SELYSIA

A NEWSLETTER OF ODONATOLOGY

Vol. 6, No. 2 Gainesville, Florida July 1, 1974

ODONATA COLLECTING "DOWN UNDER"

by
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In late June, 1972, my wife, Ailsa, three boys, and I set off on a seven-month sabbatical leave to Australia. Although my work (geochemical investigations in the Department of Geophysics and Geochemistry, Australian National University) kept me in southeastern Australia most of the time, we found time for extensive Odonata collecting in Fiji going and coming from Australia. We also took a fortnight's trip to New Guinea and managed two one-week holidays in Queensland. On all of these trips, plus numerous one-day trips in southeastern Australia, we found the Odonata collecting very rewarding. It will be most useful to divide the account into three parts: Fiji, New Guinea, and Australia.

Fiji

The sixteen hour flight from New York to Nandi is exhausting, but we found ourselves eager to start collecting. Consequently, we rented a car and were on the road a few hours after arriving in Nandi. Our main goal was *Nesobasis*, which, like *Megalagrion* of the Hawaiian Islands, is one of the world's most interesting endemic Odonata genera. (Just how interesting this genus really is was not apparent until after our second visit; we now have more than a dozen undescribed species.)

Nesobasis is, like many endemic genera, an insect of many aspects. Some are rather stout and sit boldly on exposed rocks like *Argia*. Some are obscure and hang up in shady situations under tree roots like *Palaemnema*. Some are long and delicate and hover around waterfalls, rather like some *Protoneura*. One reminded me for all the world like a rather bold little *Ischnura*. Their coloration ranges from every sort of obscure markings (two are essentially black) to brilliant metallic to bright yellow or red or blue or green.

Although they generally live around flowing water in wooded areas, there is considerable variation in their precise habitat preferences. There is also an astonishing range in morphological variation. The wing venation and stigma vary widely, with some species reminiscent of the widespread tropical genus *Teinobasis*. At least one species has a huge, pendent valvula on the venter of the ninth segment. Another (Selys' *nigrostigma*) has protuberant laminae supra- and sub-analis; these resemble part of the appendages! Indeed the entire group attains such extremes of diversity that the only reason for retaining them in one genus is the existence of a whole range of intermediate species.

Our collecting experience on Fiji consisted of three weeks, half in 1972 and the other half on the way back the following January. On the first trip I met John McLean, an entomologist from Suva. He became very much interested in the genus and collected extensively for me during my stay in Australia. More important, he found several larvae. By supposition and rearing we have referred these to two species, *telegastrum* and *longistyla*. Interestingly, although the gills of these and other

S E L Y S I A

A Newsletter of Odonatology

Compiled at
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Gainesville, Florida

by

Minter J. Westfall, Jr.
and
Clifford Johnson

Issued at intervals as available
news and information warrant

This newsletter is designed to disseminate facts and news about the activities of Odonatologists and Odonatology. It is not intended as a journal nor an organ for the publication of articles or technical papers. The name is based upon that of the "Father of Odonatology", Baron Edmond de Selys Longchamps.

unidentified species strongly resemble those of some semi-terrestrial *Megalagrion*, we never found any larvae out of water. Since my last trip to Fiji (when I collected again with McLean) he continues to collect diligently and has helped to increase our knowledge of these interesting insects.

Our first trip concentrated almost entirely on the drier half of Viti Levu, penetrating to the mountains on the north and west sides. On the second trip we went directly to the west side of Viti Levu, and then moved on to Vanua Levu (where we took seven undescribed species our first morning!) and Taveuni. On the last island, where it rained constantly, we found only one species, which will be named *meridianalis* in honor of its having been caught precisely on the 180° meridian!

While in Canberra I ensconced myself as Tony Watson's guest in the laboratories of CSIRO. We arranged a loan of the Tillyard types of *Nesobasis* from New Zealand (Watson had come across these quite by chance a few years ago and saved them from oblivion.) I set about reviewing the species. In spite of Tillyard's poor descriptions and the probability that he had never seen the Selysian specimens, he appeared to have named only one synonym: *subhumeralis*, which is *angulicollis*. His description of the common species, *selysi* was sufficiently poor that not only had I misidentified my specimens in the field, but also Kimmins was misled into describing a specimen of *selysi* as *leveri*. Subsequently, I have seen the Selysian material and been able to clear up remaining doubts about the species.

