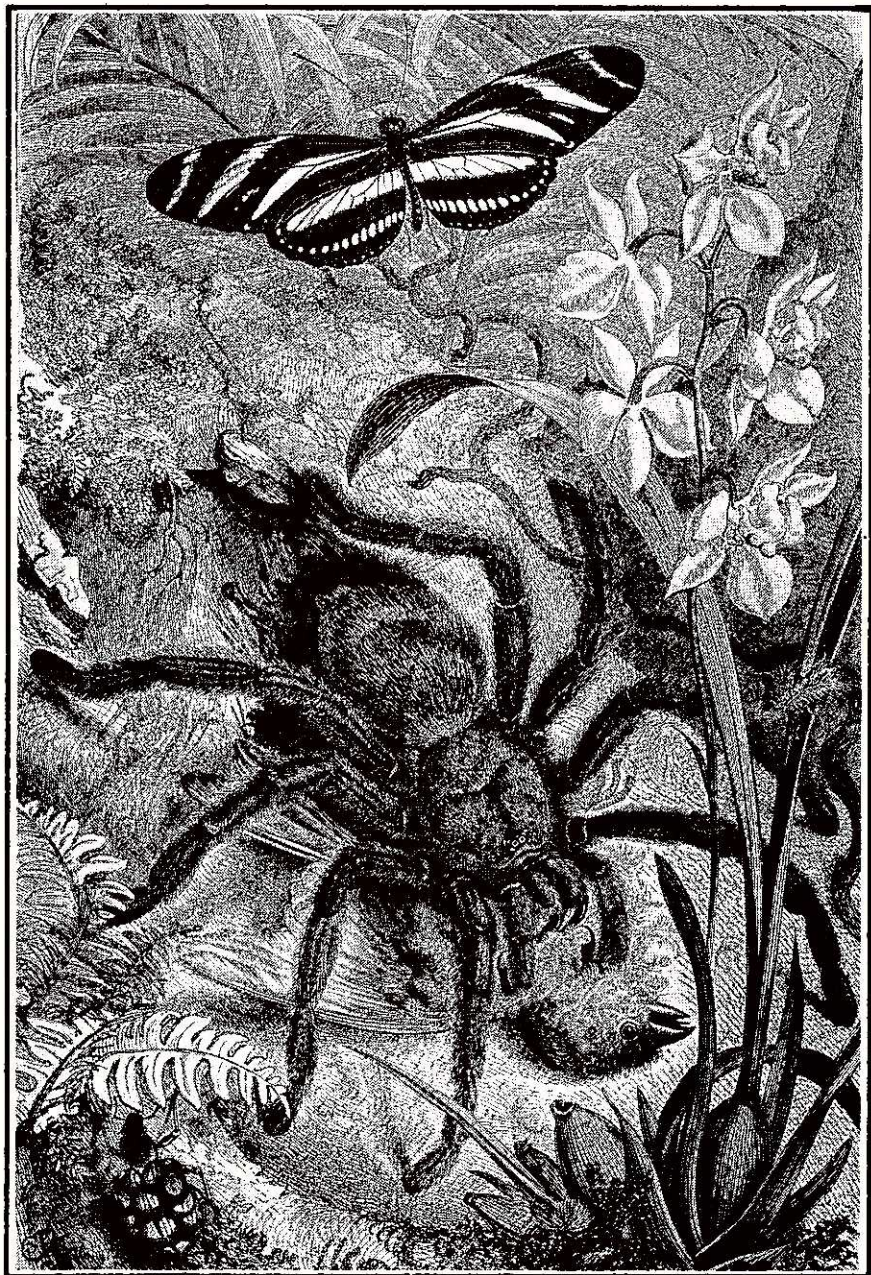


American Arachnology

The Newsletter of the American Arachnological Society



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American Arachnology is the newsletter of the American Arachnological Society and is sent only to Society members. For information on membership, write Dr. Norman Platnick, Membership Secretary, American Arachnological Society, Department of Entomology, The American Museum of Natural History, New York, NY 10024, USA. Members of the Society also receive the JOURNAL OF ARACHNOLOGY three times a year.

Correspondence, submissions and requests for back issues of American Arachnology should be directed to the editor, Dr. William Shear, Biology Department, Hampden-Sydney College, Hampden-Sydney, VA 23943, USA.

