

EDITORIAL

Thank you to everyone who wrote telling me how much they enjoyed "Our beautiful Dragonflies" number. I thoroughly enjoyed putting it together and I am very grateful to all those who contributed. We'll have another theme number before long!! As it happens this number could well be another Africa issue but this is entirely coincidental – it just so happens that almost every contribution I received had an African flavour!

2nd BIENNIAL GENERAL MEETING of W.D.A.

The second Biennial General Meeting of the Worldwide Dragonfly Association will be convened during the 2nd W.D.A. International Symposium of Odonatology, and will be held at Gällivare, Sweden on Tuesday 24 July 2001 in the Gällivare Folkets Hus.

BOARD of TRUSTEES

There being no further nomination forms returned, the new Board will consist of:

President: Philip Corbet (UK) (at present: M.J Parr)
Vice President: Mike May (USA) (May@AESOP.rutgers.edu) (at present: P.S. Corbet)
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Pantala Editor Reinhard Joedicke (Germany) (no change – co-opted 2001)

Webmaster Rob Arnold (USA) (rarnold@mail.colgate.edu) (no change)

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Schneider)

National Groups Coordinator Hidenori Ubukata (Japan) (no change)

Symposium Coordinator Gordon Pritchard (Canada) (gpritchard@ucalgary.ca) (no change co-opted 1999)

Conservation Officer Robert Ketelaar (Netherlands) (whydah@wxs.nl) (no change – co-opted 1999)

The present Board retires at the end of the Biennial General Meeting in July and the new one will take over.

The INTERNATIONAL JOURNAL of ODONATOLOGY (PANTALA).

It was not easy to produce a scientific journal for a completely new international society. At the time PHOENIX (later Worldwide Dragonfly Association) was founded in 1997 there were only a handful of members and no manuscripts at all! Everything had to start from scratch and of COURSE it was not perfect to begin with: how could it be? The new journal had teething problems but, thanks to the unstinted efforts of publishers (Backhuys), Editor (Henri Dumont - how LUCKY WDA was to have him), Editorial Board & reviewers as well as others who gave so much of their time and experience in order to iron out problems, Pantala is now a journal of which we can be justifiably proud.

Towards the end of the year 2000, after Volume 3 (2) was published, Henri decided that pressure of work made it impossible for him to continue editing Pantala and he asked to be relieved. With reluctance, the Board of Trustees accepted his decision and set about finding a replacement. Again we were so lucky. Reinhard Joedicke,

due to ill health, found he had an enforced vacuum in his working life that he wanted to fill. With the promise of his wife Monika's support, he offered his services to WDA and the Board was delighted to accept the offer.

The handover was made; Backhuys & Reinhard have forged an excellent rapport; Henri was able to provide Reinhard with a good number of MSS. in varying stages of readiness and Volume 4 (1) was published in April 2001. However, like editors of scientific journals the world over, Reinhard can never have enough papers and he asks us all to assist with a continuing flow in the months to come. Anyone with a paper to publish, please contact Reinhard: R.Joedicke@t-online.de"

Note by the new Editor

On 18 December 2000 Henri Dumont handed The International Journal of Odonatology over to me. Next day I was on my way home with a big bundle of manuscripts, a lot of information, some good advice and the anticipation of a very interesting task ahead of me. During the following weeks it was a relief when I discovered that the revision stage of each manuscript was perfectly documented and I, thus, had no problems preparing sufficient material for the publication of issue 4(1) within three months.

With regard to the edition of Pantala 4(1) I am grateful to Henri Dumont and Christine Declerque - his secretary - for their preparatory work and to Wil Peters from Backhuys Publishers for his helpful advice. Outside the Editorial Board Allen Davies, Juerg de Marmels, Daniel Grand, Benno Hinnekint, and Robby Stoks helped with reviews, and Heinrich Fliedner, an expert in Greek and Latin languages, clarified nomenclature problems. Philip Corbet checked the linguistics of several non-English authors. Thanks to them all.

One of my aims is to keep fixed publication dates of Pantala in future: 1 April and 1 October. This failed with 4(1), but we hope that this issue will be delivered within April. Judged by the present manuscript flow a punctual publication of the next issues should be no problem.

Our "Instructions to Authors" were a huge help to my editorial start. In an updated edition of the Instructions, which will be published at the next opportunity, I will introduce minor modifications. Now, however, I want to inform all potential authors about an important change: papers should please be submitted on the basis of an electronic text file, preferably attached to an e-mail or on diskette. **Thus authors no longer need to send me three printed copies of their mss**. Since all correspondence between the Editorial Office and the Referees is done by e-mail, we are all able to save on postage. I am working with WinWord, so I prefer Windows text files in the doc. or rtf. format.

Now I hope to receive interesting manuscripts covering all subjects of Odonatology from all parts of the world where odonates are living.