If Darwin had been an entomologist and lingered in Fiji rather than the Galapagos, there is little doubt that he could have established for the genus *Nesobasis* the role that his famous finches have enjoyed.

Australia

We arrived in Canberra in the middle of winter, and, with little to look forward to in the way of collecting until November, I plunged into laboratory work. We managed to get out virtually every Saturday and Sunday to stake our "good" spots for the arrival of spring. Our big hopes were centered around five genera: *Petalura*, *Austropetalia*,

Hemiphlebia, *Chorismagrion*, and *Lestoidea*. The first two were to be sought locally; the others required longer trips. We finally managed to take all five, but not without a considerable effort. Tony Watson had pointed out the predilection of *Austropetalia* for waterfalls, and, although nearly all of the records were from closer to Sydney, we were optimistic that we might manage to find the insect around Canberra. Waterfalls abound in southeastern Australia, and in our bushwalks we came across some real beauties. We were in a bit of a dither trying to figure out how to optimize our collecting efforts during its brief flight season, but events solved our problems for us. In early November we found *Austropetalia* flying right on the face of Gibraltar Falls, a popular picnic spot just outside of Canberra. I have subsequently compared this insect with *Phyllopetalia*, and fail to see a convincing generic distinction. Also at Gibraltar Falls we found two stoneflies and a large dipteran (*Comptosia*, a bombyliid) reminiscent of a former Chilean connection. As a geologist I was ecstatic to find such a vivid entomological confirmation of the Eocene separation of the "Antarctic" continents.

Petalura took slightly more effort. Appropriate bogs are more scarce than waterfalls, and we finally found the insect at a famous Tillyard locality, Burrawang. This was one of the most arduous bogs I have ever collected; the Australian flora has some bushes which are a real nuisance to the collector, such as the tea bush. On this particular day I forged into the bog with my two older boys and never saw a *Petalura*. Andrew, aged eight, saw, identified, and netted a pair of *Petalura*; his thrill can only be imagined! Earlier we had seen and missed a male of the legendary species *ingentissima* near Cairns; I now regard this as my most disappointing miss ever.

In November we took a week's trip to Cairns. Although we were looking especially for *Lestoidea* and *Chorismagrion*, we found many other very interesting things - such as *Pseudocordulia* and a thrilling new genus of gomphids related to *Hemigomphus*. Tony Watson will be naming this one. *Lestoidea* proved to be the most abundant zygopteran on forest streams. We found both species. In general appearance, stature, and habits, this genus strongly resembles a miniature *Amphipteryx*. *Chorismagrion*, which is scarce and hangs up in dark places, resembles a miniature *Synlestes*, which is essentially what it is. The various protoneurids - *Neosticta*, *Oristicta*, and *Notoneura*, are a fascinating additional element in the fauna.

In the beginning of January we took another week's trip to Queensland - this time going to southern Queensland. Collecting here was again very rewarding, with especial interest in the tiny *Austrocnemis* (which sits on lily pads and behaves precisely like *Ischnura kellicotti*), the hugh *Austrophlebia* (one of the largest and most powerful of the world's aeshnids, though hardly as fast as Tillyard claimed), the obscure forest-dweller *Telephlebia cyclops*, and a host of miscellaneous beauties.

In December I made a special trip to Alexandra in hopes of netting the rare *Hemiphlebia*. Although it has been known from a few other localities in Victoria, Alexandra is the only place where it may be more or less counted upon. The locality has changed much from Tillyard's day. The bushy flood plain of the Goulburn River has been tamed and converted into rather uninteresting cattle farms. The day I was there was hot, with a high bush fire

danger. Flies, the ubiquitous nemesis of the collector in Australia, covered my face the entire time. Tiny grasshoppers leaped away from each footfall in their hundreds, making it nearly impossible to sneak up on any odonate. It was a thoroughly miserable day, especially because, as I walked along the flood plain edge, I could see how much the habitat had changed. There were few odonates of interest, and only a few birds, such as spoonbills around one of the billabongs, to provide any diversion whatsoever. Late in the afternoon, with a ninety mile drive back to Melbourne in front of me, I was in despair. However, I found one billabong that differed somewhat from the others, and I persisted for a while longer. Here the reeds grew not only around the open water (not a good place for *Hemiphlebia*), but around a tiny seep away from the main water. Suddenly I saw a brilliant green damselfly deep in the reeds. Coaxing it out into net reach, I caught it. A female *Hemiphlebia*! As tiny as an *Austrocnemis*, greener than the greenest *Nehalennia*; this must be one of the world's prettiest odonates. In a few minutes I caught a male, and then, after a long search, another female. The day was now over, and I returned to Melbourne with at least a positive result, if not many specimens. How the species manages to survive is an interesting question.

