



Editorial

First, you will see that we have reverted to our original name of **AGRION**. This has become possible because we learnt from Vincent Kalkman (one of our Dutch members) that the Insect Working Group of the Dutch Youth Federation for Nature Studies is no longer publishing their unlisted magazine, which they called AGRION. The name "**WDA's AGRION**", introduced to distinguish the two publications, was cumbersome and not the Association's original choice, so the Board of Trustees decided the newsletter should once more become **AGRION**. It is hoped that you all approve. Please note the new ISSN.

Secondly, please note that I have changed my address. We move into an apartment on the 15th of January but my telephone number and e-mail address will remain unchanged.

Thirdly, I'd like to tell you about my plans for the July issue of **AGRION**. It will be a third thematic issue, this time under the umbrella of "REMINISCENCES". I look forward to receiving articles from members in as many parts of the world as possible telling me tales of unusual experiences while on the dragonfly trail!! At the end of this newsletter you will find three examples of what I'd like – sent to me by Allen Davies.

Please respond in the marvelous way you have done in the past!!

Message from the President

I assumed the role of President of WDA at the Biennial General Meeting held during the Symposium in Gällivare, Sweden on 24 July 2001.

I am pleased and proud to be President of WDA and express my thanks to members for having elected me. I am honoured to have been appointed leader of such a friendly, vigorous and forward-looking society. Thanks to the dedicated efforts of the outgoing Board, led by my predecessor Mike Parr, the Association is in very good heart and I hope that we members of the new Board can keep it firmly on the same course.

I am extremely heartened by the quality and constructive atmosphere of the two International Symposia we have had so far. To my mind they both qualify as festivals of inclusiveness, and long may our Symposia continue to be so. I hope that I can serve WDA as well as it deserves, and I know that I, and the other members of the incoming Board, will not want for your support and suggestions for improvement. The core of our Association is good odonatology, and my experience of the contributions to our Symposia so far assures me that in this regard WDA is thriving. May we together look forward to a prosperous and happy future.

Philip Corbet

Greetings to all WDA members

I was appointed as your Secretary at the Gällivare Symposium in July. Following in Jill's footsteps feels rather daunting, as I know that many of you have known her for a long time. I know that we owe Jill a huge thank you for all she has done for the Association thus far and I am delighted that she has decided to remain as editor of **AGRION**, leaving me to concentrate on looking after the membership and the day-to-day workings of the Association and its Board.

My work background is in the voluntary sector in the UK. I work as the Information Officer for a charity that helps people with learning disabilities. One of my tasks has been to manage the administration of the organization's membership, which is 3000 strong.

My interest in dragonflies came about through my husband, Mike. His obsession (did I say that?) has rubbed off on me. Although I don't really have any expertise in the subject I have loved the places we have visited and the people we have met in pursuit of these lovely creatures.

I look forward to working with colleagues on the Board and in particular with our new President, Philip Corbet and Treasurer Dorothy Gennard. Please feel free to contact me with any queries about your membership. In fact if you are using e-mail do drop me a line (lindaaverill@hotmail.com) as I am trying to establish a listing of all members' e-mail addresses. **Linda Averill**

Conservation, Subscription and Sponsorship - what does it mean to us?

Linda Averill, Philip Corbet, and Dorothy Gennard

The object of the WDA is to advance public education and awareness about Odonata, by the promotion of the study and conservation of dragonflies and their natural habitats in all parts of the world. Our annual subscriptions form the major part of our resources to achieve this at present. This means that every member has a direct and vital role, by means of their subscription, in the object of WDA to conserve dragonflies and sponsor members.

Our charitable activities include the provision of grants to fund suitable conservation projects in areas where they are most needed. In the past year we have had the privilege of funding a project to further knowledge of Malawian Odonata. We also have the opportunity to encourage enthusiasts and professionals, including postgraduates, who are undertaking research of a significant nature. Lastly but equally importantly, WDA sponsors individuals who, through currency or other restrictions, find it difficult to join or remain in WDA. These members add to our standing as an international association and their observations relating to the status of dragonflies in their countries is of great significance to our knowledge base. This shows why it is vital that our subscriptions are paid on time so that we can continue in these endeavours.

There is another, important reason why the Treasurer needs to receive your subscriptions promptly. WDA has to order, and pay for, all the copies of our journal that we may need, whether or not we have received your subscription on time. This means that, if your subscription arrives late, the money we have for disposal may be reduced during the intervening period. When this happens, the financial assistance we can make available in grants for projects may be reduced, just because subscriptions were not paid on time. So please help us by being punctual in this important regard. Your next annual subscription should be with the Treasurer within two weeks of you receiving this newsletter. Renewal forms, including instructions for payment, are enclosed

Additional funding, often identified for conservation activities or sponsorship purposes, comes from those who are able to add a donation to their subscriptions, or who pass on contributions from other □systematize□s for lectures given or work done.

Thank you so much and please keep it coming!

WDA 2nd Biennial General Meeting held at Gällivare, Sweden on 24 July 2001

The full minutes of the 2nd BGM will be available on the Society's website and at the 3rd Biennial meeting in Australia in January 2003. If any member cannot access the website and would like to see a copy of the minutes at this time please contact the secretary (lindaaverill@hotmail.com). The following is an abbreviated version of the proceedings.

The 2nd BGM at Gällivare was attended by 42 members and chaired by Mike Parr, the outgoing president. Those present accepted the minutes of the 1st BGM held at Colgate University on 13th July 1999.

In his report the president paid tribute to Jill Silsby the outgoing secretary/treasurer, and to Henri Dumont who had completed his term as editor-in-chief of our scientific journal. The meeting was reminded of the importance of the research fund and how five researchers had received funding so far for important work worldwide. The sponsorship fund had also assisted nine members to date.

Reports were put forward by the officers:

Secretary (Jill Silsby)

- Current membership stands at 256
- Thanks to all who have contributed to the newsletter
- Thanks to Martin Lindeboon & Martin Schorr for the Odonatological Abstracts Service

Treasurer (Jill Silsby)

- No need to raise subscriptions at present
- Thanks to members who give additional donations of either money or services in kind
- Some of the members present indicated that they would like the option of paying by standing order or direct debit. The incoming treasurer will explore the possibilities

Journal Editor (Reinhard Jödicke)

- The Journal's publication schedule settled as: Issue 1 published at the beginning of the 2nd quarter & Issue 2 at the beginning of the last quarter of each year
- Plea for members to help by keeping up the flow of manuscripts
- An updated version of the 'Instructions to authors' to be published in the journal and on the website
- Thanks to the editorial board

Webmaster (Rob Arnold)

- New links added to the WDA website
- Creation of a password-protected site for the newsletter and the Odonatological Abstracts service; beginning in 2002, the webmaster will send the new username/password combination to regional representatives for transmission to local members as they join or renew their membership
- On line version of the newsletter containing full colour images
- 33,700 visits to the website since its inception in 1998
- Updating of site in progress following members' comments

National/Regional Coordinator (Hidenori Ubukata)

- National groups established in the UK & Japan, with Peter Allen and Kazunori Higashi having been appointed as the respective national representatives
- Proposal received from members in the US naming Vicky McMillan as their national representative (this proposal was carried at the meeting)

International Symposium Standing Committee (Gordon Pritchard)

- Next symposium to be held in Australia in January 2003
- 2005 symposium – an offer received from Spain to host the meeting at Vigo University

A motion from the president was distributed before the meeting to symposium participants regarding the collection of odonotological specimens. A wide-ranging discussion was undertaken and proposals were passed regarding the publication of an article in AGRION and a code of practice together with action being taken to circulate the newsletter article to Presidents and Directors of national organizations and institutions.

