

## EDITORIAL

As you can see from “News from Members”, the section is not exactly flowing with members’ doings!! Only Philip Corbet, François Meurgey and Norman Moore have sent me any news of their activities and, when you consider that our membership is climbing steadily towards the 300 mark, only 1% is disappointing to say the least! Please remember we really are interested in what you are doing and what interests you – and, that “we” is not just an editorial “we”, it includes all your fellow members! So please, in your droves, send me e-mails telling me your personal and professional news: new job, new research project, new spouse, new baby, a proposed holiday or expedition, ANYTHING that will help us all know more about one another.

**Since I shall be flying to South Africa in early December, I’d like to wish you all a very merry Christmas and a prosperous New Year.**

## LETTER from our NEW PRESIDENT *Hidenori Ubukata*

I was elected as your 4th President at the end of the Biennial General Meeting held during the 2005 WDA Symposium at Pontevedra, Spain. All our past Presidents (Drs. M.J. Parr, P.S. Corbet and M.L. May) are prominent scientists and have profoundly contributed to the development of both odonatology and our Association. My talents will never reach those of my predecessors but I am confident in that I have a considerable passion for devoting myself to the promotion of dragonfly research and conservation, as well as to the realization of the aims of our Association. I am also spurred on by the fact that, when I assumed the Presidency, I was one of the youngest to have done so, as well as being the first from Asia. Needless to say, the members of the WDA Board of Trustees are very capable and enthusiastic in carrying out their roles, whilst the Editor of AGRION, the compiler of Odonatological Abstract Service, the National Representatives and the Future Symposia Organizers have worked, and will continue to work, devotedly for the Association. I, therefore, believe that WDA will carry on the pursuance of its published Aims and that an even more successful future is assured.

Here I would like briefly to introduce myself. I majored in zoology at Hokkaido University, Japan, and acquired my doctorate through a study on the population dynamics and territoriality of *Cordulia aenea amurensis*, under the supervision of the late Professor Shoichi Sakagami who left an enormous contribution in the field of comparative sociology of wild bees (thus he was an intimate colleague of our Patron, Dr. E. O. Wilson) and was one of the co-authors (with me) of an article on the reproductive behaviour of dragonflies in the Bonin Islands. After submitting my dissertation, I got a post in Hokkaido University of Education and started research and teacher training in science education, while continuing behavioural and ecological studies of Odonata. My recent interest has focused on the conservation of dragonfly habitats and environmental education for biodiversity. The most Impressive event in my 25 year odonatological career was the (first) International Symposium on the Conservation of Dragonflies and Their Habitat held in Kushiro. I was the Coordinator of this first Symposium and was responsible for inviting a number of researchers/conservationists of dragonflies/habitats including Drs. P. S. Corbet, M. J. Samways and the late J.A.L. Watson, who gave important key-note lectures.

The challenges for WDA in the coming few years are, I think, as follows:

**(1)** To realize the listing of our Journal (I.J.O.) in Current Contents. To achieve this Mike May, Reinhard Joedicke (the Editor) and I will do our very best and we will have the valuable support of our Patron. In addition, it would help the cause considerably if many more of you, the members of WDA, would submit your papers for publication in I.J.O.

(2) To increase membership in order to make activities at National and Regional, as well as International levels more active. One way of achieving this would be for more of you to make or enrich your own odonate homepages and then link them to our WDA website. Another is that you launch or participate in communication networks among odonatists at various levels.

(3) To make an effort to conserve dragonfly species and habitats. For this purpose let us cooperate in the project of the Global Dragonfly Assessment. The information networks mentioned above would also be useful in making the public aware of the critically diminishing dragonfly habitats and the importance of conserving them.

Finally, I would like to all our members to actively participate in all of your Association's activities.

## NEWS from MEMBERS

**All those present** at the Fourth WDA Symposium held in Spain last year (and there were more than a hundred of us) were vociferous in their appreciation of **Adolfo Cordero Rivera's** organization, energy, enthusiasm and apparent complete lack of stress in any form. And **nothing** was too much trouble for his fantastic team. The feelings of genuine friendship and general enjoyment were evident whenever two or three (or more!) of us were gathered together. (Personally I can't WAIT for Namibia in 2007!)

**Philip Corbet** has been awarded the DSc Degree by the University of Dundee, for published work on the biology of dragonflies and mosquitoes.

