnologists expand to include all of North America. The problem in both cases will be finding a willing editor, and funding.

Everyone interested in the possibility of an Arachnology Journal should send their opinions and remarks to D. C. Lowrie. [ address in Directory]

# ARACHNOLOGY SYMPOSIUM ?

We have received queries about the status of the spider symposium that was to be held at the 1971 meeting of the Entomological Society of America in Los Angeles, December. We have heard nothing more about the symposium, so we suppose it died on the vine.

# MOVIE REVIEW - The Helistrom Chronicle

When I first heard about this film, described as an insect documentary, I asked an insect taxonomist friend if he had seen it. His reply puzzled me until I had seen the movie myself. He said, " It was filthy, absolutely filthy. I saw it three times."

The narration from beginning to end is unbelievably entomophobic. The narrator who appears all too often on the screen, professes to be a scientist, not an entomologist, perhaps, but one who has studied <u>The Insect</u>. His science runs the gamut from oversimplification, exaggeration, arrogance, anthropocentric fantasy, to outright lies. The whole message is that man and <u>the insect</u> are enemies, and the end "he", <u>the insect</u>, will take over. The insect can endure conditions impossible to man, and even the poisons we use on "him" are "like mild perfume." And if <u>the insect</u> does not out breed us, he will starve us by eating our food.

The film credits the American Entomological Society for cooperation. DDT-flavored Onions to those who supposedly read and approved the script, and allowed the continual reference to millions of diversified forms as "a species". The scientific advisors are entitled to their own personal fears about the future of our species, but there is absolutely no excuse for allowing so much bad biology in a film that will be seen by so many people.

The photography of the insects is breath-taking. There are many, many beautiful shots of animals. There is even a sequence of <u>Pardosa</u> courtship and copulation, with a clear view of the distended hematodocha. The courtship and copulation of <u>Latrodectus</u> is marred by the "consultant scientist" off stage who surreptitiously, he thinks, flings the retreating of back to the  $\mathfrak{P}$ , so as to not dispute the legend. There are many remarkable time-lapse shots, though many of these were run through a bit fast.

Overall, the photography is very good, the message comes across quite heavy, but I fear that damage is done. It is a film designed to stimulate hate, and I believe "designed" is the right word. Even though the message is crude, it reinforces the general bug-stomping attitude of our culture. After learning that DDT becomes ineffective for poisoning crop pests, the reaction the film stimulates is "Well, let's get Science to develop some better poisons". It is sad that the total relationship to insects and even Nature is antagonistic.

One wishes it would be possible to alter all copies of the film now in circulation by editing out all the bits with "Hellstrom" in them, and cut his narration out of the rest of it. That would make a truely worth while film.

## NEWS ABOUT ARACHNOLOGISTS

BEATTY spent the summer continuing his study of the spider distribution on the 24 Lake Erie islands. He has been working on the project for 12 years, and says his species list os over 170 so far. Beatty is publishing biological notes on <u>Theridion pictipes</u> and a 650 mile range extension. He hopes also to have another manuscript on his Lake Erie work soon. Beatty is beginning a revision of the Hahniidae of North and Central America and would like to borrow specimens.

David BIXLER changed from graduate student at Riverside to teaching at Chaffey College sometime between AA #2 and AA # 6. Bixler spent the summer collecting Lycosids in the mountain meadows of Mt. McKinley, Alaska. His primary interest is ecological, but finds himself doing taxonomy out of necessity.

Saul FROMMER, at Riverside, California, is trying to develop a snyoptic collection of spiders. He is also interested in making the collections available to spider workers.

Don LOWRIE spent the summer on a "good collecting trip" in New Mexico, Arizona, Colorado and Utah. The Lowries drove more than 9000 miles this summer collecting and viewing places for Don's retirement next year. Lowrie is also well along with a paperback for Natureograph of Spiders of Western U. S., and hopes he completes it is 1972.

in addition to attending the arachnological congress in Brno, Bill PECK first attended John Parker's Spider Course in Wales. Peck has two graduate students in spiders this fall: Brian Taylor, who is just finishing his M. S. thesis on cross mating of northern and southern "races" of Phidippus audax Hentz; The other student, Juanita Peasly, also an M. S. candidate, has not yet settled on her problem.

