



AGRION

NEWSLETTER OF THE WORLDWIDE DRAGONFLY ASSOCIATION

PATRON: Professor Edward O. Wilson FRS, FRSE

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AGRION

NEWSLETTER OF THE WORLDWIDE DRAGONFLY ASSOCIATION

AGRION is the Worldwide Dragonfly Association's (WDA's) newsletter, published twice a year, in January and July. The WDA aims to advance public education and awareness by the promotion of the study and conservation of dragonflies (Odonata) and their natural habitats in all parts of the world. *AGRION* covers all aspects of WDA's activities; it communicates facts and knowledge related to the study and conservation of dragonflies and is a forum for news and information exchange for members. *AGRION* is freely available for downloading from the WDA website at <http://ecoevo.uvigo.es/WDA/dragonfly.htm>. WDA is a Registered Charity (Not-for-Profit Organization), Charity No. 1066039/0.

Editorial

Keith Wilson [kdpwilson@gmail.com]

There is a European bent in this issue of *AGRION* which provides a short report on the 3rd National Convention on Dragonflies held in Italy in September 2009, details of the forthcoming 1st European Congress on Odonatology which is scheduled for July 2010 in Porto, Portugal, a review on the recently published book titled *Dragonflies of the Czech Republic* and two book announcements on the publication of (i) the *Atlas of the Odonata of the Mediterranean and North Africa* and (ii) the *Status and Distribution of Dragonflies of the Mediterranean Basin*. This issue also includes articles on the dragonflies of Korea and a faunistic report on the dragonflies of three National Parks in Sarawak, East Malaysia.

For those members who have not yet renewed their membership for 2010 and any prospective new members there is a Membership renewal/application form on pages 18 and 19 at the end of this issue of *AGRION*.

For the next issue of *AGRION*, to be published at the beginning of July 2010, please send your contributions to Keith Wilson [kdpwilson@gmail.com] or Graham Reels [gtreels@cyberdude.com]. All articles, information and news items related to dragonflies or of interest to WDA members are most welcome and will be considered for publication. Please send a Word file by email (preferably) or on disk by post. Please do not forward any original artwork but send a soft copy, ideally in a compressed format e.g. 'jpeg' or 'gif', or as a file on disk if sent by post.

In keeping with the practice adopted for WDA's official organ, the International Journal of Odonatology a dragonfly photo now appears on the front cover of each issue of *AGRION*. If you have a photo illustrating any rarely observed aspect of dragonfly biology, or an unusual species, or simply a stunning dragonfly shot, please submit it for consideration for publication in *AGRION*.

Message from the President

Wolfgang Schneider [wolfgang.schneider@senckenberg.de]

In May 2009, Natalia von Ellenrieder accepted a pro tem appointment as Secretary of WDA. Although supported by a majority of members present at the 6th BGM in Mexico last June, the Board decided to have her appointment ratified through an email/postal ballot. A ballot form was published in *AGRION* 13(2) with 31 August 2009 set as the deadline for returning completed forms. Only 23 members made use of their right to vote, all of them responding favourably. As most of you have certainly realised, our new Secretary is already fulfilling her duties since the meeting in Mexico and she is doing a great job - thank you Natalia!

Season's greetings and I wish all members a happy and prosperous New Year.

Yours,

Wolfgang

Cover photo: *Polycanthagyna melanictera*, Korea, taken by Kevin C. Seo. See article spotlighting Korean odonates in this issue (page 3) for further photographs of Korean dragonflies taken by Kevin C. Seo.

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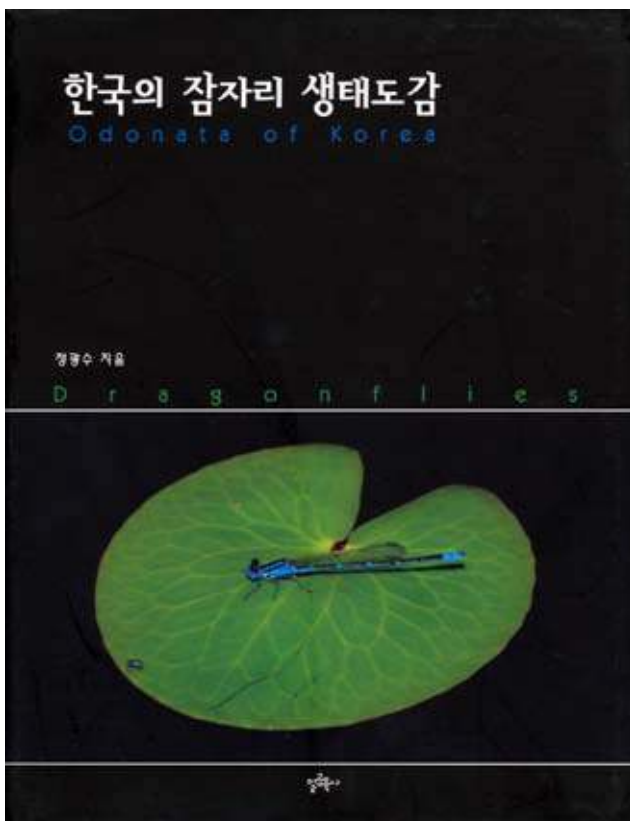
Spotlight on Korean Dragonflies

Keith Wilson [kdpwilson@gmail.com]

In 2001 Seung-Mo Lee published: *The Dragonflies of Korean Peninsula (Odonata)*, which is available from: The Dragonflies and Environment Care Group, Gileum 1-dong 612-12, Seongbuk-gu, Seoul, 136-111 Korea, tel: 82-2-913-7060, email: jeon2nam@netian.com. The publisher is Junghaeng-Sa, Yongdu-dong 236-7, Dongdaemun-gu. The book is written in both Korean and English and includes many black and white line figures and colour scans of specimens of all the Korean odonate fauna. The book provides a comprehensive account of 107 species recorded throughout Korea, although the author



The Dragonflies of Korean Peninsula (Odonata) by S.M. Lee (2001). Pub. Junghaeng-Sa, Korea. pp 229.



acknowledges that he had to rely on references alone for the species accounts and distributional information for North Korean odonates. In addition to the line drawings illustrating key identification features and the specimen scans the book also provides synonymic notes, habitat details, biological notes and distributional data for all species, but there are no colour photos of live specimens.

The lack of any comprehensive literature featuring Korean odonate photographs was overcome in May

Left: *Dragonflies of Korea* by Kwang-Su Jung, published in May 2007.

2007 with the publication of 'Odonata of Korea' authored by Kwang-Su Jung. In June 2007 Kevin C. Seo very kindly sent me a copy of Jung's newly published book. It is a hefty tome (511 glossy pages) written in Korean and lavishly illustrated with colour scans of specimens and also includes many colourful photographs of larvae and adults. Kevin is a graphics designer who helped with the book's editing and layout and also scanned many of the specimen pictures presented in the book. Since the text in the book is Korean the book is only available in Korea. The publications details (in Korean) are provided below.

The Dragonflies of Korea book enumerates 125 recorded species. Two endemic species of *Sympetrum* are listed and treated, although not illustrated, which do not appear in the World Odonata List by Schorr, Lindenboom and Paulson last revised November 2009. These two species comprise *Sympetrum onsupyongensis* Hong et Hwang, 1999 and *Sympetrum pochonboensis* Lee et Hong, 2001. The original papers describing these two new species, both from Onsupyong, Pochon County, Ryanggang Province, describe the habitat for the larvae as 'not freezing even in winter by the influence of nearby, hot spring'.

Korea is relatively rich in aeshnid species, gomphids and especially the aforementioned *Sympetrum* genus. The Checklist of Korean dragonflies [www.jasa.pe.kr/gonchung/jamjari/jamfile/11jongru.htm] lists 13 aeshnid species, 22 gomphids and 21 species of *Sympetrum*.