**François Meurgey** gives me the following news: "For the fourth consecutive year, a mission in the French West Indies was organized in Martinique during three weeks in March 2005. This study, financed by the DIREN Martinique, related to the faunistic richness of the island and the characterization of the larval habitats. This survey made possible the observation of a new species (*Tauriphila australis*) and a new genus (*Macrothemis*) for Martinique. A mission in Guadeloupe is programmed for January 2006 with **Jerrell Daigle, Sid Dunkle** and **Fred Sibley**, and another in Martinique in June 2006."

**Norman Moore** has asked me to say how sorry he and Janet were to miss the Symposium and to express his sincere appreciation of the card wishing him well that was sent by all those present who knew (and loved!) him. He tells me that, although he finds it increasingly hard to leave his house in Swavesey, he is NOT prevented from enjoying the copious dragonfly life around him, particularly the species resident in his large garden pond.

## THE FOURTH WDA INTERNATIONAL SYMPOSIUM OF ODONATOLOGY

**1. The 4<sup>th</sup> WDA International Symposium of Odonatology**, held in Pontevedra, Spain during the last week of July, 2005, was attended by 116 odonatologists from 27 countries, truly a World-wide gathering from north to south (Sweden to Australia) and from east to west (Japan to Canada). During the scientific sessions more than 60 oral presentations were made and there were some 30 poster presentations, as well as a Plenary Symposium and a Meeting of the IUCN Odonata Specialist Group. Quite a package for four days! I found the Symposium extremely stimulating and would like to thank, on behalf of WDA, Adolfo Cordero Rivera and his splendid band of on-site assistants for the excellent arrangements that they made to host the world's odonatologists.

The scientific presentations were very wide-ranging – from Morphology and Systematics to Ecology and Behaviour. Conservation and its bed-fellows – monitoring, faunistics, and environmental change – were particularly well represented in the presentations, and no part of the world with dragonflies was neglected. Africa received much attention due to the fine work of K-D. Dijkstra, Viola Clausnitzer, Mike Samways, et al., and this bodes well for the next WDA International Symposium to be held in Namibia in 2007. The organizers of that Symposium – Eugene Marais, Frank Suhling, and Andreas Martens – all presented papers on their work in Namibia at the Pontevedra Symposium and had the audience mentally packing their bags (and nets) before they had even thought of leaving Spain.

The principal theme for the meeting was 'Forests and Dragonflies', and presentations ranged from review papers by Philip Corbet and Dennis Paulson to regional surveys and to more specific topics such as the role of sun-flecks in dragonfly mating behaviour (M. Watanabe), and the difference in immune response of *Hetaerina americana* from dry and moist forests (Contreras-Garduño and Córdoba-Aquilar). Philip Corbet stressed the importance of forest microclimates, especially temperature and water deficit, along a latitudinal gradient. He pointed out that dragonflies are not found beyond altitudinal or latitudinal tree-lines, that in the Arctic forests serve principally as a 'port in a storm' and that in Mediterranean regions forests are used primarily for aestivation by pre-reproductive adults, while tropical forests are used by all stages of dragonflies for a variety of purposes. Dennis Paulson continued with the tropical theme, pointing out that the great absolute and relative abundance of dragonfly species in tropical forests can be explained, *inter alia*, by these forests' great physical complexity, that some habitats like temporary wetlands and phytotelmata last longer than in temperate zones or are unique to tropical

forests, that temperature is not limiting to larvae as it can be in temperate forests, and that adults are favoured by the higher humidity and lower temperatures inside compared with outside tropical forests.

Bert Orr discussed the odonate fauna of the non-seasonal Borneo forests, a fauna that evolved in association with these forests such that only about 20% is associated with non-forest habitats and 53% of the species are Borneo endemics. The non-forest species are mainly Libellulidae and mainly non-endemic, which must have originally been opportunists in forest gaps. Bert went on to discuss the diversity of Odonata in the various forest formations of Brunei, and concluded with some suggestions for odonate conservation. Viola Clausnitzer and K-D Dijkstra discussed the effects of opening up tropical African forests on dragonflies. They pointed out that non-forest species tend to be habitat generalists and, when forests are opened up, open-land species are able to out-compete the more specialized forest species.

The effect of forest fragmentation was also discussed by other presenters. Ola Fincke and Heike Hadrys both worked on tropical tree-hole inhabiting pseudostigmatids, but on different continents - Ola on *Megaloprepus caerulatus* in Central America, and Heike on *Coryphagrion grandis* in East Africa. Both species require the high humidity and older trees of primary moist forest, and are consequently threatened by the opening up of areas to second growth forests.

