ARGIA



THE NEWS JOURNAL OF D. S. A.

VOLUME 2, NO. 1-4

DECEMBER 15, 1990



PUBLISHED BY THE DRAGONFLY SOCIETY OF AMERICA

AN AFFILIATE OF THE SOCIETAS INTERNATIONALIS ODONATOLOGICA

THE DRAGONFLY SOCIETY OF AMERICA

EXECUTIVE COUNCIL

President
President Elect
Vice President SIO Affairs
Secretary
Regular Member
Regular MemberOpenOpen
EDITORIAL STAFF
Editor of ARGIA
Associate Editor
[1] :
SEASONAL SUMMARY COORDINATORS
CANADA
그 마이에 가는 사람이 가는 것이 없었다. 그 사람이 아름답니다 아이는 아이는 사람이 되는 것이 되었다. 그 사람이 되었다.
Eastern ZoneD. F. J. Hilton,Canada
Western Zone
CENTRAL & SOUTH AMERICA
CENTION & SOUTH AMERICA
Movico to Chile

UNITED STATES

NOTICE TO CONTRIBUTORS

enter a roll and entertainty

ARGIA accepts manuscripts (preferably under 2,500 words) on nearly every aspect of odonatology. Exceptions are taxonomic revisions, species descriptions and presentations more suitable for such journals as ODONATOLOGICA. All Ms. contributions for DSA publications, inquiries and applications for membership, and other society business should be addressed to the business office of the society at:

The Dragonfly Society of America 469 Crailhope Road Center, KY 42214, USA

ARGIA

THE NEWS JOURNAL OF THE DRAGONFLY SOCIETY OF AMERICA

VOL. 2, NO. 1-4

CENTER, KENTUCKY

DECEMBER 15, 1990

THE DRAGONFLY SOCIETY OF AMERICA'S SECOND ANNUAL COLLECTORS MEETING TO BE HELD IN WISCONSIN JUNE 21-23, 1991

By TIM VOGT

Wisconsin Department of Natural Resources, Madison, WI 53707, USA

Greetings fellow odonatologists! It's time to start making plans to attend DSA's 1991 meeting at the St. Croix National Scenic Riverway (Wisconsin/Minnesota, United States). The St. Croix Riverway is comprised of the St. Croix (247 km.) and Namekagon (158 km.) Rivers. They were established in 1968 as one of the original National Scenic Riverways under the National Wild and Scenic River Act. The St. Croix River is perhaps the least impacted large river in the United States.

Twenty-eight species of Anisoptera, including 19 species of gomphids, are presently known to breed in this magnificent river. Beginning odonatologists and experienced veterans alike are assured (weather permitting) of seeing a rich and diverse assemblage of gomphids, including Ophiogomphus n. sp., Ophio. anomalus, Ophio. howei, Gomphus (Phanogomphus) quadricolor, Gomp. (Gomphus) viridifrons, Gomp. (Gomphurus) lineatifrons, and Gomp. (Gomphurus) ventricosus. In addition, Stylurus notatus, Styl. amnicola, and S. spiniceps also breed in the St. Croix and a few tenerals may be observed. Other notable Anisoptera on the wing at this time are Neurocordulia molesta and Neuro. yamaskanensis.

GENERAL SCHEDULE

Friday, June 21, 1991

12:00 p.m.-8:00 p.m.-- Arrival and registration.

8:00 p.m.-?:?? p.m.-- Business meeting, informal presentations and slide shows.

Saturday, June 22, 1991

8:00 a.m.-9:00 p.m.-- Depart from Wood River Inn parking lot (Grantsburg, WI) to various collecting localities along the St. Croix.

9:00 p.m.-?:?? p.m. Informal presentations, data analysis, and strategy planning for June 23.

Sunday, June 23, 1991

8:00 a.m.-?:?? p.m.-- Check out of motel. Depart from Wood River Inn parking lot to various collecting localities.

?:?? p.m.-- Depart for home?

ACCOMMODATIONS

The business and informal meetings will be held in the conference room of the Wood River Inn (703 W Skyline Drive, Grantsburg, WI). The motel is just west of Grantsburg on Hwy 70 (south side of road). To better facilitate communication, participants are encouraged to stay at the Wood River Inn. This motel has 20 rooms and all rooms come with 2 double beds. One person/room is \$29.95 and 2 persons/room is \$35.95 (plus tax). To insure room availability, reservations should be made by April 15, 1991 (715-463-2541). Each participant is responsible for their own reservations.

ADDITIONAL NEARBY MOTELS

Siren Pine Woods Motel 23862 Hwy 35 South, Siren, WI. (715-349-5225) sgl. \$22.00, dbl. \$32.00

Frederic Motel Hwy 35 South, Frederic, WI (715-327-4496) sgl. \$30.00, dbl. \$32.00

Luck Country Inn Jct Hwy 48 & 35, Luck, WI (715-472-2000) sgl. \$36.00, dbl. \$40.00

Gail Motel 970 Sixth Street, Pine City, MN (612-629-2559) sgl. \$36.00, dbl. \$48.00

CAMPING

Primitive camping is available at a variety of sites along the riverway. Camping is free at federally administered sites. However, camping is limited to one night per site. For further information contact Tim Vogt at 608-266-8736.

TRANSPORTATION

Minneapolis-St. Paul International Airport is approximately 1.5 hours drive from Grantsburg. From the Twin Cites take I-35 north ca. 60 miles to Hwy 70, then east 15 miles to Grantsburg. Travel to and between sites will be by carpool and arranged each morning at the designated meeting area. Maps to collecting sites will be provided.

MEALS

There are very few restaurants in the Grantsburg metropolitan area (population 1,153). However, there is an excellent restaurant at the Wood River Inn. Pine City, MN is roughly 20 miles west of Grantsburg and has several fast food restaurants including Hardees, A&W Root Beer, Kentucky Fried Chicken, and Dairy Queen. Additional restaurants are listed

below:

The Kozy Kitchen, 827 South Pine St., Grantsburg, WI (715-463-2200)

Calderwood Lodge Supper Club, Route 2, Luck, WI (715-472-2343) Little Mexico, Siren, WI (715-349-5874)

Main Street Cafe, Main Street, Siren, WI (715-349-2536)

Disclaimer - I have never eaten at any of these restaurants.

PERMITS

Because the St. Croix Riverway is part of the US National Park Service, collecting permits will be required. Permits will be secured for all registered participants by the WI Bureau of Endangered Resources for 1991.

QUESTIONS

Any questions, concerns, or problems may be directed to Tim Vogt, WI Department of Natural Resources, Bureau of Endangered Resources, Box 7921, GEF-2, ER/4, Madison, WI 53707, (608) 266-8736. Home phone 608-429-3768. Please include a daytime phone number when writing.

POST MEETING TRIP?

If there is sufficient interest, a post meeting trip to northeastern Wisconsin will be conducted. Species of possible interest include Arigomphus cornutus, Ari. furcifer, Somatochlora franklini, and S. kennedyi.

REGISTRATION

A registration form is provided for your convenience. No fee is required, but your earliest possible registration will be appreciated so as to provide ample time to secure collecting permits, etc. Updates will be sent only to persons returning the registration form.

UNPUBLISHED RECORDS IN FLORIDA STATE COLLECTION OF ARTHROPODS (FSCA) By GEORGE H. BICK

1928 SW 48 Avenue, Gainesville, FL 32608, USA

While checking FSCA's collections in August 1990, 33 species from 19 states were found which lack published records. These are new in the sense that no published record, however brief, even only a map dot, could be found. Consideration is not given to possible presence in other museums or in private collections. The following list gives only state, county, collector, and date (month and year).

Perhaps this listing will help efforts of the Dragonfly Society of America to define distribution of the North American odonate fauna for their New-World Catalog Series.

Calopteryx angustipennis (Selys). VA, Bath, S.W. Dunkle, VI-82; Smyth, W.F. Mauffray, V-67.

Archilestes grandis (Rambur). DE, Newcastle, T.E. Rogers, VIII-IX-73.

Argia immunda (Hagen). AR, Washington, O. & M. Hite, V-60, (det L.K. Gloyd).

Argia munda Calvert. NM, Grant, C.D. Ferris, VII-78, (det L.K. Gloyd).

Coenagrion resolutum (Hagen in Selys). AZ, Coconino, P.D. Harwood, VI-68. Apparently the most southern record for this northern transcontinental species.

Enallagma basidens Calvert. IA, Scott,
S. Hummel, VIII-74.

<u>Ischnura</u> <u>kellicotti</u> Williamson. AR, Ouachita, W. Camden & G.L. Harp, VII-82.

<u>Ischnura perparva</u> Selys. AZ, Pima, R.L. Chermock, VI-46.

Ischnura ramburi (Selys). AR, Pike, M.J.
Westfall, V-84.

Telebasis byersi Westfall. GA, McIntosh, J.B. Gentry, VII-55. The main range of this species is near the coast from NC to AL; but there is a disjunct record (Vogt & McPherson, 1985, Great Lakes Ent. 18: 7-13).

Aphylla williamsoni Gloyd. MS, Winston, W.H. Cross, VIII-76.

Erpetogomphus compositus Hagen in Selys. ID, Owyhee, W.F. Barr & R.L. Penrose, IX-65.

Gomphus (Gomphurus) dilatatus Rambur. MS, Lauderdale, S.W. Dunkle, VI-84.

Gomphus (Gomphus) apomyius Donnelly. LA, East Baton Rouge, W.F. Mauffray, III-66; East Feliciana, W.F.M., III-66; Tangipahoa, W.F.M., III-66.

Gomphus (Phanogomphus) australis Needham. MS, Stone, R. McManaway, IV-72.

Aeshna juncea (Linnaeus). NM, Taos, elev 3427 m, R.L. Willey, VIII-70. The southernmost point of the Rocky Mts. extension of this transcontinental species.

Macromia illinoiensis Walsh. OK,
Sequoyah, L.E. Hornuff, VII-70.

Macromia pacifica Hagen. TN, Shelby, O. Cotten, IV-76.

Epitheca (Tetragoneuria) canis McLachlan. MA, Franklin, F.C. Thompson, V-64.

Epitheca (Tetragoneuria) sepia Gloyd. GA, Ware, W.H. Cross, VII-57.

Epitheca (Tetragoneuria) spinigera Selys. MT, Flathead, R.L. Newell, V-VI-67, V-70; R.A. Haick & D.S. Potter, VI-70; OR, Benton, J. Schuh, VI-41; J.S. Linn, VII-41. Neurocordulia molesta Walsh. MO, Girardeau, G.W. Thomas, VII-53.

Neurocordulia virginiensis Davis. NC, Chatham, R.D. Cuyler, VI-76; Durham, R.D.C., VI-75; Nash-Halifax, R.D.C., VI-81.

Somatochlora elongata (Scudder). WV, Greenbrier, P.D. Harwood, VIII-71; Tucker, P.D.H., VI-71.

Somatochlora filosa (Hagen). LA, St. Tammany, V. Brou, VII-IX-83; VII-IX-84; VIII-IX-85. All at UV light.

Somatochlora semicircularis (Selys). NM, Taos, J.B. Heppner, VII-87. The southeasternmost record for this northwestern species.

<u>Libellula (Ladona) julia</u> Uhler. AR, Sevier, P.J. McLeod, VIII-65. A disjunct

record considerably south of all pre-vious records.

Libellula (Libellula) composita Hagen. TX, Ward, E. Matthews, VII-56. The southernmost record for this western species.

<u>Libellula</u> (<u>Libellula</u>) <u>nodisticta</u> Hagen. OK, Cimarron, L.E. Hornuff, VIII-70.

Sympetrum semicinctum (Say). GA, Towns,
 J. Cooney & E. Pickard, VIII-79.
 Seemingly the southernmost record of this northeastern species.

Sympetrum vicinum (Hagen). ID, Latah, E.R. Logan, X-64, X-65; OR, Crook, S. Valley, VIII-86.

Tramea lacerata Hagen. ID, Canyon, C. Musgrave, IX-71.

KENTUCKY COMMISSION REPORTS 20 PERCENT OF STATE'S STREAMS POLLUTED, BUT ADMINISTRATION FOLLOWS POLICY TO PERMIT ADDITIONAL DISCHARGE

By CARL COOK

469 Crailhope Road, Center, KY 42214, USA

The Kentucky Division of Water has released results of a study of more than 10,000 miles of the state's rivers and smaller tributaries which shows nearly 20 percent suffer varying degrees of pollution.

The report was produced after a two year survey of Kentucky's streams, and released in compliance with federal EPA regulations requiring water quality reports to congress from each state.

Organic enrichment, siltation, disease causing organisms and chemicals were amoung pollutants found in harmful proportions in 1,978 miles of the rivers and streams tested. According to US Geo-

logical Survey figures, Kentucky has a total of 18,500 miles of streams, but only slightly more than half were tested during this study.

Several of the more severally impacted streams are beginning to show extream stress, such as fish kills, reductions of species populations, imbalances in the food chain, and complete disappearance of some species. An estimated half-million fish were killed in Kentucky's streams in the past two years, largely because of improperly treated sewage discharges, the report said.

Streams are receiving organic enrichment in agricultural producing areas

"Kentucky's clean water policies are beginning to pay off, for example, eliminating so-called "point-source" pollution, such as industrial discharge out of a factory being piped into a stream". It is extremely difficult to reconcile this line of rhetoric, when Kentucky's current adminstration has just issued a new permit to one of the state's largest manufacturers to allow construction of a new pipeline that will unprocessed industrial waste, including chlorides and trace heavy metals, directly into one of Kentucky's most pristine waters -- Lake Cumberland!

Kentucky's wetlands are supposedly protected by federal EPA laws administered by the US Army Corps of Engineers and the US Fish and Wildlife Service. It is unclear, however, just what protective measures are being provided in Kentucky, because the report states -- "Kentucky still does not have an active wetlands monitoring program. There continues to be a poor understanding of how much wetland originally existed in the state, how much is still left, and how severally the remaining areas are impacted. Nearly all areas that remain have been degraded to some degree by pollutants, such as pesticides, acid mine drainage, siltation, oil-field brine water and/or domestic and industrial sewage".

Other available data indicates that over half of Kentucky's original wetland has already been destroyed, and continues being drained or otherwise impacted at a rate 3,600 acres each year.

Wetlands provide invaluable habitat for a wide range of life forms, unique wildflowers, trees, birds, dragonflies and many other plants and animals. The marshy areas have been said to serve as "the kidneys of the landscape" filtering wastes from the ground water and ultimately returning it to streams purified.