The current board was discharged and the newly elected members were formally welcomed. The new president, Philip Corbet, said "it is an honour to accept the presidency of the society" and that he looked forward to serving the WDA.

Next B.G.M.: La Trobe University, Australia, January 2003 (date & time to be announced). **Dorothy Gennard** Minutes Recorder

The Second WDA International Symposium of Odonatology – Philip Corbet & Mike May

The International Symposium of Odonatology held at Gällivare, in northern Sweden on 22 through 27 July 2001 served as the second such gathering of the Worldwide Dragonfly Association. The first WDA Symposium was held at Colgate University, Hamilton, New York in July 1999 and has been reported in *WDA's Agrion* 4(1): 5-7. At Gällivare the **venue** was the Folkets Hus, a modern public building close to the town centre. It was spacious and well appointed, and offered excellent facilities for meetings of all sizes. Accommodation was available in cabins about 2 km from the Folkets Hus and in The Grand Hotel close by. A valuable facet of the **organization**, widely appreciated by participants, was the extensive information about the Symposium, the town and its associated attractions, travel arrangements, accommodation etc. provided on the WDA website many months in advance. The Symposium organizers, Göran and Anna Sahlèn, had spared no effort to build a well balanced scientific programme, making provision for the oral presentations (about 30), informal talks (13) and posters (17), and a PHAON workshop on African Odonata (7 contributions). A popular component of the scientific programme was the Larval Workshop led by Dr Ulf Norling, the Swedish expert from Malmö University. Dr Norling's expertise was also exploited during the customary **Plenary Discussion Session**. In *conformity* with customary practice, the main theme for the discussion was chosen for its regional relevance, on this occasion "Larval ecology, with special reference to the effects of temperature on development." As a *departure* from customary practice, Dr Norling had kindly prepared two brief explanatory papers, "Survival strategies of dragonflies at high latitudes" and "Causes and consequences of cohort-splitting in odonate larvae". These papers, published in the Symposium booklet, provided background for his introductory remarks during which he highlighted focal points for discussion. This approach proved useful, and a lively and wide-ranging discussion ensued, extending to other topics, which arose spontaneously once the main theme had been explored. It is likely that a similar model will be adopted in future symposia. A severe test of the organization, which it miraculously survived, was the automobile accident that befell Anna Sahlèn and several participants on the first day of the Symposium. All were initially hospitalized, although mercifully none sustained serious, lasting injury. However, Anna, the co-organizer, was unable to attend any part of the Symposium, obliging Göran and his several assistants to manage in Anna's absence. This they did magnificently, despite the distracting burden of anxiety they all bore for the fate of the casualties.

The **presentations**, both formal and informal, attained a uniformly high standard and covered a satisfyingly diverse range of topics, being grouped under four heads: systematics, morphology & physiology (16 presentations), faunistics & ecology (5); ecology (5); and ecology, biodiversity & conservation (5).

Papers presented under **Systematics, Morphology & Physiology** included: neuroethology of prey capture in aeshnid larvae; velocity discrimination in the odonate CNS; imaging properties of the ocellar visual system; and the Odonata collection of the National Museum of Natural History, Leiden.

Contributions to **Faunistics & Ecology** included: Ceratopogonidae as parasites of Odonata; stadia of Odonata; the ecology of *Coryphagrion grandis*; and effects of flight outcome in *Calopteryx splendens*.

Ecology included: sperm displacement in Corduliidae; parthenogenesis in *Ischnura hastata* in the Azores; costs facing tropical dragonflies in high latitudes; survival and mating success in male *Libellula fulva*; population dynamics of *Calopteryx splendens*; and use of sub-fossil eggshells as indicators of post-glacial habitat selection in Europe.

Ecology, Biodiversity & Conservation included dragonflies of desert ponds; partitioning of larvae in fish-rearing ponds; Odonata along landscape gradients; methodology of monitoring; and effects of flood-control projects on Japanese Odonata.

The workshop on **African Odonata** featured satisfyingly diverse topics, ecological and taxonomic, and included a review of early contributors, and the past and present distribution of species in arid and sub-arid regions.

The **Poster Presentations** were diverse, well prepared and attractively displayed, covering topics ranging from philately and origami through a cladistic analysis of the Coenagrionidae to seasonal variation in heavy-metal accumulation and inferred antipredation effects of chemical cues and abdominal spines of larval *Sympetrum* as defences against fish.

The Symposium was attended by about 80 primary participants, some being accompanied by family members, from about 20 nations, including Australia, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Egypt, Finland, France, Germany, Hungary, India, Italy, Japan, The Netherlands, Norway, Spain, Sweden, Switzerland, U.K. and U.S.A.. The nation represented by most participants (16) was Germany. The **age-spectrum** of primary participants was heartening, extending, without obvious discontinuity, from undergraduates to retired academics. The age-spectrum of accompanying family members was wider still, extending from the recently born, through a cluster of good-natured, co-operative children to the usual array of lively partners and spouses. The **atmosphere** throughout was, as at Colgate, memorable for its warmth and friendliness and for its freedom from interpersonal conflict. There was general awareness among members of their good fortune in being able to interact in a congenial and constructive atmosphere.

The Symposium provided the opportunity for the Boards of Trustees, old and new, to conduct WDA business; and the Biennial General Meeting, chaired by Mike Parr, was well attended.

A Social Look at the Symposium – Beth Yingling & Jill Silsby

Almost exactly one hundred of us assembled in Gällivare – “old folks, young folks all the same, in that quaint old Swedish town” (adapted from “The Cornish Choral Dance”) The youngest was just a few weeks old – he was the most incredibly social baby of Dagmar and Georg Ruppell and proved the centre of attraction whenever he put in an appearance. The oldest was 80-year-old Ronnie Silsby who lapped up all the kindness he received from participants and enjoyed himself immensely.