The front cover of this issue of *AGRION* features a splendid in-flight photograph of the aeshnid *Polycanthagyna melanictera* taken by Kevin C. Seo. A selection of Kevin's excellent photographs

국립중앙도서관 출판시도서목록(CIP)

한국의 잠자리 생태도감 = Odonata of Korea / 지은이: 정광수,
—서술: 일공출사, 2007
p. : cm

권말부록으로 "잠자리 품어 정리", "한국의 잠자리 종류 및 국명 순
을 예시표", "남북한 잠자리 국명 비교표" 수록
집고분류과 색인수록
ISBN 978-89-958060-3-6 95490 : (48000)

495.49025-KDC4
595.7330222-DCC21 CIP2007001420

한국의 잠자리 생태도감
Odonata of Korea

저술: 정광수 / 2007년 5월 2일
처음 발행한 날: 2007년 5월 12일

지은이: 정광수
펴낸이: 최도연
편집·교정: 김분주

펴낸곳: 일공출사
출판등록: 2006년 9월 2일(제313-2005-000190호)
주소: 121-840 서울시 마포구 서교동 385-99 301호
대표전화: 0505-460-1064 / 팩스: 05030-460-1064
e-mail: pody@dreamwiz.com

©정광수 2007 / ISBN 978-89-958060-3-6 / 495.49025권
이 책의 무단 전재나 복제는 법으로 금지되어 있습니다.
질문 받들어선 책은 구입하신 서점에서 교환하실 수 있습니다.

Above: *Dragonflies of Korea* publication information. The publisher's contact is Do-Yeon Pyo [pody@dreamwiz.com].



Photo: *Libellula angelina*. Photo credit: taken by Kevin C. Seo in S. Korea

of Korean dragonflies are reproduced here. The Odonata of Korea website includes many more superb photographs of Korean dragonflies taken by Kevin but also includes many high quality photographs taken by other contributors (see Dragonflies of Korea website: <http://www.jasa.pe.kr>). Kevin's Korean photos can also be viewed on-line at the Asia-Dragonfly website [http://www.asia-dragonfly.net/globalResults.php?Format=PL_HTML&Photograph=100&of fset=130].



Photos: (top): *Aeschnophlebia longistigma* paired couple; (bottom) *Gynacantha japonica*. Photo credits: both photographs taken by Kevin C. Seo in S. Korea.



Photos: (top): *Sympetrum fonscolombii* (bottom) *Trigomphus nigripes*. Photo credits: both photographs taken by Kevin C. Seo in S. Korea.

Book Review

The Dragonflies of the Czech Republic

Ales Dolny, Dan Bárta et al., 2009

672 pages. Taita Publishers, Czech republic, €70

Dennis Paulson [dennispaulson@comcast.net]

Books on Odonata are being published at a rate that would amaze anyone who had not realized how popular our favorite insects have become. The tremendous amateur interest in dragonflies has resulted in much more knowledge than a decade ago, and that interest in turn produces an imperative for more books on the group. Here is another one: -

The Dragonflies of the Czech Republic, Ecology, Conservation and Distribution, by Ales Dolny, Dan Bárta, et al.

This 672-page book is magnificent, produced by a publisher with a history of magnificent books. It is in large format, a real coffee-table book and I think the largest book on Odonata that I own (at 3.8 kg!), yet it is as full of scientifically gathered information about the Czech fauna as any technical work would be. The authors analyzed almost 75,000 odonate records to produce up-to-date maps and seasonal graphs for each of the 73 species known from the country. The introduction is over 200 pages long, treating many subjects of interest to a dragonfly biologist and enthusiast, all beautifully illustrated. There is a rather brief section on the basic biology of Odonata but lengthier sections on Czech natural environments, history of Czech odonatology, a detailed analysis of the database, odonate habitats and ecology, conservation and protection, and biomonitoring. The lists of references for all of these subjects are extensive.

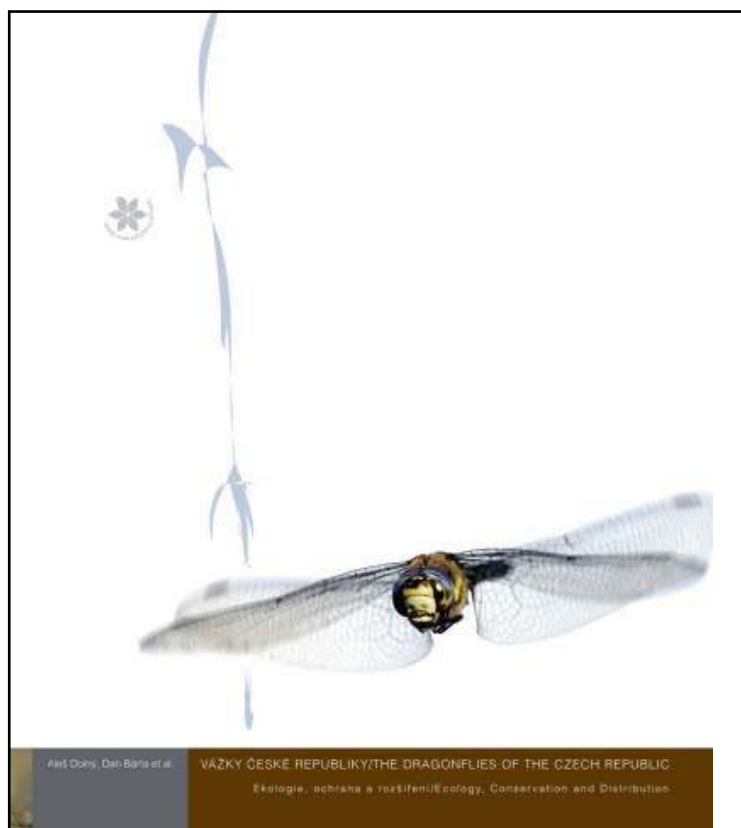
The authors know their fauna well, and they are good biologists and naturalists, so I think the book must present a clear picture of the fauna. The species accounts are extensive and abundantly illustrated. There are high-quality scans of living individuals of all of them as well as many beautiful photos in nature. As thorough a book as this is, it doesn't treat larval identification, and that is of course true of the vast majority of regional odonate books. It would be good if all of us spent more time beneath the water's surface!

Actually, the only disappointment for me in this book is that it is in the Czech language. This makes all the sense in the world, as it is the people of that country who will enjoy and benefit from this book the most.

Fortunately for many of us, all the sections are summarized in English, the species accounts are briefly summarized in English in a single section, and all illustrations are captioned in English as well as Czech. Because of this, it is possible for readers of English to get a great deal of information from the book, and, of course, a picture is worth a thousand words. Nevertheless, there is probably much to be gained by reading the entire text, and I think this is a book to be translated into all European languages!

The Dragonflies of the Czech Republic is available through the publishers, Taita Publishers, at their website: <http://www.taitapublishers.cz/>.

Editor: This book review first appeared February 2009 in the Odonata-l, which is an e-mail list about dragonfly biology sponsored by the University of Puget Sound, Tacoma, Washington.

