

THE NEWSLETTER OF THE SOCIETAS INTERNATIONALIS ODONATOLOGICA AND THE U.S. NATIONAL OFFICE

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September 1, 1993

JANNY VAN BRINK, 1923-1993

Bastiaan & Marianne Kiauta
S.I.O. Central Office
P.O. Box 256, 3720 AG Bilthoven
THE NETHERLANDS

At her home in Bilthoven, after a long, treacherous illness, which she was bearing with much courage and which to the very last did not break her good spirits, our Janny peacefully drifted away from this world on 28 March 1993, at 13:30 h. In the middle of greeting cards and small dragonfly presents, sent by over 150 worried S.I.O. members, she departed from us — her warm heart will be unable to watch any longer over her odonatological "family." Her home, known to dozen-upon-dozens of odonatologists as the "Dragonfly Lodge," had to close its doors.

Dr. Janny Margaretha Van Brink, Emeritus Professor of Cytogenetics of the University of Utrecht, The Netherlands (born: 5 May 1923, Rotterdam), was the principal initiator, the cornerstone, and a true Mother of the S.I.O. Her outstanding management capacities, capable financial administration, and above all, her warm and always understanding heart, brought together, and for more than 20 years now kept together, the world odonatological community in a way unique in the history of Entomology. In the odonatologists' world, the S.I.O. will remain a lasting monument of, and stand as a witness to, her rich life. In the dragonfly kingdom, Microgomphus jannyae Legrand 1992, and Cordulegaster vanbrinki Lohmann 1993, will forever preserve her name.

From a passing cloud
just a few scatters of rain-
dragonflies scatter

tombo

Gordon Pritchard reports that "my efforts at mediation in the ongoing difference of opinion over the operation of S.I.O. have met with failure. I have been unable to convince the President [B. Kiauta] that there are real concerns among the membership over the administrative structure and operation of the Society. Hence, the current administration of the Society resides solely in the hands of the President and I have asked him to present a statement on the current operation of S.I.O. and his scenario for the future to the membership via SELYSIA."

Correction: SELYSIA 22(1):1, DOES CORDULEGASTER EXIST IN NORTH AMERICA?, erroneously listed Taeniogaster as a new genus. It is actually an old genus, named by Selys (1854), that has been redefined and resurrected by Lohmann (1992). Thanks to Minter Westfall and Bastiaan Kiauta for spotting the error.

DRAGONFLY CONSERVATION

Norman W. Moore

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Dragonfly habitats are being destroyed all over the world, and in countries where the distributions of species are reasonably well known we know that many species are declining and some have become extinct. Can we really do anything about it? The problems of dragonfly conservation are immense: most odonate species are confined to tropical and subtropical countries where there are very few odonatists. Therefore where there is most need to conserve dragonflies there is least information and least possibility of taking conservation action. Even in the developed nations of the temperate zones the situation is not very much better because, despite a rapidly growing interest in dragonflies in some countries, dragonfly enthusiasts are rarely in a position to safeguard habitats by buying them and managing them as nature reserves. Yet despite all this there is much that can be done indirectly to conserve dragonflies with existing resources.

The overall objective of dragonfly conservation must be to conserve as many species as possible. However, most would agree that some species are of such outstanding interest that they deserve special measures to conserve them. The taxonomic isolation of the Epiophlebia species and Hemiphlebia mirabilis makes them obvious examples of such species. Apart from special measures for special species the main requirement is to protect a wide range of aquatic habitats throughout the world by protecting sites and reducing water pollution.

In Britain all of the National Nature Reserves have been selected as types of biotopes, largely on botanical grounds. Yet surveys show that over 90% of the British dragonfly species occur in these reserves. This suggests that so long as each nation protects a wide range of its habitats, it will automatically conserve most of its dragonfly species. Unfortunately most countries do not yet

SELYSIA
A Newsletter of Odonatology

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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.

SELYSIA was founded in 1963 by Dr. B. Elwood Montgomery at Purdue University, and edited from 1970-1986 by Dr. Minter J. Westfall, Jr., at the University of Florida. With V. 13, #1 (1 March 1984) it was recognized as the official newsletter of the *Societas Internationalis Odonatologica* as well as the U.S. National Office of S.I.O.