NOTICE OF CHANGE OF ADDRESS SHOULD BE SENT ONLY TO THE MEMBERSHIP SECRETARY (SEE ABOVE). To do otherwise merely delays the change; all mailing for the Society is done from a list maintained by the Membership Secretary.

IX INTERNATIONAL CONGRESS OF ARACHNOLOGY

1-8 AUGUST, PANAMA CITY, PANAMA

by Norm PLATNICK and Robert RAVEN
AMNH, New York, NY 10024

About 125 participants in the Ninth International Congress were treated to warm hospitality (including a folk dance presentation at the pre-Congress social and an evening of typical Panamanian entertainment) and warm, humid weather. Some 80 talks were given over five and a half days, and many arachnologists unable to attend were represented by abstracts or poster presentations. Thanks to the tireless efforts of Barbara and Mike ROBINSON, Diomedes QUINTERO, and their colleagues and staff, the meeting went smoothly and enthusiastically. On Sunday, August 8, the participants sweltered and scrambled through the lush tropical lowland rainforests of the Soberania National Park. The potential dangers of which we had been warned (mostly hymenopterans, and perhaps sloths falling from trees!) failed to materialize, and all reservations about the climate vanished in the enthusiasm of finding such delights as Ricinulei, Schizomida, and an incredible diversity of orb-weaving uloborids and araneids. About twenty people also joined a five-day post-Congress excursion to northern Panama.

One symposium was held (on neurophysiology) and four main talks were given: Why are genitalia usually useful species characters?, W. G. EBERHARD; A spider's eight-legged problem to localize a stimulus source, F. G. BARTH and R. HERGENROTTER; Desert adaptations of arachnids, J. L. CLOUDSLEY-THOMPSON; and The biology of the Soberania National Park, Delivered by several staff members of the Smithsonian Tropical Research Institute.

Several other talks focused on such problems of spider phylogeny as the monophyly of orb webs (J. CODDINGTON), palpimanoid interrelationships (N. I. PLATNICK and R. R. FORSTER), scytodoid interrelationships (P. T. LEHTINEN), mygalomorph interrelationships (R. RAVEN), the evolution of male genitalia (O. KRAUS), and the significance of silk-handling behavior in a variety of araneomorph families (W. G. EBERHARD).

Talks of special interest to Americans included presentations on a possible new family of Neotropical "pisaurids" (J. E. CARICO), Miagrammopes systematics (B. OPELL), ant-mimicking orb-weavers (H. W. LEVI), the bionomics of Peckhamia (E. A. MATELSKI and N. V. HORNER), Neriene life history (D. WISE), orb web construction in Dinopidae (J. CODDINGTON, and not a misprint!), spider prey of Trypoxylon wasps (C. E. GRISWOLD), the New World solpugid families (E. A. MAURY), courtship and mating in Euagrus (F. A. COYLE), reproductive biology of Scytodes (C. E. VALERIO), possible neoteny in Pacific coast opilionids (T. S. BRIGGS), the pulvinate amblypygids (D. QUINTERO), Texas gnaphosids (G. ZOLNEROWICH), retreat construction in the salticid Uluella (J. REISKIND), electrophoresis of Bothriocyrtum (M. GALINDO-RAMIREZ), and Atypoides natural history (L. S. VINCENT, who also became the first arachnologist to get married while at a Congress!).

Although the meeting was not as well-attended by Europeans as in the past, people did gather from far-flung locales: Val DAVIES from Australia, Ray and Lyn FORSTER and David COURT from New Zealand, Emilio MAURY from Argentina, B. K. TIKADER and B. H. PATEL from India, and Charles GRISWOLD, en route to his new position at the Natal Museum.

A C.I.D.A. meeting was convened, and members decided to accept the invitation of Dr. Maria RAMBLA to hold the 1986 Congress in the Spanish Pyrenees (the BONNET's will not have to travel as far as they did this year!). A new president was installed (Peter VAN HELSDINGEN) and copies of the new "Annuaire des Arachnologistes Mondiaux" were made available.