The odonate fauna of southeastern Australia contains a number of important elements absent in other parts of the world. For example, the genus *Diphlebia*, an incredibly beautiful, stout blue damselfly, is found sitting flat on rocks with wings outspread on nearly all streams. Although its affinities are with the amphypterygids, it bears no resemblance to this group in general appearance or habits. Another widespread genus is *Synlestes*, a chlorolestid, also nearly ubiquitous on streams and rivers. The aeshnids are richly represented. The species *Aeshna brevistyla* is perhaps the most widespread, but the genus *Acanthaeschna* is richly represented. This genus includes several disparate species, including subtropical *weiskeyi* and *forcipatus*, whose colors resemble *Gynacantha tibiata* and *Coryphaeschna secreta*, respectively, as well as several temperate species with colors reminiscent of North American *Aeshnas*. Other genera, such as *Notoaeschna* and *Austrophlebia* are more local. The genus *Telephlebia* is especially interesting. It is crepuscular and favors darker habitats. In coloration it resembles *Boyeria*, except that the wings are richly patterned in the costal area. It hangs up under rock ledges; the first four that I took were from a group of five hanging up within half a meter of each other, and I took them with my fingers, seriatim.

The synthemids are a very interesting group which resembles the corduliids in many respects. Neary every eastern Australian stream has one or more species in abundance, and as many as four abundant species can be found in some instances. Most abundant are the members of the genus *Eusynthemis*, with *Synthemis eustalacta* and *Choristhemis flavoterminata* somewhat more localized. The most widespread Zygoptera are members of the genera *Argiolestes* and *Austrolestes*, both found on every stream. The temperate *Argiolestes* include several dull colored species, but many sub-tropical species are brightly colored. In habits they resemble *Philogenia* more closely than any other New World megapodagrionid, but they are much smaller. *Austrolestes* is sharply distinct from *Lestes;* they sit with their wings folded over their backs (*Synlestes* sit with wings outspread but fold them over their backs when the sun

goes in). In eastern Australia we took ninety species of odonates in about two months of collecting, including the one new gomphid mentioned above. It would have taken a considerable effort to add another ten species to our list.

New Guinea

Ailsa and I collected in eastern New Guinea for a fortnight in late October, which was supposed to be the beginning of the wet season, but instead proved to be the end of the dry. Much of New Guinea is very dry, and most is only sub-humid. We saw little real rain forest in our travels, which included the vicinity around Lae and the road to Kainantu, in the eastern Highlands. The country is very rugged, and Lieftinck's remark about the paucity of gomphids (and other stream species) being related to the torrential nature of the streams appears well taken. Still, the fact that the entire sub-continent has only one gomphid species is remarkable.

New Guinea lived up to some expectations but not others. We took about sixty species, with probably less than half a dozen new species (being studied by Lieftinck). The fauna is surprisingly restricted. Besides only one gomphid, the total number of genera is low for such a large and topographically varied low-latitude area. Several groups have "run riot" and are represented by an abundance of closely related species and genera. Thus, there are many tetrathemines; we took half a dozen species of *Nannophlebia*, as well as *Microtrigonia*, *Bironides*, and *Tetrathemis*, in abundance. Two other libelluline genera were widespread: *Diplacina* (a member of Ris' Group II), and *Huonia* (an endemic genus reminiscent in appearance and habits to *Dythemis*). The ubiquitous stream zygopteran is *Notoneura*, of which there are a great many colorful species. There were several platycnemidids, including possibly a new genus from the highlands. *Rhinocypha tincta* is abundant and, surprisingly, lives in foul jungle sloughs as well as clean highland streams! Other protoneurids, such as *Selysioneura* and *Tanymecosticta*, are difficult to find; the latter is the most tenuous odonate I have ever collected. I found one flying slowly over a shadowy jungle slough; the second one required a wait of an hour simply waiting in that slough!