Beth (a friend of the Olberg/Worthington family) writes: I’ve always loved dragonflies (and damselflies), their flight patterns and colors, particularly the way the sun makes rainbow colors in their wings. Growing up, our yard included a bog (actually, we called it “the swamp”), and so when it was warm and sunny, I regularly saw many of these lovely creatures. Beginning in kindergarten, I’ve had a great friend who explored the swamp with me, and the woods and small stream that ran between our houses, and enjoyed watching the dragonflies. Who knew this combination would result in spending a week above the Arctic Circle in Sweden....

Upon our arrival at Gällivare Airport on Friday morning (until then we didn’t know we were also entering the “Mining Capital of Europe”) we were welcomed by our warm and generous host, Göran Sahlén, who deftly handled our transportation to the Grand Hotel despite his wife’s very recent accident and hospitalization. Seven tired travelers then settled in at the hotel and tried to catch up on sleep after 10+ hours of flying overnight from the US. However, in late afternoon, in search of a functioning cash machine and dinner we first explored Gällivare: no mosquitos (good), no dragonflies (not so good).

Saturday morning we enjoyed our first sumptuous breakfast buffet at the Grand Hotel, with many tasty treats of cheese, fruit, fresh hearty breads, eggs, herring, meats, etc. We then meandered over to the Folkets Hus (very conveniently located) to register for the Symposium where we were again warmly greeted by Göran.

Mid afternoon on Saturday we decided to hike up Dundret Mountain, just outside Gällivare, to try out the restaurant located about two-thirds the way up and check out the view. By a small lake at the foot of the mountain we met other Symposium folks looking for dragonflies, and a few had been seen, but mostly from afar. We also encountered a few mosquitos, but not in sufficient numbers to discourage us from our goal. We trekked onward and upward, walking on some of the ski trails, then again on the road. The views were beautiful – forests, rivers, lakes; mountains in the distance and above us – and we noticed something else: it wasn’t getting dark....Dinner was delicious, and we tried various local specialties including reindeer, arctic char and cloudberries (served warm, over vanilla ice cream). Our walk down the mountain gave us even more spectacular views, but it still wasn’t getting dark.... (That night in our hotel room we noticed the inside of the window blinds were black – the better to keep out the light, still out there at 2 am)

On Sunday, we climbed on the bus for Field Trip #1, exploring forests, bogs, lake-edge, and river-edge near Gällivare – the first “official” search for dragonflies was on! Unfortunately, we didn’t find any, but we did find lots of cloudberries (sadly not yet ripe), many other interesting flora (and some fauna, including mosquitos, but we were well prepared with head-nets and repellent – forewarned is forearmed). The forests were lovely, with lots of delicate birches and aspens (or rather trees very much like them – I did not formally identify them), as well as various evergreens. Very lush growth everywhere, and also beautiful wildflowers. Not

prepared with rubber boots, the challenge was to balance on the hummocks of grass (or other vegetation) in the bogs, so as to avoid wet feet – some of us successfully met that challenge, others did not. (An obliging *Aeshna caerulea* settled on a rock close to the coach for a couple of hours and provided material for many a photographer – JS)

Then, late on Sunday afternoon, the official programme began. We boarded buses again, this time heading for Porjus. The Arctic Colors Gallery lived up to its name by providing a colorful display of magnificent photographs by Patricia Cowern - her photos of the northern lights were particularly striking, and the “Power Monument” outside was a creative and intriguing sculpture honoring all aspects of the immense project, both natural and manmade. A tour of the historic power plant followed which was also interesting: seeing the control room with its old marble gauges, learning about the Herculean effort it took to build and then the trip 50 meters below ground to see the generating machinery up close.

From the beginning, our guide that Sunday evening was full of fellowship, facts and fun, but he reached his peak when after dinner (enjoyed al fresco, under a beautiful blue sky with puffy clouds blowing by) we boarded a rustic train for Sjaunja, and the Mosquito Museum. Younger members of the Symposium were persuaded to don mosquito-protection garb (hat netting and long jacket, all in one) and to become our “guides” — and with their leader, what excellent guides they were! We watched for reindeer as we traveled through the vast Sjauna wetlands (but they succeeded in hiding from our view), eagerly awaiting arrival at the Myggmuseum (the only one in the world). We finally arrived, and what wonders awaited us – you must see it to believe it!

Monday’s special trip began in the late afternoon to the LKAB iron ore mine in Malmberget, and who should again be our guide but Mr. Mosquito Museum from Sunday’s trip; apparently mining is his “day” job. After changing from our street clothes into boots, hard hats and long protective coats our guide told us all about the history and technology of the iron ore mine and the mining industry in the area, including the cave-in, which split the Malmberget community in two. Then we boarded a bus to enter the mine. Amazingly, there are over 250 kilometers of roads underground throughout the mine: large tunnels twisting and turning, through intersections, uphill and downhill, all cut through the rock. We drove and drove and drove – much of the time in the dark, except for the bus’s headlights. The bus stopped briefly as we went below sea level, to see the mural painted on the rock tunnel wall – waves, boats and fish. We continued down, and about 15 or 20 minutes after leaving the surface (it seemed much longer!) we were 1,000 meters below ground. We saw automated drilling equipment (walked down one very dark tunnel to do so, and were glad the flashlights we’d picked up from the mining office above ground), and the computer equipment that monitored it everything (located in a trailer off the side of one of the tunnels, with LKAB employees monitoring the computers), 90 and 70 ton dump trucks, and an immense stone-crusher that worked all too efficiently. Dust, small stones and rock was everywhere, much of which was magnetic. Many of us started experimenting with the dust and stones to test the amount of magnetism (another time those flashlights came in handy because of the magnets on their sides). All this was not what I expected when I signed up for a Symposium on dragonflies, but it was all extremely interesting.

On Tuesday evening we again boarded our buses, this time for a visit to the Sami people of the Killingi Village, and a delicious supper (of smoked fish, cheese, including “coffee cheese,” all of which was very tasty) along side the Kaitum River waterfall. Again, we had excellent guides. On the bus ride to Killingi our guide told us stories of the Sami culture, and his life growing up with the reindeer. Once off the highway, we finally saw a reindeer running ahead of our bus on the road, and later, another one in some fields at the Village. Our first stop was in the Killingi Village at some sleeping huts where school children used to stay in winter when their parents were off tending the reindeer. We heard the history of the huts, and could walk inside them to see the reindeer-skin beds surrounded by fresh boughs. We were also greeted by some generous villagers who provided us with refreshments – a delicious sparkling beverage flavored with juniper berries, and antler baskets chock full of cloudberries (these ones were ripe, and delicious!). We then travelled a short distance to a small chapel built in honour of Dag Hammarskjöld (who we were told vacationed regularly in the area), and then on to the raging waters of the Kaitum River waterfall where we enjoyed our supper and the views. At a few minutes before 10 pm, the sun was still well above the horizon and making the sky over the riverscape particularly beautiful.