1983 WESTERN SECTION MEETING

James C. Cokendolpher
Department of Biological Sciences
Texas Tech University
Lubbock, TX

The Western Regional Meeting of the American Arachnological Society was organized as part of the 64th Annual Meeting of the Pacific Division and the 59th Annual Meeting of the Southwestern and Rocky Mountain Division of the American Association for the Advancement of Science. The AAAS meetings were held on the campus of Utah State University from the 19th to the 23rd of June, with the AAS meeting being held on the 20th to 22nd of June. The AAS section of the meetings was organized by Kate WING and Eric ZURCHER. Additional planning and support were provided by James MacMAHON. All of which are heartily thanked.

Although attendance was low, the 15 individuals and Serendipity (Russel GABEL's well-mannered canine) represented seven western USA states and Israel. James MacMAHON chaired the paper sessions and discussions, and Eric ZURCHER led the field trips. In addition to the presented papers (abstracts to follow), those attending the meeting were treated to slide shows and discussions. James MacMAHON's topics were succession of the fauna and flora of Mt. St. Helens and reclamation of lands strip mined for coal near Kemmerer, Wyoming. Israel and its many habitats were presented by Amnon REISS. James COKENDOLPHER briefly noted the discovery of a fossil harvestman from Dominican Republic amber. Due to the AAS By-Laws, no business meeting was held as only one member of the Executive Committee was present.

Three field trips were organized. Afternoon trips were made to Green Canyon and Logan Canyon. An all-day excursion was made to the Raft River Mountains. At Green Canyon (see J. Arachnol. 1983, vol. 11, pp. 31-50) the Sagebrush Steppe investigated by Barbara ABRAHAM, Cindy HATLEY, James ROBINSON, Kate WING, and Eric ZURCHER during the course of their graduate studies was visited. The trip up Logan Canyon to the summit and to Bear Lake not only yielded numerous spiders, mites, and harvestmen, but also gave those attending a bird's eye view of Willis GERTSCH's hometown, Montpelier, Idaho. The firs and montane meadow (with snow!) were a pleasant relief for many of the desert inhabiting arachnologists on the excursion. Those on the all-day trip to the Raft River Mountains in the northwest corner of Utah revisited some of the sites first studied arachnologically 50 years ago by R. V. CHAMBERLIN and Wilton IVIE. A good time was had by all, including Serendipity.

As with all meetings, the evenings were set aside for food, drink, and conversation. James MacMAHON supplied the food, drink, and site for the first evening get together. MacMAHON not only supplied more pizza fixings than could be eaten, but his home provided a beautiful setting with a yard filled with a forest of both native and exotic (eastern species) trees. The second evening was spent at a barbeque supper at the home of Vince TEPEDINO. Members of the Botanical Society of America and the Ecological Society of America also attended the barbeque supper.

ABSTRACTS FROM 1983 WESTERN SECTION MEETING

FOOD OR FORM: DO SPIDERS MAKE A CHOICE?

Kate Wing

This study assessed the effects of vegetation architecture and insect abundance on the composition of spider species (numbers and abundance) in big sage shrubs (*Artemisia tridentata*) in north-eastern Utah. Using a factorial experimental design, treatments of 2 levels of foliage density--control and tied--and 2 levels of insect abundance--control and baited--were applied to big sage shrubs. Microweather differences between the 2 types of shrub architecture were not significantly different. Insect numbers were not significantly increased by foliage density treatment. Numbers of ambush hunting spiders significantly increased in the tied, more foliage-dense shrubs. Numbers of spiders hunting by actively running and jumping increased significantly in shrubs baited to increase insect abundance. Observations of spiders moving and hunting within shrubs suggest that differences between species activity and size scale of hunting area may account for the differential response by spider species to vegetation architecture and insect abundance.

ARE THERE OPTIMAL FORAGING PATTERNS AMONG TETRAGNATHID SPIDERS?

Amnon Reiss

Observations of 72 webs of *Tetragnatha nitens* were made at Arugot waddi, Ein Geddi oasis on the northwestern coast of the Dean Sea in Israel. The webs were found to be orientated at a variety of slopes to the water surface and the relationships between these angles and prey capture efficiency of the webs were examined. It was determined that 72% were orientated between 10-50° to the water surface and only 23% were 50-90°. There was a high correlation between the number of insects captured and angle of the web. If these results extend to all *T. nitens* in Israel, the prediction of having an optimal foraging pattern can be expected.