At the other end of the latitudinal gradient, Göran Sahlén also discussed forest fragmentation (by logging) and emphasized the point that non-forest species tend to be habitat generalists. Göran showed that, while northern forests may have fewer species than do tropical forests, forest ponds have more species, more individuals, and higher occupancy rates than do ponds in agricultural land. This is in part because of the more complex plant communities around forest ponds which allows for more dragonfly specialization. In contrast, open areas have only generalist species. However, as Phil Taylor and David Thompson showed, there are some open-land species with rather specialized habitat requirements or poor dispersal abilities whose numbers are reduced by forests. *Leucorrhinia hudsonica*, which is associated with peatland ponds in Canada, has higher abundance in non-forested areas (Taylor). Although the underlying processes are undoubtedly complex, this increased favourability of open habitats is perhaps associated with increased movement of dragonflies and changes in the physico-chemical characteristics of the peatland. And endangered *Coenagrion mercuriale* populations in southern England are isolated by, among other factors, forested areas that do not have suitable habitats and prevent dispersal (Thompson).

While the general bottom line from the 'Forests and Dragonflies' papers was that forests are good for maintaining dragonfly species diversity and population integrity, and that tropical forests are best at doing this, most papers showed that forests must be left undisturbed for diversity to be maintained. Michael Samways gave another example when he described the effects that invasive *Acacia* species have had on South African riverine odonates. If normally open habitats are transformed to dense, almost monocultural forests, then the effect is similar to that of turning forests into open agricultural land. Generalist odonates increase at the expense of specialist species. Not only is forest complexity reduced but, particularly in the case of *Acacia*, shade increases substantially, creating conditions that are inimical to sun-loving dragonflies. In South Africa, some odonates were considered to be nearing extinction as alien tree species invaded and transformed riparian habitats. Fortunately, with removal of these invaders – the Working for Water programme – some of these species have reappeared.

Another common theme was mating strategies. Since Jon Waage's work on sperm removal made the cover of 'Science' more than 25 years ago, dragonflies have been recognized as superb study material for work in the area of sexual selection. In Pontevedra, too many papers were presented to discuss them all, but I will mention Alex Córdoba-Aguilar's evidence for sperm ejection that suggests that not only can males remove another male's sperm, but females may also be able to choose which male's sperm to use.

The Plenary Symposium, chaired by Mike May, dealt with systematics and phylogeny. As might be expected, the session covered a lot of ground and asked more questions than it answered. Some of the questions (with some partial answers) were: How many species of Odonata are yet to be described? (Three new North American species have been described in the last 6 months.) Has the rate of new species descriptions declined? (Better techniques and more interest are apparently keeping up the rate.) How stable is the phylogeny? (Unrooted trees seem to be stable, but rooted trees are not.) Does Anisozygoptera really exist? (Probably not, but Epiophleboidea is sufficiently distinct to deserve recognition. Its status depends on where the Odonata tree is rooted.) How stable are family and genus descriptions? (Odonate genera are apparently rather poorly defined, primarily because they are based largely on wing venation. Perhaps molecular techniques will lead to more stable definitions of families and genera.) What are the relative values of larval vs. adult characters? Molecular vs. morphological characters? Can molecular phylogenies be trusted? (Unfortunately, there were no clear answers to these important questions, primarily, as Mike May put it, because getting scientists together to talk about common goals is rather like herding cats!). It was agreed that molecular techniques will play an increasingly important role in questions of systematics and phylogeny, but that better and centralized facilities are needed for storage of DNA-compliant material.

On a less scientific note I will end with the observation that I find the speed with which Power Point has commandeered scientific gatherings to be nothing short of phenomenal. And generally this is without doubt a 'good thing'. The presentations at this Symposium were truly excellent and the power of Power Point has no doubt contributed to the production of readily comprehensible communications no matter what the subject or the first language of the presenter. And during the Plenary Seminar, when a request was made for someone to distinguish between rooted and unrooted phylogenetic trees and neither blackboard and chalk, nor whiteboard and felt pen, nor flip-chart and crayon, nor overhead projector, nor any other sort of visual aid except for a computer and LCD projector was present in the room, Richard Rowe put on a splendid display of thespian talent which I am sure would have been neither as lucid nor as entertaining had he been able to pick up a piece of chalk.

*Gordon Pritchard*

## **2. Through accompanying partners' eyes.**

Pontevedra was a great place to visit. The town was large enough to have everything an accompanying partner would want and small enough to walk around.

The museum was fascinating and a great tour was enjoyed by all. The outdoor restaurants were excellent and the shopping was good. We had never seen so many shoe shops in one place!!