The resemblance between many New Guinea genera and Neotropical counterparts is remarkable. Thus, *Teinobasis* looks and behaves exactly like a *Metaleptobasis*, *Agyrtacantha* like a *Triacanthagyna*, *Agrionoptera* like a *Cannaphila*, and *Drepanosticta* is simply *Palaemnema* transposed. In some of these cases, I believe that the resemblance is no mistake and that several New World and Old World genera might have to be merged. After all, many of the older taxonomists, including Ris, used distribution as one of their taxonomic criteria. We should probably seriously reexamine much of our taxonomic philosophy to bring our classification into line with the realities of continental drift.

My most uncanny experience with New World-Old World resemblances came with *Drepanosticta*. On our last day out, we collected at some streams in the hills near Gurakor, about 30 miles south of Lae. At one place, I suddenly was seized with the thought that if I had been in Guatemala or Panama, I could find a *Palaemnema* in a tiny tributary stream by abandoning my net and crawling on my hands and knees up this shady trickle. And I did - catching the *Drepanosticta* with my fingers in approved *Palaemnema* style! No one who has collected in the New World tropics could fail to be struck by the parallels in

the Old World - parallels that are largely lost in dried, pinned specimens.

One last observation about New Guinea I offer without explanation. This concerns the highlands - the salubrious elevated backbone of the island, with a mixture of cultivated land, forested regions, grasslands (many resulting from expensive serpentine outcrops and not from human activities), and streams. The streams are as attractive a group of trickles, creeks, streams, rivers, etc., as I have seen in a long time. They are all clean and generally have sandy to rocky bottoms with abundant vegetation on the banks. Although the weather had been chilly during the nights, there had been no freeze in this area - and yet the odonates were extremely scarce. One stream in particular we examined closely twice. In Guatemala I would have taken at least twenty species in the time we spent there, but we never saw a single odonate! We did find odonates at several places, including several very interesting species, but the abundance was very low. The stream where we found the new platycnemidid genus was a real beauty, and it was only for this reason that I worked so hard there. But an hour's hard work yielded only three males of this new insect, and nothing else!

Dragonflies and Continental Drift

The once condemned continental drift theory has re-emerged full blown and now dominates the geological world. Its proofs are many and utterly convincing, although several minor details are still being resolved. Because the time of drift is relatively late in terms of the evolutionary history of the odonates, one wonders why one could not use these insects as a demonstration of drift. Why not indeed! Because taxonomists during the formative period of odonate study flourished in an era that did not admit drift, they tended to use geography as a taxonomic criterion, either consciously or unconsciously. We need to rethink much of our taxonomy to uncover relationships that have been needlessly obscured by such reasoning.

In the case of the Australian region (including New Zealand and New Guinea), geological reasoning tells that this area was once contiguous and connected broadly with southern South America. A connection with India had been severed earlier and one with Africa at a later date, but the tie with South America persisted until the Eocene (roughly 40 million years ago). Thus it is not surprising to find forms such as *Austropetalia* and *Phyllopetalia* (which genera Tillyard separated solely on account of geography, there being no good structural difference), *Phenes* and *Petalura* and *Uropetala*, *Neogomphus* and *Hemigomphus*, *Gomphomacromia* and a whole host of Australian corduliids, etc. It is also evident that *Aeshna brevistyla* is basically South American in its affinities (somewhere between *Hesperaeschna* and *Neureclipa*. Can we find other affinities? I think we can and will. For instance, *Austroagrion* looks very much like a member of the *Acanthagrion* complex. The distribution of the *Argia* complex (New World and New Guinea) now makes abundant good sense in terms of a trans-Antarctic tie. Such a faunal relationship could only exist with a more temperate climate than we now have, but again geological evidence gives us a warmer climate during the early Tertiary.

Tropical connections are more of a problem. The Group II libellulines offer abundant opportunities for establishing connections, and the *Dythemis-Trithemis* groups still others. Such zygopteran groups as the platystictids, megapoda-

grionids, amphypterygids, protoneurids, etc., will be of great interest to examine in this light. The affinities of some gomphids may turn out to be explained by drift - such as *Cacoides* vs. the ictinogomphines. Whether or not such relationships are explained by the separation of South America and Africa instead of the Australian-South American connection is still problematical.