SPECIES DENSITY OF NORTH AMERICAN THERIDIIDAE

Eric Zurcher

A species density map for the family Theridiidae in the United States and Canada was prepared from the checklist and citations of Levi and Randolph (1975). This map is compared with similar maps for mammals, breeding birds, reptiles, and amphibians. Parallels with these vertebrate groups, particularly with the amphibians, are noted. Species density increases from west to east and from north to south across the continent. High species density appears to be generally associated with the presence of broad-leaved forests. Some regions in mid-continent which appear to exhibit very low species density may reflect a lack of intensive collecting within those areas, rather than a low species density per se.

ANALYSIS OF APPENDOTOMY IN SPIDERS AND
OTHER ARACHNIDS

Vincent D. Roth

A historical review is presented for appendotomy, a collective term for autotomy, autotilly and autospasy. Examples are given for each category. Autotomy, the reflex detachment of an appendage, occurs rarely among spiders. Autotilly, the self-removal of an appendage, occurs in most spiders with damaged appendages and in several genera which remove one palp before or both after mating. Autospasy, the separation of appendages with assistance of an outside source, occurs at one of three points or not at all: at the coxatrochanter joint, the patella-tibia junction, or across the basal part of the patella. The degree of resistance to autospasy varies between families and is not related to slenderness of legs. Hersiliidae are added to the list of spiders in which autospasy occurs at the patella-tibia juncture. Five additional genera of the Agelenidae show evidence of patella division, Blabomma, Cybaeota, Cybaeozyga, Ethobuella and Yorima. The 52 families of spiders studied are arranged in the order of ease with which their legs detach. Selenopidae, Philodromidae and Pholcidae contain the species most susceptible to leg detachment. Sixteen families show little or no sign of autospasy.

ARBOREAL SPIDERS OF THE CONIFEROUS FORESTS
OF THE PACIFIC NORTHWEST

Andrew Moldenke, Becky Fichter, and
W. P. Stephen

Intensive sampling throughout the year in seven different conifer forest types in Oregon has documented low diversity. Most arboreal species are widespread taxa occurring with high predictability in similar forest types; the Pacific Northwest coast has a high proportion of species restricted to this particular climate. Arboreal spiders apportion the year differentially; few species are equivalently active during the winter and summer. Of the most abundant arboreal species, most have biennial life cycles (36) with eggs hatching in the early fall and adults produced during summer of the second year (35); others have annual cycles, hatching in spring and maturing in late fall (4) or hatching in mid-summer and maturing the following spring (13). In a mixed forest, arboreal spider species show strong host-tree specificity; the preferred tree species may differ between sites. Studies are underway to determine the microclimatic regimes and the 3-dimensional habitat spaces preferred by different spider species.

RANDOM NOTES

These comments on cameras come from Jerry ROVNER:

"Of particular interest was Alan CROOKER's first article in what promises to be a useful series. I was excited about the Pentax LX that he mentioned as one of the several available TTL flash metering cameras. I already have Pentax equipment and looked forward to purchasing an LX body. Then I found out the price--too steep for me, as this model is designed for professional photographers."

"Happily, a recent issue of Modern Photography (July, 1983) contains a review of the newest Pentax camera, the Super Program, which includes TTL flash metering among its features. The Super Program with lens can be purchased for about \$230; without lens (my situation) the price is about \$180. Along with the required pair of dedicated flashes (about \$45 each), I'll be able to add this capability to my system at a reasonable cost."

A reminder from Peter GABBUTT:

"I am sure that you know that "A catalogue of the Araneae described between 1940 and 1981" by P. M. BRIGNOLI has recently been published through the co-operation of the Manchester University Press, the Royal Society and the British Arachnological Society. Its publication has involved the B.A.S. in committing a substantial part of its reserves to fund the venture. Naturally we should like to see some return on our investment so that we are in a position to support further arachnological work of international interest in the future. For instance it is possible that supplements to the present catalogue could be published at intervals of four or five years to ensure that our taxonomic sources are kept up to date. This, of course, would depend on the success we have with sales of the present volume. I do, therefore, urge members of AAS to take advantage of the publisher's offer of a special discount price which has recently been circulated to all members. Perhaps, more important, members who are associated with universities or other institutions should persuade their libraries to buy copies of the catalogue particularly if they already possess either ROEWER's "Katalog der Araneae" or BONNET's "Bibliographia Araneorum". These additional sales might make all the difference in judging between possible success or failure of further publications in the future."