It was lovely to walk from the hotel to the town, browse for a while, meet other partners for coffee or lunch, then do like the Spaniards do and have a siesta. What a great way to spend a holiday.

Once again from a partner's point of view, the dragonfly symposium was a great event. It was lovely to meet up with old friends and form new friendships. Hope to see everyone again in 2007.

*Robyn Hawking*

## **3. The Post Symposium Tour**

On July 31<sup>st</sup> 32 eager participants departed from La Peregrina Hotel, Pontevedra at 9 o'clock for the post symposium trip. We made our way along narrow and twisting roads to the Reservoir Albarellos for collecting and sightseeing. During the trip Adolfo explained the local flora and fauna, which was very absorbing.

Lunch was at Luintia and a traditional Galician cuisine was served, accompanied by excellent local wines. Next on the agenda we enjoyed a boat cruise on the Rio Sil. Many participants were noticed to be following Spanish tradition and taking a siesta at this time.

Back onto the bus, for a long climb back up the narrow road. Our arrival at each corner was announced by several loud blasts of the bus horn. Our bus driver was excellent and his driving skills were much appreciated.

We visited a pond between the Rio Sil and our overnight stop at the town of Ourense. Our accommodation at Ourense was so luxurious that several participants were known to have ironed their tee-shirts for the occasion!!

The next day 1<sup>st</sup> August, 2005 we travelled to the Rio Arnoia near the town of Allariz, where we were surprised to see rock and tree paintings. Some participants followed little green signs for quite a distance, until they found themselves in the local village and realized they had missed the paintings.

Lunch was taken at the town of Xinzo and we then visited gravel pits and the water ponds at Sanderas, for collecting. This was an extremely hot and dusty site. The avid collectors were out in the heat, but others chose to read on the bus. Adolfo offered beer and soft drinks, which were greatly appreciated by all.

We then followed the Rio Bibne upstream through beautiful wooded slopes. The trip was exceptionally beautiful with many terraces and vines. We travelled through the mountain via 3 tunnels following the Rio Sil out of Galicia into Castilla. With the help of several GPS's we all managed to make our way to the Temple Hotel at Ponferrada for our overnight stay. The Hotel was very modern but furnished like a medieval castle, complete with a statue of El Cid at the corner.

The following day we left Ponferrada for a short journey to a pond at Caracedo and then onto the remains of the Roman gold mines at Las Mueidas. The Romans had built the tunnels for the water to run to flush out the gold. This work was done entirely by Roman slaves who survived entirely on the locally grown chestnuts.

To the top was a very steep climb on foot (0.9km). Several participants were heard to gasp, "I hope the view is worth it". It was, and we all made it to the top! Once we had regained our breath and composure, we visited a cave via a tunnel. We were supplied with torches, and hard hats. Several very glamorous group photos were taken of us wearing this apparel.

We then had a long drive to our overnight stop at Puelba San Sanabria. There was time for a river visit or a walk up 230 steps to the very old town before dinner. After dinner some participants went bat watching under the old bridge, whilst others participated in a few drinks and good conversation with our "dragonfly" friends.

After a superb and leisurely breakfast, we travelled to Laguna de las Peces, a large lake in the mountains and then onto the 2 other lakes at 1700 metres. The weather was hot and sunny again. Everyone enjoyed each others company, aware that it was our last day together. Many of the participants walked onto the second lake, which was a hard walk in the heat of the day, but well worth the effort.

All good things come to an end and at 5pm we started off for the 3 hour trip to Pontevedra to prepare for our trips home.

*Robyn Hawking & Gillian Mill*

## The JOURNEY of a DILETTANTE. - Oleg Kosterin

Entomology has arisen in relatively high latitudes and most of the insect fauna of these areas is well known. At the same time it is clear that any northern entomologist must overcome his/her high latitude chauvinism and at least once visit the tropics, which are the core of insect diversity, to get a more adequate notion of the insect world. So, with enormous gratitude, I accepted an invitation from Dr. Nikita Vikhrev, an incredibly energetic businessman, photographer, journalist and biologist from Moscow, to join his winter trip to Thailand. Needless to say, having dealt most of my life just with scarce Siberian dragonflies, I was not acquainted with Thailand's famously rich and splendidly studied fauna. But of course this was no reason to refuse such an incredible invitation. Two circumstances let me hope that the situation would not be too bad: that it would be a dry season and that we were just going to visit the touristic area of Pattaya, mostly devoid of rich primary biota. I guess reports of visits to such uninteresting places rarely appear and so this one might deserve some attention. You may find its complete informal version, with impressions of a tropics neophyte, at: <http://pisum.bionet.nsc.ru/~kosterin/odonata/thailand.htm>.