Best wishes, Reinhard

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SUBSCRIPTIONS - Jill Silsby

Wearing my Treasurer's hat, I feel I must tell you how difficult my job is made by so many members failing to pay their subscriptions when they receive the renewal forms in January. By the end of February this year, when reminders were sent out, 89 of you needed to receive them. Now, at the end of June, there are still 42 unpaid members and second reminders have had to be sent out. It is not just the chore of having to send out reminders (though it IS a chore!!). We HAVE to pay the publishers of *Pantala* before the first number is printed (in April) and we must find the money whether we have received your subscriptions or not. This makes the keeping of accounts extremely complicated and the "Journal Fund" has a big discrepancy between income and expenditure. I have to "borrow" from the "General Fund" in order to meet the required sum due to Backhuys Publishing. And, then, as late payments come in, I have to repay the General Fund. I am NOT an accountant (neither is Dorothy Gennard who will be taking over the job in July) so I beg you all to make the Treasurer's task as easy as possible!! – standing orders would abolish the need to remember.

I know from experience how easy it is to forget and, personally, if I don't do something immediately, it gets put to one side – and forgotten or even lost!! It is of course, particularly difficult if one has to make a payment in a currency other than one's own – it takes time and effort to get to the bank and make the necessary arrangements. This is why we have made arrangements for members to pay in American dollars, Japanese Yen, Dutch guilders, Belgium franks, German marks and to send their subscriptions in their own currency to their national representatives. For those of you who do not have such facilities we strongly recommend getting together with others in your country so that, together, you can make just one payment, thus saving considerably in bank charges and exchange rates.

Of course the majority of you DO send your subscriptions without needing reminders – and I'm grateful to all those who do. But 89 from a membership of 250 really does seem a high proportion!! I'm hoping a number of outstanding dues will be paid in Swedish currency in July. If you haven't yet paid and are attending the Symposium, please make sure you bring sufficient funds so that you can pay me there.

NEWS from MEMBERS

Andras Ambrus (Hungary): At present I still work with the monitoring process of the cyanid pollution of the Tisza river, and wetland monitoring programme of Hungary. This means that I mostly encounter the larval stages of dragonflies, and I have less time for behavioural studies. But, if and when this work is finished, I will probably have much more time to spend on imagoes (if I can find the way how to do it...). New, young, enthusiastic odonatists are working at Debrecen University in **Gyoergy Devai's** department, as PhD students. Two of them will probably attend the Symposium in Sweden.

Philip Corbet (UK) Our sympathy goes to Philip who, in January 2001, suffered a mild stroke, from which he is recovering well. One consequence is that he cannot accomplish as much in a day as he did formerly and he apologies to any correspondents or collaborators who have been kept waiting for a response. His recent book "Dragonflies. Behaviour and Ecology of Odonata" was selected in 2000 for inclusion in the annual Outstanding Academic Titles list by the review journal Choice."

Dave Goddard (UK) will be busy once again throughout the months of May, June, July and August – he will lead a Butterfly & Dragonfly Walk in Bennerley Marsh each month.

Daniel Grand (France) was in Guadaloupe (Lesser Antilles) in March of this year and sent me a lovely print of *Argia concinna*.

Jens Kipping (Germany). An article from Jens can be found further on but he sends us a word of warning: "In February/March this year, I made a second trip, travelling from Namibia to northwest Botswana; we saw a very different, very green, Africa with rich vegetation, flowering plants and many more insects than last year during the dry season. We found some interesting locations in northern Namibia (for example the Popa Falls at the Kavango) and a new site at the Chobe River in Botswana. Here we had a near disaster: two of our fellow students were almost killed by a huge crocodile. It came out of the water during the night and tried to pull the whole tent, with the girls inside, into the water. Fortunately the tent tore and the croc captured only a sleeping bag and a backpack and the girls got off with a bad fright. But this was a deep shock for all of us and, besides that we had to organize new passports and flight tickets for the girls (all were in the backpack). Later we heard from several sources, that the number of croc-attacks on humans has increased recently. A guy who camped at the Kwaii Bridge (North Gate) in Northern Moremi was pulled into the river together with his tent, which had been erected 15 metres from the bank. He survived but with damaged legs. In January of this year 13 people were killed by crocodiles in the northern Okavango region near Shakawe, most of them fishermen and boat-polers. And I remembered that I had captured dragonflies in the water of the Chobe river just 3 km's downstream from the Chobe Safari Lodge - the place of our croc adventure of this year. I think this should be a warning to everyone who loves African dragonflies - don't approach too close to the water in the larger rivers, it's really dangerous!

Next year in February I'll go back to the Okavango to collect more dragonfly data for my thesis paper, you see - I lost my heart to the African continent."

Dennis Paulson (USA) visited Venezuela but found fewer odonates than he had hoped.

Boudjema Samraoui (**Algeria**) is enjoying a break from home while attending a post-doctoral fellowship in Belgium. He hopes to make it to the Symposium in Sweden and looks forward to renewing acquaintance with many friends made during meetings in Leeds, Oxford and Osaka.