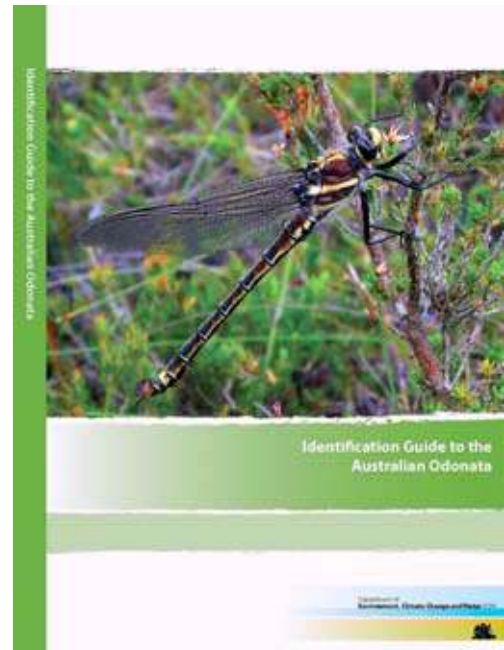


Book Announcements

Identification Guide to the Australian Odonata G. Theischinger & I. Endersby

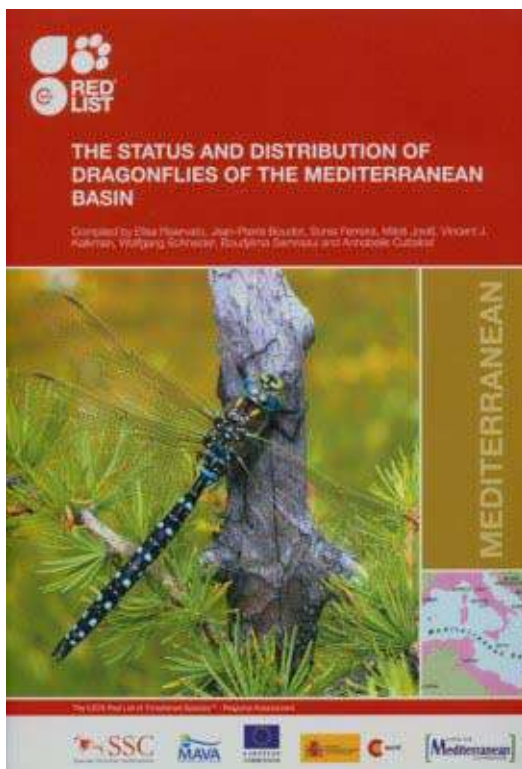
This guide contains keys to the species (adults and larvae) of the Australian dragonflies, dot-maps for every species (in alphabetical order of genus and species names) and profiles (including some photos) of the Australian species of official conservation concern. It was announced at the 2009 International Congress of Odonatology in Mexico and scheduled to be published in November 2009. The first of the 100 printed copies arrived just before Christmas, and copies will become available at a price yet to be worked out. Further information will follow.

The publisher is the Department of Environment, Climate Change and Water NSW - www.environment.nsw.gov.au



The Status and Distribution of Dragonflies of the Mediterranean Basin Published by IUCN (International Union for Conservation of Nature)

Compiled by Elisa Riservato, Jean-Pierre Boudot, Sonia Ferreira, Miloš Jović,
Vincent J. Kalkman, Wolfgang Schneider, Boudjéma Samraoui & Annabelle Cuttelod



This report contains a review of the conservation status of 165 Mediterranean species of dragonflies occurring in the Mediterranean basin, according to the IUCN regional Red Listing criteria. It identifies species that are threatened with extinction at regional level so that appropriate conservation action can be taken to improve their status.

The geographical scope of this report is the Mediterranean region in terms of freshwater hydrosystems, defined by identifying all catchments of rivers flowing into the Mediterranean Sea as well as in the adjacent Atlantic waters of Spain, Portugal and Morocco.

The status of all species was assessed using the IUCN Red List Criteria (IUCN 2001), which are the world's most widely accepted system for measuring extinction risk. All assessments followed the Guidelines for Application of IUCN Red List Criteria at Regional Levels (IUCN 2003). The assessments were peer-reviewed by other experts during a workshop and through correspondence with relevant experts.

The 33 page report was published by the IUCN on 15th September 2009. The booklet is available as 'pdf' download in either English or Spanish from the IUCN web site [see <http://www.iucn.org/about/union/secretariat/offices/iucnmed/resources/publications/>].

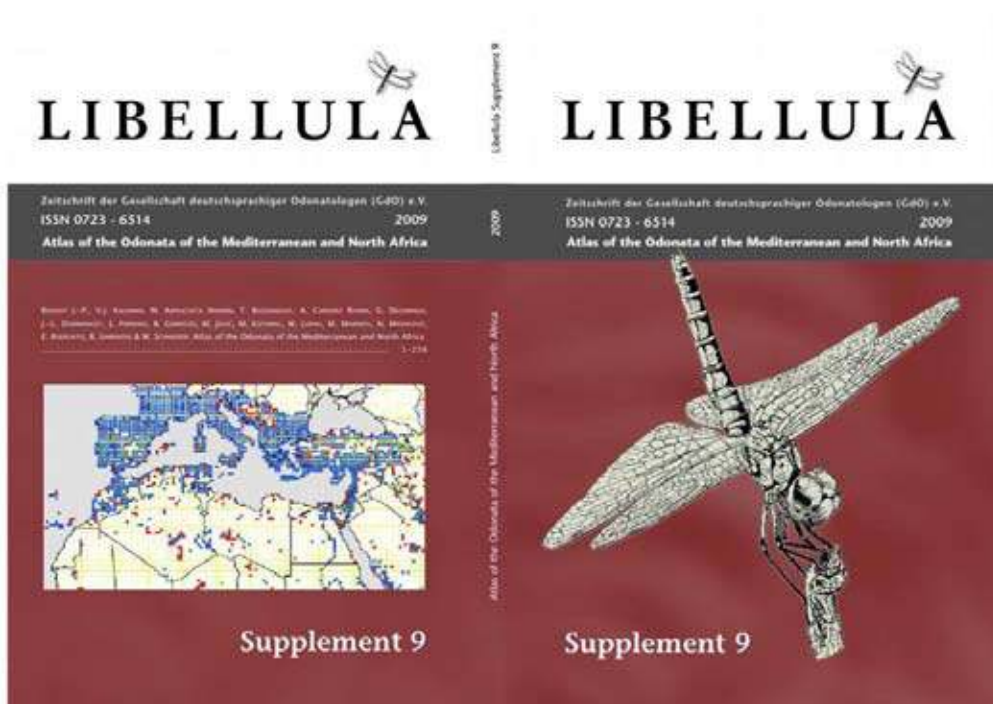
Libellula Supplement 9

Atlas of the Odonata of the Mediterranean and North Africa

Vincent Kalkman & Jean-Pierre Boudot

The work towards the production of an European Atlas was discussed by Vincent Kalkman and Jean-Pierre Boudot in the January 2009 *AGRION*, pages 18-19. Now the *Atlas of the Odonata of the Mediterranean and North Africa* has been published in Spring 2009. The atlas provides distribution maps for the Odonata of North Africa, the Levant, Anatolia and all of Mediterranean Europe. Some nearby areas such as Portugal, Canary Islands, Madeira, Serbia, Macedonia, Bulgaria and parts of the Arabian Peninsula, Iraq and Iran are also covered.

The Libellula Supplement is 256 pages, including 224 with four-colour reproduction. In total 182 taxa are treated, each with a colour distribution map and IUCN Red List status both global and regional. The Atlas includes 220 photos including photographs of larvae. The book is 15 cm x 21cm and written in English. For inquiries please send an informal email to gdo.peitzner@gmx.de



Jean-Pierre Boudot et al.

***Pantala flavescens* (Fabricius, 1798)**

Distribution in the Mediterranean - Status by country:

Global	LC	EGY, GUA, ECU, CRC, BEL, HR, JOR, LBN, MAE, MAE, MEX, NER, SRI
Mediterranean	NE	SDN, YED, TUR, YUN
North Africa	NE	

Pantala flavescens is a well known circumtropical migrant, which is seen in North Africa and in the eastern Mediterranean. Within Europe records have been published from Madeira (Chen 2006), southeastern Greece (Lacorte 2001) and the European part of Turkey (Hüçer & Akçin 2004, 2006). The species has been mentioned from France and Spain, which is most likely based on a misapprehension of *Isometia* (1967) by Acosta (1968).