The report also says 48 of Kentucy's 120 counties are at moderate to high risk for ground-water pollution from leaking underground tanks, hazardous waste sites, mine drainage, oil and

through fertilizer and feedlot runoff, this can deplete the stream of oxygen and kill fish and invertebrate organisms. Silation is also largely caused by agricultural practises that cause erosion of cultivated land. Silation covers aquatic plants, bottom habitats of invertebrates and fish spawning beds. Some toxic chemicals are readily dissolved and may eventually enter drinking-water supplies, others can bind to silt particles and pose long term dangers to stream bottom inhabitants. A steady decrease, and in some instances the complete disappearance, of some species of gomphid dragonflies in many Kentucky streams can be attributed to toxic materials buildup in the stream-bed.

The study intended to determine whether Kentucky's streams meet goals of the Federal Clean Waters Act, such as whether they are suitable habitat for fish, or whether they are safe for swimming without health risks. The report shows 8 percent of the total streams tested are not a suitable habitat for fish, and of the 3,595 miles of streams having the worst pollution, 43 percent are unsafe for swimming due to high counts of fecal coliform bacteria.

The report said city sewage treatment plants and farms were the main sources of coliform bacteria, which can cause intestinal ailments if ingested, and ear infections in swimmers. A spokesperson in the state Division of Water Quality, said the report may point out some areas where swimming should be banned for health reasons, and that possibly this action would be studied.

The report indicates Kentucky's lakes are up to now much less polluted than the state's streams. Ninety-one percent of Kentucky's 214,861 acres of lakes surveyed showed minimal or no pollution. But the report identifies three lakes-- Barkley Lake, Kentucky Lake and Paintsville Lake-- as being threatened with pollution in the near term.

The Division's spokesperson said

gas well brine pits, chemical pesticides and herbicides used in agriculture, septic tanks, and drainage from animal feed lots. All these sources are following a national trend to become more serious pollutants as populations increase.

Mankind should be extreamly concerned as he views the increasing contamination of one of the living world's irreplaceable building blocks-- water!

LOS CABALLEROS Y LOS CABALLITOS

By JERRELL J. DAIGLE

2166 Kimberley Lane, Tallahassee, FL 32301, USA

Mexico! Land of enchantment, rugged scenery, and exotic dragons! Ken Tennessen, his son Greg, and I heeded the call. We eagerly accepted Enrique Gonzalez's invitation to join him on a late June collecting trip to Ciudad Valles in northeastern San Luis Potosi State.

After spending the night in Tampa (where we put on a dazzling soccer exhibition that left hundreds of guests- and myself gasping for air!), we flew to Mexico City. Enrique met us at the airport and took us to the fancy Riazor for the evening. couldn't sleep at all, so we watched the World Cup Soccer games on TV. The next morning we loaded up the jeep-truck with luggage and nets. We managed to hit the country road only after fighting the furious city rush hour traffic. We were joined by Dr. Rodolfo Novello and student Angel Flores, so the party consisted of six enthusiastic dragonfly collectors.

After about 200 miles of dry, cactus country, we reached the pine forested Sierra Madre Oriental mountain range. We stopped at the first good, jungle mountain trickle-stream near Chapulhuacan for lunch and a little bit of collecting. We spied dozens of colorful damselflies. While we swung our nets wildly, bemused mothers and childern

continued to wash the family laundry in the little stream. Amoung the species collected were five species of blue Argias (including two new species), Archilestes grandis, Paraphlebia zoe, and keen-eyed Ken caught a giant majestic Archilestes regalis male, the only one seen there.

The group pushed on and we arrived at Ciudad Valles, a nice modern city of over 300,000 people. We stayed at the San Fernando Hotel for the week. The large rooms had hot showers, electricity, and air-conditioning. The restaurant served excellent meals, but be sure you know your Spanish! I once ordered a glass of cold apple juice but got back a saucer and cup of hot tea!

The next day, Enrique drove us to the world famous Rio Huichihuayan waterfall. The diversity and abundance of odonates were spectacular! We tabulated over 50 species before the usual afternoon rains fell from the sky. Among the notable species were Phyllogomphoides suasus, Erpetogomphus constrictor, Argia calida, A. fissa, A. rhoadsi, other Argias, Brachmorhoga and Macrothemis spp. A few specimens of the glamorous Gynacantha helenga, Archilestes regalis, the rare Enacantha caribbea, and the Mecistogaster modesta, called "helicopters" by the locals, were collected by disblieving norteamericanos!

The next several days were spent visiting nearby waterfalls or cascading springs among the Tamaulipan scrub forest. Gomphids new to us such as Phyllogomphoides duodentatus, P. albrighti, Erpetogomphus eutainia, Phyllocycla brevipphylla, and an undescribed species of Gomphurus were collected. Several Palaemnema species were found at headwater seeps; the two known species we collected were paulicoba and paulitoyaca. An unexpected find was several aerobatic Macromia annulata that hot-swinging Greg managed to corral. Other unusual species were Neoneura amelia, an orange Coryphaeschna nr. perrensi, the two colorful red-eyed Argias, cuprea and oenea, plus Libellula croceipennis.

At one roaring waterfall gorge, the giant Libellula herculea appeared out of nowhere and perched on a swaying lianavine overhanging the deep, rushing torrents. Using my long handle tropics net, I slowly and carefully climbed from boulder to boulder to get into a rather precarious position. Once in place, I took a deep breath and swung my net. Yes, I got it!--- Then I slipped and fell 150 feet into the roaring waterfall! Naah---just kidding!

All good things must come to an end and we reluctantly returned to Mexico City. We did stop at one last stream near Jalpan before we entered the desert. There we collected Paltothemis lineatipes, Pseudoleon superbus, several

Brachmorhoga, Macrothemis and Argia sp., and the brilliant emerald green Erpetogomphus elaps. Not surprisingly, we found about 12 new species comprised of Argias, Palaemnemas, Aphylla, Gomphurus, Progomphus, and Coryphaeschna on this expedition. The Aphylla and the Progomphus were collected at an intriguing sulphur spring.

Altogether, it was both a rewarding and fun filled trip! Even on the last day in Mexico City, Enrique and his family took us to a colorful bazaar where we shopped for Mexican handicrafts and jewelry. Throughout the trip, the food was terrific! We sampled the enchiladas. soups, shish-kabobs, and the local beers many times! Enrique, Rodolfo, and Angel proved to be excellent collectors and highly knowledgeable of the Mexican Odonata fauna. They were terrific hosts, great storytellers, and clever practical jokers at times.

We all agreed that we must do this again soon! Enrique said he plans to host another collectors meeting in 1992, at either the field station in Guadalajara, or the famous biological field station at Los Tuxtlas near Veracruz. We can hardly wait! Again, many thanks to our host, Enrique, for guiding us, and to Rodolfo and Angel for sharing the fellowship and good times. Til then-Hasta luego!

PERU REVISITED

By SIDNEY W. DUNKLE

International Odonata Research Institute, P.O. Box 1269, Gainesville, FL 32602, USA

In the 1989 ARGIA, I described a 3 week collecting trip in August to the Explorama facilities in Amazonian lowland Peru. In July of 1990 I had the opportunity to visit the same areas again

for 4 weeks. Because I had seen most of the local odonates in 1989, and because the collecting was not as good in 1990, I believe I got a truer picture of what rainforest collecting is really like.

There are no Macromias in the Neotropics -- the most fun to catch, or to try to catch, of all odonates, in my opinion. Aeshnids are scarce and usually fly too high to net. On this trip I got about one swing at an Aeshnid per day, which I usually missed. Then could spend the rest of the day berating myself for not waiting for a better shot, etc., etc. There was no second chance to redeem yourself. Gomphids are almost never seen, and I have yet to see the first Corduliid in South America. Thus, practically speaking, the only available dragonflies are Libellulids. Of these, only a few species are seen in the shady forest, in the present case Uracis fastigiata, and sunspots on the streams a Perithemis and an occasional Orthemis cultriformis. Thus rainforest odonate collecting boils down to slow careful searching through the dense understory for hard-to-see damselflies. Alas, no doubt the sunny forest canopy is where the real odonate action is.

By far the commonest forest damselfly in the Explorama area was Heteragrion sp. B. The yellow males perch quietly and tamely, with wings spread, along the streams, and anybody can catch as many as they want. I took just a small sample in 1990. I hope that somebody revises this very difficult genus soon, so that I can put a name on these specimens. About ever 50 m or so on a good stream, a Perissolestes might These brown elongate skinny damselflies act like a secretive Lestes, which makes them inconspicuous indeed as they perch under overhanging leaves in the forest gloom. I found that after about 4:00 in the afternoon, forest damselflies were too hard to see, and you might as well give up looking and go home.

The best Zygoptera collecting was usually at the extreme upper ends of the streams where water seeped from the hillsides. At each seep head, one might find a Philogenia or two, a few Polythore, and a couple Phasmoneura ephippigera, Heteragrion inca, or Psaironeura tenuissima. If, and only if, sunspots

were present would Argia forficula drop down from the trees.

In 1989 I collected 102 species of odonates at the three Explorama facilities, the Inn 25 miles NE of Iquitos, the Lodge 50 mi NE Iquitos, and the Camp, about 100 mi NE Iquitos. In 1990 I did not see 36 of these at any of the three locations. Probably the major reason was the somewhat different time of year, but also, according to the Explorama staff, the water level in the Amazon River and all its multitudinous tributaries was much higher than it usually is in July. Thus certain habitats where I had collected in 1989 were under several feet of water in 1990. I might add that mosquitoes were a whole lot more abundant in 1990!

Among the absentee Odonata in 1990, most notable were Chrysobasis sp., and Aeolagrion flammeum, both of which had been common at the Lodge in 1989. Other species, greatly reduced in number but still present, were Acanthagrion ascendens, Aeolagrion dorsal, A. foliaceum, Helveciagrion chirihuanum, Erythrodiplax attenuata, Miathyria simplex, Micrathyria tibialis, and Perithemis cornelia. Most disappointing was the absence of the dusk flight of Neuraeschna harpya or any other Aeshnid. the other hand, I collected 21 species not found in 1989. Chief among these were a few specimens of a new Philogenia. Other notable new catches were Mnesarete hauxwelli(?), Hetaerina laesa, Polythore mutata, Perissolestes cas-<u>ter(?)</u>, Mecistogaster linearis, Argia gerhardi(?).

The value of taking a few specimens of each species seen was shown by the experience I had with Neoneura rubriventris and Uracis fastigiata. I made a minimal effort to collect these relatively common species, but when I got back and examined them in more detail, I found that the rare N. denticulata and U. ovipositrix were mixed among them!

Only 3 species of Gomphidae were

taken in 1990, 2 of them as emerging tenerals or at a lighted sheet at night. The third species was represented by a lone male Aphylla boliviana on the muddy Yanamono River at the Lodge. After weeks of searching, I could hardly believe my eyes that here was a gomphid perched in the open like they are supposed to do! a careful stalk, and taking careful aim, I took my fastest swing -and golfed the perch from under the dragonfly! I felt sick as I watched him fly down the river. Although I should have scared the malpighian tubules out of him, he at least did not fly up into the trees, and the area of sunny river bank was limited. On the 1% chance that he might have stopped at the edge of the sunny area, I dispiritedly trudged after him in the searing heat. A look around confirmed my fears--no Aphylla. wait! There he was perched on a grass stem at the bottom of the steep bank below me! This time I did have a second chance and was able to redeem myself! could tell the same type of stories about Staurophlebia wayana, but those do not have happy endings, and the pain is still too fresh in my mind.

Collecting in the open provides a change of pace from forest collecting. In the open, the dominant odonates by far are Coenagrionids and Libellulids. 2 ponds were available within Only walking distance, a small dammed stream pool at the Inn and a pond about 80 X 40 m at the lodge. At the former, Acanthagrion ascendens and Micrathyria tibialis were common in 1989, but none were present in 1990. At the Lodge pond, 16 species were present 1989, only 9 in 1990, and these were much less abundant. The latter pond was more covered by water lettuce and the grasses on the bank had been grazed shorter in 1990, which probably account for the decrease in most of the odonates at that habitat.

In the blazing equatorial sun, which seems to almost push against the skin like a solar wind, the activities of Libellulids are speeded up while those of the collector are slowed down. Micrathyrias are often amazingly wary,

when an attempt to get the net closer by even 1 inch will cause them to fly to a higher perch. I sometimes had to stand still for several minutes until their terrtorial imperative returned them to a perch within reach-IF they returned. Oligocladas are almost as bad-they are fast, wary, and difficult to approach and to keep in sight.

I would have thought that many odonates could be caught while canoeing a tropical river, but such was definitely not the case. In the first place, dugout canoes are are heavy, clumsy, and tippy, the ironwood paddles are exercise just to lift. At the Camp, the only odonate along the edges of the Sucusari River was Perithemis lais. At the Lodge along the Yanamono River, several species were present. The more common ones were Acanthagrion lancea, Macrothemis lauriana, Oligoclada pachystigma, Perithemis bella, and of course, Erythemis peruviana. The latter is the Erythemis simplicicollis of Amazonia, abundant everywhere in the open, but apparently it is not as voracious as simplicicollis. In fact I did not find any odonates with large prey in Peru. The best place for canoe-collecting was a partly shaded tributary of the Yanamono. Here I had several encounters with Staurophlebia, which resulted in depleting the population by one male! A few other species were also present, such as Neoneura rubriventris, Perithemis cornelia, P. electra, and a couple of Micrathyria mengeri. Surprisingly, a few Hetaerina sanguinea perched along the edges of the channel, even though there was no visible flow.

A few comments on equipment for tropical collecting might be appropriate. In 1989 I wore jeans and carried my stuff in a camera bag slung over my shoulder. But when the jeans got wet, they stayed wet. The camera bag impeded progress through the undergrowth and tended to swing me off balance when I was crossing log bridges. Also the strap rubbed the skin off my shoulder. In 1990 I wore thin pants and a photographer's vest, which solved the above problems

but created some others. The vest was hot to wear and was always soaked with sweat around the shoulders. As it mildewed, I tried to keep moving ahead of the smell! The vest did provide some protection against mosquitoes, ant stings, and wasp stings.

I think that anyone allergic to Hymenoptera stings could not collect in the tropics, because I was stung almost daily by some species of ant or another. Fortunately I have never been stung by the largest of the ants, Paraponera clavata, for which one sting is said to give you a fever for several hours.

While on the subject of ants, let me extol the virtues of knee-length rubber boots, with pants tuked inside. With this footwear you can wade into sort of mud or water and not worry about what might glom onto or penetrate your tender hide. And at the end of the day, you have clean and unshriveled, though sweeaty, feet. The lack of human smell on the outside of the boots keeps ants from attacking and climbing up the inside of your pants. You can even walk through army ant swarms.