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have an explicit policy of conserving examples of their main biotopes. The efforts of those concerned with the conservation of dragonflies (and other invertebrates) are best directed to persuading their countries to adopt a system of conserving representative examples of the main biotopes which occur in their countries. Most dragonfly species are dependent upon rainforest. Therefore conservation of a wide range of rainforest biotopes is particularly important. Odonatists are urged to give all possible support to the conservation of rainforest in their own and other countries.

The creation of national parks and nature reserves and control of pollution are national matters, but they can be supported internationally. International designations, such as World Heritage Areas and Ramsar sites, provide much needed support to national conservation organizations when the latter attempt to conserve the designated areas. Similarly, international water quality standards help or even force governments to improve their systems of control.

Despite the difficulties, much has been done both nationally and internationally to conserve dragonflies in recent years. Dragonflies have a special place in the arts and culture of Japan, and as a result Japan appears to be the only country where reserves open to the public have been created especially for dragonflies. The first and most famous of these in *The Dragonfly Kingdom* at Nakamura. Thanks to the local initiative of Mr. M. Sugimura and the support of Dr. S. Asahina and other Japanese odonatists and of the World Wildlife Fund, a series of old paddy fields has been transformed into a nature reserve which now supports over 60 species of dragonflies in an area of about 50 hectares. A similar number of species is protected in the Okegaya-numa Conservation Area in the Shizuoka Prefecture. This site includes the only continuously occupied habitat of *Libellula angelina* in Japan. Reserves such as

these not only benefit dragonflies but help to promote conservation in general: about 50,000 people visited the *Dragonfly Kingdom* in 1990. It will be visited by members of the S.I.O. *Symposium* in 1993.

Thanks to the work of D.A.L. Davies, J.W.H. Trueman, G.A. Hoye, J.H. Hawking, J.A.L. Watson and T.R. New, much is now known about the status of *Hemiphysalis mirabilis*, and suitable management of its habitats in Australian National Parks is assured.

In the United Kingdom landowners and farmers have a traditional interest in natural history and increasingly in conservation. Hundreds of ponds have been restored or created by them for wildlife in general, but many farmers mention the conservation of dragonflies as a motivation. An outstanding example is the *Ashton Water Dragonfly Sanctuary* on the estate of the Hon. Miriam Rothschild, which is under the care of Mr. R. MacKenzie Dodds. Thanks to sympathetic management a lake, which once contained only a few species of dragonfly, now supports many. There is a visitor centre and the site is used for research and demonstration purposes. Much can be done with modern machines to construct new habitats. For example, it took a day and a half to make my own pond which is especially designed for dragonflies. It is only 45 m long and 15 m wide but more than half the English odonate fauna has been seen on it, and most breed there regularly.

Conservation is one of the main objectives of the *British Dragonfly Society*. It achieves its aims by publishing booklets about habitat creation and management and by advising national and local conservation bodies about the management of dragonfly habitats in their nature reserves. For example, the *Royal Society for the Protection of Birds* sends the *Society* copies of management plans when they come up for revision so that B.D.S. members can visit the reserves and suggest ways of improving them for dragonflies. Supporting studies on the requirements of rarer species are also in progress.