Pantala flavescens male, Wiesbaden (DC)

Libellula Supplement 9: 1-214

Atlas of the Mediterranean and North African Odonata

***Rhyothemis conchylina* (Boisduval, 1832)**

Distribution in the Mediterranean - Status by country:

Global	LC	GGY, GR
Mediterranean	RE	
North Africa	RE	

Rhyothemis conchylina is a widespread Afrotropical species of which the two Palearctic populations might refer to refugia of more humid periods in either the Pliocene or Holocene. One of these populations was found in northeastern Algeria and the second in northern Israel. The latter population was described as a poorly distinct subspecies *R. c. syriae* (Schulz, 1949). Both populations have been revised since at least 1980 (Dumont 1991). *Rhyothemis conchylina* is classified as RE in the Mediterranean and North African Red Lists.

Rhyothemis conchylina male, Karamay (DC)

Libellula Supplement 9: 1-214

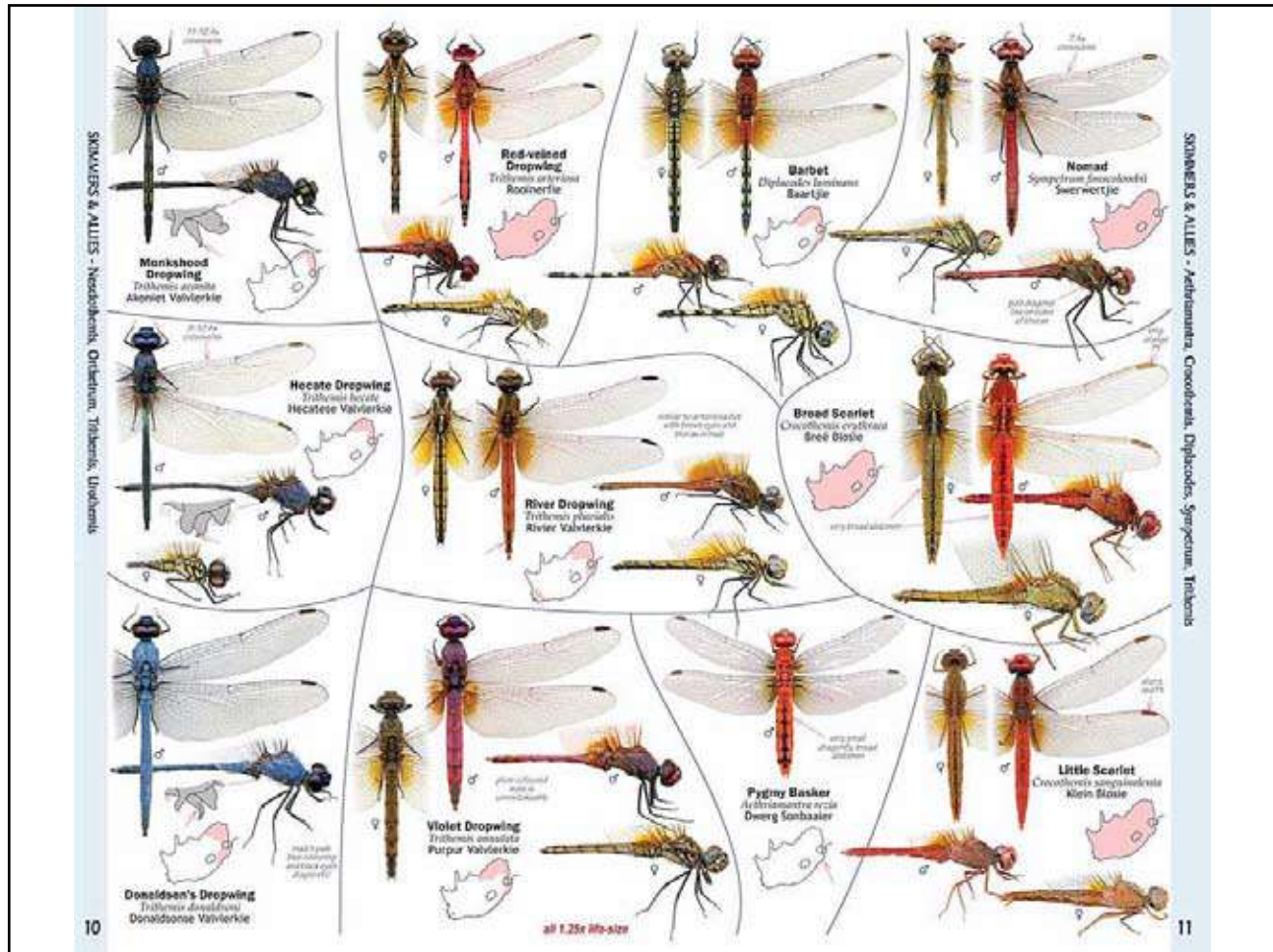
Leaflet Announcement

South African Dragonflies A Quick Guide Warwick Tarboton & Michèle Tarboton

This new and highly innovative Quick Guide to the Dragonflies of South Africa fills a gap left by the Tarbotons' now out-of-print *Fieldguide to the Dragonflies of South Africa*. It includes 300 illustrations featuring 87 of the 93 dragonfly (Anisoptera) species currently known to occur in South Africa. All are shown to scale at 1.25x life-size. The guide is 1.2 m wide when fully opened (see below, left) and folds down to a handy field size which comes in a sturdy plastic sleeve (see right). Below is a fold-out double page spread providing an example of the detail included i.e. male and female plan and side view illustrations, distribution map and English, Afrikaans and Latin names.



The guide sells at R70.00 inclusive of postage within South Africa. If you are interested in obtaining a copy contact Warwick & Michèle Tarboton at email [wami@warwicktarboton.co.za]. For further details see Warwick's web pages at www.warwicktarboton.co.za.



1st European Congress on Odonatology Vairão, Portugal, July 2010

Sónia Ferreira [hiporame@gmail.com]
Centro de Investigação em Biodiversidade e Recursos Genéticos (CIBIO)

The study of dragonflies has a long history and is widespread throughout many scientific fields, giving new and exciting insights on their evolution, biology, ecology and behaviour. Aspects of their study even go beyond the knowledge of the group itself, giving better comprehension of wide-ranging phenomena such as climate change.

European dragonflies have been extensively studied. The high number of researchers and therefore the volume of information available about this part of the world fauna constitutes a valid reason for the creation of an active scientific forum, where researchers and students from all European countries can learn, debate and exchange experiences. Such a forum permits the establishment or reinforcement of collaborations between researchers and institutions, and also promotes harmonization of methodologies and data in regard to networking, particularly of pan-European dragonfly monitoring.

Strengthening the importance of such an initiative is the wide variation in the depth of knowledge of the group across Europe, and the conspicuous need for capacity building in southern and eastern countries of the continent. All these issues were evident during the symposium *Monitoring Dragonflies in Europe* that took place in Wageningen in June 2008. This meeting, which focused only on monitoring procedures, was attended by 35 researchers from 12 European countries, clearly indicating the high level of interest in this specific field of Odonata study.

During this meeting it was proposed that there should be biennial meetings, specifically as a forum for researchers engaged in European dragonfly research. It was established that this meeting should be intercalated with the WDA International Congresses of Odonatology, and ideally organized in places where relatively low economical investment by the participants is required, allowing the attendance of a higher number of researchers and especially students.