Wolfgang Schneider (Germany) enjoyed a two week holiday in Saudi Arabia in February this year.

Ronnie Silsby (UK) attained the ripe old age of 80 in February. Congratulations to him!! – and love from the Editor!!! Jan Taylor (Australia): We managed a trip to far north Queensland in 2000and saw a number of Rhyothemis graphiptera - I saw many around one lake on the Atherton Tablelands. Cape Tribulation was marred by wet weather - almost English wet with drizzle, grey skies and cool. I had been looking forward to tropical heat but the white-lipped tree-frogs loved it!

Report on educational activities related to Odonata - 2000 - Roy Beckemeyer.

February: "Dragonflies of the Great Plains" presented to the Biology Club of Southwestern College, Winfield, Kansas. Approximately 12 students and faculty members were in attendance. Basic biology, ecology and distribution of Great Plains Odonata.

May: "Dragonflies and damselflies" presented to the Idalia Society (Kansas City, Kansas), a group of professional and amateur entomologists, none specialists in Odonata. Approximately 50 people in attendance. An introduction of Odonata classification and biology.

June: Insect Booth at the "Walk With Wildlife". Live dragonflies and other insects on display together with specimens from collections. The event is in an outdoor setting, with attendees walking the paths of Pawnee Prairie Park in Wichita, Kansas, and going from station to station viewing and learning about animals of various kinds. Approximately 1400 people, mostly families with children, attended.

June: "Fossil insects of Kansas" presented at the Great Plains Nature Center, Wichita, Kansas. About a dozen attendees. Covered the evolution of insects as reflected in the Kansas fossil record, including the dragonflies and their giant precursors, the Protodonata.

September: "Dragons and damsels" presented to the Topeka Audubon Society (Topeka, Kansas). Attendance 70 people. A general overview of Odonata for the general public.

October: "Dragonflies and damselflies" presented on four days as part of the Dyck Arboretum's "Discovery Days", a series on biodiversity of the prairie. Hesston, Kansas. The presentation was given to groups of about 70 to 90 students and 25 to 30 teachers and volunteers each day, reaching over 400 people in total. Students ranged from second through fifth grades (7-10 years of age). Basic biology, habitat requirements, and diversity of Odonata in Kansas and the Great Plains.

ANNOUNCEMENT of AFRICAN ODONATA WORKSHOP – Andreas Martens & KD Dykstra (**PHAON**)

e would like to hold a special workshop on African Odonata during the WDA International Symposium which will be held in Gallivare, Sweden from 21 to 27 July 2001. The aim of the workshop is to obtain an overview of current knowledge and to exchange thoughts on research priorities for African odonatology. We hope to address the following subjects:

Introduction & research history Biogeography (hot spots & endemism) Biogeography & ecology (dry areas) Behaviour

Taxonomy (general)

Taxonomy (larvae)

Applied Biology

Ecology Organisation & collaboration

Each topic will be introduced by a speaker (10 minutes), followed by 15 minutes of discussion. We would like to invite those who are already joining the symposium to volunteer to introduce one or more topics. Please contact KD (dijkstra@naturalis.nnm.nl) if you wish to attend the workshop, indicating whether you wish to give an introduction (also if your preferred subject is not listed). We hope that the workshop will also attract more Afro-odonatologists to the symposium (contact Goeran Sahlen (goran.sahlen@ebc.uu.se)

See you in Sweden!

Internet site on the Odonata of the East Mediterranean -

During the last few years many odonatologists have visited parts of the Middle East, the Balkans and Asia Minor, which has led to a considerable increase in knowledge of the Odonata of these regions. In order to combine our efforts and to stimulate contact between the odonatologists active in this region, we have decided to set up an Internet site on this subject and we hope it will also become a forum for discussions and a breeding ground for new activities.

The site will contain articles, notes, requests, checklists, a glossary of persons and a large number of photographs, especially of less known species. We will update the site regularly and hope to receive contributions from our fellow odonatologists. The site can be found at http://www.fly.to/epallage. Contributions for the site can be sent to Marcel Wasscher. At the moment, our interest is mainly focused on Turkey. The site contains an updated checklist of Turkey, with notes on certain species. We are planning to publish a preliminary distribution atlas in the winter of 2002/2003. For this atlas we are compiling a data file containing all published records. In addition, a large number of records obtained during fieldwork in the period 1995 - 2001, as well as material present in various collections will become available to science via this file. This year we hope to finish our work on collections present in the Zoological Museum, Amsterdam, Museum Naturalis, Leiden (formerly Rijksmuseum van Natuurlijke Historie), and the British Museum (Natural History), London. Anyone interested in this project, or who is willing to join, can contact Vincent Kalkman.