The next time I go to the tropics, I am taking a couple of sweat bands to keep sweat from dripping into my eyes and onto my glasses. And I am going to change the style of my glasses to atype which allows air flow between the nose and the lens. The glasses I've been wearing restrict such air flow and the lenes sometimes fog when I stand still. This is especially irritating when I am trying to photograph something, as I can't tell whether the subject is out of focus or my glasses are steamed over.

I always carry a collapsible umbrella to use during the frequent rain showers. Final personal recommendations

are to don't eat anything that has not been cooked, and don't get any shower water into your mouth. That way you will hopefully avoid diarrhea, and thereby a) keep up your strength for collecting, and b) expose your bottom less often to the mosquitoes!

A large part of the enjoyment of a tropical trip comes from seeing the rich diversity of the other life forms. There were some spectacular butterflies and moths, beetles, bugs, katydids, tarantulas, and other invertebrates. I saw more mammals than I usually do in the including tropics, 2 species 'possums, 2 of squirrels, three-toed sloths, Saddle-back Tarmarin monkeys, and some forest rats. We also saw both species of fresh-water dolphins, the Grey and the Pink. Bats were everywhere at night. It's a wonder any odonates escape from them long enough to reproduce.

I also saw many snakes, mostly slender <u>Imantodes</u> tree snakes at night, but also 2 species of coral snakes and a large green Parrot Snake. No vipers though. Other herps included Green Iguanas, large Tegu lizards that went across the forrest floor like cruise missles, and other beautiful lizards and frogs. One frog gave loud, spaced whooping calls after a rain, while another called for "Bert" from the tree tops.

Birds that stand out in my memories are Sun Bittens, a flock of Swallowtailed Kites, a Black-chested Hawk, and the turkey-like Horned Screamers. Another bird that especially stands out in my memory is the tame Gray-winged Trumpeter, a chicken-like bird, at the Camp. He snatched the only Polythore derivata I collected from in front of my camera while I was trying to photograph it--and ate it!! I still entertain dark thoughts of Trumpeter a la King, Trumpeter fracassee, Kentucky-fried Trumpeter....

COMPUTERIZED NEW WORLD ODONATA LIST Version 2.0
By ROSSER W. GARRISON .
1030 Fondale Street, Azusa, CA 91702, USA

In April, 1990, I sent a hard copy of a preliminary D-BASE list of all known New World Odonata (excluding Hawaii) to several workers. Several generously responded with constructive criticisms and aid. The list was meant to enable one to find the correct authority for a described taxon, and especially to determine if the species in question was originally described in that genus.

Version 2.0 (computerized) of this file is now complete. Besides incorporating previous corrections, it also includes: 1) all species that are described and manuscript names whose publication is imminent, 2) author(s) and correct dates, 3) all synonyms, homonyms, nomina nuda, and 4) original genus for those species changed to a new genus.

The customized driver for this database file allows one to 1) display the list to the screen, text file, or printer; via an ASCII file or to a Wordstar file, 2) list all original genera, 3) print an index of all taxa, and 4) list all taxa described by any author. It also allows one to list any taxon including all subordinate taxa. For example, it will print Argia with all species, or all Zygoptera, etc.

I have verified almost all names in the list by checking original citations in my library. The list has 2700 entries; the hard copy numbers 52 pages of single spaced text.

As with any undertaking, various problems remain; and of these, I wish to toss out a few to readers of this newsletter with hopes of generating some comment, or, better yet, some research. My main interest is in neotropical Odonata: I consider the nearctic fauna sufficiently well known, although I am

aware that controversy exists on the status of various genera/subgenera (in the Gomphidae, for example) or species/subspecies. There is probably not a consensus on many of these problems. Thus, my comments will address the neotropical fauna only.

- 1. DICTERIASTIDAE. At least seven species have been proposed under <u>Heliocharis</u> and <u>Dicterias</u>. The most conservative view is to consider only two species under one genus (<u>Dicterias</u>) as follows: <u>atrosanquinea</u> Selys, 1853 and <u>amazona</u> (Selys, 1853). Has anyone studied members of this family?
- 2. LESTIDAE Has anyone figured or seen <u>Lestes spollinaris</u> Navas, <u>L. sternalis</u> Navas, or <u>L. sublatus</u> Hagen in Selys? From the literature, <u>L. urubamba</u> Kennedy, 1942 seems to be a synonym of <u>L. falcifer</u> Sjostedt, 1918. Any thoughts on this?
- 3. PSEUDOSTIGMATIDAE. Many names have been introduced in this family, containing what I feel are 18 species. Schmidt (1958) described many subspecies of Microstigma but seemingly no one accepts them. I have considered them synonyms. There are also various subspecies of Mecistogaster. Does anyone have information on the validity of any of these subspecies, or are they seasonal forms?
- 4. PROTONEURIDAE. Do we use the original spelling (Protonevra) or (Protoneura? If we deviate from the original spelling in one case, do we need to be consistent throughout on various endings of species names? That is: caia instead of caja; Archaeopodagrion bilobata or bilobatum? Ischnura capreolus or capreola? Leptagrion aculeata or aculeatum? I thank Jurg De Marmels of Venezuela for notifying me of this, and I invite coments.

Dennis Paulson in a letter to Minter Westfall, suggested that Neoneura ethela Williamson might be a synonym of \underline{N} . Sylvatica Hagen in Selys. Has anyone verified this?

ARGIA: This difficult genus is comprised of a number of names whose specific identity is doubtful or unknowable. I have had access to the Argia collection at the University of Michigan and have unraveled some of the problems, but others remain. Some of Navas' species are known from types or syntypes in this country, but others seem to be unknown.

"Coenagrion" minutissimum (Selys, 1878). Has anyone determined what this is? I find it hard to believe that Coenagrion would exist in South America.

Homeoura lindneri (Ris) and $\underline{\text{H}}$. nepos (Selys) are apparently distinct species, despite Kiauta's note (Odonatologica: 17(4):438, 1988) synonymizing them. Jurg De Marmels loaned me a specimen of each.

- 6. AESHNIDAE. Williamson suggested that <u>Triacanthagyna septima</u> (Selys, 1857) was a synonym of <u>T. obscuripennis</u> (Blanchard, 1843). Should we consider <u>obscuripennis</u> a <u>nomen obletum</u>?
- 7. GOMPHIDAE. Is everyone satisfied that Selys and Hagen's Monographie des Gomphines was published in 1858, not 1857?
- 8. LIBELLULIDAE. Erythrodiplax: I am not satisfied with the specific status of some species. Specifically, I suggest that E. minuscula, E. connata, and E. fusca represent three separate species. Furthermore, E. connata occurs in two forms, red and pruinose blue. Secondly, I am inclined to consider E. abjecta and possibly E. media and E. cleoptra as synonyms of E. connata. Characters given by Borror do not seem convincing to me and "E. abjecta" re-

corded by Borror from Baja California seems to me to be <u>E</u>. <u>connata</u>. Thirdly, certain other subspecies should be raised to species rank: <u>e.g. E. famula</u> and <u>E</u>. <u>lativittata</u> (De Marmels has found them to be sympatric in at least one area in Venezuela), and <u>E</u>. <u>amazonica</u> and <u>E</u>. <u>melanica</u>. Any comments?

GENERAL COMMENTS ON AUTHORSHIP AND DATES:

1. Hagen and Selys. Much has been written concerning the correct authorship of taxa by these two authorities. I cite either one or the other as the original describer, depending on who was listed after the new species name. I have attributed all MS names (Dale mss., Bates mss., etc.) to either Selys or Hagen depending on species. Determination of correct authorship has been diffecult. For example, Neoerythromma cultellatum is described originally as "Enallagma cultellatum, Hagen mss." I attribute authorship to Selys, though Selys states, "(Description after that of MM. Hagen and Gundlach)", and "I have not seen this species..." No doubt there will continue to be controversy on authorship of several taxa, as has been discussed by Montgomery and others. I have determined authorship on a case by case basis.

If Hagen is the authority, I have cited the author as "Hagen in Selys, 1858" rather than "Hagen, 1858" or "Hagen in Selys and Hagen, 1858."

2. Schmidt: The paper by E. Schmidt, Odonata nebst Bemerkungen uber die Anomisma und Chalcopteryx des Amazonas-Gebiets, is often cited as 1942. I follow Montgomery (1967: Studies in the Polythoridae. Acta Biol. Venez. 5(9):158), who argues for using the reprint date of 1952 as the correct year, because almost all of the original issues were destroyed.

DRAGONFLY SOCIETY OF AMERICA'S 1990 MEETING

By GEORGE L. HARP

Department of Biological Sciences, Arkansas State University, State University, AR 72467, USA

Phoebe and I thoroughly enjoyed hosting the 1990 D.S.A. meeting, held on the Arkansas State Campus 1-3 June. The 21 participants included John Belshe, Duncan Cuyler, Jerrell Daigle, Ailsa and Nick Donnelly, Sid Dunkle, Carol and Oliver Flint, Phoebe and George Harp, Bob Honig, David Jamieson, Mike May, Caroline and John Michalski, Clark Shiffer, Bill and Corbin Smith, Tim Vogt and Minter Westfall.

The Flints arrived a day early, I journeyed with them to the St. Francis River that evening to black light. To legitimize the event, I netted a few odonates. Early arrivals Friday either collected Cypress and Janes Creeks to the northeast, or visited gravel pits just south of Jonesboro. That evening, after the business meeting, Sid presented a very interesting slide program, "Dragonfly Collecting in Peru." to close the the evening, I showed a series of slides of midwest odonates, attempting to "stump the group." It didn't work. They correctly identified all species, most without hesitation. As an added treat, unbeknownst to me, Phoebe had ordered a huge cookie, complete with icing dragonfly, for the evening's refreshment. To provide a model, she literally gave the decorator the shirt off her back. The cookie was a decided visual and gustatorial success!

On saturday, the group travelled to the productive South Fork of Spring River, just west of Hardy. Here, the group again resoundingly demonstrated its professional ability. Among other things, 62.5 specimens of Ophiogomphus westfalli were collected! Sid's 3.5 specimens put us over the top - way to

go, Sid! While the day was overcast, collecting was fairly good at this site. Although South Fork does not challenge Ten Acre Pond or Bays Mountain Lake as yet, in time it might.

After leaving South Fork, some went to Big Creek south of Ash Flat for Argia plana. Later, most of us met for dinner at the Front Page Cafe, where we enjoyed pass arounds and "throwed" rolls. That evening, Sid shared an exquisite Japaese videotape of odonates with us. Finally, I showed slides from a 1984 trip to Mexico, and the group helped me identify several odonates.

On Sunday most of the gang travelled to Rock Creek and Strawberry River for one last search for Arkansas odonates. O. westfalli was collected at these sites as well. By midafternoon, the party was over. However, at least 44 species were observed or collected, foremost among them, of course, being $\underline{0}$. westfalli. Other interesting captures included Chromargrion conditium, a state record (thanks Mike!), Tachopteryx thoreyi, Gomphurus ozarkensis, Gomphus lividus, Macromia pacifica, Neurocordulia virginiensis and N. xanthosoma. Mark Pippenger collected his first ever Epiaeschna heros, and Minter, while returning through Mississippi, collected his first specimens of Arigomphus submedianus. Congratulations to all. I think we collected most everything that paticipants sought, except the elusive Somatochlora ozarkanensis.

Again, Phoebe and I very much enjoyed hosting the meeting. We look forward to the Wisconsin meeting next year.

NEW SPECIES OF <u>Cordulegaster</u> DISCOVERED IN ARKANSAS By K. J. TENNESSEN

1949 Hickory Avenue, Florence, AL 35630, USA

While collecting for gomphids, mainly Ophiogomphus westfalli, in the Ouachita Mountains in central Arkansas from May 24 to 29 this year, I collected several individuals of a Cordulegaster which did not look familiar. The first specimen was a female flying near a creek near Ouachita Lake, in Garland County. The body was very black, with long, sharply pointed yellow spots down each side of the abdomen, remindful somewhat of diastatops.

EPA REJECT'S PROPOSED COLORADO DAM (Reprinted from Trout Unlimited)

WASHINGTON - Supporters and opponents agree the recent EPA veto of the Two Forks Dam project in Colorado could spell the end of huge projects aimed at diverting water supplies in the West.

But both sides also agreed that a decision by the Environmental Protection Agency to kill the Denver-area project would not spell the end of the fight over projects that pits developers against conservationists.

The Washington Post said yesterday that EPA Administrator William Reilly is expected within a few days to announce a decision to block the dam, the largest non-federal water project in the West.

The city of Denver wants to increase water supplies for its suburbs. The project calls for building a 615-foot-high dam, creating a reservoir on the South Platte River southwest of the

Two days later, near the Caddo River in Montgomery County, I took another female in a field, and decided to return the next day to look for small runs. I collected three males at a very small run in a pasture, and Jerrell Daigle, who accompanied me, also collected several specimens.

The male cerci are very distinct from diastatops and bilineata, and the frons and labrum are bone white. Other color characters that appear to be useful in distinguishing this species are also present.

city. The project would flood wildlife habitat and block the flow of one of the nation's prime trout-fishing streams.

EPA officials say that while action will be taken soon on a review board's recommendation that no dam be built at the site, no decision has been made.

William Van Schooneveld, chairman of the group behind the project, said his group, the Metropolitan Water Providers, received a letter last week that "pretty much indicated what they were going to do. This decision affects not just Denver, but it may be the end of all big water projects," he said.

Hope Babcock, general counsel for the National Audubon Society, agreed on the significance of a veto. "It says once again that the era of building these enormous projects is over, she said. KENTUCKY SCIENTISTS HOPE TO ESTABLISH NATURAL HISTORY MUSEUM (Reprinted from Kentucky Arts & Science Bulletin)

LEXINGTON, KY. - Kentucky has long been fertile ground for collecting rare natural history objects. It is home of the endangered darter fish, and archaeologists have uncovered a treasure trove of fossils here, but everything is hauled away to museums in other states because Kentucky has no suitable public museum to display them.

A small group wants to remedy the problem by establishing a Kentucky Natural History Museum. A steering committee, led by Donald Chesnut of the Kentucky Geological Survey and Kathy Roberts of Lexington's Living Arts & Science Center, began working on the museum project last November.

They are trying to get established as a non-profit corporation, after which they will look for donations and grants to get the museum started.

"Kentucky is such a good state for natural history. People from universities and research institutes all over the world come to Kentucky to collect fossils and study the rocks," Chesnut said. "And, of course, most of the things end up wherever those people are from."