The Editor of the Journal of Arachnology is soliciting cover illustrations for volumes 12-22 (or more). The first 11 volumes each featured a drawing of a different order of living arachnids. Since no drawings of the fossil orders have been submitted for consideration, we must start all over again. However, this time instead of drawings we want good photographs to be published in black and white. We can accept black and white prints (6 in X 5 in., minimum size), or color slides only (no color prints), of each order of arachnids (sensu lato, including scorpions and eurypterids) living or fossil. Entries will be judged by an impartial panel of judges (if we can find one!), and decisions will be final--i.e., contestants will find out if they won when the volume featuring that order is printed (11 years from now, or more, for the last order!). Therefore, submissions can NOT be returned. (It is possible that the slides will be shown at a "photo salon" at the next meetings, and the membership at large asked to vote on the winner of each order). Send your entries to Dr. Oscar F. FRANCKE, Department of Biological Sciences, Texas Tech University, Lubbock, Texas 79409.

We're reviving our quiz feature with this submission from G. B. EDWARDS. The answers are to be found later in this issue.

NOMENCLATURAL BEDFELLOWS

Can you identify the following famous (?) authors from their often (?) used initials (how much room do we have on a label, anyway??) Only a few are of modern vintage, and a couple are really obscure! Hint: All combinations described new species.

B & C	M & G
D & R	G & J
G & I	P & S
P & P	G & D
G & A	P & W
W & E	G & R
G & M	C & I
L & L	G & W
I & B	L & D
C & G	C & B
G & P	T, D & R

1983 EASTERN SECTION MEETING

Barbara Abraham
Department of Biological Sciences
Hampton Institute
Hampton, VA

The 1983 Eastern Division Meeting of the American Arachnological Society was hosted by J. ROVNER at Ohio University (Athens) on June 24-27. Sixty-four persons preregistered, and last-minute arrivals included V. ROTH, who came directly from the Western Section Meeting.

During registration and the social on Friday evening, an innovation in meeting memorabilia, the official SPIDER SKI CAP, was on sale in lieu of tee shirts.

On Saturday four papers on systematics and seven papers on ecology were read. Saturday evening's event, a picnic at Dow Lake (which was eventually located by everyone--even A. BRADY), was enjoyed by all. D. WISE's Enoplognatha hunting party, however, came back empty-handed.

On Sunday four papers on physiology and seven papers on behavior were presented. The afternoon ended with "Miscellanea". M. GREENSTONE requested Society help in convincing the USDA to hire a systematic arachnologist. This led to a general discussion of the complementary needs of systematic and ecological arachnologists regarding specimen identifications.

Next AAS President J. REISKIND coined a term by explaining how monotaxophilia (the love of spiders, of course, in this case) has contributed to biology. The "Miscellanea" section was rounded off by B. TIETJEN and A. CADY's imaginative presentation on teleportation as a comprehensive model for explaining diverse problems in spider biology.

After a brief business meeting, participants retired to a steak dinner, which was served on campus. Sunday evening's festivities continued with music (on stage, this time!) by the melodious voice and guitar of G. UETZ. The evening ended with slides of tropical spiders (mostly salticids, of course) by G. B. EDWARDS, more of G. STRATTON's triple-X rated spider movies, a film by S. SKINNER, and a rerun of the classic "Life on a Silken Thread."

Although the weather remained hot and humid, Monday's field trip to Hocking Hills State Park provided some good collecting and lots of photogenic scenery. B. SHEAR dug up Antrodiaetus, V. ROTH pointed out Calymmaria, and the box lunch was enjoyed by all.

Many thanks are due J. ROVNER and the folks at Ohio U. for a well-organized, enjoyable and informative get-together.

ABSTRACTS FROM 1983 EASTERN SECTION MEETING

EVOLUTION OF COOPERATIVE PREY CAPTURE AND FEEDING IN COMMUNAL SPIDERS

George T. Uetz

A model is proposed which predicts that cooperative prey capture and feeding is advantageous to spiders living in groups when the prey size/spider size ratio exceeds 1.5. Cooperation among spiders increases capture success and improves feeding efficiency, and is advantageous to the individual when the cost of defending a prey item (at the risk of losing it) is greater than the cost of sharing it with other spiders. Data from studies of Mallos gregalis (Dictynidae) and other communal spiders are examined in light of this model.