On Wednesday’s Mid-symposium tour, we travelled even farther north to the high mountains at Nikkaluokta, again with the hope of finding dragonflies. Alas again, the findings were few because the weather did not cooperate. Upon our arrival it was drizzling (although that didn’t prevent the mosquitos from appearing), and before long, the drizzle became a downpour. We managed to hike a bit, despite the rain, but cut it short because we were getting too wet and cold. We took advantage of the heat and warm beverages provided by the café, and once warmed up enjoyed the exhibit of the beautiful tapestries there (and the gift shop). The sun finally came out an hour or so before we had to return to Gällivare, and then we had glorious views of the mountains and snowfields.

Even with all of these side trips I still managed to attend some of the Symposium sessions, which I also enjoyed. The presentations I saw and heard were very interesting and informative. I also enjoyed the poster session, and especially making an origami dragonfly (under the instruction of a very patient teacher). As an outsider and dragonfly neophyte, I felt welcome and, by the end, not too much of an interloper after all. Thanks to the WDA for being willing to take all comers and especially to Göran Sahlén, who put together such a great program and, even under trying circumstances, was the consummate host.

Jill writes: I must add a few words to Beth’s account of alternative activities during our week in Gällivare. She mentions the mid-symposium tour: a handful of us had elected to travel by helicopter high up onto a mountain plateau. It was bitterly cold – as Beth says, the weather was FOUL – but very beautiful. We saw big herds of reindeer, a single lemming, and a skua flying at an even greater altitude than ours but it was hard to envisage any member of the Odonata surviving in such a harsh habitat. Aki Sasamoto painstakingly searched the marginal growth in the mountain tarns but he found neither larvae nor exuviae – However, Louise Ward found a fragment of an anisopteran wing, to prove they did manage to survive in this magical, harsh environment of the high fells. .

The Symposium through Japanese Eyes – Akihito Sasamoto

The 3rd WDA Symposium in Sweden gave me my first opportunity to travel in Europe and, thanks to the nice members, I had an extremely pleasant and precious experience – especially during the Post Symposium Tour in southern Sweden. We not only saw wonderful scenery and enjoyed delicious meals, but I also encountered many European odonates, most of which were unfamiliar to me, living as I do in Japan.

Japan and Sweden are situated far from each other in the east and west of the Eurasian landmass, however, we sometimes share same species, or, if different, related subspecies or replaced species. I would attempt to state below what I noticed about such species, which I observed in the field and compared with Japanese related ones after home returning.

Of the genus *Calopteryx*, which is one of my favourites, we have three species (*atrata*, *japonica*, *cornelia*) in Japan. *Japonica* is said to be closely related to *virgo* and was once placed as the subspecies of the latter, so I had long been eager to observe living *virgo*. In Japan *japonica* is not so common as it only inhabits clear streams, while in Sweden *virgo* doesn't seem so uncommon because we found it even in stagnant ditches in the suburb of Uppsala. When I compared dried specimens of both, I found their differences are distinct. Compared with *japonica*, in *virgo* the sternites of the male distal abdomen is pinkish, (*japonica* whitish), the tip of wings more rounded, the body length much smaller; and female pseudostigma is smaller, about 1/3 of *japonica*. Though I don't know how *virgo* species changes through the Eurasian landmass, I can't really believe they should ever have been placed as subspecies.

Leucorrhinia dubia dubia was present in a marsh near our cabins in Gällivare. *L. dubia orientalis* is distributed in north and high mountains of central district of Japan. They are sometimes dealt with as different species, but at other time as the same species. As far as I observed, their inhabited environments are not different. When compared with dried specimens, the shapes of male hamule and body size are similar to each other, but the red dorsal abdominal spots are located on segments 5 to 7 in nominotypical *dubia* while only on 7 in *orientalis*. Except for this marking pattern I think that they may be very close.

Another species we found around our cabins was *Aeshna juncea*. *A. juncea* species are, according to Belyshev's "The Dragonflies of Siberia Vol.1(2)" (1973), separated into 5 subspecies. But, so far, their morphological differences have not been discussed sufficiently. In fact *juncea* specimens I met in Gällivare were so different in appearance to Japanese *juncea* that I didn't recognize them as the same species until I was taught so. The specimens from Gällivare, compared with Japanese *juncea*, are of smaller size and have finer stripes on the side of thorax, but have much more conspicuous beautiful markings on the abdomen. In particular, those of 10th segments of Gällivare *juncea* are beautiful bluish spots, while those of Japanese *juncea* can hardly be found. I am very interested to know how *juncea* species appear in intermediate regions. By the way, perhaps due to cooler climate, I was surprised that Swedish aeshnids often sat on the ground or the trunks of trees, a behaviour rarely seen in Japan.

Finally I would write on *Somatochlora metallica*. This species has several related species in Eurasia, and has in Hokkaido, replaced *japonica*. *S. metallica* is slightly larger and more robust than *japonica*. Though appearances of male caudal appendages of both species are similar, body colorations are quite different; the body of *metallica* is bright metallic green, while that of *japonica* is darkish metallic, and colour of stigma of *metallica* is much brighter brown than that of *japonica*. Once Koyama (Bull. Hokkaido. Odon. Soc., 3:14-15, 1989) discussed the differences between these two species, saying in the articles that they are easily distinguishable, and that it was very difficult to justify their relationship due to insufficient knowledge of the complicated subspecific relations in Russia. I also think so, after comparing the two species together.

Anyway it was really good for me to have the opportunity to reconsider Japanese species from a new viewpoint by encountering European species. Moreover I made many kind friends and had a very good time. Thank you, everyone.

The Post-symposium Tour – Jill Silsby

Twenty of us travelled down to Stockholm by air, road or rail, all of us eventually meeting up beside a couple of mini-buses that were to be our mode of transport for the next couple of days. There were NO MOSQUITOS. It was to be more of a cultural experience than an odonatological one and it was one that was enjoyed by every one of us. The only fly in the ointment was the absence of Anna Sahlén who was still not fit to accompany us.

An expedition that particularly interested me was a visit to the Royal burial-mounds in Old Uppsala. Egypt has its pyramids, England has Stonehenge and Sweden has these mounds, which were built approximately 1,500 years ago for the kings Aun, Egil and Adils. They have provided excitement, history and legend for countless generations of Scandinavians and one of the leading 17th century scientists, Olof Rudbeck, "proved" that the Uppsala mounds were the main seat of power for the sunken civilisation of Atlantis! Spectacular finds have been dug up and the mounds were important symbols for the Vikings, representing a golden bygone era when the Ynglinga dynasty (who worshiped the God Freya) was the leading royal family in Scandinavia.