2010 was selected as the year for the *1st European Congress on Odonatology*, to be held in Vairão in the facilities of CIBIO, the Research Centre in Biodiversity and Genetic Resources of Porto University, Portugal. This year it will be possible to make an informed assessment of the status of European Odonata research; the European Red List will be available and it will be possible to have a first insight on the European Atlas. This is also the emblematic year of the Countdown 2010 initiative, which by itself justifies the efforts to gather information and researchers in a reflection of the threatened status of European Odonata and their conservation.

For all of the above reasons we hope to be able to count on your presence at the congress, which will be held on 2 to 5 July 2010. The congress is open to all issues related to Western Palaearctic Odonata, including North African research. Suggestions are obviously welcome. After the congress a summer camp will take place in the Trás-os-Montes region of northeastern Portugal, a poorly studied area where *Macromia splendens*, *Gomphus graslinii* and *Oxygastra curtisii* occur and new populations are expected to be found. Detailed information on the congress and the summer camp is available at <http://www.europeandragonflies.com/>.



Photo: Porto

**A short report on the 3rd Convention on the Dragonflies of Italy
Naturmuseum Südtirol, Bolzano, Italy
September 4-6, 2009**

**Tim Termaat [tim.termaat@vlinderstichting.nl]
Dutch Butterfly Conservation, P.O. Box 506, 6700 AM Wageningen, The Netherlands**

The steadily growing number of dragonfly enthusiasts in Italy was clearly visible in the attendance at this 3rd national convention. No less than 65 participants joined the meeting and although Bolzano lies in the northernmost part of the country many people came from the southern regions of Italy. Since one of the main goals was to unite dragonfly researchers, both young and old from all regions, this meeting was a success from the beginning.

The programme on the first one and a half days consisted of oral and poster presentations. Two invited speakers, Rainer Buchwald and myself, presented papers on the ecology and dispersal behavior of *Lestes dryas* and on the possibilities to start a European dragonfly monitoring network. Subsequently, many excellent talks were given on the dragonfly fauna from regions all over Italy, some of which resulted in the presentation of regional distribution atlases. Interesting contributions from abroad included a talk by Florian



Photo 1: Elisa Riservato, who is now the first President of Odonata.it, and Sönke Hardersen, who is the Secretary, address the Convention. Both can be contacted at “Odonata.it” [odonata.it@gmail.com]. Photo credit: Tim Termaat.



Photo 2: Delegates enjoy lunch. Photo credit: Tim Termaat

Weihrauch on the impact of föhn winds on the dispersion of *Orthetrum albistylum* in Europe, a talk about climate change and alien invasive species by Jürgen Ott and a talk on the occurrence of *Gomphus flavipes* in Austria, by Maria Schindler.

The second afternoon was dedicated to discussing the foundation of an Italian society for dragonfly study & conservation and to discuss the society’s constitution and name. This resulted in a long debate ‘Italian Style’; very passionate and quite overwhelming to witness! The result was for all to be proud of; the society **Odonata.it** is now a fact. This success was celebrated in a cosy



Photo 3: Group photo of delegates at the 3rd Meeting of Italian Odonatologists. Photo credit: Dino Mastrotto.

restaurant which served nice northern Italian specialties. All is good that ends well!

Although the official part of the convention was over, most participants joined the excursion on the following day, which gave lots of opportunities to speak with each other more informally. We visited a bog in the Sarntaler Alps. Few dragonflies were present here in early September, but the recorded species were of great 'alpine quality'. Sightings of *Aeshna caerulea*, *Somatochlora arctica* and *Somatochlora alpestris* were most noteworthy.

Thus ended a very successful and pleasant meeting. The results are very promising for the future study of



Photos 4 & 5: Post-convention excursion to the Sarntaler Alps. Photo credit: Tim Termaat.

odonates in Italy and set a good example for other countries in Southern Europe, where the study of dragonflies is still fragmented in many cases.

Gratitude is due to the organizers of the convention, who did a perfect job, namely Alex Festi, Tanja Nössing and Petra Kranebitter. Many thanks also to Elisa Riservato and Sönke Hardersen, who both made many efforts to let Odonat.it see the light of day. Elisa is now its first President and Sönke is the Secretary. Alex Festi will serve as Vice-President. Congratulations!

The Odonata of three National Parks in Sarawak

Rory. A. Dow¹ [rory.dow230@yahoo.co.uk] &
Graham T. Reels² [gtreels@cyberdude.com]

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P.O. Box 9517, 2300 RA Leiden, The Netherlands

² H-3-30 Fairview Park, Yuen Long, NT, Hong Kong

Introduction

Since 2005 we have been surveying the odonate fauna of Sarawak in Malaysian Borneo. Unfortunately due to time constraints it has so far only been possible to publish species lists for a few of the areas we have sampled (e.g. Dow 2008, Dow & Reels 2008, 2009); here we take the opportunity to give species lists for three of Sarawak's most easily accessible National Parks. Most of the records are based on specimens, but some observational and photographic records are included separately for two of the parks. Most sampling has been of adult Odonata, but some sampling of larvae has been conducted at Kubah National Park in 2008 by RD and in 2009 by Stephen Butler, and at Similajau National Park in 2008 by RD. Notes on some species are provided.

Kubah National Park

Kubah National Park (including the Matang Wildlife Centre) is located not far outside of Kuching, the state capital of Sarawak, and covers slightly over 22sqkm. The park includes part of a range of hills that reach 911m on the peak of Gunung Serapi. Much of the park is covered by mixed dipterocarp forest, with kerangas and hill dipterocarp forest at higher elevations, and some lower montane forest found above 700m. There are areas of alluvial forest in the valley of the Sg. Rayu (Hazebroek & Morshidi 2001). There are many small hill-side streams in the steep terrain at Kubah, and a number of streams in less steep terrain at the Matang Wildlife Centre, as well as the larger Sg. Rayu. These streams provide rich habitats for Odonata.

Historically Odonata have been collected in the vicinity of Kubah, but it is not entirely clear if any collecting was ever carried out in the area now within the park's boundaries. 'Mt. Matang' is given as the location for a number of important records from the early part of the twentieth century, and the Matang Road is a famous collecting location in Sarawak; however this includes areas now within Kuching or its outskirts. Certainly, many of the records from Mt. Matang refer to the range of hills where Kubah is situated, but it is not clear if they actually refer to the peak now called Gunung Matang, to Gunung Serapi, or are a general reference to the whole range. Some records from Mt. Matang might actually refer to some other location in Sarawak. More recently Matsuki & Kitagawa (1992, 1993) include some records from Gunung Serapi; however not all of Gunung Serapi is

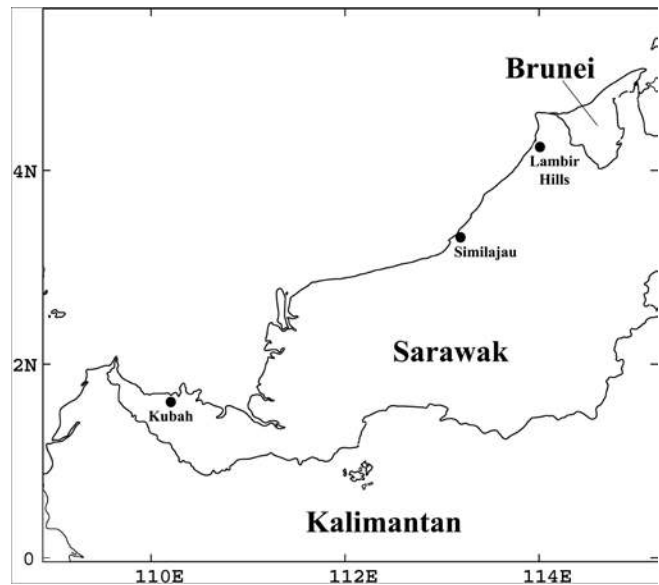


Figure 1. Map of Sarawak, showing locations of Kubah, Similajau and Lambir Hills National Parks



Figure 2. *Drepanosticta* nr. *dupophila* (Platystictidae) in forest at Kubah. Photo by GR

within the park's boundaries.