The trend toward taking collections from the state began in 1807, when President Thomas Jefferson sent William Clark and Meriwether Lewis to Big Bone Lick in northern Kentucky to gather Mammoth bones. Those bones went to Philadelphia and Washington, and then Benjamin Franklin took them to Paris.

Much later, in the 1960s, mastodon, mammoth, sloth and musk ox bones were gathered by University of Nebraska researchers. They are stored in a warehouse in Nebraska and could return to Kentucky if there was a place to display and care for them, Chesnut said.

After a small natural history museum at the University of Kentucky closed in 1970, other important collections have lift the state because there was no place for them:

A collection of leafhoppers gathered by former UK graduate school dean William Funkhouser went to the Smithsonian Institution.

Specimens of darter fish went to the Florida State Museum.

Bat specimens have gone to Texas Tech University. UK biology professor Wayne Davis, who decided to send the bats to Texas, said that was "the best, most appropriate place" for the collection. "I wanted the collection to go someplace where someone could use it," he said. "We don't have any reasonable prospect of having a research collection here."

Chesnut said UK still has valuable collections that could become part of a natural history museum. Some are in storage; others are tucked away in small museums around the state:

The Zoology Museum has stuffed biggame heads, a hippopotamus skull, a duckbill platypus skeleton and the vertebra from a whale.

The James S. Hudnall Geology Museum has a 310-million-year-old fossil from McCreary County that is thought to be the oldest reptile fossil ever found in North America, and a 300-million-year-old shark's jaw found in a coal bed in Henderson County.

The Herbarium of the Thomas Hunt Morgan School of Biology has 50,000 species of plants, including an orchid collected in 1985 and now thought to be extinct.

These museums have only limited degrees of public access. The Zoology Museum, for example, needs another exit door before it can safely accommodate more than 20 people at a time. "If we could get a comprehensive Museum of Natural History, that would be terrific,"

said Doris Westerman, who is on that museum's committee.

Chesnut said the museum that his group envisioned could work with the existing UK museums as well as others across Kentucky. In addition to a permanent collection, there would be traveling exhibits.

"We want the museum to be not just an archive or an attic, but to teach the basic concepts in the various sciences and why these are important," he said. "To teach things about the greenhouse effect and why it's important, about the major cycles that have happened on Earth and how they effect us here in Kentucky."

The museum would be run by the non-profit corporation and would not be directly related to the University of Kentucky, he said. It probably will be in or near Lexington to allow it to draw on scientists from UK, Eastern Kentucky University, University of Louisville and Morehead State University.





The ARGIA "Forum"

ACROSS THE EDITOR'S DESK

We hope you will like this issue of ARGIA. I think we are slowly improving both content and cosmetic appearance, and many of the ideas for improvements have been suggested by you, the readers. We still badly need more of your articles -- the content can only reflect what is submitted to us. We have again been forced to print a combined four-number issue for this volume. Cost considerrations has been the main factor, but a drought of papers submitted in time for early issues also was a causative factor (see the President's report to Executive Council elsewhere in this issue for more detailed discussion).

What suggestions would you offer for improving DSA's service to members, or for improving the usefulness and appearance of ARGIA? I have been asking these questions of nearly everyone I've corresponded with, or talked with by phone, and we hope you will continue to freely offer your ideas for improvement.

Many of you have responded with very good suggestions for things DSA might consider doing for improvement: 1) "You will be compiling a lot of data in both the New-World Catalog and Season Summaries, some method of checking accuracy of species determinations should be assured for these important records. You might also want to establish a repository to send voucher specimens checking and reference purposes". 2) "Why not require authors to send copies of their books and papers for review in ARGIA, then place them in the society's library for benefit of the members?" (See the article in this issue concerning the establishment of the Society's library. Ed.)

Some suggestions for improvement of ARGIA were also received: 1) "I wonder if there is a possibility to include photos in the ARGIA format without running over budget." 2) "I thought the printing in the last issue was too small

I hope you will use a larger type face in future issues." 3) "It would be nice to use some pin & ink drawings as article breaks or headings to jazz up ARGIA a little." 4) "I suggest running the content of each article continuously—not separating parts on different pages."

Some changes have already been made in ARGIA in response to these suggestions. I think publishing photos could be accomplished at moderate additional cost. To have acceptable image quality, it would probably mean we would have to reproduce ARGIA by photo off-set, rather than by Xerox process. That should also give higher resolution to printing as well. We were already considering the change to the photo off-set process anyway, just as soon as there is improvment in income. O.K. contributors, let's have some photos! glossey, black & white, positives please.

Some nice pin & ink figures can be used right now irrespective of the reproduction process we use. How about some submissions? The DSA logo using Plathemis lydia was something hastily used because it was a pin & ink drawing that reproduced best out of about halfdozen tried on the Xerox copier -- and it was seemingly appropriate because the species belongs to the American fauna. I have no particular hang-up that this logo has to represent either ARGIA, or DSA as a whole. Let's have some discussion about it, and why not some of you artists out there who are good with pin & ink submit some drawings? Let's have some of only Argias to consider for the logo of the journal, and perhaps some without restrictions on species to consider for the Society logo? Otherwise, we should formally adapt the present logo, and probably have someone who is a better artist than your editor re-draw it to reproduce better, and in scale versions suitable for all our needs.

I also thank Bastiaan Kiauta for a long letter containing many valued suggestions concerning the production of ARGIA. These were very helpful, Bastiaan, you will notice many incorporated in this issue.

The folklore surrounding dragon-flies has always intrigued me. Beginning in mediaeval times, they have been associated with evil, or even considered deadly, and the belief has persisted through supposedly factual incidents reported in news media, in rural folklore, and modern science fiction. MONTGOMERY, Selysia 3:(2), 1965, probably provided the main impetus that has brought about the widespread interest in the subject. Now the study of folk names, and folklore associated with Odonata has, in its self, become almost a seperate science.

The following incidents and items concerning this subject have been brought to my attention recently:

I attended a dinner party recently, and my host introduced me to a group of other guests from out of town. He mentioned that I was an odonatologist, a lady in the group said "Oh, you're a specialist in some field of dentistry", When I explaned it was a science pertaining to dragonflies, no one knew what a dragonfly was. When I mentioned snakedoctor, the lady exclaimed "Oh my lord I was always told as a child those things had a deadly sting, do they really?"

In the copyrighted comic strip HI AND LOIS, by Dik Browne and Mort Walker, published 7/25/90, a dragonfly is featured flying overhead and baby Trixie wonders "Hope he don't sting me."

A friend showed me a family sprapbook which has been in her family since civil war times, it contains a newspaper clipping which reports as factual an incident of the poisonous stinging by a dragonfly. The location mentioned, and date of publication is not certainly known, but is believed to have occured in Georgia before 1880.

"Boy killed by poisonous sting. Matthew Bibb the 11 year old son of John

Bibb, of the Wartrace Community, was stung by a poisonous Snake-Doctor while swimming. He died three days later after suffering convulsions and feaver. Dr. Pfalzer states that stings of most kinds of such Creatures are no more harmful than the Honey-Bee. But the sort having the color black with yellow spots, and a long stinger on the hinder end are capable of such mischief and should be completely avoided at all times. Contrary to general belief and practice, Whiskey and other Spirits should not be given for stings and snake bites, according to Dr. Pfalzer."

It would seem the "posionus creature" described in this story could as easily have been Sphecius speciosus (the Cicada-Killer Wasp), which does have a formidable sting, but certainly not fatal, unless there was an allergic reaction. I doubt that a very high degree of expertise about insect classification existed in rural communities at that time. What actually happend in reported incidents of this sort are difficult to determine. But the numerous similar stories have tended to perpetuate the belief that Odonata do possess the ability to sting.

Odonata have also been featured in modern science fiction. Jim Hallerman, a writer and collector in this field, showed me a copy of Fantastk Action (a comic book) published around 1970. The theme is on a race of super intelligent, extraterrestrial dragonflies who visit earth to collect human specimens for their museums, it seems specimens of beautiful females are in great demand and sell for a fortune on their planet! (Perhaps just retribution for the acts of entomologists down through the ages, since the time of Linnaeus???).

Dragonflies' order name, Odonata, ("tooth-like") is very appropriate because of the saber-like mandibles of the larvae, but if Fabricius had considered only the adults the name would have still been appropriate. Who knows? Maybe he was bitten by one, and that influenced his choice of names.

I had handled dragonflies for years without being bitten. All books I had read said they were nice little fellows and perfectly harmless to people. I had given a lot of talks about dragonflies, and one of the first things I always try to get across to an audience is that dragonflies won't harm you in any way. I really believed that. Wrong!

My first sobering experence came at the Johnson City SIO meeting, as everyone was returning from an afternoon collecting trip, we were met at the buses by a contingent of media personal eager for news of our "exciting captures." The lady reporter who interviewed me seemed somewhat intimidated by big <u>Tachopteryx</u> thoreyi I cought. He was buzzing his wings thrashing his abdomen about. She asked if he would bite, and I assured her that he would not. To prove my point, I brought his mouth into contact with my hand-- (???????) Whereupon he proceded to sink his mandibles into my finger and literally bit off a piece of skin! Well, at least having proved they could not chomp-off an entire finger, and, with blood dripping, I excused myself as graciously as possible!!!

Even after that episode, I was not really convenced dragonflies hold any animosity toward collectors. But not any more! Not after what happened last June when I was after an Ophiogomphus acuminatus on Little Swan Creek in Tennessee-- I had just netted a big Hagenus brevistylus and before I could put it into an envelope, along comes an O. acuminatus and settles on the sandbar at my feet, so (and I would have probably put this tip in a future "Technique" column except for what happend next!), I put the big fellow under my hat for safekeeping while I used both hands with the net. The resulting wing-whirring and thrashing agout was expected, but what I did not expect was the big guy to clampdown on my scalp in the thinning spot on top of my head! The acuminatus away, but I felt particular pleasure in dipping the bervistylus in Acetone later. I'm sure many of us have had an an experence with female <u>Cordulegaster</u> that try to thrust their oviposter into your hand while you hold them. Now and again, if they hit a tender place, they have sufficent force to puncture the skin. So-- now we know the truth-- dragonflies <u>can</u> both bite and sting-- and there is really some measure of truth in folklore to that effect after all!

1991 (and 1992) promises to provide plenty of opportunities for persons with odonatological interests to do traveling, both locally and world-wide. You will see elsewhere in this issue several anouncements regarding upcomming meetings and conventions:

Foremost, will be the XI International Symposium of Odonatology, sponsored by SIO and hosted by Prof. Carlo Utzeri, of Universirta La Sapienza, Rome, Italy. It is to be held at Trevi (Perugia), Italy, through August 18-25, 1991.

DSA's own Annual Meeting will be held in Wisconsin, in the vicinity of the St. Croix National Scenic River, in the small town of Grantsburg. Dates are 21-23, June, 1991, and the host is Tim Vogt. In keeping with DSA tradition, this will be a low key, very affordable, collecting orented affair. It will provide opportunity to collect in one of the least impacted areas remaining in the US-Hope to see you all there.

A Satelite Symposium on the Odonata, will be held as a part of the XIX International Congress of Entomology, in Beijing, China, on June 28 - July 4, 1992. The Convener of the Congrass is Dr. Wu Yan-ru, and the probable Chairmen of the Odonata Symposium will be the well-known Chinese Odonatologist Chao Hsiu-fu.

Look over these anouncemments early and decide on those you will be attending. Then get your registrations and reservations sent in early. Godspeed.

Carl Cook, Editor

FIELD AND CABINET TECHNIQUES
(or how to catch and prepare dragonflies
in 101 easy lessens!)

By Carl Cook 469 Crailhope Road Center, KY 42214

This is intended to be a reader participation column, and it, hopefully, will become a regular feature of ARGIA. I know all of us have a few special techniques to help bag "high-flyers," or some unusual methods and shortcuts when it comes to preparing the specimens. O.K., now is the time to share those tips with the rest of our readers.

I'll start with a few things I've learned to do (and learned not to do) in the (more years than I'm going to admit) that I've been collecting insects. And, oh yes, you do really learn something new nearly every day. An example was the article by SAWKIEWICZ, odonatol. 3:(3) where he describes the observation he had made in China, of a boy with a live dragonfly tied to the end of a thread. It seems other odonates would fly in closely and carelessly, around the tied individual. This gave him the idea to try the same method for collecting specimens -- to use a live dragonfly as a decoy to attract others near enough to net them. He stated the surprising result was a "slaughter", rather than the pleasant hunt he normally enjoyed in collecting dragonflies. I wondered if it would really work, especially with gomphids, but I read the article too late to try these. In late September I visited a small intermittent meadow stream, dry except for frequent small pools, which was absolutely swarming with Aeshna umbrosa, also, but much less abundant were Somatochlora linearis. Introduction of a tethered A. umbrosa caused a flurry of dogfights and disruption of the male's regular patrolling flights. And I thought actually hindered collecting rather than helped in this particular situation.

The next opportunity I had to decoy odonates came on an early May trip this

year to the Cumberland Plateau area of central Tennessee, I had driven down to the Caney Fork River to look for Cordulegasters. The weather was coolish and lightly overcast. As I walked under the Highway #70 bridge, I saw that winter flooding had piled a logjam against the bridge supports, and there was now a long upstream pool where my favorite sandy ripple for Cordulegasters used to be. But, wait, there were several Helocordulia selysi flying out over the pool, perhaps the trip could be salvaged after all. The only problem the pool was deep and the dragonflies wary, not often coming near enough to net. I finally saw a female ovipositing on a scummy area of the pool and cought her. It then occurred to me that I might tie her to a stick and lure males within striking distance. It worked! For about an hour I sat on a log and netted one male after another as they hovered over the tethered female. Finally with enough, I went on downstream looking for Cordulegasters.

When the June flight of several Gompus species came on, I tried the decoying method on them, but again without too much success. Where males were on patrol, or hovering, it was more effective to wade out into the river after them. However, over deeper streams it might be effective to lure them nearer to bank. I think in some instances it is rather helpful, but may not be as effective in every situation.

Next, I will refer to another Notul. odonatol. 3:(5) article: BACCETTI, PERROTTI and UTZERI, regarding the usefulness of ornithological mist nets as traps for Anisoptera. First I would warn potential users of this type of traps in the U.S. that stringent regulations apply to their use, and that permits from the U.S. Fish & Wildlife Service, and from all states so far as I am aware, are required for legal purchase and use.