Odonates, along with many other relatively primitive aquatic insect groups, offer an opportunity that is nearly unequaled in the animal world. The evolution of mammals and birds is sufficiently late in time so that there is little that can be done with these, but the odonates are nearly ideal. For example, one can find that for genus after genus, the resemblance between South American and African forms is just about what one would expect for parallel, isolated evolution of two faunas that were once contiguous but were separated in the Cretaceous. This field promises to be an especially interesting area of biogeography in the future and its problems should be taken seriously by all students of Odonata.

WHY "DRAGONFLIES AND DAMSELFLIES"?

By

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If someone should write an article with the title, "Flies and Houseflies", or "Bugs and Assassin Bugs", or "Men and Workmen", we might raise our eyebrows and ask, "Aren't houseflies flies, or assassin bugs bugs, or workmen men?" For many years the common name for the Order Odonata has been "dragonflies" and still is, then why "dragonflies and damselflies"? In the 1929 Handbook of the Dragonflies of North America, Part I (p. 11), Dr. Needham used "dragonflies" for the Order, "dragonflies proper" for the Anisoptera and "damselflies" for the Zygoptera. However, in his general discussion, "proper" is not always added when it should be and a person unfamiliar with the Odonata would have difficulty deciding whether the information was for the whole Order or just the Suborder. In "Part II. Systematic", the common name for the Suborder Anisoptera is an unqualified "Dragonflies". According to Dr. Walker, in his introduction to volume I of The Odonata of Canada and Alaska, "damselflies" in some parts of the world is used for the whole Order. If we wish to use "damselflies" (and it is a likable name) for the Zygoptera only, why not a distinctive and exclusive name for the Anisoptera, perhaps the old name of "libelles" or a coined new one? No one seems willing to restrict any of the present common names to the Anisoptera. Because the larger anisopterans are the dragons or dinosaurs of the insect world, I once suggested "dino flies" to several people but received a negative reaction as it was a hybrid word. The prefix dino- means terrible, which is hardly appropriate from the point of view of those of us who think them beautiful and marvelous creatures. Perhaps something like "aerophiles" meaning air lovers would be considered more favorably, or from the Middle English word "ladde" have "laddeflies and damselflies" in classifying the dragonflies. Regardless of what some people first learned and think, "damselflies", as well as "dragonflies proper", are dragonflies.

One recent popular article that is not confusing to the reader as to Order and Suborder is "Nymph, damsel, and dragon" by Dr. Paul D. Harwood, in the

August 1973 SMITHSONIAN (vol. 4, no. 5). This is a beautifully written informative account illustrated with superb color photographs. The outside cover alone, with the photograph of the brilliant scarlet *Sympetrum* (or *Tarnetrum*, if you prefer) *illotum*, is worth the price ($1.00) of a single copy of the magazine. SMITHSONIAN is published by Smithsonian Associates, 900 Jefferson Drive, Washington, D.C. 20560.

WORK IN PROGRESS

I have recently reared *Somatochlora provocans* from South Carolina and have found the nymph to be very similar to the nymphs of *S. minor* and *S. walshii*. When describing the *provocans* nymph, I would like to compare it in detail with these two species, but have available here in the Florida State Collection of Arthropods only one reared female of *walshii* and no *minor*. I would greatly appreciate receiving specimens on loan for study, or any information on these two species. - K. J. Tennessen, Department of Entomology, University of Florida, Gainesville, Florida 32611.

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I would be interested in hearing of any records of *Libellula luctuosa* from western Canada (B.C. and Manitoba), or from Wash., Ore., Calif., Ariz., Utah, Nev., Mont., Idaho., Wyo., Colo., N. Dak., S. Dak., Baja California and Mexico. - Rosser W. Garrison, Division of Entomology, University of California, Berkeley, California 94720.

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The effects of photoperiod and temperature on seasonal development and synchronization of emergence are being studied in a population of *Leucorrhinia intacta* Hagen near Guelph, Ontario (43°33'N., 80°15'W). The phenology is being characterized through regular sampling of larvae, daily collection of exuviae and field observation. Laboratory studies are underway to determine the effects of photoperiod and temperature on larval development and growth, including induction and termination of diapause.

Larval development in the field and the duration and temporal distribution of emergence of *Sympetrum vicinum* Hagen are also being studied at the same site.

The rate and duration of larval development of *Agrion maculatum* Beauv. are being followed in streams near Waterloo, Ontario (43°28'N., 80°31'W).

This work is part of an M.Sc. project supervised by Professor Philip S. Corbet at the Department of Biology, University of Waterloo. - K. J. Deacon, Department of Biology, University of Waterloo, Waterloo, Ontario, N2L 3G1. Canada.