Another project we are currently working on is the compilation of an overview of the genus Cordulegaster in Greece and Turkey. Gert Jan van Pelt will finish his work on the Cordulegaster taxa of Greece this year. Arjan Kop will try to sort out characters useful for the identification of the larval stages of the Greek representatives of the genus. He will visit various localities in Greece in order to collect more material. Additional material, however, is wanted and anyone who has any (larvae, exuviae or imagines) from roughly the Balkans to Iran is asked to contact Gert Jan van Pelt.)

This year, additional fieldwork will be conducted in the north of Turkey in order to evaluate the taxonomic status of the subspecies of *C. insignis* present in that region.

> Antoine van der Heijden (A.E.vanderHeijden@student.tudelft.nl) Vincent Kalkman (kalkman@naturalis.nnm.nl) Arjan Kop koparjan@hotmail.com Marcel Wasscher (m.wasscher@broekhuis.nl)

Gert Jan van Pelt (gj.vanpelt@wolmail.nl

TWO at LARGE in the GAMBIA - Evelyn Prendergast

It was a taste of things to come when we arrived at the ferry to take us over the River Gambia to MacCarthy Island to find that the engine had broken down. However, this was obviously nothing new and, once there were enough passengers on board, we were all invited to man the wire cable and pull ourselves across the 200 yards of river – a surprisingly easy task.

Mike Parr and I had arrived the previous day at Banjul on the coast, where Clive Barlow who was organizing our tour and accompanying us throughout met us. This was a great bonus in two respects: as author of the field guide to "The Birds of The Gambia", he had an unrivalled knowledge of the country's birds and secondly he had organized the 1996 BDS tour and had proved himself then an expert dragonfly catcher. Our tour programme was "flexible" which meant that whatever we planned ahead rarely took place.

Our base on the island, 160km from Banjul, was the Bao Bolon Camp close to the old slaving headquarters at Georgetown, once the up-river capital of the country. Here we were very well looked after by the cheerful staff and were lulled to sleep by the chirps of a love-sick Epaulette Bat and woken by the calls of Laughing and Mourning Doves.

We had intended to base ourselves on Basse Sante Su, some 80km further east but the camp there was on the north bank and most of the sites we wanted to visit were on the south side – and the ferry at Basse had broken down. The last hope was to use the ferry at Fatoto, another 50km east and the last small town before the Senegal frontier but – surprise, surprise! – the ferry here was out of action awaiting a new rope. However Bao Bolon proved a satisfactory base and we were, at the cost of about two hours extra travel a day, able to accomplish all we wanted. We used to leave the camp at about 7.30 hrs and, by the time we got to the main dragonfly haunts, it was getting on for 9 o-clock, just about the time the insects were really active. On the south bank we penetrated beyond Koina, about 400km from the coast, to where the River Gambia leaves Senegal and, almost opposite, on the north side, there lay the frontier village of Sarkuli Kunda. At this point the Gambia is a deep hundred metre wide river with muddy banks.

Altogether we stopped at 44 different sites, including perennial streams, rice fields (nearly all dry), pools and waterholes beside the road and, when a dragonfly was spotted in the roadside savannah, trees and scrub. Naturally some sites were more productive than others but, even when there was no water within kilometres, a few dragonflies were always to be found amongst, or over, the vegetation – the number of gomphids flying around out of reach does not bear thinking about. There were "incidents" of course: we jeered at Clive when he left his net by the side of a stream and had to go back for it – fortunately he found the person who was "looking after it for him". And the next day Mike did exactly the same thing. However the only major upset was when, on our return journey, we arrived at Tendaba Camp, where we had reserved rooms, only to find they were already occupied by some of the 100 people attending a conference there. Since the camp had run out of beer, there was no dissent when Clive suggested we'd better go straight back to Banjul. This resulted in a perilous four and a half hour journey, mainly in the dark, back to our hotel on the coast, where fortunately there were vacant beds and plenty of cold beer.

Suitably refreshed, we decided that the next day would be spent exploring the north side of the river, five kilometres away across the river mouth – but it was not to be. Our vehicle got snarled up in a traffic jam and we missed the ferry – so we went to the far south west of the country instead, to the sand and gravel pits at Kartung, a 30km journey that took over two hours. Here we found some large clear water lagoons with banks of *Typha* and other vegetation, the only example of this type of habitat in the country, and alive with dragonflies. It more than made up for failing to get to the north bank.

On the final day I was stricken with "Banjul Belly", soon treated by the hotel doctor, a smiling dark-skinned Gambian with short curly white hair. Later, when I thanked him, he replied "No problem. Black magic."

It will be some time before we finish identifying the insects we caught but, amongst those already examined, there are two species of *Tetrathemis*, both new to the Gambia and both found on the same shady pool in a palm grove.

A BRIEF PORTRAIT of THREE SPECIAL ODONATOLOGISTS – Boudjema Samraoui

In 1993, before the Algerian drama began to unfold and weeks before events took a turn to the worst, we were blessed to welcome in Annaba, three prestigious odonatologists: Philip Corbet, Henri Dumont and Peter Miller. Here, in this "chatty" note, I will sketch a brief portrait of these three contrasting figures.