So, on 24 January 2005, four of us arrived at Pattaya and were accommodated in Natural Park Resort, on Jomtien Beach. Many acquaintances of mine who managed to visit the tropics reported disappointedly that "there are no insects in the tropics"! Indeed, in the short Siberian spring and summer, if the air manages to be heated to 20°C and above, it starts boiling with insects regardless if it is day or night. It seems that for some reason the tropics support about the same amount of insect individuals but their activity is redistributed round the year. So I was prepared for some disappointment. Next morning the reality appeared not so bad: the amount and diversity of insect life looked reasonable, neither allowing boredom nor bringing about an informational shock. I would say that Thailand in winter and at daytime most reminded me of the Crimea in summer, though night-time was rather empty. However, that evening I discovered a great place nearby: a swamp with tall grass, some ferns, *Typha* and *Phragmites*, surrounded with a tiny forest, almost right on the Jomtien Beach, between B.O. Guesthouse and Metro Jomtien Condotel. There were no dragonflies or damselflies in the twilight.

Next morning, we started by investigating the hotel surroundings. First we walked along a patch of land away from the beach not yet used for hotel construction and discovered a chain of very shallow pools with muddy banks. We spent most of that hot day exploring those pools. At their banks flew and rested numerous *Brachythemis contaminata*, of both sexes, a dragonfly which we later found everywhere we went. Next in tall grass nearby we saw some elegant *Orthetrum sabina* and I noticed several *Pantala flavescens* flying high above the bank. On the grass, I collected a young ♀ *Crocothemis servilia*. (Next day a ♂ *Diplacodes trivialis* was added to the list, as well as some mature ♂ *C. servilia*. Upon my visit to these pools on January 31, on the trunk of a large tree growing a dozen metres from the water, I found two large exuviae of *Epophthalmia* sp. about 1.5m above the ground). Then I crossed the road and moved to one of the agricultural reservoirs surrounded by palms. At its bank, with partly inundated herbs, I found *B. contaminata*, a mature ♂ *C. servilia* and, in the herbs, numerous tiny *Agriocnemis f. femina* hid. That was all for that day.

Next day, January 26, we studied the swamp in the morning and again at about noon. On a grassy edge of the surrounding grove, there fluttered a dozen young ♀ *Rhyothemis variegata*. On the swamp, there were *A. femina* in dense grass and several *Ceriagrion auranticum* around the swamp margins, in grass and among bushes, where some patches of open water appeared. I found a single ♂ *Aciagrion pallidum* in the grass and, on a tree branch facing the swamp about 3m high, I noticed a perching *Lathrecista asiatica*. Several *O. sabina* were startled from grass (but no *B. contaminata*). In the following days, I revisited the swamp repeatedly. On January 28, I did it in twilight and, in the shade of the tree grove surrounding the swamp, I spotted an erratically flying ♂ *Pseudothemis jorina* and, in another similar place, a fast and very low flying ♀ *D. trivialis*. No more crepuscular activity of odonates was observed nor while revisiting on January 31. On February 2, there were the same *R. variegata*, *O. sabina*, *A. femina* and *C. auranticum* but I also found two freshly emerged and still soft ♀ *Onychargia atrocyana*, as well as a fresh, soft ♀ *Rhodothemis rufa*.

In the afternoon of January 26, we were on a regular excursion to the 'Tropical Garden' Nong Nuch near Pattaya. I managed to escape from our guides towards a sharp hill covered with green rather than dry forest. At its foot, in a depression of a gentle grassy slope there was a small artificial pond. At the banks, along with regular *A. femina* and *B. contaminata*, there were numerous *Acisoma p. panorpoides*, one or two male *Pseudagrion microcephalum* and a young soft male *Ceriagrion indochinense* was occasionally discovered in the net. Having reached the hill, I found an old and desolate road, grown up with weeds, going through the forest at the slope base and walked along it for half an hour. I met several *P. flavescens* and *Rhyothemis p. phyllis* as well as starting a male and capturing a female *Tholymis tillaga*.