Direct international support for dragonfly conservation was initiated in 1980, when the late Sir Peter Scott suggested that an Odonata Specialist Group should be set up to advise the Species Survival Commission of the *International Union for the Conservation of Nature and Natural Resources (I.U.C.N.)*. The Group held its inaugural meeting on the occasion of the *International Symposium of Entomology* at Kyoto, Japan in 1980. Subsequently the Group has met on the occasions of the S.I.O. international symposia. S.I.O. has given valuable support to the Group, notably by publishing its Reports, which deal with particular conservation topics and give reviews of conservation progress throughout the world. The present members of the Odonata Specialist Group are: S. Asahina, H.J. Dumont, S.W. Dunkle, J.I. dos R. Furtado, M. Hämäläinen, B. Kiauta, A.B.M. Machado, N.W. Moore, M.J. Parr, D.R. Paulson, M.J. Samways, E.G. Schmidt, Z. Spuris, B.K. Tyagi and J.A.L. Watson. The Group keeps I.U.C.N.'s *Red List of Threatened Animals* up-to-date, outlines conservation research priorities and promotes studies on endangered special species. It helps to keep those concerned with dragonfly conservation in touch with each other. As Chairman, I ensure that I.U.C.N. is made aware of the needs of dragonfly conservation when they are dealing with aquatic habitats, national parks etc. At our next meeting (in Osaka on August 1st) we shall be discussing the first draft of the Action Plan for dragonflies which we are preparing for I.U.C.N. Initial studies suggest that centres of endemism for dragonflies coincide closely with those for birds. The Action Plan recommends that further studies should be carried out on dragonflies in the centres of endemism for birds so that a stronger case can be made for conserving these areas to mutual advantage. The Action Plan also recommends the establishment of a world conservation data base for dragonflies, and for studies of dragonflies in protected areas. From these we could discover which species already receive some

protection and could ensure that the management of protected areas takes the conservation of dragonflies into account.

The work of many odonatists on the taxonomy, distribution and biological requirements of dragonfly species gives growing support to conservation, as do the efforts to popularize dragonflies through talks, films and publications. However these things take time, and time is not on our side. For the immediate future the conservation of dragonflies is best served by the broad brush technique of urging all nations to conserve good examples of the biotopes which they have in their care.

*A frog jumped in plip!
the dragonfly soared off
over the old pond*

tombo

.....
The following paragraphs, excerpted from an article entitled "The role of amateur and professional insect collecting" by Rosser W. Garrison [ARGIA 5(1):5-9], may be of interest to SELYSIA readers:

My purpose here is to address a concern that I feel is gradually becoming entrenched in the public's mind concerning the impact of collecting on various species. Specifically, are we placing too much emphasis on the harmful effects of collecting? Does sampling of a natural population (even a restricted deme) cause irreversible detrimental effects on the population? Some of my concern also stems from aggressive policies recently initiated by the U.S. Fish and Wildlife Service (USFWS). Law enforcement agents of this organization have recently raided private residences and confiscated certain specimens which they believe were illegally obtained or collected. Agents have served subpoenas to collectors, seeking insect specimens for use as evidence against other collectors. These actions have become well known throughout the entomological community but are only now starting to be addressed. I have talked to many amateur and professional entomologists, many of whom are extremely concerned about these actions. Many entomologists, and some agents of public agencies, appear to be ignorant of rules and regulations about collecting in our own country and abroad.

For example:

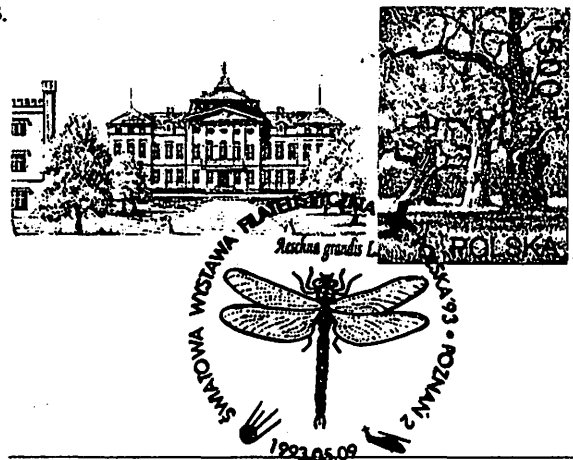
1. Some entomologists who have collected on U.S. National Forest land and on Bureau of Land Management (BLM) land were told by rangers that collecting permits were needed. Head offices of both agencies later indicated that no insect collecting permits were needed.
2. The USFWS is apparently enforcing provisions of the Lacey Act. Enforcement of laws of foreign governments which require insect or invertebrate collecting permits has recently occurred. Specimens collected in Mexico, for example, have been confiscated at the U.S. border by USFWS personnel. Unfortunately, obtaining insect collecting permits in Mexico involves much time (perhaps a year or more in advance) and money (almost \$1000—for a one-year permit). Many other Latin American countries require such permits, though their cost seems to be lower.
3. Some countries, such as Australia, require export permits as well as collecting permits. Other countries apparently require similar permits but it is difficult or almost impossible to acquire or even obtain information about them. For example I have just learned that all insects imported from Indonesia require an import permit, but attempts at obtaining the information was difficult. [...]