Then I would like to descrbe a home made trap that is far more effective for odonates. The netting for such a trap may be purchased from: Nylon Net Company,

P.O. Box 592, Memphis, TN 38101. The recommended material is their Regent-3/16" Mash Nylon Netting, the amount material required is 40 linear feet netting 6 feet wide, and 20 linear feet of netting 10 feet wide. This will cost about \$135.00. The trap is triangular shaped, 20 feet on all three sides, with top and two sides covered with netting, and third side open for entry of the odonates. The 6 foot wide netting is used for sidewalls, the 10' wide netting will furnish enough material to make the top. Turn over a selvage, and sew in a small nylon rope on all edges, let the rope extend a foot or two at each corner of the netting. Dye everything black. You will also need three 10 foot lenghts of metal thin-wall conduit for corner posts, paint these black, and make some kind of joint connection at the middle they will take apart for transport. Get a spool of black nylon twine for guy lines, and you are ready to set up.

This trap is most effective for stream patrolling species—Macromias, many Aeshnids, and is the best method I know to collect pesky Neurocordulias. You will need to stay with the trap and remove specimens before they can recover from the collision with the net and fly back out the entrance.

The Giant Economy Size Aerial Nets: I make my own. I start with an aluminum hoop and handle fish-landing net sold by above Nylon Net Company. It is their stock #1648 H. This net has a 38" hoop diameter, and slide-a-way handle to stow easily in your car, the price is about \$25.00. Throw away the net bag, and make your own. Order a pound of #N111D 3/8 mesh size Monofilament Netting (@ \$20.00 from same company) and you'll have bag material for life. Nothing but mono netting will work on so large a net-too much air resistance, and when it got wet, it would be too heavy to swing. I like to use this net for the technique that Jarrell Daigle calls "pancaking"-- swatting hovering gomphines right down onto the water!

The Long-Handle "Tropics Net": I

haven't had much success with the lightduty commercial model made by a wellknown supply house. Firstly, the 12' handle isn't long enough, takes too much time to screw the segments together, and is sure to break after very little use. Their heavier-duty telescoping model is more rugged, but gets pretty heavy to carry and use after a while-- and it costs a leg and an arm! At the Johnson City SIO Symposium everyone was quite impressed by the custom made net showed by Kiyoshi Inoue. Nothing remotely similar is avalible in the U.S., but I have found something that can be adopted. Repairmen who work for your local light & power company use a tool known as a "hot-stick". It is a telescoping fiberglass pole about 25 feet long when extended, twist-lock rings secure extendable sections at any desired length. and you can remove some of the sections when you don't need the full length. Any mechanically adept person can fit a hoop to this pole.

When people look at the gear in my pick-up and see a set of safty harness, they ask if I am a hard-rock climber, when I answer it's only a part of my dragonfly collecting gear they seem puzzled. Nick Donnelly told of standing on top of his pick-up while Ailsa (Mrs. Donnelly) drove down back-country dirt roads to catch high-flying Somatochloras, I've done that too, but I like to wear a safty harness snapped to the roll-bar-If you try that, tell your driver to watch out for low tree limbs!

There were supposed to be some preparation tips too, so before I run out of space, here goes: I guess nearly every dragonfly collector these days knows Acetone is the best thing to come down the pike since indoor plumbing, but too many of us don't use it properly. I get many specimens in exchange that are not first quility museum grade material just because the Acetone treatment was not properly done. Acetone works by being both a desiccant and solvent, it extracts both water and fatty substances from the specimens. When it has absorbed about 10% water and sufficient fats to

turn slightly yellow it should be discarded as it will no longer preserve the colors well. Some collectors carry a jar of Acetone along in the field and dunk specimens in it as soon as they are cought, Don't do that. Acetone must be a strong irritant, because a live dragonfly placed in it will curl its abdomen and retract its legs in an unnatural position.

As specimens are collected they should be placed alive in small glassine or paper envelopes. Keep them in the shade and cool if possible, when moving from one location to another carry them in the air conditioned passenger space. not in the trunk. When I carry specimens in the back of my topper-equipped pickup-- I put them in an icebox, which is cooled with just a small amount of ice cubes in a closed zip-lock bag. Keep the specimens dry at all times. Never put more than one specimen to an envelope, they will chew on each other. mating pairs associated by placing each in seperate envelope, then the two envelopes together in another.

So we have now returned home with a big box of goodies. Leave them alive in their envelopes for several hours or overnight until they have expelled the gut contents. I never use a cyanide jar for killing, it fades the colors. can kill with Acetone by two methods- 1) for Anisoptera, use a hypodermic syringe inject a drop or two into the specimen, this kills almost instantly. (be sure to use the glass type syringe. the rubber plunger in plastic syringes expands and locks up from reaction to Acetone). 2) for Zygoptera (and also Anisoptera if you perfer) hold specimen by wings dip into Acetone for a few seconds and lay out on old newspaper to dry, if they recover and begin moveing, dip again. Now straighten abdomen and legs (a camel-hair brush is good for Zygoptera) and put back in their envelopes, snip a corner off bottom of envelopes for better drainage and dunk everything in fresh Acetone for 24 hours. remove and dry for another 24 hours in low humidity conditions (or borrow your

wife's hair blower, and dry for about 10 minutes). You should now have specimens any museum would be pleased to add to their collection. One final precaution—if there is pruinose spots on the specimens don't use Acetone for either killing or a desiccant, it will desolve the pruinescence. You may safely use pure (95% or above) isoproopyl alcohol and follow with rapid drying with a hair dryer, but color preservation is not nearly so good as with Acetone.

WARNING! DANGER! DANGER! Be sure to take proper precautions when using Acetone. It is as inflammable as gasoline. Don't smoke, and don't use it in the same room where there is any kind of a flame. Also remember Acetone is a powerful solvent, use only glass or metal containers. And don't spill it on anything of value. It will dissolive your table top, your computer, you telephone, take the paint off your car, and eat right through a tile floor!

Now that you have prepared your specimens nicely, you must provide protection for your collection from dermestids or they will surely destroy it. After Acetone treatment your specimens are completely sterilized, try to keep them that way. I keep on hand several sizes of zip-closure plastic bags, store your specimens in these, in appropriate size lots of glassine envelopes, paper triangles, or carded "Beatty" envelopes, and they should keep safely indefinitely even without the addition of fumigants. The important thing is to be sure they are not infested before putting them in the bags. Never, never, add specimens from outside sources to your sterilized collection without first fumigating them. Removing them from their envelopes and soaking them overnight in Acetone is an effective fumigant and at the same time cleans oily deposits off.

If you have a study collection that you work with frequently, you will usually want to store it in "Beatty" envelopes, housed in boxes or drawers, and these should be provided with a fumigant constantly. I no longer use PDB because

it accelerates shrinkage of "Beatty" envelopes, and also is disagreeable to constantly work around. I was very pleased with the results gotten with useing Vapona as long as it was available. Since it has generally become difficult to obtain, I have tried using Texize No-Pest strips which seem just as effective as Vapona and cost less. Any strip insecticide containing 2. 2- Dichlorovinyl Dimethyl Phosphate as the active ingredient would be an effective fumigant. I have also found 1-inch sections cut from pets flea-collars to work very effectively, and, very economical, if discount brands such as Bansect (from Wal-Mart or other discount stores) are purchased.

Check out Sid Dunkle's piece "Peru Revisited" elsewhere in this issue, for some excellent tips on collecting in the tropics

Now let's have some of your tips!

A SUGGESTED FORUM FOR DISCUSSING THE VALIDITY OF SOME AMERICAN ODONATE SPECIES

By Thomas W. Donnelly 2091 Partridge Lane Binghamton, NY 13903

I am puzzled by several U.S. and numerous Latin American odonate species. Leaving out for the moment the obviously undescribed, there are a great many that should be discussed. Some are sufficiently rare that meaningful discussion is difficult. But some are very widespread and many workes have taken them.

My own concept of what a species is may not conform to that of everyone else. I don't use the term to name things that I simply can "tell apart". In past discussions I have frequently been told that, for example, "there are 51 ways in which Macromia georgina and illinoiensis differ". I am not swayed by this sort of

reasoning. I am impressed, on the other hand, by the tendency of wide-ranging species to vary. This variation can be expressed (for me) by use of trinomials, or by no nomenclatorial device whatever. (We can simply call them the dark northern forms, or whatever). I believe that a "species" represents a probably genetic entity such that interbreeding would not be successful. Clearly this is a judgement call. I regard a true hybrid as rare phenomenon, recognizing that they have been found numerous times in other groups.

I believe that there should be a continuing forum on the status of American species. The bulletin ARGIA would be a very suitable forum.

I propose that we identify some problem species and invite as many people who have opinions on them to contribute their views. A given problem could then be discussed fully in a single number of ARGIA.

My proposed first discussion would be on the above-mentioned species, Macromia georgina and illinoiensis, which are currently puzzling me. I thought I had them well sorted out until I received some Illinois specimens from Tim Cashatt.

Miscellanea

FRAGILE

Insectes desséchés pour l'étude.

СУХИЕ НАСЕКОМЫЕ

ДЛЯ НАУЧНОГО ИССЛЕДОВАНИЯ.

ОСТОРОЖНО

How to say it in Russian!



DSA Business Reports

MINUTES OF FORMATIVE MEETING OF DSA, JOHNSON CITY, TENNESSEE, 08/11/89

On the evening of August 11, 1989, at Johnson City, Tennessee, and in conjunction with the Tenth International Symposium of Odonatology held at East Tennessee State University, The organizational meeting of a new Odonatological Society, THE DRAGONFLY SOCIETY OF AMERICA (first proposed as The American Dragonfly Society), was successfully held. Preliminary discussions had been held on several previous evenings and the formation of a new society had been advocated by those present.

At the formative meeting floor discussions have ensued regarding purpose, objectives, and business aspects of forming a new society. Each item has been decided by simple majority vote of persons attending the meeting. It has been decided the society will publish a news journal which will be called ARGIA; and that another primary objective of the society will be to establish a Seasonal Summary of Odonata collecting data which will be submitted by the members and published by the society.

The following slate of officers have been elected to serve a two year term: Carl Cook, President; Donnelly, President Elect; Minter Westfall, Rob Cannangs, & Rodolfo Novelo, Vice Presidents; Sid Dunkle, Secretary; Jerrell Daigle, Treasurer; and Carl Cook, Editor in Chief. Season Summary Coordinators elected were Frank Rob Cannings, Duncan Cuyler, Rosser Garrison, Rodolfo Novelo, Dennis Paulson, Ken Tennessen, and Tim Vogt.

44 persons joined the society as Charter Members.

Sidney W. Dunkle, Secretary DSA

DRAGONFLY SOCIETY OF AMERICA (DSA)
MINUTES-- 1 JUNE 1990 BUSINESS MEETING,
JONESBORO, ARKANSAS

Meeting presided over by President-Elect Thomas Donnelly.

Present at Meeting: John Belshe, Duncan Cuyler, Jerrell Daigle, Thomas and Ailsa Donnelly, Sidney Dunkle, Oliver and Carol Flint, George and Phoebe Harp, Robert Honig, David Jameson, Michael May, John and Caroline Michalski, Mark Pippinger, Clark Shiffer, Bill and Corbin Smith, Timothy Vogt, and Minter Westfall.

Minutes of the 11 August 1989 Meeting at Johnson City, Tennessee, were accepted unanimously.

An election by ballot was held for 3 openings on the Executive Council. George Harp and Michael May were elected. The third member is still to be elected, as no other nominee had a clear majority.

Some amendments to the Constitution were proposed and voted upon. Article XIII describing distribution of assets should the DSA be dissolved, was proposed and accepted unanimously. Article XIII was added to the Constitution to satisfy the U.S. Internal Revenue Service (IRS) tax statutes for a non-profit society. In addition to adopting Article XIII, the membership voted unanimously to delete Article IV, Section E from the Constitution, because it could be construed by the IRS as allowing "bonuses" to members. In future years when the DSA does have some financial assets, a similar section with proper legal language can be reinstated to the Constitution.

Proposed written By-Laws were distributed for the membership's consider-

ation. In connection with the preceding paragraph on the tax status of the DSA, Section II C of the By-Laws was also deleted. Finally on this topic it was asked if the DSA needs to be incorporated in order to be regarded by the IRS as a non-profit organization. This will have to be checked.

Possible conflicts between ARGIA (DSA) and SELYSIA (SIO) for new items, and between other journals of SIO and a possible future research journal of DSA was discussed. Most members present felt that there was no conflict, and that these newsletters and journals had different audiences with different interests. In any case, the membership felt that any article in ARGIA could also be reprinted in SELYSIA at the discretion of the editor of the latter. A series of interesting suggestions by Bastiaan Kiauta for possible changes in the forof SELYSIA was read by Minter Westfall. Some of these, if adopted by SELYSIA, would emphasize the differences between ARGIA and SELYSIA. Dr. Donnelly suggested that a possible regular feature column for ARGIA could be an opinion by someone on a difficult taxonomic problem, for example Macromia georgina vs. M. illinoiensis. The column in the next ARGIA could be on the same or a different problem.

Thomas Donnelly suggested that DSA produce, one by one, and at different prices, annotated Odonata lists of individual states, provinces, departments or countries. The membership thought that this was a good idea, and a discussion of suitable formats and contents of such publications ensued.

Dr. Donnelly also solicited comments on a U.S. Fish and Wildlife Service list of threatened Odonata. He will collate all respondent's comments, then send a final copy to the USF & WS and to each respondent.

An invitation to hold the 1991 DSA Meeting in Wisconsin was issued by Tim Vogt. This invitation was accepted with alacrity. Tim Vogt will co-ordinate the meeting, assisted by Bill Smith.

Sidney W. Dunkle, Secretary DSA

CONSTITUTIONAL AMENDMENT ADOPTED

Some concern had been expresed by several members that the Constitution as originally worded, might fail to meet all provisions of the U.S. Internal Revenue Code to qualify DSA for non-profit organization status.

Accordingly, the amendment of one Article, and addition of one new Article, was acted upon at the Jonesboro meeting, in compliance the provisions of Article XII for such purposes.

The twelve signatures supporting the amendment were: John F. Belshe, R. Duncan Cuyler, Jerrell James Daigle, T.W. Donnelly, Sidney W. Dunkle, Oliver S. Flint, George L. Harp, Robert A. Hong Michael L. May, Mark Pippenger, Clark Shiffer, and Minter J. Westfall, Jr.

Amendment proposed is as follows:

- 1) Section E of ARTICLE IV shall be deleted.
- 2) A new article, ARTICLE XIII: ASSET LIQUIDATION, shall be added.