David RICHMAN spent the summer hunting live <u>Pellenes</u> for his Ph.D. research at the University of Arizona, Tucson. He is studying mating dances and electrophoresis. Richman has numerous notes on <u>Loxosceles arizonica</u> which he hopes to publish in the near future.

H. K. WALLACE is happy to be back working on spiders since completing his duties as Chairman of the Zoology Dept. in 1968. He has been working on a revision of the genus <u>Pirata</u> of North and Central America over the last two years and hopes to finish major portions of his work in the near future. Much of his time has been spent photographing spiders, and genitalia for study purposes and plans to use the better photographs in his publication. He has also spent much of his time identifying wolf spiders for various workers and governmental agencies. Wallace would welcome freshly molted

male lycosids with lightly sclerotized palps for photographing, and also any wolf spiders.

John F. ANDERSON continues his study of the physiological ecology of arachnids with a soon to be completed study of the physiology of starvation in various species of spiders.

Jon REISKIND is extending his revision of the Castianeirinae into South America and will spend next summer studying the ecology and behavior of these spiders in Venezuela and Panama. He is presently surveying the spider fauna of Spanish Moss and Magnolia microhabitats in northern Florida. He was a participant in the Summer Institute in Systematics in Washington, D.C. this past summer.

Charles HARPER recently completed his doctoral dissertation: "The comparative ecology of the sibling species of the wolf spider." He worked with Lycosa ammophila and L. lenta.

Yael LUBIN has returned from a one and one-half year stay in New Guinea where she studied the predatory behavior of several species of <u>Cyrtophora</u>.

Willard WHITCOMB is as active as ever and deeply involved with biological control work but he and his students are continuing spider work including faunal surveys of various northern Florida habitats and some life history studies.

Carlos VALERIO is presently working in Costa Rica on his doctoral dissertation which is a population study of the parasites of <u>Achaearanea tepidariorum</u> in Costa Rica.

Drs. Anderson and Reiskind will offer a graduate course in Arachnology in the Spring of 1972.

REPORT

#### Fifth International Arachnological Congress

For reasons that will become evident, I am somewhat less than the ideal reporter to write about the 5 th Arachnological Congress in Brno [Czechslovakia]. But it was so memorable an experience that, despite the limitations, I acceded to Bea Vogel's request that L make like one (reporter, that is). My qualifications, aside from any considerations of competence, are diminished because I arrived in Brno a day and half after the congress opened, thanks to not having the proper documentation for transit through Hungary. Then, I later spent another half day discussing the philosophy of visa validity with the Czech National Police. The cumulative result was that I missed hearing about half the papers that were presented. But since these papers and their wealth of arachnological wisdom will be

published in time and available to you, this report, then, should be free to deal with the habits and behavior of arachnologists rather than arachnids ---- and on that score, I can report fairly adequately.

The congress was formally opened (I was later told) by Prof. Josef KRATOCHVIL, who welcomed the participants in the name of the Czechoslovakian Academy of Sciences. Prof. Pierre BONNET, who had not yet arrived (because he was also engaged in discussions on passports and visas) was elected the Honorary President of the Congress. A moving force of C.I.D.A., Prof. Max VACHON, was unable to attend due to an automobile accident he ahd had a short time earlier, but he was ably and amiable represented by Sec. Adjoint Michel HUBERT and Sec. Admin. Francoise REBIERE. They, along with several of their colleagues from the Museum National d'Histoire Naturelle, arrived each staggering under a small bale of new C.I.D.A. directories which had just been completed. The directories were distributed to all of us foolish enough to add their bulk to our already-overstuffed luggage. More astute individuals chose to have them sent later by mail.