A complete listing of rules and regulations for this country [USA] and at least a listing of countries requiring permits should be made available to entomologists. Knowledge of these laws would help us to work within a cooperative framework with law enforcement agents. Agents in our local and national governments, and in governments abroad, should streamline the processing of permits so that they can be readily available to entomologists. Recommendations of recognized amateurs by acknowledged professionals (even within other countries) would be one way of simplifying the permit process for those already known to be contributing to science. This is not meant to exclude other individuals, but is meant to streamline the process for regular contributors.

[Dr. Garrison's address: 1030 Fondale St., Azusa, CA 91702-0821, USA]

[Editor's note: SELYSIA would welcome contributions from any country providing reliable information about current rules and regulations, procedures for obtaining permits, potentially helpful contacts, or efforts to modify existing laws. Please consider doing your part to solve this problem!]

.....
Juliusz Samolag [ul. Poznanska 72, 62-080 Tarnowo Podgórne, POLAND] sent Bastiaan Kiauta a card with special postmark [below] of the World Philatelic Exhibition held in Poland in May 1993.



.....
Dr. Roman Pavljuk has been investigating parasites of Odonata and dragonfly fauna in the western part of Ukraine for the last 40 years. His publication "The History of Ukrainian Odonatology" was published in *Acta Hydroentomologica Latvica* N2, 1992. Address for cooperation: Dr. R. Pavljuk, Museum of Zoology, University of Lwiv, Grushewskogo str., 4, Lwiv, Ukraine, 290005.

*A tied rowboat moves
at the end of its mooring-
dragonflies mating*

tombo

.....
Dr. Victor Fursov investigates Odonata egg parasitoids from the superfamily Chalcidoidea (families Mymaridae, Trichodrammatidae, Eulophidae). Cooperation is possible in any way. [Dr. V. Fursov, Department of Plant Protection, Schmalhausen Institute of Zoology, Lenin str., 15, Kiev, Ukraine, 252601].

SUMMARY OF CURRENT RESEARCH

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At Dan Johnson's kind invitation (actually a rather pointed suggestion), and to encourage an even more active exchange of odonatological ideas in these pages, I offer the following summary of some of my own current research. This falls into two rather divergent categories — ecophysiology and behavior on one hand, taxonomy on the other — reflecting, no doubt, some deep-seated schism in my personality.

In the first area, I am still investigating a phenomenon that has kept me amused off and on since graduate school, control of body temperature by dragonflies. I've recently completed (well, almost) a long-term study of *Anax junius*. Besides confirming that *Anax* regulate thoracic temperature quite well, the data strongly suggest that they regulate temperature of their heads as well. They apparently do this by selectively shunting hemolymph to the head, but physiological details of circulatory control are unclear. Also, it seems that unloading of excess heat via the abdomen can explain thoracic temperature regulation at high, but not at low or moderate, temperatures; under the latter circumstances modulation of heat production may be important. I am currently trying to determine whether flight characteristics, and thus possibly flight metabolism, are temperature dependent, and am also exploring possible advantages of head temperature regulation.

In related research, I've examined mechanisms of body temperature regulation in *Arigomphus villosipes* and *Sympetrum vicinum*. Like other gomphids, but unlike most libellulids in my experience, *A. villosipes* rather routinely uses both ectothermy (basking) and endothermy (wing-whirring) to maintain high body temperature during cool intervals. *Sympetrum* is particularly interesting because its late flight season results in routine exposure to quite chilly temperatures. Males are very effective ectothermic regulators when alone; females apparently somewhat less so. Sex takes precedence over staying warm, however, and tandem and copulating pairs regulate body temperature poorly, if at all, even though tandem flight seemingly would benefit by greater power and agility that high thoracic temperature would entail.