We have been sampling Odonata at Kubah since 2005; additionally the first author visited the park in 2003 and both authors visited the park in 2004, but collecting permits were not available for these early visits. Of the parks covered here, Kubah has received the most collecting effort to date.

Zygoptera

Amphipterygidae

1. *D. podolestoides* Laidlaw, 1934

Chlorocyphidae

2. *Heliocypha biseriata* (Selys, 1859)
3. *Libellago aurantiaca* Selys, 1859
4. *Rhinocypha cucullata* (Selys, 1873)
5. *Rhinocypha* sp.¹
6. *Sundacypha petiolata* (Selys, 1859)

Euphaeidae

7. *Dysphaea dimidiata* (Selys, 1853)
8. *Euphaea impar* Selys, 1859
9. *Euphaea subcostalis* Selys, 1873
10. *Euphaea tricolor* Selys, 1859

Calopterygidae

11. *Vestalis amaryllis* Lieftinck, 1965
12. *Vestalis amnicola* Lieftinck, 1965
13. *Vestalis amoena* Hagen in Selys, 1853
14. *Vestalis atropa* Lieftinck, 1965

Megapodagrionidae

15. *Bornargiolestes* species²
16. *Podolestes orientalis* Selys, 1862
17. *Rhinagrion borneense* (Selys, 1886)

Platystictidae

18. *Drepanosticta* sp. cf. *crenitis* Lieftinck, 1933³
19. *Drepanosticta* ?*dupophila* Lieftinck, 1933⁴
20. *Drepanosticta* sp. cf. *forficula* Kimmins, 1936⁵
21. *Drepanosticta rufostigma* (Selys, 1886)
22. *Drepanosticta versicolor* (Laidlaw, 1913)
23. *Protosticta* sp. cf. *feronia* A Lieftinck, 1933⁶

Protoneuridae

24. *Elattonaura analis* (Selys, 1860)
25. *Prodasineura dorsalis* (Selys, 1860)
26. *Prodasineura haematosoma* Lieftinck, 1937
27. *Prodasineura hosei* (Laidlaw, 1913)
28. *Prodasineura notostigma* (Selys, 1860)
29. *Prodasineura verticalis* (Selys, 1860)

Coenagrionidae

30. *Agriocnemis femina* (Brauer, 1868)
31. *Amphicnemis* sp. cf. *dactylostyla* Lieftinck, 1953⁷
32. *Archibasis tenella* Lieftinck, 1949
33. *Ceriagrion cerinorubellum* (Brauer, 1865)
34. *Pericnemis stictica* (Hagen in Selys, 1863)
35. *Pericnemis triangularis* Laidlaw, 1931
36. *Pseudagrion microcephalum* (Rambur, 1842)
37. *Pseudagrion perfuscatum* Lieftinck, 1937
38. *Stenagrion dubium* (Laidlaw, 1912)

Platycnemididae

39. *Coeliccia cyaneothorax* Kimmins, 1936
40. *Coeliccia flavostriata* Laidlaw, 1918⁸
41. *Coeliccia* sp. cf. *nemoricola* Laidlaw, 1912⁹

42. *Coeliccia nigrohamata* Laidlaw, 1918

43. *Copera vittata* (Selys, 1863)

Anisoptera

Gomphidae¹⁰

44. *Acrogomphus* sp.
45. *Burmagomphus* sp.
46. *Heliogomphus* ?*blandulus* Lieftinck, 1929¹¹
47. *Leptogomphus coomansi* Laidlaw, 1936
48. *Macrogomphus* sp.
49. *Microgomphus* sp.

Aeshnidae

50. *Indaeschna grubaueri* (Förster, 1904)
51. *Tetracanthagyna degorsi* Martin, 1896

Corduliidae

52. *Macromia arachnomima* Lieftinck, 1953¹²
53. *Macromia* ?*westwoodii* Selys, 1874¹²
54. *Macromidia fulva* Laidlaw, 1915
55. *Macromidia genialis erratica* Lieftinck, 1948¹³
56. *Idionyx* sp. cf. *selysi* Fraser, 1926¹⁴

Libellulidae

57. *Cratilla lineata* (Brauer, 1878)
58. *Cratilla metallica* (Brauer, 1878)
59. *Lyriothemis biappendiculata* (Selys, 1878)
60. *Lyriothemis cleis* Brauer, 1868
61. *Neurothemis fluctuans* (Fabricius, 1793)
62. *Neurothemis terminata* Ris, 1911
63. *Orchithemis pulcherrima* Brauer, 1878
64. *Orthetrum chrysis* (Selys, 1891)
65. *Orthetrum glaucum* (Brauer, 1865)
66. *Orthetrum pruinosum schneideri* Förster, 1903
67. *Orthetrum testaceum* (Burmeister, 1839)
68. *Rhyothemis phyllis* (Sulzer, 1776)
69. *Risiothemis dohrni* (Kruger, 1902)
70. *Trithemis aurora* (Burmeister, 1839)
71. *Trithemis festiva* (Rambur, 1842)
72. *Tyriobapta kuekenthali* (Karsch, 1900)
73. *Tyriobapta torrida* Kirby, 1889
74. *Urothemis signata insignata* (Selys, 1872)
75. *Zygonyx ida* Selys, 1869

Photographic and observational records

Zygoptera

Platystictidae

76. *Drepanosticta* ? *barbatula* Lieftinck, 1940¹⁵

Anisoptera

Aeshnidae

77. *Heliaeschna* sp.

Libellulidae

78. *Agrioptera insignis* (Rambur, 1842)
79. *Nesoxenia lineata* (Selys, 1879)
80. *Orthetrum sabina* (Drury, 1773)
81. *Pantala flavescens* (Fabricius, 1798)
82. *Rhyothemis triangularis* Kirby, 1889
83. *Tyriobapta laidlawi* Ris, 1919
84. *Zyxomma petiolatum* Rambur, 1842

Similajau National Park

Similajau National Park is located about 20km northeast of Bintulu town, and consists of a strip of forest along 25km of coastline. The park covers about 71sqkm and the forest is mostly mixed dipterocarp and kerangas. Additionally there are areas of mangrove, and some shallow ponds around the park accommodation. We are not aware of any records of Odonata from the park or its vicinity in the literature. To date we have only sampled at Similajau for a short period in February 2008; undoubtedly further sampling would reveal many additions to the list below.



Figure 3. *Raphismia bispina* (Hagen, 1867) (Libellulidae) in mangrove at Similajau. Photo by GR

Zygoptera

Amphipterygidae

1. *D. podolestoides* Laidlaw, 1934

Chlorocyphidae

2. *Libellago hyalina* Selys, 1859
3. *Libellago semiopaca* (Selys, 1873)
4. *Sundacypha petiolata* (Selys, 1859)

Euphaeidae

5. *Euphaea impar* Selys, 1859

Calopterygidae

6. *Vestalis amaryllis* Lieftinck, 1965

Lestidae

7. *Lestes praemorsus decipiens* Kirby, 1894

Megapodagrionidae

8. *Podolestes orientalis* Selys, 1862
9. *Rhinagrion borneense* (Selys, 1886)

Platystictidae

10. *Drepanosticta* sp. cf. *dentifera* Kimmins, 1936¹⁶
11. *Drepanosticta rufostigma* (Selys, 1886)
12. *Protosticta* sp. cf. *feronia* B Lieftinck, 1933¹⁷

Protoneuridae

13. *Prodasineura dorsalis* (Selys, 1860)
14. *Prodasineura* sp. cf. *peramoena* (Laidlaw, 1913)¹⁸
15. *Prodasineura verticalis* (Selys, 1860)

Coenagrionidae

16. *Agriocnemis femina* (Brauer, 1868)
17. *Amphicnemis* sp.¹⁹
18. *Archibasis viola* Lieftinck, 1949
19. *Ceriagrion cerinorubellum* (Brauer, 1865)
20. *Pseudagrion microcephalum* (Rambur, 1842)
21. *Pseudagrion perfuscatum* Lieftinck, 1937
22. *Xiphiagrion cyanomelas* (Selys, 1876)

Platycnemididae

23. *Coeliccia* sp. cf. *nemoricola* Laidlaw, 1912⁹
24. *Coeliccia nigrohamata* Laidlaw, 1918
25. *Coeliccia* new species²⁰

Anisoptera

Gomphidae¹⁰

26. *Acrogomphus* sp.
27. *Gomphidia* sp.
28. *Heliogomphus* sp.
29. *Leptogomphus* sp.
30. *Microgomphus* sp.