THE EXTINCT ORDERS OF ARACHNIDS

William A. Shear

The nominal orders Phalangiotarbida (Architarbi), Haptopoda, Anthracomarti, Trigonotarbida, and Kustarachnae have been variously placed in recent chelicerate phylogenies. The placements were based, as in the past, on the studies of Petrunkevitch--about which there are serious questions among paleontologists. Four of the orders are known only from the Carboniferous; trigonotarbids also occur earlier (Devonian). Trigonotarbids are the sister-group of the Araneae and Amblypygi taken together, kustarachnids seem most like Uropygi and/or Schizomida, and haptopods may well be close to the Opiliones. Phalangiotarbids have many highly unusual characteristics that may indicate an aquatic habitat.

SYSTEMATIC PROBLEMS IN THE LYCOSA HELLUO SPECIES GROUP

Allen R. Brady

The nomenclature of large lycosids has been complicated by the addition of numerous generic names (Roewer, 1958) which appear to have little evolutionary basis. In addition the type species of the genus, Lycosa tarentula (Linnaeus), has few close relatives in North America. Species belonging to the Lycosa helluo group are recognized by similarity in color pattern, epigynal shape, and male palpal structure. Correlation of these characteristics with eye arrangement, and length of legs compared to carapace dimensions will be used to elucidate relationships of species belonging to the helluo group. Certain features of the eye arrangement and length of legs relative to carapace dimensions appear to be consistently similar within lycosid species groups and different between species groups. Habitat preferences and behavioral attributes also supply significant information concerning systematic relationships.

AN OVERVIEW OF MIAGRAMMOPES SYSTEMATICS (ARANEAE: ULOBORIDAE).

Brent D. Opell

As broadly defined, the genus Miagrammopes is characterized by a flat, rectangular carapace which retains only the posterior eyes and features prominent lateral eye tubercles and a pair of unique, central, paraxial apodemes. It is represented by 27 Neotropical, 12 Australian, six Oriental, and four Ethiopian species, but, aside from one Mexican species, does not have Holarctic members. The primary median apophysis of the male's palpus is responsible for coupling with the epigynum as shown by complementary changes of the two structures both within and between species groups. Cladistic analysis of carapace, sternite, and genitalic features divides Miagrammopes into one group represented in all regions and another with only Neotropical and Australian members.

THE LIMITS OF PALPIMANOIDEA, OR, WHAT IS AN ARANEOID?

Norman I. Platnick and Raymond R. Forster

A cladistic analysis of the results of a comparative morphological survey of the archaeid spiders and their relatives (Archaeidae, Mecysmauchenidae, and two new families) indicates that recent hypotheses by Lehtinen and Levi assigning these taxa to two different superfamilies (Araneoidea and Palpimanoidea) should be rejected. The four families are judged instead to represent a monophyletic group which, along with the Tetricellidae, Micropholcommatidae, and Mimetidae, belongs in the Palpimanoidea rather than Araneoidea.

LIFE HISTORY OF THE MYGALOMORPH SPIDER ANTRODIAETUS UNICOLOR
IN WESTERN NORTH CAROLINA

Nancy L. Reagan and William C. McGimsey

Antrodiaetus unicolor is a primitive burrowing spider found primarily in the southern Appalachian region of the eastern United States. The purpose of this study was to determine the life history of a population of A. unicolor in western North Carolina. Age classes were identified from size-frequency histograms constructed from 874 burrow measurements taken during the summer of 1982, and from histological observations of developing reproductive structures of immature spiders. Both sexes appear to reach maturity 4 years post-hatching. Males survive for only one reproductive season, while females may live for as many as four years after reaching maturity, and are capable of reproducing annually.

CICURINA BRYANTAE EXLINE: A DISCUSSION
OF THE SPIDER AND ITS RETREAT.
(AGELENIDAE, CRYPHOECAEAE)

Robert G. Bennett

Cicurina bryantae Ex. has been rarely collected. Described in 1936 on the basis of one female, it has remained over the years a poorly known species. A single male was tentatively identified in 1972. But, as with other reportedly rare organisms, it has been found recently that this species is actually quite common over its range. This paper is an account of the biology of this spider as it has been noted by the author. Details of habitat and microhabitat are discussed as well as the very interesting retreat construct common to adults and immatures of both sexes. This retreat is very similar to constructs reported for Japanese cavernicolous cybaeine agelenids.