I also maintain a long-standing interest in energy requirements of adult Odonata. One particular problem has been difficulty in obtaining accurate data on flight metabolism. After trying on and off for a number of years, I think I can make a reasonable, although still approximate, estimate from data on body temperature during sustained flight. This information should make possible improved estimates of energy budgets of dragonflies. I first published on the energy budget problem 10 years ago (Fried & May, 1983, *Ecol. Ent.* 8:283), but it now appears that energy requirements may have been substantially underestimated. As noted above, another interesting aspect of flight metabolism is its possible dependence on ambient temperature, and I think I finally have reasonable evidence that metabolism increases with declining temperature, in *Anax*, at least.

On the other side of the energy equation I am completing, with Joel Baird (Cornell Univ.), an intensive study of foraging behavior of *Pachydiplax longipennis*. One of the more interesting results is documentation of relatively strong territoriality at feeding sites, where no mating takes place. I have begun some comparative studies of other libellulid species, although these have progressed extremely slowly due to lack of time and convenient study sites. I would be very interested, though, in hearing from others who, systematically or incidentally, have made observations of adult foraging. In addition I've gathered a substantial amount of data on growth, accumulation of energy reserves, and body composition of

adult odonates. Besides simply providing information on energy supplies, these data may have implications for understanding mortality factors and sexual selection in dragonflies (e.g., see Anholt, et al., 1991, *Can. J. Zool.* 69:1156). A particular interest has been examination of energy reserves in migrants. This and other aspects of recent work on migration are summarized in my 1992 article in *ARGIA* 4(2):4. We're still very interested in receiving your reports of migratory activity, especially in North and Central America.

On the taxonomic front, life is even more chaotic, if anything. The big project, of course, is completion, with Minter Westfall, of the almost mythical *Manual of the Damselflies of North America*. Minter has now been working on this for nearly forty years, with my assistance for the last seven. To say that work proceeds by fits and starts is slightly ludicrous understatement. Nevertheless, the last six months have seen considerably renewed activity. The end seems in sight for both text and illustrations. There are still some editorial problems to work out, but maybe it will be ready for the publisher by year's end (I know I told some of you that six years ago, but this time I really mean it!?). I also continue to work, with Frank Carle and other collaborators, on occurrence and distribution of New Jersey dragonflies. This work has come to the point where the greatest need is time to write it up, although we are still anxious to hear from anyone with interesting records from New Jersey.

I've been working on a couple of "recreational" taxonomic projects, too. For example, I'm trying to puzzle out just which species of *Epitheca* (*Tetragoneuria*) occur in southern New Jersey. Except for *spinosa*, which is probably extirpated here, these comprise a dark-winged form (*semiaquea*?) and two almost invariably clear-winged forms (*cynosura* and *costalis*?). I can find all three flying together, but "*semiaquea*" dominates in, and is evidently confined to, the Pine Barrens, while "*costalis*" seems largely to replace *cynosura* in the rest of the southern third of the state. If anyone has clear-winged specimens from Burlington, Ocean, Atlantic, Camden, Gloucester, Salem, Cumberland, or Cape May counties, I would love to see them.

Also, I'm attempting to understand systematics of the genus *Enallagma* using cladistic analysis of morphological characters. This work is being done in collaboration with Jack Zloty (*Univ. of Calgary*), who is also examining isozyme characters, and likewise in coordination with work by Mark McPeck (*Dartmouth College*) on mitochondrial DNA. We would be grateful for the loan of examples of palearctic (except *cyathigerum*) and Ethiopian species. Finally, the *Enallagma* work has led to a very cursory examination of the supposed subfamilies of Coenagrionidae. At the moment, those proposed by Fraser and others seem to me to have little basis in reality. Nevertheless, I'm trying to test their validity by analysis of venational, genitalic, and other morphological characteristics of representative genera.

If anyone would like further information about any aspect of my research, or has information or ideas to contribute or any comment to make whatsoever, I'd be delighted to hear from you. I confess to being a slow correspondent, but, like most people, I'm always eager to talk about my interests.