Sometime during the ensuing week the directive committee of the congress met (over dinner and wine, naturally) to nominate officers for the coming triennium, choose a locale for the next congress, and attend to whatever business such committees attend to. At the final meeting, then, its recommendations were presented to the entire congress and acted upon by vote of the members in attendance. Dr. Eric DUFFEY was elected president to succeed retiring president Prof. Roland LEGENDRE. Dr. Willis GERTSCH. Dr. Takeo YAGIMUMA, and Dr. Heinrich HOMANN ( ! think), none of whom were present at the congress, were elected vice presidents. It was agreed to accept Prof. L. VLIJM's invitation to convene the 1974 congress in Amsterdam. The committee then expressed its thanks to Prof. KRATOCHVIL and the Czech Academy of Sciences and to Drs. MILLER, SILHAVY and ZDAREK who had been chiefly responsible for organizing the activity. Other members of the Institute of Vertebrate Zoology in Brno, who had helped with the organization and in smoothing out rough spots, also merited ( and I hope received) expressions of appreciation. Among them was Dr. R. OBRTEL, who functioned as chief trouble-shooter, and became, Figaro-fashion, all things to all people who had a problem. (Note: All of the above information was dispensed in French on " the morning after", and it is subject to emendation since [ was neither fully alert nor taking notes at the time.)

Although I do not have the "official"figures, I would estimate that about 100 persons, including spouses, attended the congress. From the names that I recognized on the congress list as being present (there were some no-shows), I can count representatives from 23 countries. Herb LEVI, John COOKE, Robin LEECH, and my wife and I represented North America, and along with Emilio MAURY from Argentina, the Western Hemisphere for that matter. Dr. Seisho SUZUKI from Japan and Dr. Carl RICHTER from the Congo were the others attending from outside Europe.

National origin, however, was of small consequence. As a matter of fact it became evident only as it was responsible for language inconvenience

occasionally, and even this was of small importance although it sometimes was necessary to listen in one language and reply in another. The ambience was one of thorough congeniality. Most of the participants were housed in four or five neighboring hotels, and if one made a short reconnoitre of the bars, he would seldom fail to find an arachnological discussion which he could join. Czech beer, being what it is (divine!), provided for a considerable depth in these extemporaneous meetings.

Spontaneously convened groups, irrespective of principal interests and backgrounds, would become welded together through inherent compatability apparently. And whether they commenced over dinner, at the opera, or in a museum, they would continue on together for long periods. One evening at the Black Bear, a restaurant which became somewhat of a favorite, the nine of us dining together represented seven nations --- Belgium, the Congo, France, Germany, Holland, Scotland, and theU.S. --- and the trilingual conversation didn't falter for hours. The evening that Smetana's "Bartered Bride" was playing at the modern, new Brno Opera House, a sizeable arachnological delegation suspended other activity long enough to hear this Bohemian opera, sung in Bohemian, in (or, at least, near) Bohemia -the sort of combination that doesn't arise too frequently. The Gregor Mendel Museum, whose guest book became a virtual roster of the congress, sometimes was hard put to close its doors in the evening because of arachnologists wandering around the monastery garden where some Mendelian fouro'clocks (although no peas) were still blooming.

The organizing committee had also arranged excursions out of Brno. On a short one to the Moravian Karst, we were conducted through a large and interesting, commercially developed cave that was located in a beautiful area replete with sink-holes and deep valleys typical of cave-formation terrain. We regrouped late in the afternoon at a sylvan beer garden that overlooked one of the spectacular sink-holes several hundred feet deep. A second, more extensive trip took us through two Natural Reserve areas for talking and collecting during the day and then to a wine cellar for eating and drinking during the night. The wine cellar, the legimate article tunneled into the side of a hill, with its low, arched ceiling made of brick, tended to reflect sound in a way that caused one to shout at his neighbor, which, of course, intensified the reverberations cumulatively. Some of the less hardy were forced to abandom the premises before they could become sufficiently anesthetized to endure the noise. The majority, however, proved to be as adaptable as the creatures that they study, and they merely continued to raise their voices and carry on.