Philip came with Henri as part of a jury set up to examine Magister students and they both put up with a long trip to Constantine, typical Algerian bureaucracy, and extended student defence.

Philip excels at asking judicious questions and very few people can better him in the art of listening to answers. No matter how trivial the answer is, he will "sink" it very patiently, encouraging his speaker with a nod and adding later his own comments. Of course, he was an instant hit with new students; older students still had in mind his exciting lectures on the life history of *Anax imperator* back in 1991. After talking to Philip, you never look at dragonflies

in the same way again, and discussion shifts in a fascinating way from one odonatological topic to another. The excessive Mediterranean heat did not deter him (or Frieda who stayed bravely by his side) from extensive field trips. Philip is also a never-ending source of funny stories and he entertained us with delightful portraits of many odonatologists. Here mere names to us suddenly sprang to life. Before leaving, he, generously, insisted that the money allocated by the University to cover his expenses, would be set up as a small fund to help students.

Henri was more familiar with North Africa. In fact, he is a "legionnaire" who has for years crisscrossed the Sahara. He came to Annaba, armed to the teeth with nets and small bottles. In a short time he fired me with his infectious passion for zooplankton and biogeography. Between bouts of zooplankton sampling, we turned our attention to dragonflies and I came to appreciate his very sharp eye. Back in the laboratory, questions about the distribution of some species were raised and with the help of an army of students, he foraged through the whole collection and in the end was satisfied that *Sympetrum depressiusculum* was indeed not present. I passed the test but I had hardly time to be relieved as Henri was immediately concerned by yet another species, delving once more into the collection... Henri's rugged and roguish attitude makes him an attractive figure.

Although familiar with many scientists working with T.R.E. Southwood, just one floor below David Phillips' team, which included me as a D.Phil. student, I totally "missed" Peter Miller while I was at Oxford. At Annaba, he gave lectures on insect physiology and delicate experimental work, which enthralled us. Sperm competition was elegantly "dissected". In the field, Peter was very much interested by the behaviour of the notonectid *Anisops sardea* and, after numerous attempts to capture a specimen had failed, he resorted to taking his hat off. Using this important piece of equipment he deftly scooped what he needed. On the Kebir River, which at the time was reduced to residual pools, we witnessed a large emergence of *Paragomphus genei* and *Orthetrum chrysostigma*. We wondered if small instar larvae could aestivate by burrowing into wet sand prior to desiccation and we set up an impromptu experiment to test the idea: larvae were transplanted into wet sand but were in no mood to cooperate and after the "experiment" was over, Peter was anxious that all the larvae were returned to the water.

Peter's patience was rewarded by a very cooperative *Urothemis edwardsii*, the rare Afrotropical relict, which he managed to photograph at very close quarters. He was delighted and promised to exchange notes when he had a chance to study the sub-Saharan populations. A few weeks after he left, I received copies of the beautiful photographs he took during his short stay among us. Peter's unassuming and gentle manners belied the formidable scientist that he was

So, three great odonatologists graced Annaba in 1993 and they enriched our lives by providing us all with a distinctly new look at odonatology and science.

A SPECIAL DRAGONFLY MOMENT - Jill Silsby

There are not many of us who don't have, and treasure, special dragonfly moments. Philip Corbet referred to one of his in the January number of this newsletter and I have heard and read of many others. One of mine occurred a few years ago in Botswana's Okavango delta. We were in a small rowing boat with an outboard motor, travelling through one of the many hippopotamus channels that are lined with floating banks of tall papyrus.

The channel widened and suddenly we found ourselves in an area of open water largely covered with pink and yellow water lilies. The sun was shining, there was a gentle breeze (which was a relief after the hemmed-in feeling experienced in the channels), kingfishers flashed low over the water, pied ones hovered overhead, a pair of African Fish Eagles uttered their haunting cries – and it teemed with odonates. Although there were a handful of zygopterans and a few aeshnoids (particularly gomphids of one kind or another) the majority were libellulids – libellulids in every conceivable colour and engaging in every possible kind of odonate behaviour! For several minutes I was able to watch a pair of *Olpogastra lugubris* (Mock Emerald) as they wove figures of eight over a patch of water



Photo by Jill Silsby

lilies beside the bank. As the sexes in this species are very similar I was unable to see if it was a pair of males trying to gain supremacy one over the other, or if I was witnessing a rare example of anisopteran courtship display. The fact that they flew off together, and did not return, probably makes the second alternative the more likely one. Norman Moore, who also witnessed this behaviour some forty years before, was of the same opinion and wrote: "Male courtship dances are not confined to the dragonflies with coloured wings."