*Red dragonfly
stops to taste the dew-
on the waterlily*

tombo

FUNCTIONAL MORPHOLOGY OF ODONATA: BRIEF SUMMARY OF MY RESEARCH PLANS

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FUNCTIONAL MORPHOLOGY AND SENSORY PROJECTION OF SENSILLES OF DAMSELFLY ENDOPHYTIC OVIPOSITOR.

The valvulae 1, 2, and 3 are the three major components of the ovipositor in adult zygopteran damselflies. The first two have been modified to form leaves. This structure is the organ for scratching plant epidermis and for displacement of eggs into plant tissues. The valvulae 3 has been modified to form a structure for fixation on the plant surface. Dragonfly ovipositor (OP) has been studied by H. Weele (1906), St. Quentin (1962), and Pfau (1985, 1991). But our preliminary research on skeletal-muscle organization of OP of *Sympetma annulata* Selys (Lestidae) and SEM-microscopy of external and internal surfaces of valvulae (on different taxa) shows new features of the endophytic types of OP such as internal sculpture of valvulae and external micromorphology of sensilla.

Mechanoreceptors of the ovipositor complex are important sources of information during oviposition. Valvulae 1-2 have campaniform sensilles on the external surface. Valvulae 3 has ventrally a row of hair sensilles and caudally a sensory organ, often called the "stylus." During oviposition the females touch the plant surface with the stylus. A morphological study of the ovipositor (light microscopy) revealed the presence of a fine setose surface at the top of the styli. Srivastava & Babu (1985) regard these setae as forming special sensory organs. To understand the processing of sensory information we need to know not only the behavior and physiology but also the neuroanatomy of the projection patterns of primary sensory afferents too. Such studies have not been carried out.

The aim of the present study is to trace central projections of receptors of the ovipositor complex of *S. annulata*. Tactile hairs of valvulae 3 and styli, and campaniform sensilla of the leaves, are presumptive proprioceptors involved in control of valvulae movement during plant piece selection and oviposition. Thus the comparison of different ovipositor projections will help us to find an anatomical basis for sensory integration in the terminal ganglion of the damselfly central nervous system. It is interesting to recognize whether projections from different organs provide clues to the functional organization within the neuropile. Moreover, for other insects central sensory projections of ovipositor sensory organs are unknown. Afferent fibers will be backfilled using anterograde cobalt fills and central projections will be studied in wholmounts and in sections; sensory cells will be stained with methylene blue. The following proprioceptors will be studied: the distal campaniform sensilles of the upper and lower leaves (valvulae 1,2), hair rows on the ventral part of the valvulae, and apical hairs of the stylus.

"AN ATLAS OF ARRESTER OF DRAGONFLIES": IS IT A REALITY?

The head of dragonfly imagoes is very large if compared with its fastening to the neck. The head feels great loads during feeding and tandem capture or tandem flight (especially in Anisoptera). At the same time in flight it serves as an organ of gravity like a statolith. Inertial forces act on the head, and it signals the insect about turns with the help of trichoid sensilles fields. Therefore, the insect needs maximal head mobility in flight and maximal strength of the head during feeding. This problem is solved with the help of the Arrester System (for the first time briefly studied by H. Mittelstaedt (1950)). It consists of: a) two moving neck sclerites (postcervicale)

covered by microtrichia; b) fields of microtrichia laterally from occiput on the head; c) secretory apparatus in the hypoderma of postcervicale; d) sensory apparatus including campaniform and trichoid sensilles. This system is unique for dragonfly imagoes and was studied in detail morphologically and physiologically (see *ODONATOLOGICAL ABSTRACTS* 6936, 6986, 7505, 7636, 7637, 8108, 8109, 8362). Some macro- and microstructures can be important for phylogeny of dragonflies.