Aeshnidae

31. *Anax panybeus* Hagen, 1867
32. *Indaeschna grubaueri* (Förster, 1904)

Libellulidae

33. *Agrionoptera insignis* (Rambur, 1842)
34. *Agrionoptera sexlineata* Selys, 1879
35. *Camacinia gigantea* (Brauer, 1867)
36. *Diplacodes trivialis* (Rambur, 1842)
37. *Lyriothemis biappendiculata* (Selys, 1878)
38. *Nannophya pygmaea* Rambur, 1842
39. *Neurothemis fluctuans* (Fabricius, 1793)
40. *Neurothemis terminata* Ris, 1911
41. *Orchithemis pulcherrima* Brauer, 1878
42. *Orthetrum chrysis* (Selys, 1891)
43. *Orthetrum testaceum* (Burmeister, 1839)
44. *Pornothemis serrata* Krüger, 1902
45. *Raphismia bispina* (Hagen, 1867)
46. *Rhyothemis triangularis* Kirby, 1889
47. *Tramea transmarina euryale* Selys, 1878
48. *Tyriobapta kuekenthali* (Karsch, 1900)
49. *Tyriobapta torrida* Kirby, 1889
50. *Zygonyx ida* Selys, 1869
51. *Zyxomma obtusum* Albarda, 1881

Lambir Hills National Park

Lambir Hills National Park is located about 24km southwest of the city of Miri and covers ca 70sqkm. The park is dominated by mixed dipterocarp forest, with areas of kerangas forest in places. There are also some swampy forest habits at the foot of the hills and a variety of ponds with varying degrees of shade in the vicinity of the park headquarters. Lambir Hills is renowned for the diversity of its tree species, and is known to be of special conservation interest (Hazebroek & Morshidi 2001). However the park had never been surveyed specifically for Odonata prior to 2005, when we first collected Odonata there; collecting trips to the park were also made in 2006, 2007 and 2008. One of the most notable features of the park's odonate fauna is the presence of *Euphaea ameeke*, a species otherwise only known from Brunei.



Figure 4. *Euphaea ameeke* van Tol & Norma-Rashid, 1995 (Euphaeidae) at forest stream at Lambir Hills. Photo by GR

Zygoptera

Amphipterygidae

1. *D. podolestoides* Laidlaw, 1934

Chlorocyphidae

2. *Libellago aurantiaca* Selys, 1859
3. *Libellago hyalina* Selys, 1859

Euphaeidae

4. *Euphaea ameeke* van Tol & Norma-Rashid, 1995

Calopterygidae

5. *Vestalis amabilis* Lieftinck, 1965

Lestidae

6. *Lestes praemorsus decipiens* Kirby, 1894

Megapodagrionidae

7. *Bornargiolestes* species²
8. *Podolestes orientalis* Selys, 1862
9. *Rhinagrion borneense* (Selys, 1886)

Platystictidae

10. *Drepanosticta* sp. cf. *dentifera* Kimmins, 1936¹⁶
11. *Drepanosticta rufostigma* (Selys, 1886)
12. *Drepanosticta versicolor* (Laidlaw, 1913)
13. *Protosticta* sp. cf. *feronia* B Lieftinck, 1933¹⁷

Protoneuridae

14. *Prodasineura collaris* (Selys, 1860)
15. *Prodasineura* sp. cf. *peramoena* (Laidlaw, 1913)¹⁸
16. *Prodasineura verticalis* (Selys, 1860)

Coenagrionidae

17. *Aciagrion borneense* Ris, 1911
18. *Agriocnemis femina* (Brauer, 1868)
19. *Amphicnemis* sp.¹⁹
20. *Archibasis tenella* Lieftinck, 1949
21. *Argiocnemis rubescens rubeola* Selys, 1877
22. *Ceriagrion cerinorubellum* (Brauer, 1865)
23. *Ischnura senegalensis* (Rambur, 1842)
24. *Pseudagrion lalakense* Orr & van Tol, 2001
25. *Pseudagrion microcephalum* (Rambur, 1842)
26. *Stenagrion dubium* (Laidlaw, 1912)
27. *Xiphiagrion cyanomelas* (Selys, 1876)

Platycnemididae

28. *Coeliccia* sp. cf. *nemoricola* Laidlaw, 1912⁹
29. *Coeliccia nigrohamata* Laidlaw, 1918
30. *Coeliccia* new species²⁰
31. *Copera vittata* (Selys, 1863)

Anisoptera

Gomphidae

32. *Ictinogomphus decoratus melaenops* (Selys, 1858)
33. *Macrogomphus quadratus* (Selys, 1878)

Aeshnidae

34. *Heliaeschna idae* (Brauer, 1865)
35. *Heliaeschna simplicia* (Karsch, 1891)

Corduliidae

36. *Macromia cincta* Rambur, 1842
37. *Macromidia fulva* Laidlaw, 1915

Libellulidae

38. *Acisoma panorpoides* Rambur, 1842
39. *Aethriamanta gracilis* (Brauer, 1878)
40. *Brachydiplax chalybea* Brauer, 1868
41. *Brachydiplax farinosa* Krüger, 1902
42. *Lyriothemis cleis* Brauer, 1868
43. *Nannophya pygmaea* Rambur, 1842
44. *Neurothemis fluctuans* (Fabricius, 1793)
45. *Neurothemis ramburii* (Brauer, 1866)
46. *Neurothemis terminata* Ris, 1911
47. *Orchithemis pulcherrima* Brauer, 1878
48. *Orthetrum chrysis* (Selys, 1891)
49. *Orthetrum glaucum* (Brauer, 1865)
50. *Orthetrum sabina* (Drury, 1773)
51. *Orthetrum testaceum* (Burmeister, 1839)
52. *Rhodothemis rufa* (Rambur, 1842)
53. *Rhyothemis aterrima* Selys, 1891
54. *Rhyothemis obsolescens* Kirby, 1889
55. *Rhyothemis triangularis* Kirby, 1889
56. *Tetrathemis irregularis hyalina* Kirby, 1889
57. *Tyriobapta kuekenthali* (Karsch, 1900)
58. *Tyriobapta torrida* Kirby, 1889
59. *Urothemis signata insignata* (Selys, 1872)

Photographic and observational records

Zygoptera

Coenagrionidae

60. *Onychargia atrocyana* (Selys, 1865)

Anisoptera

Aeshnidae

61. *Anax guttatus* (Burmeister, 1839)
62. *Gynacantha dohrni* Krüger, 1899
63. *Oligoaeschna* sp.