Maybe this should provide the theme for the next thematic number of **AGRION**

OKAVANGO – Jens Kipping

I send you greetings from one of the most beautiful places on earth. First I want to thank WDA for the student grant, which allowed me to make this trip to the Botswana Okavango swamps and then I would like to tell you about some of the things I saw and experienced.

June 2000. I have begun my trip in and around Maun, which lies in the southern part of the delta and is an area of seasonal swamps. I have found a very interesting dragonfly assemblage and have, so far, recorded 65 species. It is amazing to see, flying around me, so many of the dragonflies I had, until recently, only read about. In the last two weeks the number of individuals and number of species, have distinctly decreased due to the cold nights we have experienced. But I need to travel more extensively and so I have made a trip to the Victoria Falls and next I will go to the northern "Panhandle" part of the delta around Shakawe where there are permanent swamps, together with papyrus beds and fast flowing water. There I hope to find a very different species community to the one I have seen here around Maun. The time here has not been without incident. Adventures range from elephants and lions around me while catching dragons to a full speed clash with a hippo. But I'm still alive and much enjoying the time here.

Preliminary list of recorded species

Delta itself:

Pantala flavescens Urothemis edwardsi Orthetrum chrysostigma

O. brachiale

Rhyothemis semihyalina Hemistigma albipuncta Brachythemis leucosticta

Philomon luminans T. hecate

Anax imperator Ictinogomphus ferox

Lestes uncifer Agriocnemis exilis Pseudagrion nubicum Tramea basilaris

U. assignata

O. trinacria O. spec. indet. Diplacodes lefebvrei Crocothemis erythraea

B. lacustra

Trithemis annulata T. stictica

A. tristis

Cinitogomphus dundoensis

L. ochracheus A. rubiferum

P. deningi P.spec. indet. Tholymis tillarga

O. icteromelas Palpopleura lucia D. okavangoensis

Sympetrum fonscolombii Acisoma panorpoides

T. monardi T. kirbyi

Hemianax ephippiger

Gomphus spec. indet.

Palpopleura deceptor

Crocothemis sanguinolenta

Zygonyx torrida

G. manderica

L. pallidus A. victoria P.spec. indet.

Additional species at Victoria Falls and Chobe River:

Phaon iridipennis Lestinogomphus angustus Paragomphus cataractae Olpogastra lugubris

Trithemis donaldsoni P. jucunda

Orthetrum spec. indet.

Elattoneura tropicalis

Crenigomphus hartmanni Macromia picta

Gynacantha villosa T. arteriosa

Bradinopyga cornuta

++ several spec. indet.

After a short trip to Shakawe, I will be joining an International Conservation Group working in the delta, together with Chris Appleton from the University of Natal.

Note from Editor. Jens received a grant from our Conservation Fund to help him participate in this Expedition.

ENCOUNTERS with DRAGONFLY ROYALTY: Anax tristis Hagen in UGANDA in the 1950s - Philip Corbet

hese reminiscences were prompted by the note from Mike Samways of 22 February 2001 to the information exchange centre Phaon. In the note Mike described the rocket-like departure behaviour of Anax tristis when alarmed

In October 1954 I visited an outstation of the East African Tsetse and Trypanomiasis Research Organisation in Busoga, southeast Uganda. A morning of rich experience was spent in lakeside forest, walking along deeply shaded tracks where, from time to time, I would meet a patrolling male Gynacantha villosa Grünberg face to face, allowing me to marvel at its huge, limpid, emerald-green eyes as it hovered just in front of my nose. After a while



I came upon a pond where reticulate shafts of light cast a lattice-like pattern on the debris covering one margin. I stopped, my attention held by a Gynacantha laying eggs in the mud of the pool. But was there something unusual about that lattice-like pattern? Yes, it was moving, slowly and smoothly, as the python beneath eased itself out of the pond and onto the forest floor. Near midday I entered a dazzlingly sun-baked clearing, about 50 metres in diameter, in the centre of which stood a clump of elephant grass. The adrenalin surged as I spied what I took to be a male Anax tristis (its pale abdominal segment 3 and its great size left me in little doubt of its identity) powering back and forth across the diameter of the clearing. With my long-handled net I felt too conspicuous to attempt an approach unconcealed: so I waited until he was at the far side of the clearing before running to the clump of elephant grass and hiding within it. Three times I let His Majesty pass within a metre or so of where I stood, each time trying to balance myself for the strike. And then the moment of truth: I swung the net. In went the dragonfly, up to the end of the net, only to turn round and fly out again before I could turn over the rim and close the bag. Then I witnessed the behaviour that Mike Samways described so well in his note to Phaon, as His Majesty shot up into the air above me, climbing vertically at breath-taking speed until lost to view against the vivid blue of the sky.

On another occasion I encountered what I took to be this species hawking strongly, 3 to 10 metres above the ground over grass near a forest margin soon after Civil Twilight. As soon as it detected my presence it darted away, disappearing over the forest canopy, which was at least 28 metres high.