My dissertation on this thema includes unpublished material with numerous figures and SEM-photomicrographs (more than 800). An original tree of arrester evolution was proposed. This huge material cannot be broken up and published as a series of journal articles. I propose to publish *An Atlas of Arrester*, but I have not the possibility and finances to realize this idea in the Ukraine. That's why I need help of the odonatological community. My idea is following:

1. The English text (100-150 typewritten pages): functional morphology, histology, and physiology (brief), descriptions of morphological features of arrester for taxa of 25 dragonfly families (on the basis of 227 species). Evolution of Arrester will be discussed.
2. The *Atlas* must be illustrated in the best way to be commercially attractive. General morphology figures (5-6) I can make as good water colour pictures (in one or many colours). Pictures of back side of head and neck region of different species (postcervical sclerites and back side of the head) – 80 figures on 10 pages. The photomicrographs with legends – 300 on 50 pages.
3. Arrester will be compared with arthropodan fixation systems – review of different structures of fixation (10 text pages and 4 figures pages).

In all, 200-250 pages.

Anyone who has a possibility to help in any way, write me, please.

*escaping the net
blue dragonfly darts away
into the sunlight*

tombo

MAPPING OF ODONATA IN THE EASTERN PART OF KIEV PROVINCE (UKRAINE): A FIRST TRIAL

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In late July and August 1992, during an expedition collecting molluscs for radioecological investigations of the Chernobyl catastrophe, we made observations on Odonata of the waters of Kiev Province. The area studied had 4100 km² and included four eastern districts of the Province. One or two sites were selected from each 10 x 10 km of the territory. 25 species from 50 sites have been reported. The finds of *Sympetrum meridionale*, *Aeshna juncea*, and *A. viridis* are particularly interesting. Localities of *Stratiotes aloides* (L.) were mapped as potential habitats of *A. viridis*. A range expansion was found for *Orthetrum albistylum* and *Erythroma viridulum*. This was the first attempt at mapping the Odonata distribution in Kiev Province. The earlier studies of dragonfly fauna of the Province were based only on collections. We hope to publish these data in *Acta Hydroentomologica Latvica* N3.

HOW I GOT THE NAME TOMBO

Lorraine Ellis Harr
4102 N.E. 130th Place
Portland, OR 97230-1499

In case the following is of any interest, I am sharing this little notation about my writing of dragonfly *haiku*.

In 1975, sometime after a vacation trip to a jungle area near Chiapas in Mexico, where dragonflies and butterflies gather so thick they fill the air with vivid colors, I wrote and had published the first book of English language *haiku* on a single theme: Dragonflies! 226 of them!

Although the Japanese *haiku* poets wrote many *haiku* about insects [cicadas, crickets, fleas, flies, butterflies and dragonflies — and even snails and frogs], a complete book on the subject of dragonflies, those delightful, jewel-winged creatures, is a first in any language! I titled the book TOMBO (dragonfly in Japanese) and it soon became how my *haiku* friends referred to me. Thus I became, in the Japanese tradition of *haiku* poets, named *tombo*.

That book is out of print. I have only five copies left and five grandkids to give them to. Many thanks for printing some of my dragonfly *haiku* in your publication.

BULLETIN OF AMERICAN ODONATOLOGY

Thomas W. Donnelly, editor of B.A.O.
2091 Partridge Lane, Binghamton, NY 13903, USA

The BULLETIN OF AMERICAN ODONATOLOGY is a journal devoted to studies of Odonata of the New World. The B.A.O. considers a wide range of topics for publication, including faunal synopses, behavioral studies, ecological studies, etc. The B.A.O. publishes results of taxonomic studies but will not consider publishing *new* names at any level. The editor invites submissions of manuscripts.

Annual subscription rate for members of the *Dragonfly Society of America*, including surface postage, \$15; for non-members, \$18.75 plus \$4.00 for postage outside of North America. Subscriptions should be sent to *Dragonfly Society of America*, c/o T. Donnelly, at the address above.