"ARTICLE XIII: ASSET LIQUIDATION

A. Upon cessation and final dissoution of the Society, sufficient of its assets and properties shall be liquidated, and first priority for proceeds shall be to pay the Society's outstanding liabilities. Any remaining assets and properties shall be assigned, transferred and paid over to an organization, or organizations, of similar scientific or educational purposes which meet the requirments of U.S. Internal Revenue Code of 1954 Section 501 (C),

- (3), (as revised) as being organized and operated exclusively for charitable and non-profit purposes.
- B. From applicant organizations qualified as above, the DSA Executive Council shall, by majorty vote, designate one or more recipients for the remaining assets and properties, with preference being given to organization promoting the science of Odonatology, and/or Odonata habitat and wetlands conservation, or organizations supportive of similar objectives as the Dragonfly Society of America".

BY-LAWS FOR THE SOCIETY ADOPTED BY EXECUTIVE COUNCIL

By-Laws are essentially a set of rules by which an organization conducts its affairs. Article XI of the Constitution charges the Executive Council with the responsibility of amending and approving the set of By-Laws submitted by the Society's President. At the business session of the Jonesboro meeting, the first since formation of the society, that responsibility was discharged, and the following By-Laws adopted:

THE DRAGONFLY SOCIETY OF AMERICA BY-LAWS

SECTION I. DUES

- A. All dues and memberships are by the calender year, without regard for the month in which you join, payable with enrollment application and on or before March 1 of each succeeding year. Dues are deemed in arrears on July 1 of current year.
- B. Dues are payable in US Dollars; rates are \$3.00 for regular member, \$10.00 for sustaining member, \$10.00 for institutional member. Extra charges shall apply for air mail delivery of ARGIA outside of US at \$10.00, or first class delivery in US at \$7.00. Dues rates for the succeeding year shall be established by the Executive Council at each Annual Meeting.

- C. Gratis membership shall be extended to colleagues, upon request, residing in low-income countries outside North America. Continuation of this policy for each succeeding year will depend on available revenues. The Executive Council shall determine the feasibility of this policy at each Annual Meeting.
- D. Members in good standing may cancel their membership for the forthcoming year in writing, which must reach the Business Office prior to December 31, of current year. Cancellation of current year membership and/or removal of name from current Membership List cannot be considered.
- F. Members remaining in arears for one year may be removed from membership.

SECTION II. FINANCIAL

- A. The Treasurer shall be responsible for establishing the Society's bank checking account and/or savings account, shall be the only person empowered to endorse instruments made payable to The Dragonfly Society of America, shall keep the bank account books current and available for inspection by the Executive Council upon notice.
- B. Only the Treasurer shall be empowered to disburse funds from the Society's bank account. All accounts submitted for payment shall be itemized for each particular article of goods or service and shall include a statement that said goods or service were provided for The Dragonfly Society of America. Where Officers or Members submit statements for reimbursement of expenses, the name of Officer or Member must also appear on statement.

SECTION III. BUSINESS ADMINSTRATION

A. The Society shall strive to maintain a centralized office address, changed as infrequently as possible, to receive all correspondence, quires, manuscripts, applications and dues. Ideally, one Society Officer shall serve

as <u>de facto</u> Business Manager during his/her term of office.

B. The position of Business Manager shall be strictly voluntary and without salary. The position may be held by any elected officer, or in lieu of candidate officers, any member of the Society upon approval of a majority of Executive Council.

SECTION IV. PUBLICATIONS

- A. The regular serial publications of the Society shall be ARGIA, a quarterly news journal of informal articles, notices and current news items regarding almost every aspect of Odonatology, and SEASON SUMMARY OF ODONATA, an annual volume of collecting data submitted by members. All members in good standing shall receive these two publications as part of their membership.
- B. The Society may issue other publications from time to time, which shall not be inclusive with membership. Members in good standing shall be entitled to purchase such publications at 20% discount under regular prices.
- C. The production of the Society's publications and the administration of its editorial polices shall be under the direction and control of the Editor-in-Chief. The Editor-in-Chief shall have the responsibility to appoint Associate Editors, and special project Editors, as required to carry out the Society's publications program. The Editor-in-Chief shall submit a written proposal for the establishment of any new publications project (except ARGIA and SEASON SUMMARY ANNUAL) to the Executive Council, and must receive the approval of 2/3 of the responding Council Members before preceding with proposed project.
- D. The office of Editor-in-Chief is an elected position. ARGIA Editor, SEASON SUMMARY Editor, Project Editors, and SEASON SUMMARY Coordinators are positions appointed by Editor-in-Chief. The same person may hold more than one of the appointed positions at the same time.

SECTION V. DUTIES OF OFFICERS

- A. PRESIDENT: Shall preside at all meetings and other functions of the Society; shall be Chairman of the Executive Council; and shall be empowered to call special meetings of the Society and/or Executive Council.
- B. PRESIDENT ELECT: Shall assume all the duties of President in the event of death, resignation, disability or absence of incumbent President.
- C. IMMEDIATE PAST PRESIDENT: Shall serve one term on Executive Council with full voting privileges.
- D. VICE PRESIDENTS: There shall be three Vice Presidents; no more than one shall reside in the same country; and at least one shall also belong to Societas International Odonatologica. It shall be the duty of Vice Presidents to represent the interests of members from their respective regions; and the SIO member shall act as liaison with that organization.
- E. SECRETARY: It shall be the duty of the Secretary to transcribe minutes and proceedings of all Society meetings, and read the proceedings of the immediate past meeting for approval by the Society membership. The Secretary shall keep records of all Society proceedings available for inspection upon proper notice.
- F. TREASURER: The Treasurer shall have the responsibility for handling the Society's funds, through deposits, investments, and disbursements.
- G. EDITOR IN CHIEF: Shall have editorial and production responsibilities for the Society's publications.

PRESIDENT'S REPORT TO EXECUTIVE COUNCIL

One of the duties of a chief officer of an organization is, or should be, to make periodic reports on the condition of his organization to the governing board, with appropriate suggestions for changes that should be considered. Normally, this report would have been presented at the annual meeting in Jonesboro last June, but your President was unable to attend because of a family illness.

SOCIETY FINANCES:

1989 is the first year we have completed records of income and expenses, however, both income and expense were atypical because we recieved a one time grant from SIO which we will not have the benefit of receiving in future years, and we had initial membership soliciting expenses that may not reoccur.

INCOME (from SIO grant) \$600.00 (from membership dues) 122.00	
TOTAL INCOME \$722.00	
EXPENSES (printing ARGIA)\$189.00 (printing solicitations	

TOTAL EXPENSES.....\$584.62

SURPLUS.....\$137.38

The surplus amount of \$137.38 has been set aside in a special fund to provide free memberships to colleagues outside of North America who reside in soft currency countries. It is adequate for the time being.

OPERATING FUNDS FOR 1990:

Projections were made in February 1990 on probable incresases in membership for 1990, and probable costs of operations. It was projected membership should reach 100 and provide \$350.00 income. The cost for printing quarterly 12 page runs of ARGIA, their mailing costs, and probable miscellaneous expenses was projected at \$550.00-- ex-

penses not feasible within our expected income. An assessment was made again in May 1990 and the same income projected earlier seemed likely. Projections were made for a semiannual 22 page run of ARGIA and other expenses that amounted to \$400.00. At the same time my projections indicated an annual run of 40 pages could cut costs to \$335.00. I made the decision to pursue the latter alternative with intent to remain within the budget. I feel confident the year-end audit will justify the manner in which this problem was handled. I strongly oppose an outgoing adminstration passing on a deficit to the incoming.

NEED FOR MORE ARTICLES:

am concerned, as am sure the Executive Council must be, by the delayed appearances of ARGIA. As pointed out above, the most serious problem has been a shortfall of operating revenue, but other problems have also existed which may have prevented a regular publishing schedule had adequate funds actually been available. Too much dependence for contributed articles has rested upon the shoulders of a small cadre of the society's officers, and while ARGIA presumes to cater to the interest of a wide array of nationalities, we have as yet no articles from outside the US-- I extend a special invitation to our colleagues in other countries to become contributors. Also always remember you do not have to be a member of DSA to contribute to ARGIA. I also happen to believe it is profoundly better for an editor to spend his time editing, rather than filling up space with his own narrow viewpoint. How sweet it would be to set up an issue and have too many articles to fit the available space!

APPEARANCE OF ARGIA:

The format and quality of ARGIA can certainly stand improvement, hopefully you will notice several improvements in the next issue. When I have contact with readers I always ask for their ideas for improvments, some mentioned were a more readable type face, and that the entire

article should be continuous- not separated within the journal, an index to contents on back cover, these things are being done in the next issue. The idea of using photographs and figures has strong appeal, and while it will require a slightly more expensive printing process, I recommend we do it.

STATUS OF NEARCTIC CATALOG:

Dr. Donnelly's proposal for DSA to publish a Nearctic Distributional Catalog was well received at the Jonesboro meeting. I believe we would be ready to proceed with the first issues of the series quite soon if the matter of financing the project could be resolved. Should DSA try to obtain a grant for initial issues? Should they obtain a loan? Establish a special fund? Offer subscriptions for the series? We need your input on this matter.

STATUS OF SEASON SUMMARY:

The response to the Season Summary project has been less than overwhelming. Some of the zone coordinators have not yet sent reports for 1989, and those who did make reports usually listed only their own collections, indicating they received no information from other zone collectors. The available records for 1989 will be summarized and included with the mailing of next ARGIA. I continue to believe the project will eventually furnish valuable data, and needs to be continued if at all possible. I think some changes in the program are indicated: It seems best to have future reports sent directly to the Editor for the time being, and perhaps reinstate sending to zone coordinators when the load of reports is heavier. Some simpler method of reporting must be devised to encourage more participants, perhaps a pre-printed form, where most of the information could be simply checked off, could be included in an ARGIA mailing. It seems necessary to allow more time for identifying material and preparing reports, thus 1990 collecting data will not be published until year-end 1991. I recommend the Executive Council approve

these changes.

A LIBRARY FOR THE SOCIETY?:

Suggestions have been made by eral. including Dr. Kiauta, establishing the society's own library would be a worthy project. I have circulated the idea among several members and are already receiving gifts papers. I have placed my personal brary of about 15,000 titles at service of DSA members, and am already providing Xerox copies at cost. might say that I have been acting, officially, as pro term librarian already. I recommend the Executive Council do establish a society library, create the appointed office of Librarian with responsibility to oversee the project.

OPERATIONS RESTRUCTURING:

The production and distribution of ARGIA constitutes the society's largest expense item. The optimum quarterly schedule cannot be achieved on the society's present income, at current production costs. Printing short runs of each issue and having to pay regular postal rates are very costly, my projections have indicated a probable cost of nearly double our dues rate for the desired quarterly publication schedule. I recommend the Executive Council provide input regarding this problem, that they consider some, or all, of the below suggested remedies, but that they postpone final action until the 1991 Annual Meeting.

1) The By-Laws call for the Executive Council to examine the society's financial condition at each annual meeting and set dues accordingly. Your President proposed at the formative meeting that dues be set as low as possible to attract the amateurs and students. I now realize the dues as set cannot support the society, and that rates of about \$6.00 for regular membership and \$12.00 for sustaining and instutional dues would be more realistic and still remain very afordable.

- 2) We should look at the possibility that one of the universities with good reproduction equipment might be willing to print copy-ready issues for the society, I know this is done with many other newsletters.
- 3) We need to locate an attorney (is there one among our membership?), or university legal department, who would volunteer their services to prepare an incorporation application for the society, (I have been asked \$500.00 for this service by private attorneys, but am told it takes about 1 hour!). This would permit the society, in turn, to apply for non-profit mailing privileges with the US Postal Service.
- 4) Each of us who is connected with an institution should encourage that institution to become an institutional subscriber to ARGIA.
- 5) A steadily increasing number of members who renewed in 1990 chose to become sustaining members, we should encourage our colleagues to select that membership class wherever possible.
- 6) I strongly recommend that no changes be made in the society's current policy of providing free memberships to colleagues residing in dollar deficient countries.

CONCLUDING REMARKS:

I feel that problems of this nature are not extraordinary for an organization of DSA's youth. I wish to emphasize that DSA is financially sound, and this adminstration will hand over the reins in June 1991 with a balanced budget. This action is taken in accordance with provisions of the Constitution and By-Laws to provide the Executive Council with information necessary to assure continued sound operation of the society. I am very optimistic about the society's future impact on Odonatology.

Respectfully submitted, Carl Cook, President

THE PROPOSED NEW-WORLD ODONATA FAUNA PUBLICATION SERIES

By Thomas W. Donnelly 2091 Partridge Lane Binghamton, NY 13903

I have discussed informally the idea of a series of publications attempting to document the Odonata fauna of the New World. I have received a sufficient number of positive responses to suggest that this is an idea that will appeal to the majority of workers.

The current problems, as I see them, are:

- 1) The scope. I envision state or provincial lists for all Odonata. In many cases, I can envision lists for smaller areas. I believe that some areas might be difficult to document (the Great Plains states, for example).
- 2) The degree of detail. I envision county records for most things, and more detailed records where they are warranted.
- 3) The format. I envision cameraready copy, such as could be produced by
 most word-processing programs. I see no
 possibility that a typed manuscript can
 be dealt with considering the probable
 magnitude of the series. This may be a
 smaller problem than I originally envisioned, because it is possible to
 produce uniformatted ASCII files from
 most programs. Thus, it may not matter
 which word-processing program you use.
- 4) Taxonomy. This is almost a separate issue. I regard the validity of several U.S. forms as debatable, and the number of these problems will be greater in Latin America. I think that any lists will have numerous statements that certain species are being included according to a specified diagnosis (such as for many Argia species sensu Calvert).

My questions at this point are: 1) Is this a good idea? 2) If so, then what can various people contribute?, and

3) when can they contribute it? 4) Are a sufficiently large number of people willing to subscribe to a possibly irregular series of faunal publications? Or should each number be produced and sold on spec. (which might double the cost)?

TWO NEW EXECUTIVE COUNCIL MEMBERS ELECTED

Of the remaining three openings for membership on DSA's Executive Council, two were filled at the Jonesboro meeting on 1 June 1990. Elected were Prof. George L. Harp, Department of Biological Sciences, Arkansas State University, Jonesboro, Arkansas, and Prof. Michael L. May, Depertment of Entomology, Cook College, Rutgers University, New Brunswick, New Jersey. Both are renowned Odonatologists, and authors of numerous publications concerning odonates.

Congratulations, George and Mike, its good to have you aboard!