Carrying-on, in fact, rather aptly describes some of the behavior patterns that became evident under the conditions. One of the early releasers featured an impromptu Japanese dance, and that was followed some time later by a Czech-Finnish-Dutch glee club in a selection of Hungarian and Czech folk music (I suppose). As greater quantities of the excellent Czech wine disappeared, even the Honorary President contributed to the madness by singing, in its entirety, "La Marsellaise" - in Spanish- to the pop-eyed amazement of the French delegation that was sharing his table. The food was also good. Later, emerging from the throbbing cellar into the

balmy, moon-lit night and the silent village street was so pleasant a contrast that it doubtless helped everyone to arrive home in a quite satisfactory condition.

About half the members of the congress joined the three day excursion to the High Tatra Mountains. Unfortunately, the long trip was not greatly enhanced by the weather. It remained cold and wet for almost the entire time, hampering collectors and distressing everyone. Further, the rather primative accommodations in which we were booked were, needlessly, a source of embarrassment to out hosts. Interesting and quite adequate, they actually engendered a spirit of camaraderie that would otherwise have been lacking. The extensive commercial development in some parts of the Tatras, which are popular both in the summer and as a ski resort, was in interesting contrast to the village of Zdiar where we stayed near the Polish frontier. Here, traditional Slovakian log houses were still being constructed in a manner and style that probably has not changed in centuries.

Intending to observe and collect some "alpine" arachnids, as well as to have an aerial view of the region, most of the group ascended the high peaks on a funicular one afternoon. A snow storm overtook us enroute, however, and only a few, hardy, Northern European types ventured more than a short distance from the terminal building. They scrabbled around under the snow and rocks and actually returned with a few specimens, but the rest of us bided out time over coffee and conversation until we could get space in a descending car. No time was ever wasted doing nothing.

The snow continued through the night on the peaks and afforded even more spectacular scenery the following day as we returned to Brno. Leaving the group, my wife and I returned as far as Bratislava with Torbjorn KRONESTEDT and his wife who had driven (, and ferried) down from Sweden. We were thus able to stop often to collect and admire the view. The wild Colchium blooming profusely along side the mountain streams and the snow covered peaks in the distance were so beautiful that it almost made us forget to look for spiders. It was a properly esthetic ( and traveloguesque) finale to an incomparable ten days of arachnological interchange.

Bill Peck

## ARACHNOLOGY COURSES

CALIFORNIA STATE COLLEGE, Long Beach, Calif. 90801: Dr. W. D. Stockton teaches Entomology 320. Terrestrial arthropods, arachnids, exclusive of mites, offered on demand.

EASTERN ILLINOIS UNIVERSITY, Charleston, III. 61920: Dr. R. C. Funk will teach Zoology 535, Arthropodology, a graduate course treating terrestrial, non-insectan arthropods. Will accept students for an M.S. on systematics or biology of non-insectan arthropods.