SPIDER EGG COCOONS: THEIR ROLE IN PARASITE ATTACK

Craig S. Hieber

The cocoon as a reproductive strategy against parasite attack is currently being studied for two species of orb-weaving spiders, Argiope aurantia and Mecynogea lemniscata. Preliminary data (and speculation) on the timing of cocoon production, the location of cocoons within the habitat, and the architecture of cocoons with regard to parasite attack are presented.

FACTORS AFFECTING THE DISTRIBUTION AND ABUNDANCE
OF AN ERIGONID SPIDER IN A FLORIDA SALT MARSH

Jan C. Weaver

A small erigonid spider was the most abundant spider in a Florida salt marsh. Spiders endure submersion by daily tides (by crouching) in the leaf axils of smooth cord-grass, Spartina alterniflora. The spider does not use a captured bubble of air and does not appear to use plastron respiration to respire under water. Spiders do not discriminate between plants at a site or perceive them as a limiting resource (i.e., compete for them). There is considerable variation in spider densities and population dynamics in different parts of the marsh, which is suggestively but not significantly correlated with plant characteristics (density, height and number of leaves). Cannibalism and predation on the leafhopper Prolelesia marginata (Homoptera: Delphacidae) were observed in the field. Feeding trials indicate a liking by the spider for P. marginata. Interestingly, spider numbers were negatively (though not significantly) correlated with P. marginata numbers.

HABITAT ASSOCIATION AND FORAGING STRATEGIES OF TWO POPULATIONS
OF THE LONG JAWED ORB WEAVING SPIDER
TETRAGNATHA ELONGATA

Rosemary G. Gillespie

Tetragnatha elongata was studied in an endeavour to find whether its pattern of dispersion is non-random. Two populations from different habitats were examined. Measurements were made on various aspects of the environment, as well as on the webs themselves, and the spider occupant, to find out with what physical and structural features the webs are associated. Spiders are found to exhibit a significant association with areas of slow moving water; and where this condition is met, they appear to build in areas of high light intensity. But the populations examined differed markedly in both density and foraging strategy. These differences are discussed.

IMPORTANCE OF THE SHRUB STRATUM TO GROUND-DWELLING
SPIDERS IN SHRUB-STEPPE

Barbara J. Abraham and Robert R. Parmenter

A field experiment was performed in Wyoming shrub-steppe to detect effects on ground-dwelling spiders of removing the shrub stratum. Control and "shrub removal" plots, as well as a strip-mined plot which was revegetated with grasses, had similar abundance of spiders, species richness, diversity and evenness. Similarity of spider assemblages (measured by Jaccard's and Schoener's Indices) ranged from 18% to 50% in control and shrub removal plots, 0% to 35% in control and revegetated plots, and 0% to 26% in shrub removal and revegetated plots through the season. A different species of spider was dominant in each plot. These results may accrue from patchy distributions (many rare species) overriding habitat effects of shrubs on ground-dwelling spider assemblages in shrub-steppe.

EXPERIMENTAL STUDIES OF THE INTERACTIONS BETWEEN A
WEB-INVADING SPIDER AND TWO HOST SPECIES

Scott F. Larcher and David H. Wise

Field experiments were conducted to establish the effect of the web-invading spider, Argyrodes trigonum on two spider species that serve as its host, Neriene radiata and Metepeira labyrinthica. Experiments investigated: (1) the effect of host-Argyrodes size differentials on the rate of host emigration and mortality, (2) the rate of Argyrodes immigration to and emigration from host-occupied and host-unoccupied webs, (3) the effect of additional food on host and Argyrodes emigration, and (4) the use of host webs by Argyrodes. Significant host emigration occurred when the host-Argyrodes weight ratio was less than 10:1. Additional food had no effect on host or Argyrodes emigration, and Argyrodes will immigrate to and emigrate from host-occupied and host-unoccupied webs with equal frequency. Argyrodes will utilize the host web to capture prey following the host's emigration.