And, talking of Vikings, our visit to the Viking Museum provided us with another fascinating couple of hours. To Europeans and those of European stock, the Vikings were fierce invaders who wore horned hats and pillaged the surrounding countryside. In the Museum we learnt that, while they are best known for the long voyages they undertook in their uniquely designed ships which carried them to four continents, only a few actually took part in the voyages – most were peaceful peasants and artisans pursuing their trades at home. They had a strong culture behind them and artefacts, clothing and jewellery were of extremely high quality.

We covered many miles and visited many fascinating places; we fed well, slept well and much enjoyed each other's company

This brings to an end the accounts of our doings in Sweden – now we must begin saving up for the Third WDA Symposium which will be held in Australia in just about a year's time – January 2003.

Leiden, The Netherlands - 1 - 3 June 2002

The third European Regional Meeting will be held in the National Natural History Museum "Naturalis" in the historic university town of Leiden. We invite everyone interested in dragonflies to attend, including those that are not members of WDA. It should be remembered that these Regional Meetings are intended as informal get-togethers of odonatists living in a particular region or country, to encourage the cementing of friendships and the exchange of a more regional type of dragonfly information.

Leiden

Leiden, positioned between Amsterdam and The Hague, is a small town with an academic atmosphere: besides accommodating the country's oldest university, it is home to the national museums of natural history, botany, archaeology and ethnology. Founded on an island in the Rhine, girdled and dissected by canals, the historic centre has old churches, academic buildings, windmills, a fortress and a botanical garden. In fact, Leiden boasts more monumental buildings than any other Dutch town, save Amsterdam. Leiden lies close to the North Sea in a triangle of typically Dutch landscapes: coastal dunes to the west, flower bulb fields to the north and green meadows ("polders") to the east and south.

Programme

The programme will consist of two days at the museum and one in the field. The excursion will go to the Kromme Rade and the Oppad, two footpaths through a habitat that is difficult to characterise for a non-Dutch audience. Known as "laagveen", which could be translated as "lowland mire" or "low peat moor", this is an area where peat has been partially extracted and where a mosaic of water, marsh and forest has formed. Species like *Aeshna isoceles*, *Brachytron pratense* and *Libellula fulva* will be abundantly present, the diligent may find *Aeshna viridis* larvae. The day will end with a meal of Dutch bread, meat and cheese. This will be enjoyed in the barn of the farm where the food is produced (and where you may pat and feed the sheep, goats, pigs and cows responsible!).

Please note that it is not possible to visit the rich odonatological collections of the museum during the meeting. If you wish to visit them before or after the meeting, please contact Jan van Tol (tol@nnm.nl). Presentations will be held at the museum. This will include two special sessions, one on European collaboration among odonatologists and one about colour polymorphism. If you have a particular interest for either, please contact their chairmen Robert Ketelaar for European collaboration (robert.ketelaar@vlinderstichting.nl) and Niels Dingemans for colour polymorphism (dingemans@cto.nioo.knaw.nl).

Costs

The meeting will cost approximately 40 Euros. Payment will be made during the meeting. The fee includes Registration, the excursion and dinner after the excursion. It does not include other meals. Prices of accommodation are provided below.

Accommodation

Three types of accommodation are available: hotel, guesthouse and private. Accommodation is scarce in Leiden and we have therefore reserved rooms. These must be booked individually BEFORE 1 March 2002 by those attending the meeting. Prices include breakfast, but not the 2 Euro tourist tax per person per night. Mention "WDA" when booking. The number of reserved rooms is limited, so try to book as soon as possible.

Double rooms with private bathroom, either with one double or two single beds, are available at Hotel Nieuw Minerva in the heart of Leiden's old centre. It is on the waterfront of an ancient branch of the Rhine, along which the city was founded. The double rooms cost 115 to 125 Euro per night. Please indicate whether you are willing to share a double room with another participant. Address: Hotel Nieuw Minerva, Boommarkt 23, 2312 EA Leiden. Telephone: +31-71-5126358. Fax: +31-71-5142674. E-mail: hotel@nieuwminerva.nl

Single rooms and double rooms with two single beds, are available at the guesthouse Pension Witte Singel. The Witte Singel is part of the canal that demarcates the border of the old town. The guesthouse is further from the museum than the hotel, but the walk takes you through the historic centre. Doubles cost about 58, singles 31 Euro per night, depending on whether you have a private or shared bathroom. Please indicate if you require a private bathroom and if you are willing to share a double room with another meeting attendant. Address: Pension Witte Singel 80, 2311 BP Leiden. Telephone: +31-71-5124592. Fax: +31-71-5142890. E-mail: wvandriel@pension-ws.demon.nl

For those unable to afford either, the organisers have limited capacity available at their homes. This is rather basic and you must bring your own sheets. It is free of charge though. Please contact us if you would like to stay here.

Registration

If you wish to attend the meeting, please register before the 1st of May 2002, preferably by e-mail. Send your name and address to kalkman@nnm.nl or to the postal address below. Please indicate if you wish to give a presentation. Make sure to arrange accommodation yourself.

See you in Leiden!

KD Dijkstra (dijkstra@nnm.nl) & Vincent Kalkman (kalkman@nnm.nl)
EIS-Nederland, PO Box 9517, 2300 RA Leiden, The Netherlands

N.B. Please note that this will be the only announcement of the forthcoming European meeting because the next issue of AGRION will appear AFTER the event!!

Editor.

.....

Networking for the conservation of dragonflies

— Robert Ketelaar

Throughout Europe, a number of organisations and institutions coordinate conservation work on dragonflies. Activities of these organisations include one or more of the following:

- A national or regional database of records of dragonflies
- Preparation of a Red List
- Consultancy of public institutions and nature conservation bodies
- Conducting applied research on the ecology and conservation of dragonflies.
- Education of children or the broader public.

The nature of these organisations is very diverse. In some countries these activities are coordinated by NGO's (e.g. Great Britain, The Netherlands), decentralised and coordinated by regional governments (e.g. Germany) or coordinated by private persons or a small group of individuals. In most countries, the last point mentioned is the case. Until recently, there was no cooperation between these organisations. This not only inhibits mutual sharing of knowledge but also hampers European cooperation on the conservation of dragonflies.

During the European meeting of WDA in Leiden, a workshop will be held to explore the current activities and involved organisations around Europe and to discuss possible future projects. I would welcome especially representatives of those organisations with activities as described of individual coordinators from countries where this type of organisations does not exist.

The Dutch Butterfly Conservation will prepare this workshop and will prepare a report with datasheets on each country or decentralised part with organisation involved in dragonfly conservation, contact persons, activities and publications. This report will serve as a first step towards a European network for the conservation of dragonflies.