Issues published or in press are listed below:

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COMPORTAMIENTO REPRODUCTIVO Y POLICROMATISMO EN *ISCHNURA DENTICOLLIS* Burmeister (Zygoptera: Coenagrionidae), [Reproductive behavior and polychromatism in *Ischnura denticollis*], with English summary Alejandro Córdoba Aguilar. 1(3): 57-64

A CHECKLIST OF THE ODONATA OF THE DOMINICAN REPUBLIC BY PROVINCE, Jerrell James Daigle 1(4): 65-69

ODONATA DE LA SIERRA DE HUAUCHINANGO, PUEBLA, MEXICO [Odonata of the Sierra de Huachinango, Puebla, Mexico], José A. Gómez Anaya y Rodolfo Novelo Gutiérrez 1(4): 71-73

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LA NAYADE DE *ARCHILESTES LATIALATUS* DONNELLY, 1981 (ZYGOPTERA: LESTIDAE) [The larva of *Archilestes latialatus*], R. Novelo Gutiérrez (in press)

FIRST ODONATOLOGICAL SYMPOSIUM OF THE ALPS-ADRIATIC REGIONAL COMMUNITY

Mladen Kotarac
Marohovih 11, SLO-62000
Maribor, SLOVENIA

The Symposium will be held July 3-7, 1994, in Maribor (Marburg an der Drau), the capital of southern Styria, at the foot of Pohorje Mountains in Slovenia. It will be primarily concerned with the fauna, ecology, population biology, behaviour and various aspects of the eastern Alpine taxa, though other papers would also be greatly appreciated.

Participants are expected from the regions/countries of the Alps-Adriatic Regional Community, viz. Austria, Bavaria, Croatia, Friuli, Slovenia, Veneto and western Hungary, but all other workers will be warmly welcomed.

Our objective is to convene such Symposia at 2-year intervals, each time in a different region of the Community.

Preliminary Programme:

- July 3: Arrival and informal Welcome Gathering of participants
- July 4: Paper sessions, etc.
- July 5: Paper sessions and discussion on location of forthcoming venues. (Organisers hope some invitations will be forthcoming!)
Evening: Symposium Dinner
- July 6: Field trip to characteristic odonate habitats (including montane bogs and various streams)
- July 7: [optional] Another field trip to a different odonatologically interesting area in Slovenia

Except in nature reserves, collecting of odonate voucher specimens is free in Slovenia.

For family members not interested in odonates, a sight-seeing programme in the Maribor area and in southern Styria is planned.

Costs:

- Registration Fee: DM 20.- per person, accompanying family members free
- Hotel rooms: DM 50.- approx. per day/person, incl. full board. Some cheaper possibilities are being explored.
- Symposium Dinner: DM 30.- per person
- Transportation charges for field trips can be defined only after the number of participants is known.

Registration and other details:

- Those interested should write to the Organising Secretary (address above) before 1 December 1993 to receive Registration Forms and other information.
- Registration deadline: March 1, 1994
- Abstracts of Papers: Participants will be asked to send brief abstracts of their presentation(s) along with the Registration Form. Those received by March 1, 1994 will be published, and the booklet made available at the Symposium. After the Symposium there is also a possibility of publication of full papers through S.I.O.
- Languages: all languages are acceptable though for obvious reasons English, German, Italian and French are preferable. Simultaneous translation of oral presentations is not possible, but, if required, the highlights of non-English papers will be summarized orally in English and, upon request, those of any papers will be summarized in German and Slovene.

WANTED: ODONATE SPECIES LISTS

We are collecting odonate species lists for sites occupied by at least one species found at Bays Mountain Park, Sullivan County, Tennessee. Analysis of these data will facilitate our understanding of niche-partitioning by showing which species pairs have considerable experience co-existing, and which do not. If each of you would share your lists for a few sites, the aggregate could be an impressive amount of information.

The check-list printed on the back of this sheet is a convenient way to report your data--just fold the sheet and mail it; but we would be glad to get your list in any form. Note that adult and larval collections should be reported in separate columns. We would also like a brief habitat description of each site, and an indication of how intensive your collections have been. Don't hesitate to report sites visited only once or twice-- though they may not be complete lists, they are still evidence of co-occurrence for the species that were collected.

Thanks in advance for your cooperation. Thanks also to those who have already responded to our plea at Ste. Therese. Please indicate whether you would like to receive reprints of our publications on Bays Mtn odonates as they become available.

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FOLD, STAPLE, AND MAIL

STAMP

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