### **NEW ADDRESSES**

BIXLER, Dr. David B., Chaffey College, 5885 Haven Ave., Alta Loma, Calif. 91701

CULTER, Dr. Bruce E., 2441 W. Larpenteur, Saint Paul, Minn. 55113

McCRONE, Dr. John D., Director of Research, Univ. of Iowa, Iowa City, Iowa 52240

MES!BOV, Bob, 240 Cabrini Blvd., New York, N. Y. 10033

MUMA, Dr. Martin, General Delivery, Silver City, New Mexico 88601

# NEW LISTINGS, Arachnologists of the Americas

- BAILEY, Hector, 2490 East, Sherbrooke, Montreal 134, Quebec. B.S.,
  Montreal University. Current interest: Salticidae vs. Hymenoptera.
- BROWN, Katharine M., 829 Sarah Ann, Nacogdoches, Texas 75961. Has just received an M.S. from Stephen F. Austin State University. Brown's thesis is entitled "Taxonomic and cellulosa acetate electrophorestic studies of spiders of Nacogdoches, Texas." It is a fine piece of work and she has added 51 species to the list of Texas spiders, bringing the present total to 628 for the state. We hope she will continue to add species at this rate.
- FUNK, Richard C., Dept. of Zoology, Eastern Illinois Univ. Charleston,
  111 61920. Assistant professor, Curator of non-insectan arthropods.
  Current research: Taxonomic studies of the mite superfamily
  Celaenopsoidea (Mesostigmata) and a survey of non-insectan
  arthropods of east-central Illinois. Teaches a graduate course in
  arthropodology [ see under Courses].
- HORNER, Norman, Biology Dept., Midwestern Univ., Wichita Falls, Texas 76308. Graduate student, completing a Ph.D. at Oklahoma State University on the bionomics of Metaphidippus galathea and its significance as a biological control agent in sorghum. Thesis supervised by Dr. K. J. Starks. Horner received his M.S. at North Texas State University on the life history of Loxosceles reculsa. His current interest is spider dispersal.
- JUNG, Albert, 1754 B Stockton St., San Francisco, Calif. 94133. Just graduated from University of California, Berkeley. Looking for a graduate school. This fall, Jung is on a grand tour of the U.S. visiting as many arachnologists as he can, and collecting everywhere. Jung spent the summer at the Southwestern Research Station.

Portal, on an undergraduate research participation program, working with Vince Roth on spiders. Project completed: Spiders of the Chiricahua Area, and A new tarantula from the Chiricahua Mts. General interest in spider taxonomy with special interest in Theraphosidae in the United States.

- MOSIG, Dirk W., Psychology Dept., Georgia Southwestern College, Americus, Georgia 31709. Professor. Mosig received his degree at the Univ. of Florida, and enjoyed courses from both McCrone and Reiskind. His interest in spiders is behavioral, especially prey capture. He hopes to work with salticids and theraphosids.
- RALSTON, James, Dept. of Zoology, 220 Natural Science Bldg., Michigan State Univ., East Lansing, Mich. 48823
- STOCKTON, W. D., Dept. of Biology, California State College, Long Beach Calif. 90801. Professor, Curator of the arachnid collection of the college. Has had 3 M.S. candidates in spiders, and one in scorpiones. Stockton has not been active in publishing on arachnids yet. One paper in press reporting amblypigids in Ecuador and Galapagos islands. The college collection has about 10,000 specimens and Stockton is interested in exchange with other institutions.
- THORN, Erik, 1164 Patrick St., Victoria, B.C., Canada. Exhibition designer. Active interest in life histories and distribution of arachnids, centipedes and millipeds of the Pacific Northwest. General year round collecting on southern Vancouver Island, occasionally other areas as time permits. Particular interest is Antrodiaetus pacificus and a melanic population of Latrodectus. Publication, 1967, Preliminary distributional list of the spiders of British Columbia. [B.C. Provincal Museum Pub.?]

  We must apologise to Mr. Thorn for the delay in publishing his particulars. He has written us before, but his letter got lost somewhere. We hope this hasn't happened to too many others.
- VAIL, David, Dept. of Zoology, 220 Natural Sciences Bidg., Michigan State Univ., East Lansing, Mich. 48823. Areas of interest: Arthropod succession in terrestrial environments. Methods of field sampling. Current research: community structure of spider populations in cultivated fields.

#### ADDENDUM:

R.G. HOLMBERG and J. M. HARDMAN are studying the feeding of 2 Pardosa species under the supervision of Dr. A. L. TURNBULL, at Simon Fraser University. Hardman's M.S. from Imperial College, University of London, was on "Investigations on the arthropod predators of leafhoppers in an acid grass field". He is presently investigating the functional response of the 2 Pardosa to the abundance of Drosophila melanogaster. Holmberg's M.S. from the Univ. of Saskatchewan was "The odoriferous glands of some Palpatores Phalangida". He is now investigating prey selection in the Pardosa species. Holmberg and Hardman would like to learn what others are doing in arthropod feeding.