More information: Robert Ketelaar, Dutch Butterfly Conservation robert.ketelaar@vlinderstichting.nl

A Message from the National/Regional Coordinator

— Hidenori Ubukata

At the second Biennial General Meeting at Gallivare, Peter Allen (U.K.), Kazunori Higashi (Japan) and Vicky McMillan (U.S.A.) who had been officially appointed by me were proposed as the National Representative of each country and ratified unanimously. I'm glad we now have three Representatives from the countries with relatively large numbers of members. I hope more countries and regions will choose their own National/Regional representatives by December 2002 to be approved by the next BGM in Australia. One of the aims of our Association is to conserve dragonflies and their habitats, for which the establishment of local networks within a country/region as well as worldwide is very important. National/Regional Representatives would act as the nodes connecting national/regional networks with worldwide ones.

Another important function of Representatives is to collect subscriptions in their own currency and transfer them to the Treasurer of the Association. In certain countries there have been 'unofficial representatives' who have played this role since the establishment of the Association. Establishment of an official Representative will guarantee the continuation of this role and would decrease the ratio of late payers of subscription.

It has become easier to communicate with each other through the development of electronic mailing systems so I recommend that members without national groups/representatives should start now discussing about them. And then, if your country/region succeeds in nominating a person as your representative please contact me with a view to obtaining my official appointment before ratification in the 2003 BGM

e-mail: ubukata@kus.hokkyodai.ac.jp

NEWS from MEMBERS

Viola Clausnitzer (Germany) spent nearly two months in Tanzania, returning in November "with lots of interesting records and specimens".

Tom Williamson (France) writes: "I have just officially become co-administrator of the Pays-de-Loire regional group of the French association SFO. It concerns the southern part of Brittany, north and south of river Loire estuary: very nice areas for Odonata (we have at the moment found up to 54 species in the Loire-Atlantique departement, the French equivalent of a county in UK). We are now focusing on the study of larvae and exuviae research, especially on gomphids, which are large rivers dwellers. Our local group also has an email address: sfo-pdl@voila.fr Anyone interested in 'odonating' in this part of France, can get information from us before coming, through this email address."

Anax parthenope in St HELENA – Graham Vick

I would like to place on record a female specimen of *Anax parthenope* Selys, 1839 (GSV det.) which was caught on the Atlantic island of St Helena. The specimen was given to me several years ago by Prof. Philip Corbet, who obtained it from Dr P. Ashmole of ICAPB University of Edinburgh. The data are: PA36 BURQUE' 10/89 – i.e. Oct. 1989, but I cannot identify the site information.

This is a most interesting record of a species with a predominantly Palaearctic distribution, which includes of course North Africa, but it is surprising to find it so far south. The specimen is mature and in good condition apart from wing tip damage on one side which appears to have been caused by its capture or storage before death. The identification has been carefully checked.

Past records for St Helena are of *Sympetrum dilatatum* Calvert, 1892 – the “St Helena dragonfly”, believed extinct, a very large endemic member of the genus with hindwing length 34-36mm (RIS, 1911), compared with typical values for *S. striolatum* of 28mm.

I wonder if any readers have comments about this unusual record for *A. parthenope*?

.....

SOME ACTIVITIES in NEW GUINEA – Matthias Hartung

After the reunion in Germany I was asked by Prof. Guenther Peters (Mus.Nat. Hist., Berlin) to help a society in Leipzig with identifications of Odonata from one or two tropical areas. This society (Phyllodrom e.V.) is founded to protect the rain forest in tropical countries. The first activity was Indonesia with Sumatra and some countries of South America. Later the society changed its activity to New Guinea. So I have got a lot of Odonata specimens from New Guinea since 1997. These specimens were collected in Irian Jaya and Papua New Guinea. 1999 this society has held a workshop on rain forest science, mostly regarding New Guinea and the tropic South East Asia in the University of Leipzig with lectures on the human history, the culture and art of the Papua New Guinea. There I held a lecture on the zoogeography of the Odonata in New Guinea. A small paper on this lecture was published later (HARTUNG, M. (2001): “Zur Zoogeographie der Libellen (Odonata) von Neuguinea”. Phyllodrom-Journal. Proceedings of the Symposium on Rain forest Science, 23./24. Oct. 1999, Ampyx-Verlag Halle, ISBN: 3-932795-12-1: p. 63-69; German with English summary.

Recently it has been impossible to visit Irian Jaya because of the political situation. Therefore, in the near future members of the Phyllodrom will look for Odonates mostly in Papua New Guinea only and surrounding islands. In the last month I have held again a lecture in Leipzig on preparation methods of Odonata regarding tropic conditions. I hope that more of this rare material will be preserved in the future.

Starting in 2000 I have built a home page on Odonate projects, including my New Guinea project (<http://odonata.hartung.1xu.de>). I have included all my slides, which I presented during the New Guinea lecture. In the last few weeks I have reconstructed this website and included many more pictures. Among them are microscope pictures of an undescribed female of *Arrhenocnemis amphidactylis* (Megapodagrionidae). This is a remarkable species with big horns on the thorax in front of the wings – in the females as well as in the males. The Odonate fauna of New Guinea is very interesting, many species possess unique anatomic details and several are endemic to the island. The rich biodiversity of this island should be protected as a unique developing region of Odonata.

.....

REMINISCENCES

As I said in the Editorial, the next issue of *AGRION* will hopefully feature members' reminiscences – so please let them flood in!! A couple of months ago I was speaking to Allen Davies on the phone and mentioned this idea. I asked him if I could include three of the tales he sent me for inclusion in my recently published “Dragonflies of the World” that were in the end omitted by the publishers. They typify the sort of thing that I hope you will all send me. Here they are, as an appetite whetter!!

Allen Davies graphically describes his visit to the Himalayas in the hope of finding E. laidlawi. After struggling through bamboo forests and finally emerging above the cloud and rain level, he achieved success in two places: one not very far from Darjeeling at 3500m and the other on the Nepal/India border, at around the same altitude. He describes his first sight as follows: “we found a clearing where, to our amazement, several Bleriot-like, not very manoeuvrable dragonflies circled about the treetops, looking like E. superstes but with much longer bodies and a wingspan of 66 mm.” He concludes: “It is food for thought that this old relic chose nearly half the height of Everest to escape our attentions for so long – and we believe that the species is not threatened.”

On p.127 of Dragonflies of the World, E. superstes is shown clinging to the trumpet of a daffodil in an English garden and hereby hangs a tale. The insect was observed flying beside a stream on the east side of Japan's Mt. Fuji on 12 April 1995. It was captured by the observer, placed in a matchbox and transported by air to England. A week later, on April 19th, the matchbox with its contents was presented to Allen and accepted as a very welcome gift – it was a fine specimen. The two dragonfly enthusiasts were examining the ‘corpse’ when it was seen to twitch a leg and, a minute or two later, it became obvious that the dead specimen was very much alive. Allen's partner was dispatched to pick “something from the garden” so that the exotic visitor could be photographed without delay – she came back with the daffodil!