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My research topic is the seasonal regulation of several *Sympetrum* species. Since it is suspected that the eggs overwinter, the influences of temperature and photoperiod on embryonic development and hatching are being examined. Temperatures of 12°, 15°, 20°, and 25°C. have been combined with photoperiods of 10L: 14D, 12L: 12D, 14L: 10D, and 16L: 8D to give sixteen different experimental conditions. An obligatory diapause apparently is not involved in *Sympetrum rubicundulum*, *S. obtrusum*, nor in *S. vicinum*. Since *Sympetrum* often inhabit temporary ponds and the eggs may be subjected to drying, the presence of water

should also be considered. I would appreciate further information on the biology of this genus at various latitudes (Waterloo: 43°28'N., 80° 31'W.) as I wish to attempt to correlate geographical with seasonal distribution.

This work is part of an M.Sc. project under the supervision of Professor Philip S. Corbet at the Department of Biology, University of Waterloo. - Miss J. Peterson, Department of Biology, University of Waterloo, Waterloo, Ontario, N2L, 3G1. Canada.

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CORBET MOVES TO NEW ZEALAND

Philip S. Corbet, Professor and Chairman, Department of Biology, University of Waterloo, Ontario has accepted appointment as Professor and Director of Studies in Environmental Sciences at the University of Canterbury, Christchurch, New Zealand, where he will start work in mid-1974.

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EXCHANGES

I would be willing to trade or pay for the following: Walker: Studies on *Aeshna* and *Somatochlora*; his 1953 volume on Zygoptera of Canada and Alaska. Muttkowski: Catalogue of the Odonata of North America. Tillyard: The Biology of Dragonflies. Fraser: Monograph of the Cordulegasteridae (Mem. Ind. Mus., 1929). Calvert: Neuroptera volume of Biolgia Centrali Americana. - Rosser W. Garrison, Division of Entomology, University of California, Berkeley, California 94720.

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I am interested in expanding my collection. I have a large series of many adult North American Anisoptera and Zygoptera for trade. I am especially interested in other North American species but wish to trade with other areas of the world very much. To initiate an exchange send a list of what you have available and I will respond by indicating what I would like and enclosing a list of what I have available. In addition I am interested in obtaining some of the more important literature and am willing to pay with cash or specimens. - Kenneth W. Knopf, Department of Entomology, 3103 McCarty Hall, University of Florida, Gainesville, Florida, U.S.A., 32611.

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SECOND INTERNATIONAL SYMPOSIUM OF ODONATOLOGY

by

M. J. Westfall, Jr.

The symposium sponsored by the Societas Internationalis Odonatologica (S.I.O.) was held September 20-23, 1973 in Karsruhe, Germany at the State Museum of Natural History (Landessammlungen für Naturkunde). The list of those registered contained 63 names, although some others attended who were not listed and a few registered were not able to attend. The members represented 17 countries (Austria, Belgium, Canada, Denmark, France, German Federal Republic, India, Italy, Japan, the Netherlands, Nigeria, Spain, Sweden, United Kingdom, United States of America, Uruguay, and Yugoslavia). Especially honored were Dr. S. Asahina, Dr. M. A. Lieftinck, and Prof. Dr. F. Schaller.

Dr. G. Jurzitza, as the general chairman, opened the first morning session, and a welcome was extended by the Director of the Museum. Dr. Asahina was to give the opening invitational paper but was delayed in arriving, so I presented my paper first, followed by a

short paper by Dr. D. Paulson. In the afternoon Dr. H. J. Dumont and Mr. B. O. N. Hinnekint presented papers, followed by movies taken by Dr. Lieftinck. After a coffee break, Dr. Asahina presented a paper "Interspecific hybrids among the Odonata", and his invitational paper, "The development of odonatology in the Far East". There were slide programs in the evening.

This is not intended to be a complete report of the meeting, listing all of the papers, but these continued the second day, followed by a business meeting in the afternoon. A delightful dinner party was held in the evening at a fine West German restaurant.

Saturday was another full day of paper presentations, and Sunday Dr. E. Schmidt and Dr. G. Jurzitza led an excursion by bus to the magnificent Black Forest. Despite inclement weather we all enjoyed the outing with some success in collecting. A post-symposium tour organized and led by Sig. I. Bucciarelli was made by several members to the island of Sardinia, Italy, and proved to be a very interesting trip. The March 1974 issue of ODONATOLOGICA contains five of the papers presented at the symposium, including the invitational paper by Dr. Asahina.