These were the only two occasions when I came close to capturing an adult Anax tristis, although I often encountered larvae. Another memorable encounter with this majestic creature was at Entebbe, Uganda, on a fine, cloudless morning at the beginning of the rains. Several Anax tristis (recognisable by their size) were rising effortlessly on a thermal, in company with circling Abdim's Storks, Ciconia abdimii. For sheer visual impact, such a sight can hardly be equalled.

Towards an exchange-office for exuviae of the Western-Palaearctic

n the last decade the interest in and the knowledge of the exuviae of European Odonata has grown considerably. With the publications of Heidemann & Seidenbusch 1993, G. Jerken & Sternberg 1999, and Norling & Sahlen 1997, almost all European exuviae can be identified. Yet the identification remains difficult and material for comparison is often necessary.

In order to solve this problem and to stimulate further research on exuviae, we have taken the initiative to start an exchange-office for exuviae. The principle is simple: anyone who would like to have exuviae of certain species sends a letter or email. Within a few weeks the requested exuviae will turn up in your post-box. In return for this we ask you to send us exuviae of species that you have found in number. In this way we can make someone in Poland happy with reference-material of Crocothemis erythraea from France, while a person in Great-Britain will be happy receiving Polish material of Coenagrion lunulatum.

The following list shows which species are already present in the exuviae-bank and can thus be ordered. At the moment all the material available is from the Western-Palearctic (mainly Europe). Depending on the support of other exuviae-collectors the number of species will grow in the next year. In the future an updated list of the available material can be ordered by sending an email. Any material forwarded to the exchange-office should be accompanied with information on the date and the locality.

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Darwinweg 2

Exuviae of the species beneath are available and can be ordered.

Lestes macrostigma Epallage fatime Sympecma peadisca Erythromma najas

Aeshna grandis Aeshna isosceles Aeshna cyanea Aeshna juncea

Aeshna mixta Aeshna subarctica Aeshna viridis

Anax imperator Boyeria Irene Brachytron pratense Caliaeschna microstigma

Gomphus pulchellus Gomphus schneideri Gomphus vulgatissimus Gomphus flavipes

Lindenia tetraphylla Onychogomphus forcipatus foripatus Onychogomphus uncatus

Onychogomphus f. albotibialis Onychogomphus flexuosus

Cordulegaster boltonii

Cordulea aenea Somatochlora flavomaculata Epitheca bimaculata Somatochlora metallica

Oxygastra curtisii

Crocothemis erythraea

Leucorrhinia albifrons Leucorrhinia rubicunda Leucorrhinia pectoralis

Leucorrhinia dubia Libellula depressa Libellula quadrimaculata Orthetrum cancellatum

Sympetrum danae Sympetrum striolatum Sympetrum vulgatum

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Welcome to New Members

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Reviews

Damselflies of North America. Minter J. Westfall Jr & Michael L. May. 1996. Scientific Publishers, Gainsville, Florida. ISBN: 0-945417-93-4. Information regarding current price and postage costs is available on http://www.afn.org/~iori/oinstore.html
Copies obtainable from the I.O.R.I.

This handsome volume meets a long-felt need of odonatologists wishing to identify any of the 161 species of North American Zygoptera. It has appropriately been dedicated to three pioneers in this field of endeavour: Philip P. Calvert, James G. Needham and Edmund M. Walker. The last book to treat the subject, "A handbook of the dragonflies of North America" by J.G. Needham and Hortense B. Butler (1929), is long out of date and much taxonomic work has supervened since its publication. The 'extended gestation' (as the authors put) of the 1996 book reflects the magnitude of the task of grappling with this additional work, as well as the size of the suborder being treated.

The book follows the approach and format of the 1955 edition of its counterpart treating the Anisoptera of North America (now available in the updated edition published in 2000), except that keys have been extended to accommodate phenotypic variation, for which the many who struggle with such variation will be grateful. Also, there are many more illustrations, which are clear and well chosen, many being microphotographs, including SEMs, of diagnostic features such as mesostigmal plates. Especially useful are wash drawings of whole larvae. There are some elegant colour photographs of adults in the field.

The geographical coverage comprises continental US and Canada, the Greater Antilles and the northernmost states of Mexico. Emphasis throughout is on users' convenience, species being arranged alphabetically by genus and species. The contents include chapters on classification and the fossil record, life cycle, behaviour and physiology, biogeography, habitats and conservation, and

techniques for collecting and studying. There is a useful bibliography and a glossary. The index lists generic and specific names. No English names are used in the book. Wing venation follows the Comstock-Needham system and is clearly explained. Larval keys are to the final stadium only. Some readers may be surprised that, on page 28, the prolarva is denied the status of a stadium. Many species descriptions are prefaced by notes on biology.