The following tale, again from Allen, is interesting: “in 1983, we sought shelter for the night in NE New Caledonia and found a small hostel with a bar. On the landlord enquiring where we were going, we indicated a waterfall high up on the forested mountainside and explained we were looking for a particular type of les libellules, which we described. He recommended the best way through the forest and added he would have caught some for us by the time we returned. On our return we found a row of ten inverted beer glasses on the bar, each with a Gynacantha inside – of three different species, one of them being a new species for the Island and previously thought to be confined to Australia”. The explanation, apparently, lay in the fact that when these species want to rest they choose a branch from which to hang: the windows of the bar were of the horizontal slatted variety and “their perch-seeking behaviour led them directly into the bar.”

.....

Reprint of Corbet's 1999 book on dragonflies

Philip Corbet

In 2001 the book was reprinted by Cornell University Press. I was unaware beforehand that it was going to be reprinted. Curiously, the reprint is not designated as such, but differs from the original 1999 edition in having a black cover, not a pale grey cover (as in the CUP edition) or a dark blue cover (as in the Harley Books edition), and in having at the bottom of page iv a paragraph referring to the WDA website. The reprint bears the same date (1999) and the same ISBN number (0-8014-2592) as the 1999 edition. In the 2001 reprint most of the corrigenda listed on the WDA website have been incorporated. Those corrigenda that have *not* been incorporated in the reprint have been marked in the corrigenda now on the website with an asterisk (*). With very few exceptions, all corrigenda have been incorporated up to and including those added on 4 December 2000.

.....

Reviews.

Dragonflies of Indiana – James R. Curry. 2001. Indiana Academy of Science. ISBN: 1-883362-11-3 (hardcover). Author's address: Biology Department, Franklin College, 501 E. Monroe Street, Franklin, IN 46131-2598.

This robust, handsome volume treats only Anisoptera, a reminder that the pre-empting of the name 'dragonflies' to denote Anisoptera rather than Odonata can have misleading consequences. To remark upon this, however, is not to criticize the book because its title, according to modern convention, is consistent with the author's practice of using common names (together with their scientific equivalents) throughout. Although the author's stated aim was to produce a 'field guide', the weight, size and quality of paper in this book make it inappropriate for field use. The printing, both of photographs and text, is indeed of the highest quality. The text is commendably free of typographical errors.

The identification keys are models of simplicity, and enable the reader to proceed smoothly from family to species. Within each family and genus, species are presented in alphabetical order of generic and specific name, respectively, making it straightforward to locate any species simply by leafing through the pages. The book focuses on adults; larvae are keyed only to family. Each of the 97 species recorded from Indiana is described on two facing pages, one accommodating two beautiful and highly informative colour photographs (taken from different angles), and the other a distribution map for Indiana, a calendar chart showing the position of the flight period, and text entries devoted to recognition, size, flight season in Indiana, status (common, rare etc.), description, habitat, behaviour, and range (beyond the State). Some statements in the text are supported by citations to the 65 references in a useful bibliography near the end of the book. An index to taxa and topics concludes the work. The bibliography is preceded by a separate section listing ten (general) reference books on Odonata.

The book begins with nine brief chapters introducing the reader to topics likely to be of special interest to odonatologists, e.g. the history of dragonfly biology in Indiana, anisopteran anatomy, life cycle, conservation, collecting, preservation of specimens, classification, and photography. All are concise and informative. What the author has to say in the chapters on collecting and conservation could usefully be required reading for all field entomologists. Many will endorse the author's statement (page 24) that "The only way to conserve dragonflies is to maintain habitats suitable to their needs." A glossary occupies three and a half pages. The entries are on the whole concise, accurate, and useful. Some might quibble at the definition of thermoregulation, which confines endothermic warming to wing-whirring by the perched dragonfly: endothermic warming can occur also during, and as a result of, flight. Hence the frenzied flight style of fliers during cool weather. Some readers (including the late Philip P. Calvert, 1929: 233) would prefer the term 'exuviae' to represent the plural form of 'exuvia.' Also not everyone would include the maiden flight as 'emergence.' These comments relate to trivia in what is a beautiful book, distinguished by its economy and elegance. Besides being an essential companion for odonatologists in Indiana, it would grace the library of any odonatologist. In content and presentation I regard it as a model of its genre.

Philip S. Corbet. 2 October 2001

Dragonflies of the World. – Jill Silsby. 2001. CSIRO Publishing, 150 Oxford St., PO Box 1139, Collingwood, VIC 3066. ISBN 0 643 065121. (For Australasia, Africa, & Asia): Natural History Museum, Cromwell Road, London. ISBN 0 565 09165 4. (For UK, Europe & North Africa): Smithsonian Institution Press, Herndon. ISBN 1560989 599 (for the Americas). (hard cover). 216 pp. Author's address: 37 Astoria House, 116 High Street, Purley, Surrey. CR8 2XT, UK.

By any measure this is a truly remarkable book — remarkable in its conception, and remarkable in its accomplishment. The author's stated aim has been to produce, for experienced zoologists as well as interested amateurs, a text describing the "unique attributes of dragonflies in general, the distinctive features of individual families and subfamilies, and the incredible variety of these lovely, ubiquitous insects..." The author's approach has been to assemble a wealth of information about the biology of Odonata and to present it against the broad canvas of the world fauna within the template of taxonomy and systematics. Despite being a relative newcomer to odonatology, she has achieved her aim very effectively, producing a book that deserves a central place in the library of any odonatologist. As Dr Mike Parr, former President of the Worldwide Dragonfly Association, remarks in the Foreword: "There is no doubt that this book will intrigue and stimulate many readers who, while interested in natural history and in dragonflies particularly, had no general text to help them identify, at least to the family and subfamily levels, odonates seen anywhere in the world." In producing this book, a Herculean task, the author has achieved her goal: to produce a single volume that would list,

describe and illustrate representatives of Odonata from every major taxon and every part of the world. Odonatologists have needed such a book for a long time.

After the Foreword and Preface, there are 12 chapters, each devoted to an aspect of odonate biology. Five have been written by guest experts, namely: Georg Rüppell (flight), Peter Miller (colour), John Trueman (evolutionary riddles), Stephen Butler (captive rearing) and Norman Moore (conservation). Eight other specialists have contributed sections within chapters. There is a useful Glossary, a list of dragonfly societies, two brief bibliographies (featuring acknowledged sources and further reading) and Indexes (to species and to topics).