Corduliidae

64. *Epophthalmia vittigera* (Rambur, 1842)

Libellulidae

65. *Diplacodes trivialis* (Rambur, 1842)
66. *Hydrobasileus croceus* (Brauer, 1867)
67. *Lyriothemis biappendiculata* (Selys, 1878)
68. *Onychothemis coccinea* Lieftinck, 1953
69. *Pantala flavescens* (Fabricius, 1798)
70. *Rhyothemis phyllis* (Sulzer, 1776)
71. *Tholymis tillarga* (Fabricius, 1798)
72. *Tramea* sp.
73. *Zyxomma petiolatum* Rambur, 1842

Notes

1. Females of an unidentified *Rhinocypha* species have been collected on one rocky stream at Kubah. They are clearly allied to *Rhinocypha spinifer* Laidlaw, 1931, and might be a western form of that species; however this would represent a considerable increase in both the geographical (the most westerly record known is from Mount Dulit) and altitudinal (the collecting site is at ca 200 m) ranges of that upland species. The male has not yet been found despite careful searches by RD and seems exceptionally elusive.

2. A *Bornargiolestes* species now known from a number of locations across Sarawak. Although it is structurally similar to *B. nigra* Kimmins, 1936, it differs in mature male colouration and as both taxa occur on the lower slopes of Gunung Mulu (Dow, unpublished), it appears likely that they are distinct species. The breeding habitat appears to be damp areas in steep terrain in mixed and hill dipterocarp forest where a shallow layer of leaf litter is kept permanently moist by a slight trickle of water; such places are sometimes found at the bottom of cliffs.

3. This species is clearly closely allied to *D. crenitis*, but differs in details of colouration at least.

4. This may be the true *D. dupophila*, but differs in small details.

5. A close ally of *D. forficula*, but probably a distinct species.

6. This species is certainly close to *P. feronia*, known with certainty only from northwest Kalimantan, but differs consistently in colouration and size.

7. This species is most common in low pH swamp forest,

but two specimens have been collected in lowland mixed dipterocarp forest at Kubah.

8. See Dow (2010) for a detailed account of this species and its allies.

9. A lowland species found across Sarawak, closely related to but distinct from the true *C. nemoricola*. A revision of this taxonomically challenging group of *Coeliccia* species is in preparation by RD.

10. Most records of the Gomphidae from Kubah and Similajau are of larvae and cannot be identified beyond genus at present.

11. Female *Heliogomphus* collected at Kubah are certainly close to *H. blandulus*, but until males are collected or successfully reared from larvae, the exact status of the species found in the park cannot be known with certainty.

12. Larval records.

13. Not previously recorded from Borneo, but now known from Kubah, and also from Gunung Mulu National Park and a location in Kapit division (Dow, unpublished).

14. A species now known from a number of locations across Sarawak. Until recently the only *Idionyx* species known from Borneo was *I. yolanda* Selys, 1871.

15. RD photographed what is either *D. barbatula* or a close ally at the Matang Wildlife Centre in 2003.

16. Another problematic platystictid taxon. Populations have been found at a number of locations in Sarawak east of the Lupar river; there is considerable variation in the profile of the male cercus even within single populations, and some size differences between populations, but otherwise all agree well with *D. dentifera* and are probably merely variants of that species.

17. A species known from a number of locations in Sarawak east of the Lupar river, and from Brunei (e.g. Orr 2001); differing consistently from and certainly specifically distinct from *P. feronia*.

18. This is *Prodasineura* sp. A of Orr (2003). It is widespread in Bintulu, Miri and Limbang divisions of Sarawak and in Brunei; it may merely be a form of the poorly known *P. peramoena*.

19. Problematic *Amphicnemis* taxa that are the subject of ongoing investigation.

20. An unnamed species, quite common in parts of northeast Sarawak and Brunei.

References

- Dow, R.A., 2008. Odonata of the "Glen Forest" at Samarakan, Bintulu Division, Sarawak, Malaysian Borneo. *Agrion* 12(2): 46-48.
- Dow, R.A., 2010. Revision of the genus *Coeliccia* (Zygoptera: Platycnemididae) in Borneo. Part I. The *borneensis*-group of species. To appear in *Zoologische Mededelingen* 84.
- Dow, R.A. & G.T. Reels, 2008. List of species recorded at Gunung Mulu National Park, Sarawak, Malaysian Borneo in 2005-2006. *Echo* 5: 2-3.

- Dow, R.A. & G.T. Reels, 2009. Expedition to Mount Dulit, Sarawak, August-September 2008 – Odonata. IDF-Report 44, *Newsletter of the International Dragonfly Fund* 19: 1-16.
- Hazebroek, H.P. & A.K.A. Morshidi, 2001. *National Parks of Sarawak*. Natural History Publications (Borneo).
- Matsuki, K. & K. Kitagawa, 1992. Bornean Odonata taken by Dr. T. Ueda. I. Anisoptera. *Aeschna* 26: 1-6.
- Matsuki, K. & K. Kitagawa, 1993. Bornean Odonata taken by Dr. T. Ueda. II. Zygoptera. *Aeschna* 27: 1-10.
- Orr, A.G., 2001. An annotated checklist of the Odonata of Brunei with ecological notes and descriptions of hitherto unknown males and larvae. *International Journal of Odonatology* 4: 167-220.
- Orr, A.G., 2003. *A guide to the dragonflies of Borneo: their identification and biology*. Natural History Publications (Borneo), Kota Kinabalu.

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Members Update 2009
Natalia von Ellenrieder [Natalia.ellenrieder@gmail.com]

2009: 279 Members (including 12 sponsored memberships) across 41 countries			
New Members in 2009	Cancellations in 2009	Non Payers at end of year	
19	12	8	
Details of new members and change of addresses			
New Members			
Mark Y. Stoeckle	Rockefeller University Box 234, 1230 York Ave., New York NY 10065	USA	Mark.stoeckle@rockefeller.edu
Martin Černý	Dept. Ecology, Charles University Prague, Vinicna 7, CZ 128 44 Prague 2	Czech Republic	cerny@natur.cuni.cz
Johan van't Bosch	Newtonplein 62-2, 2562 JX, Den Haag	The Netherlands	Johanvantbosch@yahoo.co.uk
Ryuu Hayashi	Asutoria-hokudaimae #309, 1-12, Kita 20-jou Nishi 4-chome, Kita- ku, Sapporo, Hokkaido 001-0020	Japan	r.hayashi@ees.hokudai.ac.jp
Clem Tacconi	32 St. Margarets Road, Wyton, Huntingdon, CAMBS, PE28 2AN	UK	tacconic@tiscali.co.uk
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Marianne Kiauta	Callunastraat 6, NL- 5853 GA, Ebengewald	Netherlands	mbkiauta@gmail.com
Lawrence Ball	Wood End Cottage, 12 New Lane, Sutton Green, Guildford, GU4 7QF	UK	lb285@kent.ac.uk
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Linda Averill			linda.averill@blueyonder.co.uk
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Cédric Vanappelghem	34 rue de Bailleul, 62580 THELUS	France	cedvana@free.fr
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Family (without journal) Yen 5600	GB £35	US \$70	Euro 48
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角谷 拓 宛 (Mr. Taku Kadoya, Department of Ecosystem Studies, Institute of
Agriculture and Life Science, The University of Tokyo, 1-1-1 Yayoi, Bunkyo-ku, Tokyo
113-8657, Japan.) E-mail: kado_taku@yahoo.co.jp

iv) **UK members & all others** – by sterling cheque or GB £ bank notes, or by international money order, postal order or transfer to UK account at Lloyds TSB plc, 942 Brighton Road, Purley, Surrey CR8 2XD. Quoting BIC: LOYDGB21151; IBAN: GB07LOYD30917201048068. Application form to be sent to Linda Averill, 49 James Road, Kidderminster, Worcs, UK DY10 2TR. E-mail: linda.averill@blueyonder.co.uk

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