#### DIRECTORY OF AMERICAN ARACHNOLOGISTS

#### **OCTOBER 1971**

The underlined number is the issue of American Arachnology in which a short statement of interest was published, if at all. We regret that there may be some incorrect addresses included, but we can publish only the information we have. Corrections sent in will be published in AA # 7.

Abalos, J. W. Facultad Ciencias Exactas,		Beer, Robert E. Depts. of Entomology,	
Fisicas y Naturaled		Systematics and Ecology	
Departmento de Zoologia		Univ. of Kansas	
Velez Sarsfield 299		Lawrence, Kans. 66044	_
Cordola, Argentina		ecology acarines	<u>5</u>
Anderson, John F.		Benner, Bill	
Dept. of Zoology		1442 Durham Rd.	
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Gainesville, Fla. 32601		spider webs	<u>5</u>
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	•	Bentzien, Michael M.	4
Bailey, Hector	•	425 Vernon St.	
Apt 6, 2490 East		San Francisco, Calif. 94132	
Sherbrooke, Montreal 134			
Quebec, Canada		Berry, James W.	
Salticidae vs.Hymenoptera	<u>6</u>	Dept. of Zoology	
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Bare, Rex O.		Indianapolis, Ind. 46208	1.
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Nuevo Bosque de Chapultepec		Bixler, David E.	
Apt. Postal 18-845		Chaffey College	
Mexico D. F., Mexico		5885 Haven Ave.	
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Bayer, Lutz J.		systematics, ecology	<u>2</u> *
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Dept. of Zoology		Briggs, Thomas S.	
Southern Illinois Univ.		845 Corbett Ave.	
Carbondale, III. 62901	9	San Francisco, Calif. 94131	
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829 Sarah Ann		Crawford, F. T.	
Nacogdoches, Texas 75961		Dept. of Psychology	
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University College		Dondale, Charles D.	
Oxford, England	_	Canada Dept. of Agriculture	
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Lynchburg College			
Lynchburg, Virginia 24504		Drew, William A.	
systematics Pisauridae	<u>2</u>	Dept. of Entomology	
		Oklahoma State Univ.	
Chickering, A. M.		Stillwater, Okla. 74074	
Museum of Comparative Zoology		Oklahoma spiders	2
Harvard Univ.		·	_
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Cambridge, Mass. 02138	2		
Carribean spiders	<u>2</u>	Entomology Research Division	
		U. S. Dept. of Agriculture	
Cooke, John A. L.		P. 0. Box 232	
American Museum of	•	Kerrville, Texas 78028	
Natural History			<u>5</u>
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		Columbia, Missouri 65201	
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Eberhard, William G. Zoology Dept. University at Cali Columbia spider webs	<u>2</u>	Fronk, W. Don  Dept. of Entomology  Colorado State Univ.  Fort Collins, Colo. 80521  alfalfa, Colorado spiders	<u>2</u>
Edgar, Arlan L. Biology Dept. Alma College Alma, Mich. 48801 taxonomy opilionids		Funk, Richard C. Div. of Life Sciences Eastern Illinois Univ. Charleston, Ill. 61920	<u>6</u>
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Harper, Charles A. Dept. of Zoology Univ. of Florida Gainesville, Florida 32601 ecology lycosids	<u>2</u>	Johnson, Bob D. Dept. of Biology Univ. of Dayton Dayton, Ohio 45409	ann i as
Haynes, Dean L. Dept. of Entomology Michigan State Univ. East Lansing, Mich 48823 ecology spiders	<u>2</u>	Judd, William W. Dept. of Zoology Univ. of Western Ontario London, Ontario ecology spiders,opilionids	<u>2</u> .
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	Muma, Martin General Delivery Silver City, New Mexico 8806 spiders	1 <u>2</u>	Randall, Winnifred Dept. of Biology Case Western Reserve Univ. Cleveland, Ohio 44106 arachnid anatomy	<u>2</u>
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