An outstanding strength of the book is the panoply of fine photographs, predominantly by the author, but with contributions from 27 other people. Four other odonatologists have contributed drawings and diagrams. The photographs, depicting larvae as well as adults, are arranged according to topic and (in Chapter 9) taxonomic sequence.

Having regard to the author's stated aim, the book's kingpin is the longest chapter (9), entitled "Odonata around the world" in which the structure and biology are described of all 73 subfamilies of Odonata. Verbal descriptions are amplified by informative and arresting photographs, some being of preserved specimens, but most being of living ones. Many photographs illustrate habitats, thus greatly enhancing the reader's interest.

The text contains a wealth of interesting information about odonate biology. To assemble and systematize such diverse material must have been a daunting task. In presenting it, the author has departed from conventional practice in the way she cites sources: the source mentioned tends to be the person from whom she gleaned a fact rather than the author who first reported it. This somewhat quaint approach reduces the book's value as a secondary source and may sound a jarring note for the scientific reader, but it is not difficult to understand why the author adopted it. Had she attempted to unearth and cite primary sources, her book might never have been written, and odonatology would have been much the poorer as a result! This departure from convention means of course that many facts reported cannot be traced to source or verified. For example, giving a source for the statement on page 20 that the deep-burrowing larva of *Lestinogomphus africanus* carries a respiratory siphon 60 mm long would have allowed the reader (and the author) to ascertain that the species concerned is actually a species of *Neurogomphus* and that its siphon is less than 20 mm long.

Coverage of information is on the whole commendably balanced and accurate although, inevitably in a book of this broad compass, there are weak patches. These mainly reflect attempts at generalization. For example, the account of migration (in Chapter 3) and the definition of this term on page 27, do not adequately reflect current understanding of this phenomenon. Likewise, the impression given that there is consensus regarding the function of auricles is misleading: discussions of this topic at several international symposia have been long, active and inconclusive! The distinction between the final stadium and metamorphosis (page 23) is not clearly drawn, and the definition of the term 'diapause' (page 199) obscures, rather than clarifies, the accepted, necessary distinction between diapause and quiescence.

The book, both text and illustrations, is beautifully and stylishly produced and consequently is a pleasure to use. The layout makes excellent use of the large page size (22.5 x 25.5 cm). The text is commendably free of typographical errors (giving it immediate, premier status among most books published nowadays) although the spelling of 'cordulegastrid' seems to have escaped the proof-reader's eye enough times to be noteworthy.

To summarise: this book is a *tour de force* of which the principal author, the contributors (of text & illustrations) and publishers can be unreservedly proud. It stands as an impressive testimony to Jill Silsby's skill, vision, determination and capacity for sheer hard work, and she deserves the admiration and gratitude of all odonatologists for having conceived this worthy project and seen it to completion. If I didn't already possess it, this book would be my first choice for my next Christmas or birthday present.

Philip S. Corbet. 13 November 2001

.....

Please don't forget to send me contributions for next issue's "REMINISCENCES". I'd love another BUMPER number

WDA has its roots in Slovenia but its branches spread all over the world. Our membership, as we go to print, is 262 and we have members in 35 countries

WORLDWIDE DRAGONFLY ASSOCIATION

Membership Application & Subscription Renewal Form

I/We wish to join/renew membership of the above Society and enclose cheque, postal order or other proof of payment (Note 4) to the value shown below:

Membership, 2002

Single (WITH Journal)	£30;	US \$52;	Euro 50;	Yen 5,500
Single (WITHOUT Journal)	£13;	US \$23;	Euro 22;	Yen 2,400
Family (WITH Journal)	£40;	US \$68;	Euro 67;	Yen 7,400
Family (WITHOUT Journal)	£23;	US \$40;	Euro 38;	Yen 4,200
Student (WITH Journal)	£22;	US \$38;	Euro 36;	Yen 4,000
Student (WITHOUT Journal)	£5;	US \$9;	Euro 9;	Yen 900
Affiliated Society	£42	US \$71	Euro 70	Yen 7800

Donation to General, Conservation, or Sponsorship Funds: £; US\$; EuroYen

(If you have a preference, please underline the preferred Fund)

TOTAL: £.....; US\$; Euro; Yen

NAME (In upper case please)

ADDRESS

Date: Membership Number **E-mail**

In order to obtain access to WDA's password-protected pages on our Web site, you should enter your email address above. The Site contains Odonatological Abstracts and an enhanced version of AGRION!

Members without access to the Web or who are unable to download long documents may obtain hard copies of the Abstracts by placing an "X" in the box but, in order to save postage, it is hoped as few people as possible do this.

NOTES

1) Cheques, etc should be made out to "Worldwide Dragonfly Association".

2) Subscriptions run from January 1st to December 31st.

3) **U.S. Account** (No. 30103204) is with Oneida Savings Bank, Hamilton, NY 13346

U.K. Account (No. 01048068) is with Lloyds TSB, 942 Brighton Rd, PURLEY, Surrey CR8 2XD (Sort Code 30-91-72);

German A/c (No.429403 041) is with MAINZER VOLKSBANK (BLZ 551 900 00), Im Borner Grund, D-55127 Mainz

4) Subscriptions should be paid as follows:

(i) **US members** - by US\$ check OR direct into US Account (see Note 3 above)

(ii) **EMU members** - should pay in Euros, directly into the German account (see Note 3 above)

(iii) **Japanese members** - by Yen Postal Transfer, as requested by Prof. Ubukata. Postal transfer number is 02750-5-6919; name of remittee is Hidenori Ubukata

(iv) **UK members & all others**- by sterling cheque or GB£ banknotes, or by International Money, Postal Order, Intl. Money Transfer

5) Completed forms (with cheques if relevant) should be sent to:

(i) **U.S. Members:** Dr.Vicky McMillan, Dept. of Biology, Colgate Univ., 13 Oak Drive, Hamilton, NY 13346-1398

(ii) **EMU Members:** Dr. Wolfgang Schneider, Hessisches Landesmuseum, Zoologische, Abteilung, Friedensplatz 1, D-64283 Darmstadt, Germany

(iii) **Japanese Members:** Prof. Hidenori Ubukata, Dept. Science Edn., Hokkaido Univ. of Education at Kushiro, Shiroyama 1-15-55, Kushiro, 085

(iv) **All others, including UK members:** Dr Dorothy Gennard, Dept. of Biological Studies, Univ. of Lincoln, Brayford Pool, Lincoln LN6 7TS, UK.

NB If renewal subscriptions are not received within two weeks of receiving this form (10th February 2002 at the latest), a surcharge of £1 (or equivalent) will be levied

However your subscriptions are remitted, it is vital that ALL bank charges are pre-paid by the sender.

Please place an "X" in this box if you are not willing for your name and address to be held on a database or published in AGRION as a member of WDA.