XI INTERNATIONAL SYMPOSIUM OF ODONATOLOGY

Trevi (Perugia), Italy, August 18-25, 1991

FINAL ANNOUNCEMENT

GENERAL INFORMATION

The Eleventh International Symposium of Odonatology will take place in Trevi (Perugia), central Italy, from August 18 to 25, 1991, at the Centro Congressi Hotel della Torre. According to tridition of the S.I.O. Symposia, A oneday mid-symposium trip, a two-day postsymposium tour and a Social Dinner will be organized. Trevi is a well-preserved medieval hillside village overlooking the Clitunno river valley. It has a population of 2000 and is near Perugia, Assisi and a few lesser know towns where famous rinascimental architecture and painting schools flourished. The organizers believe that the choice of Trevi as the seat for the XI Symposium represents a favourable compromise between the splendid but expensive, Sardinia, which was voted by the majority of participants at the X Symposium, and the cheaper, but very dispersive, Rome.

REGISTRATION

The registration fees include Symposium Program, Abstract and Trips booklets, mid-symposium tour and two coffee breaks a day. Fees must be paid in Italian Lire (please inquire for exchange rates) by Postal Money Order (cheaper) or International Cheque (more expensive) made out to Carlo Utzeri, XI International Symposium of Odonatology, address as below. Those who prefer the (very expensive) Bank Transfer Provision way (please apply for Swift System) should send their money tax free to Carlo Utzeri, XI International Symposium of Odonatology, account no. 82694/3, Banco di Santo Spirito, Ag. Piazzale Aldo Moro 5, 00185 Roma, Italy.

Ordinary (at Symposium)... Lire 160.000 (before 28/03/91)......Lire 120.000 Student....Lire 80.000 Associate....Lire 60.000 Non-SIO member....Lire 160.000 Non-members sending their fees before Mar. 31, 1991, and then joining S.I.O. during the Symposium, will be refunded Lire 40.000.

PAPERS

Oral 15-min contributed papers and poster displays will be accepted concerning to all fields of Odonatology. Also 30-min invited papers will be presented. Abstracts, compiled in strict accordance with instrictions (apply for form), must be sent before March 31, 1991, to the Organizing Secretary (address below).

ACCOMODATION

Accommodation in single or double rooms with full board (breakfast and two meals) at the Hotel della Torre costs Lire 125.000 (ca. \$109.00, taxes excluded, per person per day. All rooms have private bathrooms. Additional facilities

include tennis courts and swimming pool. Alternative housing at lower rates will be available (see schedule below). Single meals at the Hotel della Torre cost Lire 30.000 (ca. \$26.00) each.

SOCIAL DINNER

The Social Dinner will be held in a rural place with plain furnitures and will give the conveners the opportunity of tasting local specialities. No formal dress is required. Lire 35.000 (ca. \$30.00)

FIELD TRIPS

A one-day mid Symposium trip on August 20 or 21 and a two-day Post-Symposium Tour on August 24-25 Will be organized to some water places for collecting purposes. Interesting historical and artistic localities will also be visited either during the <<official>> trips or on request of participants. Post-Symposium Tour (including transport, food and accomodation) Lire 120.000 (ca. \$105.00)

GRANTS

At present no funds are available to provide participants with any financial help. Should funds become available for this purpose, it will be opportunely communicated. Those who need a formal letter of invitation to apply for grants to Authorities of their Country should ask the Chairman of the Standing Committee for the Organization of International Symposa of Odonatology (address below)

ORGANIZING COMMITTEE, SECRETARY:
Carlo UTZERI
Universita "La Sapienza"
Dip. to Biol. Anim. e Uomo
Viale dell'Universita 32
1-00185 Roma (Italy)
PHONE: (6) 4958254, 4958259, 49914787
FAX: (6) 4959387

CHAIRMAN OF THE STANDING COMMITTEE
FOR THE ORGANIZATION OF INTERNATIONAL SYMPOSIA OF ODONATOLOGY:
Bastiaan KIAUTA
S.I.O. Central Office
P.O. Box 256
NL-3720 Bilthoven, Netherlands

Alternative housing at lower rates: Third class hotel Lire 50.000 (half board) Beds in rural houses Lire 10.000 (no meals)

Facsimile copies of registration forms for above Symposium are inserted in this newsletter for your convvenience.

PRELIMINARY NOTICE OF ODONATA SATELITE MEETING AT XIX INTERNATIONAL CONGRESS OF ENTOMOLOGY, BEIJING, 1992

Prof. Dr. B. Kiauta S.I.O. Central Office P.O. Box 256 3720 AG Bilthoven, The Netherlands

Bilthoven, May 29, 1990

To the Editors of the SIO newsletters:

In accordance with our tradition, I have requested the Organizing Commettee of the XIXth International Congress of Entomology, Beijing, P.R. China, to origanize, in the framework of the Congress, a SATELITE SYMPOSIUM ON THE ODONATA. The request has been granted and the enclosed communication has just reached my office.

Simultaneously with this circular, a letter goes to Professor Hsiu-fu CHAO, our senior member in China, with the request to accept the chairmanship of the Symposium.

I would be thankful if you would publish the information contained in the enclosed letter <u>and</u> the Registration Form in the forthcoming issue of your newsletter.

The SIO would be glad to be able to publish the abstracts of papers to be presented at this Symposium in a separate booklet, therefore please request all our members intending to participate to send a copy of their registration form and a brief abstract (not exceeding 1 typed page) to my office.

The latter should raech me on <u>September 1, 1991</u>, at the latest.

With thanks and kindest regards,

Yours ever, (signed) Bastiaan KIAUTA

XIX INTERNATIONAL CONGRESS OF ENTOMOLOGY BEIJING 1992

19 Zhongguancun Lu, Beijing 100080 China Tel: (861)2563011 Fax: (861)2565689 Telex: 222337 ICCST CN

Dear Dr. Prof. Kiauta:

I am very glad to inform you that your proposed entitled "A satelite meeting on the Odonata" is acceoted by the Program Committee and will be organized into the tentative Section 1: Systematics, Phylogeny & Zoogeography. It is demanded that the symposium is not exceed and you may suggest a chairman for the session. Please plan the time alloted for each speaker for oral presentation, preferably about 15 minutes.

Enclosed herewith is a form to be filled for information concerning the speakers, the titles of their presentations, the chairman and whether a monograph will be issued. Suggestions for assuring the success of the symposium and also of the Congress are enthusiastically welcome. No strict deadline of date for submitting the filled form to the convener of the commettee is set, yet we still hope to receive it prior to the end of November 1990, since all necessaey information should be made accessible to meet the needs of the Second Announcement which will be prepared by the end of 1990.

Your cooperation and help will be highly appreciated.

Sincerely yours, (signed) Wu Yan-ru

Convener of Sectional Systematics Phylogeny & Zoogeography The Program Committee XIX International Congress of Entomology. Beijing, China

All requests for information, participant registration, and presentation forms should be addressed to the Convener:

Dr. Wu Yan-ru XIX International Congress of Ent., 19 Zhongguancun lu, Beijing, 100080, China

We have no further information at the present time concerning the agenda, or the specific dates when the Satelite Odonata Meeting will convene. When the Second Announcement is circulated we expect to have more specific details, and they will be published in this newsletter.

A PROPOSED LIBRARY FOR DSA

By Carl Cook 469 Crailhope Road Center, KY 42214

Several positive responses have been received from colleagues from whom I have requested sets of their papers to form the nucleus of a possible future DSA library.

It also appears there is a demand for an economical xeroxing service, primarily from amateur and other non-affiliated odonatologists, away from good libraries, or who do not have access to inter-library loan services.

This appears to be an excellent opportunity for DSA to provide a needed service to its membership. I envision that DSA could accept donations of surplus books and papers from authors, and in particular, from estates. The duplicates might be disposed of, perhaps through SIO's Antiquarian Department, in order to provide some income to DSA. The xeroxing service might be funded from such income, or it may be possible these charges could be regulated so as to be self-supporting.

MEMBERSHIP LIST OF THE DRAGONFLY SOCIETY OF AMERICA

CANADA

- Bachand, Yves 563 rue Poulin Sherbrooke, Quebec J1E 2N4
- * Barten, Jo 3152 Wachna Drive Windsor, Ontario N8T 1Z8
- * BONDY, Mr. PETER
 12633 Riverside Drive E.
 Tecumseh, Ontario N8N 1A7
 Phone: (519) 735-2376
 - Bowles, Mr. Robert L. 30 Esther Anne Drive Orillia, Ontario Phone: (705) 325-3149
- * Cannings, Dr. Robert A.
 British Columbia Provincial Museum
 601 Belleville Street
 Victoria, B.C. V8V 1X4
 Phone: (604) 387-2419
- * Cannings, Dr. Sydney G.
 Department of Zoology
 University of British Columbia
 Vancouver, B.C. V6T 2A9
- * Hellebuyck, Mr. Victor 1277 Lincoln Sherbrooke, Quebec J1H 2H8
 - Herman, T.B.
 Biology Department
 Acadia University
 Wolfville, Nova Scotia BOP 1X0
- * Hilton, Dr. Donald F. J.
 Dept. of Biological Sciences,
 Bishop's University
 Lennoxville, Quebec J1H 1Z7
 - Hutchings, Mr. Gord E 908 Falkirk Avenue, RR #2 Sidney, B.C. V8L 3S1 Phone (604) 655-0951

- Pilon, Dr. Jean-Guy Dept. Sciences Biologiques Universite'de Montreal, CP 6128 Montreal, Quebec H3C 3J7
- * PRATT, Mr. PAUL D.
 7100 Matchette Road
 LaSalle. Ontario N9C.2S3
 Phone: (8519) 978-1339 home,
 966-5852 office
 - Pritchard, Gordon
 Biological Sciences
 University of Calgary
 Calgary, Alberta T2N 1N4
 - Walker, Mr. Dave RR # 4 Durham, Ontario NOG 1RO
- * Wigle, Mr. Michael
 Box 643
 Bella Coola, B.C. VOT 1CO
 - Zloty, Jack
 Department of Biological Sciences
 University of Calgary
 2500 University Drive NW
 Calgary, Alberta 2TN 1N4

GERMANY

PIPER, Dr. WERNER Unnastrasse 6 D-2000 Hamburg 20

FINLAND

Hamalainen, Dr. Matti Tullilaboratoria, Tekniikantie 13, SF-02150 ESPOO Phone: 358 0 805 7451 (Home), Fax +358 0 463211 or +358 0 463383

FRANCE

MACHET, Dr. PHILIPPE 65 Bd de la Republique F-92210 Saint-Cloud

MEXICO

- * Gonzalez Soriano, Dr. Enrique Instituto de Biologia, UNAM Departmento de Zoologia Apartado Postal 70-153 C.P. 04510, Mexico, D.F. Phone: 550-52-15 ext.4908 office, 680-61-90 home
- * Novelo G., Dr. Rodolfo
 Instituto de Ecologia, A.C., Km 2.5
 Antigua Carretera a Coatepec
 A.P.63, 91000 Xalapa, Ver.
 Phone: (281) 8-60-00,
 FAX: (281) 8-69-10

THE NETHERLANDS

- * Kiauta, Dr. Bastiaan P.O. Box 256 3700 AG Bilthoven
- * van Tol, Dr. Jan Rijksmuseum van Natuurlyke Historie Postbus 9517 2300 RA Leiden

UNITED KINGDOM

* Corbet, Prof. Dr. Philip S. The Old Manse, 45 Lanark Road Edinburgh EH14 1TL Phone: (031) 667 1081 Ext. 3215

UNITED STATES

- * Artus, Mr. Scott 2136 Liberty Drive Fort Collins, CO 80521
- * AYCOCK, Dr. JAMES F. 5490 Stirling Road Davie, FL 33314
 - Baker, Dr. James H. 2011 Singleton Huston, TX 77008 Phone: (713) 862-5123
 - Barlow, Mr. Allen E., Jr. 411B Passaic Street Hackensack, NJ 07601 Phone: (201) 487-3415

- * BELSHE, Dr. JOHN F.
 Biology Department
 Central Missouri State University
 Warrensburg, MO 64093
 Phone: (816) 429-4838
- * Bick, Dr. George H. 1928 S. W. 48th Avenue Gainesville, FL 32608
 - Borkin, Susan Sullivan Milwaukee Public Museum 800 W. Wells Street Milwaukee, WI 53233 Phone: (414) 278-2758
- * Carle, Dr. Frank Louis 146 Mountain View Road Warren, NJ 07060
- * Carpenter, Virginia A.
 Cape Cod Museum of Nat. History
 Drawer R
 Brewster, MA 02631
 - CASHETT, Dr. EVERETT D.
 Illinois State Museum (Zoology)
 1920 10-1/2 Street
 Springfield, IL 62703
 Phone: (217) 782-6689
- * COOK, Mr. CARL 469 Crailhope Road Center, KY 42214 Phone (502) 565-3795
- * CUYLER, Mr. R. DUNCAN N. Garrett Road Durham, NC 27707
- * Daigle, Mr. Jerrell J. 2166 Kimberley Lane Tallahassee, FL 32301 Phone: (904) 878-8787
- * Donnelly, Dr. Thomas W. 2091 Partridge Lane Binghamton, NY 13903
- * Dunkle, Dr. Sidney W.
 Odonata Research Institute
 P.O. Box 1269
 Gainesville, FL 32611-1269
 Phone: (904) 372-3505 Ext 197

- EARLE, Mr. BRIAN D.
 Science/Math Division
 Cedar Valley College
 3030 Dallas Avenue
 Lancaster, TX 75134-3799
 Phone: (214) 372-8160
- * Evans, Dr. Mary Alice
 Department of Entomology
 Colorado State University
 Fort Collins, CO 80523
- * FLINT, Dr. OLIVER S., JR.
 Entomology Stop 105
 National Museum of Natural History
 Washington, DC 20560
 Phone: (202) 357-2169
- * GARRISON, Dr. ROSSER W. 1030 Fondale Street Azusa, CA 91702-0821
- * Glotzhober, Robert C. c/o Ohio Historical Society 1982 Velma Avenue Columbus, OH 43211-2497 Phone: (614) 297-2633
- * Harp, Dr. George L. 606 Maplewood Terrace Jonesboro, AR 72401 Phone: (501) 935-2526
 - Hasskarl, Elsie F. R. D. 2, Box 10 West Brittleboro, VT 05301
 - Heady, Dr. Susan E.

 Department of Entomology
 OARDC-Ohio State University
 1680 Madison Avenue
 Wooster, OH 44691
 Phone: (216) 263-3725
 - Holzbach, Mr. John E. 229 Maywood Drive Youngstown, OH 44512
 - HONIG, Mr. ROBERT A. 3794 Syracuse Houston, TX 77005 (713) 757-3709=Work; (713) 665-6963=Home

- * Johnson, Dr. Dan M.