THIRD INTERNATIONAL SYMPOSIUM OF ODONATOLOGY

The next symposium will be held at the University of Lancaster, England, August 4-7, 1975. It will be under the general chairmanship of Dr. T. T. Macan, assisted by Dr. P. J. Mill, Dr. and Mrs. M. J. Parr, and Mr. R. M. Gambles. It is hoped that a large group will be able to attend. Incidentally, if you have not yet joined S.I.O. we urge that you do so immediately. The Society needs more financial backing to continue publication of the fine journal ODONATOLOGICA. Annual dues are 50 Hfl., and applications for membership should be sent to Dr. B. Kiauta, Institute of Genetics, University of Utrecht, Opaalweg 20, Utrecht, the Netherlands, or to the representatives of S.I.O. in Japan (Mr. K. Inoue, Fuminosato 4-5-9, Abeno-ku, Osaka 545) and North America (Dr. M. J. Westfall, Jr., Department of Zoology, University of Florida, Gainesville, Florida 32611, USA).

SMITH-HODGES ODONATA COLLECTION NOW IN GAINESVILLE

Some readers are aware that in the 1930s at the University of Alabama in Tuscaloosa Dr. Septima C. Smith and Dr. Robert S. Hodges, with the help of a number of students known as the "Dragonets", began bringing together an impressive collection of Odonata. The specimens were mostly from the large Tuscaloosa County, but also from other parts of the state, and some from other states, including those received from Needham, Walker, and others in exchange. There is also a box from South America still unstudied, and some from the Orient. Some were studied and identifications confirmed by Leonora K. Gloyd. They reared long series of many species in Alabama, some for the first time, and collected the largest number of specimens of *Neurocordulia* known to me. They had prepared and all but published a number of manuscripts, including a large one on this genus. It was in anticipation of the publication of this that Needham and I included their description of the new species *N. alabamensis* in the Manual of the Dragonflies of North America in 1955. In a recent paper of

mine in ODONATOLOGIDA I referred to gomphines in this collection, especially the series of *Gomphus modestus* Needham which they had reared. They collected the first specimens of *Gompus septima* which I named for Septima Smith and of *Gomphus hodgesi* which I recognized as a new species while working with Dr. Needham and which he named for Robert Hodges. Before their papers were finished Dr. Hodges became ill and after his death Dr. Smith retired and moved to Fort Worth, Texas where she lives with her neice, Ms. Martha Sue Parr, who is a lawyer.

Recently Dr. Smith gave the Odonata collection, library, manuscripts, and many excellent photographs by Dr. Hodges to me. My graduate assistant, Kenneth Tennessen, and I went to Tuscaloosa to bring the collection to Gainesville where it will receive good care. The specimens in vials had dried up but we have restored most of these with alcohol. Dermestids had destroyed some of the adults, but the bulk of the collection is in good condition. We have not yet had time to examine all of it and make a count of the number of species and specimens, but it is a very large collection. We hope in the future to use the Alabama specimens in getting together a comprehensive list of the species of that state.

Previously we had acquired the collections of Dr. C. Francis Byers who is retired and living in Gainesville, and Dr. Richard P. Trogdon who retired this year. Dr. William H. Cross has given a large part of his collection and promised the remainder. Dr. Robert B. Cumming, Mr. Duncan Cuyler, and others have given large numbers of specimens. Several present day workers and Research Associates of the Florida State Collection of Arthropods have contributed many specimens. Among them is Dr. Thomas W. Donnelly whose unusual account of collecting in Australia, etc., appears earlier in this number. The collections of Dr. Clifford Johnson and Dr. Dennis R. Paulson, along with others, have been promised. We anticipate this will continue to be an important center for studies of Odonata. - M. J. Westfall, Jr.

CHANGE OF FORMAT OF SELYSIA

Some readers may be wondering why we did not justify the margins in this number as we have in the past. To save time of the editors and secretaries we were requested to make this change. The University of Florida has been very helpful in providing mimeographing and mailing of SELYSIA as a public service so we have not had to charge for it. It has been 14 months since the last number appeared but we have not had enough news to print one sooner. The date of Vol. 7, No. 1 will depend upon your response in news items.