Odonatologists everywhere, but especially in the region covered by this book, have been wonderfully served by its publication and will have reason to be lastingly grateful to its two authors whose dedicated work over many years has brought this project to completion

.Philip Corbet. 28.2.2001

Dragonflies of North America. James G. Needham, Minter J. Westfall, Jr. & Michael L. May. 2000. Scientific Publishers, Gainesville. ISBN 0 - 945417-94-2. Copies obtainable from IORI (Bill Mauffray) at iori@afn.org . For current pricing and ordering instructions please contact: http://www.afn.org/~oinstore.html .

The first, 1955, edition of this fine work was said by the authors Needham and Westfall to have been written to provide a "means of cultivating acquaintance with the order of insects called Odonata or dragonflies". That they succeeded handsomely is evident from the advances made in odonatological knowledge in the United States and Canada in the past forty-six years, and in the very active various entomological societies of North America, especially the Dragonfly Society of the Americas.

It was inevitable that the vast amount of new information which had accumulated on North American dragonflies during the second half of the 20th century would call for a major revision of the 1955 edition. We are fortunate that Minter J. Westfall, Jr, the junior author of the first edition, has now collaborated with Michael May to produce a very worthy successor to the earlier pioneering effort. May and Westfall say they have attempted to keep to the fundamental aims of the work by providing an authoritative, usable reference for the identification of the 350 dragonfly species in the region encompassed by this book.

The book is divided into two main sections. Part 1 deals with dragonflies in general, including characteristics of adults & larvae; methods involved in field studies; and preservation and curation techniques. Part 2 is a systematic account of the families, genera and species of North American dragonflies, including revised and new dichotomous keys to both adults and larvae. The geographic range covered includes mainland North America, the Greater Antilles and the states of Mexico sharing a boundary with the U.S.

Keeping largely to the original species descriptions, the authors bring up to date aspects of morphological terminology, taxonomy and study techniques. The authors adhere to the Comstock-Needham system of terminology of wing venation. Although this system is older and not now so widely used as the Tillyard-Fraser system, the account of this vitally important aspect of dragonfly anatomy is clearly explained and, therefore, immensely helpful for understanding wing growth, relationships of dragonfly groups and differentiation of genera.

The major changes from the first edition include the addition of 54 species and the relegation of 34 species names to synonymy or sub-specific status. New also are illustrations of great merit and usefulness, facilitating the identification of many of the species. The paintings by Lawrence Zettler and colour photographs by several authors are particularly outstanding.

The individual descriptions of the adults and larvae include drawings or photographs of key structures, and give distributions by states, countries and flight periods. Other sections of the book include a regional species list (13 regions being recognised in the North America area); a full and very useful glossary; and an extensive bibliography. All species are indexed under scientific names and English names. The English name for each species is also included in the text.

The amount of skill and dedicated effort needed to revise and produce a volume of this scope and quality is immense. All odonatologists, especially those in the Americas owe a great deal to Minter Westfall and Michael May for having successfully accomplished this herculean task. This fine book will constitute the definitive identification source for North American Anisoptera for the foreseeable future.

Michael J. Parr & Philip S. Corbet. 5/3/2001

I'd like to use this as an opportunity to take my leave as Secretary/Treasurer of WDA. Right from those heady days in Maribor (in July 1997), following the break up of the uncompleted SIO Business Meeting and the declaration: "SIO is DEAD", I and my colleagues attending that Meeting (Vicky McMillan and Wolfgang Schneider), together with those present in spirit (Henri Dumont and Mike Parr) have enjoyed our involvement with the Worldwide Dragonfly Association. That was four years ago and all four of us now are resigning from the Board of Trustees since we feel a stint of four years is long enough and that it is definitely time for a change of officers, thus ensuring that the Association can recharge its batteries and that there is no danger of stagnation.

Personally, I want to say how much I appreciate the help, encouragement and constant support I have received from our members. One of our original aims was to ensure the new society (Phoenix first and then WDA) was a friendly one – and this, with your help, we have achieved – I consider you are all my friends!!! We had other aims, the chief one being that WDA should be run on democratic lines – our Constitution is constantly at hand and is our Bible!! We instituted Student Membership, Family Membership, Sponsored Membership and a considerably reduced membership for those non-academic dragonfly lovers who do not wish to receive the scientific Journal - all of these were innovations and have proved very popular. We have tried to keep our yearly subscriptions as low as we possibly can but it is NOT easy to keep within our budget – in fact we are only able to do so because of the generosity of many of our members. Our Sponsorship and Conservation Funds can only operate because of the donations we receive and, as Treasurer, I thank all of you who have made them.

Under the presidency of Philip Corbet, the new Board will ensure our Association goes from strength to strength and, with Mike May as Vice-President, Linda Averill as Secretary, Dorothy Gennard as Treasurer and Reinhard Joedicke as Journal Editor, you will be in good hands. I wish them and the rest of the new Board well.

lill Silsby

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WDA has its roots in Slovenia but its branches spread all over the world. Our membership, as we go to print, is 251 and we have members in 32 countries