 Department of Biological Sciences
 East Tennessee State University
 Johnson City, TN 37614
 Phone: (615) 929-4359
- * Kauer, Kim O.
 471 Berkeley Drive
 Clemson, SC 29631
 Phone: (803) 654-4006
- * Koenig, Dr. Walter D.
 Hastings Natural History Res.,
 Star Route Box 80,
 Carmel Valley, CA 93924
- * KONDRATIEFF, Dr. B. C.
 Dept. of Entomology,
 Colorado State Univ.,
 Fort Collins, CO 80523
 Phone: (303) 491-7314
 - Krotzer, Mr. R. Stephen 2105-A Montreat Pkwy., Birmingham, AL 35216 Phone (205) 822-9606
 - Mauffray, Mr. William F. 3426 Pasadena Drive Baton Rouge, LA 70814 Phone: (504) 275-5903
- * MAY, Dr. MICHAEL L.

 Dept. of Entomology, Cook Coll.,
 Rutgers University
 P.O. Box 231,
 New Brunswick, NJ 08903
 Phone: (201) 932-9459
 - Michalski, Mrs. Caroline 90 Western Avenue Morristown, NJ 07960 Phone (201) 829-0094
 - Michalski, Mr. John 90 Western Avenue Morristown, NJ 07960 Phone: (201) 829-0094
 - Miller, Mr. Kelly B. 2314 Bennett Avenue Glenwood Springs, CO 81601 Phone: (303) 945-6297

- Nichols, Mr. Barry S. 7004 Ethan Allen Way Louisville, KY 40272 Phone: (502) 937-4733
- * Orr, Richard L. 14015 Bramble Lane T-1 Laurel, MD 20708 Phone: (301) 604-7843
- * PAULSON, Dr. DENNIS R.

 Museum of Natural History
 University of Puget Sound
 Tacoma, WA 98416
 Phone: (206) 756-3798
- * PIPPENGER, Dr. MARK 6108 Kenwood Little Rock, AR 72207 Phone: (501) 664-4717
 - Restifo, Robert A. Vector-borne Disease Unit P.O. Box 2568 Columbus OH 43216-2568
 - Scoville, Mr. Mark Cougar Place Waldorf, MD 20601
- * Shiffer, Mr. Clark 254 S. Gill Street State College, PA 16801 (814) 359-5113=Work, 234-5020=home
- * Smith, Mr. William E7618 Hwy. PF Plain, WI 53577 Phone: (608) 544-3801
- * Soltesz, Mr. Ken P.O. Box 62 South Salem, NY 10590 Phone: (914) 763-8615
- * Strom, Mr. Douglas G. 1772 Mansfield Street Port St. Lucie, FL 34952 Phone: (407) 335-4310
- * Tennessen, Dr. Kenneth J. Hickory Avenue Florence, AL 35630 Phone: (205) 766-6970

- * VALLEY Mr. STEVEN A. 1165 S. W. Lawrence Albany, OR 97321 Phone: (503) 928-4467
- * Vogt, Mr. Tim
 Wisconsin Dept. Nat. Resources
 Bureau of Endangered Resources
 Madison, WI 53707
 (608) 266-8736=Work,
 (608) 429-3768=Home
 - Voorhees, Frank Ray c/o Dept. of Biology Central Missouri State University Warrensburg, MO 64093 Phone: (816) 429-4933
- * WESTFALL, Dr. MINTER J., JR.
 Dept. of Zoology, Univ. of Florida
 Gainesville, FL 32611
 - White, Mr. Hal 103 Radcliffe Drive Newark, DE 19711

USSR

- Gorb, Dr. Stanislaw
 Laboratory of Insect Physiology
 Schmalhausen Institute of Zoology
 Lenin str., 15, Kiev, Ukraine
 252601, USSR
- Pritykina, Dr. L.N.
 Paleontological Institute
 USSR Academy of Sciences
 Profsoyuznaya 123
 Moscow 117868, USSR

VENEZUELA

DeMarmels, Lic. Jurg Inst. Zool. Agricola, Fac, Agronomia UCV Aptdo. 4579 Maracay 2101-A

(*= Charter Membership)

(NAME IN CAPITALS= Sustaining Member)

PLEASE! DSA NEEDS YOUR HELP

The number of new member enrollments for the society in 1990 has been very graifying, we virtually doubled our membership. To continue our expansion into 1991 we need your help. Inserted in the following pages you will see a copy of our membership application blank. I hope you will xerox some copies of this and hand them to your associates, include one with your correspondance, call attention to DSA's free membership provision to your colleagues abroad, with your help we can double the membership again next year.

We also need more news items for ARGIA. Below is a form for convenient submittal of items, please use it to keep us informed about what's new with you, and your department.

Carl Cook, Editor
=======================================
1. STUDENT'S PROJECTWHOWHO
WHEREINSTRUCTOR
2. HONORS & AWARDS: RECIPIENT
TITLE OF AWARD
GIVEN FOR
GIVEN BYDATE
3. RESEARCH GRANT: RECIPIENT
GIVEN BYDATEDATE.
PROJECT
3. PAPER TO REVIEW (enclose copy): AUTHOR
TITLE
JOURNALDATEDATE.
4. MOVING UP: PERSON
OLD POSITION
NEW POSITION
LOCATIONDATE
RESPONSIBILITIES

	COLLECTING TRIPS: PERSONDATE	
LO	CATION(S)	
ОВ	JECTIVE(S)	
ō.	ANY OTHER NEWS ITEM (OR DETAILS OF ABOVE):	
6.		
7.		• • • • • • • • • •
8.		
9.		X
10		
11	***************************************	* * * * * * * * * * * * * *
12		
13		
14	***************************************	
15		
17		

27		
28		

THE DRAGONFLY SOCIETY OF AMERICA APPLICATION FOR MEMBERSHIP (PLEASE TYPE OR PRINT ALL INFORMATION)

NAME & TITLE (exactly as you want them to appear on membership list)
and the same of th
ADDRESS
CITYSTATE & ZIP
COUNTRY
YOU MAY OPTIONALLY ELL IN BELOW INDEX.
YOU MAY OPTIONALLY FILL IN BELOW INFORMATION ABOUT YOUR ODONATOLOGICAL INTEREST IF DESIRED:
MY SPECIAL INTERESTS ARE: (e.g., biology, taxonomy, behavior, etc.)
······································
SESSICATE CAL AREAS OF INTEREST?
Exchange SpecimensExch. ReprintsExch. Photographic Ph
Buy SpecimensSell Specimens Identify for others, subject to following condition
casject to following condition
EMILITE COURT
FAMILIES, GENERA, OR OTHER GROUPS OF SPECIAL INTEREST?
······································
PLEASE GIVE A BRIEF OUTLINE OF CURRENT COUNTY
PLEASE GIVE A BRIEF OUTLINE OF CURRENT STUDY PROJECTS:(IF ANY)

Dues and memberships are by the calender year, without regard for the month in which you join and are payable with enrollment application and on or before March 1 of each succeeding year. All members will receive the current calender year issues of the society news journal ARGIA; the special second sec
I APPLY FOR MEMBERSHIP IN THE DRAGONFLY SOCIETY OF AMERICA, IN CATEGORY INDICATED BELOW:
REGULAR MEMBER\$3.00 SUSTAINING MEMBER\$10.00 INSTUTIONAL (e.g., libraries)\$10.00 INSTUTIONAL (e.g., libraries)\$10.00 FIRST CLASS delivery in U.S\$7.00
TOTAL AMOUNT ENCLOSED
lease remit in United States funds by bank check, bank money order or international money order to he order of THE DRAGONFLY SOCIETY OF AMERICA, mailed with this application to:
The Dragonfly Society of America, 469 Crailhope Road, Center, KY 42214, United States

MICROSCOPES: All types of compound and stereomicroscopes, accessaries and optical components, new & used, sold, bought, and swapped. Antique microscopes especially wanted. Send for price list of items available.

C & K INSTRUMENTS, 469 Crailhope

Road, Center, KY 42214

DATA WANTED: Collecting data records wanted for the state of New York.

THOMAS W. DONNELLY, 2091 Partridge Lane, Binghamton, NY 13903

EXCHANGE WANTED: I am interested in all families and material from all geographical areas. I have on hand approximately 1,000 - 1,200 different species at all times available for exchange. Particular wants are the several Nearctic species I lack: Ophiogomphus edmondo, Somatochlora brevicincta and S. septentrionalis, plus males of Coenagrion angulatum, Macromia margarita and M. rickeri, and ANY Gomphidae from ANYWHERE.

CARL COOK, 469 Crailhope Road, Center, KY 42214

EXCHANGE WANTED: Wants to exchange Odonata from North and Central America, and the Caribbean Islands.

JERRELL J. DAIGLE, 2166 Kimberly Lane, Tallahassee, FL 32301

DATA WANTED: I have been collecting more or less intensively in Kentucky and Tennessee for over 40 years, but I am continually amazed that new records still turn up (e.g., Ophiogomphus howei, and Phanogomphus sandrius). has always been my intention to publish a catalog for these two states, now I am eager for this project to become part of DSA's Nearctic Catalog scheme announced elsewhere in this journal. I invite everyone who has collected odonates in Kentucky or Tennessee to participate by sending me their records. If you have unidentified or doubtfully identified specimens, I will be glad to determine them.

CARL COOK, 469 Crailhope Road, Center, KY 42214

I AM INTERESTED in corresponding and exchanging with anyone interested in neotropical Odonata. My collection for the U.S., Canada, and Alaska is almost complete.Lacking is: Enallagma laurenti, Ophiogomphus edmundo, Somatochlobrevicincta and S. georgiana. Lacking from the Antilles are: Enallagma truncatum, Telebasis corallina, Gynacantha ereagris, Progomphus zephyrus, and Scapanea archboldi.

ROSSER W. GARRISON, 1030 Fondale

St., Azusa, CA 91702-0821

DATA WANTED: The following people are known by the Editor to have regional lists in preparation and should welcome additional records from the states indi-ALABAMA-- Ken Tennessen, 1949 cated: Hickory Ave., Florence, AL 35630; MISSOURI -- John F. Belshe, Dept. of Biology, Central Missouri State University, Warrensburg, MO 64093; NEW JERSEY--Michael L. May, Dept. of Entomology, Rutgers University, New Brunswick, NJ 08903; NEW YORK-- Thomas W. Donnelly, 2091 Partridge Lane, Binghamton, NY 13903; OHIO--Robert C. Glotzhober, Ohio Histrical Society, 1982 Velma Avenue, Columbus, OH 43211-2497; VIRGINIA-- Frank L. Carle, 146 Mountain View Road, Warren, NJ 07060 WISCONSIN -- William A. Smith, E7618, Hwy. PF, Plain, WI 53577.

NEW BOOKS AVAILABLE: Two volumes that cover all known Odonata from Peninsula Florida, including vagrants, are now available. These books are illustrated with color photographs of each species, informal descriptions, and ecological information about each species. These books provide identifications for virtually all species that occur in the southeastern US, and nearly a third of the North American fauna. Dragonflies of the Florida Peninsula, Bermuda and the Bahamas, and Dameselflies of the Florida Peninsula, Bermuda, and the Bahamas, by Sidney W. Dunkle. Available for \$14.95 (plus \$1.50 postage), each volume, from:

SCIENTIFIC PUBLISHERS, P.O. Box

15718, Gainesville, FL 32604

DSA is a non-profit society, under regulations of Federal and State statutes, with its own Officers, Executive Council, and Editoral Staff. It was organized under the auspices of SOCIETAS INTERNATIONAL ODONATOLOGICA, as an independent affiliate of that society's family of regional organizations. The society's purposes are to encourage scientific research, habitat preservation, and aesthetic enjoyment of Odonata by: 1cooperation and comradeship among the Odonatologists of all countries; interchange between the amateur and professional disciplines; 3- the establishment of the society's own series of publications to disseminate information in our fields of interest; 4- support for wetlands and habitat preservation as the most effective way for conservation of odonates; 5- cooperation with organizatons orientated toward common goals of environmental preservation; 6- our society supports international recognition of the essential role of scientific collecting in biological research, proliferation of governmental restrictions may allow thousands of undiscovered species become extinct without becoming known to science, and total prohibition of scientific collecting practised in some countries may be counterproductive to species servation because it hinders effective population monitoring; 7- the society has commenced a season summary data recording scheme for Odonata collected in North, Central and South America, the seasonal data to be published in an annual volume, and also to form the basis for a new distributional catalogue; 8- the society will hold an annual business meeting in conjunction with the well known informal "collectors' gatherings" that have become so popular in recent years; 9- the society shall strive to maintain a basic dues rate affordable to amateurs and students, with professionally orientated publication series optional and priced separately.

PUBLICATIONS furnished with membership are ARGIA, a quarterly news journal, devoted to news about society affairs, informal articles on collecting, and news and views on Odonatology in general; and an ANNUAL SEASON SUMMARY, devoted to collecting records submitted by persons doing field work anywhere in North, Central or South America. As demand developes, other serial and seperate publications are planned, including the distributional catalogue already announced, and a refereed journal accepting original research papers.

MEMBERSHIP in DSA is open to any person interested in the objectives of our society. Dues and membership are for the calender year, without regard for the month in which you join, dues are initially payable with enrollment application, and on or before March 1 of each succeeding year. All members will receive the current calender year issues of ARGIA (including a Membership List Supplement containing members' addresses, special interests, and exchange information), and the SEASON SUMMARY ANNUAL. Members will receive a 20% discount on all society's separately priced publications. Cancellation of current year membership and/or removal of name from current membership list cannot be considered.

SPECIAL NOTICE: A grant-in-aid from the SOCIETAS INTERNATIONAL ODONATOLOGICA provides for a limited number of FREE memberships for colleagues residing outside of North America in countries with soft currency, or fiscal policies which prevents US funds being sent abroad. PLEASE APPLY.

DUES FOR 1991: REGULAR MEMBER..\$3.00 SUSTAINING..\$10.00 INSTUTIONAL..\$10.00 AIR MAIL delivery of ARGIA outside of US..\$10.00 FIRST CLASS delivery in US...\$7.00

Please remit in United States funds by bank check, bank money order, or international money order made payable to The Dragonfly Society of America.

Business Mailing Address:

CONTENTS

BICK, G.H., Unpublished records in Florida State Collection of Arthropods (FSCA)3 BROWNE, D. & M WALKER, Hi and Lois
DEPARTMENTS
EXCHANGES & NOTICES42
MEMBERSHIP APPLICATION FORM41
MEMBERSHIP LIST35
MISCELLANEA, How to say it in Russian
SOCIETY AFFAIRS, By-Laws Adopted