Next day, January 27, we visited 'the Coral Island' Ko Lan, with landscapes looking pretty Mediterranean and again strongly reminding me of the Crimea. Uphill there were a number of *P. flavescens* hovering far above slopes and roads or rarely perching on high dry tree branches. Down towards the beach they became more and more numerous. I found a large abandoned swimming pool with shallow dirty water and slime. Its concrete banks

were full of libellulid exuviae, and the dragonflies were numerous. At the banks there were a lot of *Trithemis festiva* and *Macrodiplax cora*. Both perched on bushes and branches but the latter were more cautious and were longer on the wing. As expected, there were some *B. contaminata*, *O. sabina*, *C. servilia* and of course many *P. flavescens*. One ♂ *D. trivialis* ranged low along the water margin. Some damselflies occupied slime protruding from the water: many *Ischnura senegalensis* and a few *P. microcephalum*. At one place near the pool among bushes, there restlessly fluttered a school of *R. phyllis* females. Nikita found a very small and extremely dirty pool near the beach, with a patch of reed that harboured a number of *I. senegalensis*, some *C. servilia*, a perching and ranging ♂ *P. congener* and a *Brachydyplax farinosa*.

Here I deviate from chronology and place a report of our visit to another island south-east of Pattaya, Ko-Khram, on 2<sup>nd</sup> February. The vegetation of this island differed greatly: most of the land was covered with a forest of huge spiny bamboo. Several large and deep holes were long ago dug out in this forest near the beach, and are now ponds with steep slopes. The dragonfly fauna appeared to be rich and diverse. Among several *P. flavescens* restlessly flying, I noticed a ♂ *Tramea* sp. and, startled from a grass, a ♂ *T. tillagra*. There were several ♂ *C. servilia* and *T. aurora*, many *T. festiva* and a few *B. contaminata*. Some *O. sabina* and ♀ *T. festiva* were found perching on grass nearby. Beside one of the ponds, there were three ♀ *R. phyllis* and one *R. variegata*. The four occupied protruding branches of a dead bush at the water and were very cautious. When a human appeared on the bank, they started fluttering over a bushy bank, noticeably keeping together. The three *R. phyllis* continued until the human disappeared (once I patiently waited for half an hour) but the *R. variegata*, after a while, invariably settled down on a perch, abandoning her companions. At the same bush also perched a very cautious male *P. jorina*. There were many *I. senegalensis* (which looked larger and more bluish than on Ko Lan). I collected a ♀ *Agriocnemis pygmaea* while my companion photographed a ♀ of another *Agriocnemis* which, judging from the pattern and prothorax shape seen on the photo was *A. minima*. Also, near one of the ponds, I found a ♂ of a *Ceriaton* sp.: its appendages looked like those of *C. indochinense* but its abdomen was bright red above and orange on the sides (not yellow) and the body size was larger. Towards evening I walked up a steep road and, on either side, saw one or two male and many female *P. congener* (and nothing else) perching on branches of spiny bamboo. For some reason they were obviously concentrated on just this small section of the road.

On 28<sup>th</sup> January we visited the Khao Khieo Open Zoo at Si Racha. At the edge of a lifeless, deeply autumnal slope forest that seemed incredible in such a hot weather, we found a huge aviary and, beside the netting, there was a territory of a beautiful ♂ *Neurothemis fulvia*. It was too cautious and I spent maybe an hour in vain attempts to photograph it. He perched on sticks or branches but, when alarmed, disappeared above the forest, to appear later on a lawn in front of the aviary or on the same forest edge. Once I saw how it flew above a small artificial pool and touched the water surface for a wink. Later I was able to photograph a female on the aviary net. Nearby, elegant ♂ *Prodasineura autumnalis* kept to grassy banks of a lotic ditch. When I later checked my photos, I was struck to see that one individual differed strongly by definitely pruinosed sides of the pterothorax and lower appendages, being absolutely identical in all other respects: body build, pattern and size. There were also a few *B. contaminata* and *Pseudagrion* (most probably *microcephalum*) on this ditch.

On February 1<sup>st</sup>, I managed to visit the large lake in Bang Phra, Chon Buri Province. It was rather a boring place, which could be confused with some steppe lakes of West Siberia. There was a wide surrounding plain with 'plain grass and weeds', where only scattered ♀ *B. contaminata* were seen. The lake seemed to have stepped back into the dry season: its banks were just mud with large dead snails and some patches of high grass and reed. I found a small valley of something like a dried out tributary, with a chain of tiny pools and went 'upstream'. There I saw several *O. sabina* perching and several *P. flavescens* flying. A male *P. congener* occupied the vicinity of a small pool and, although cautious, returned to it again and again. This time I also saw a small libellulid with a black body and black proximal halves of wings. Away from the lake, in the shade of several trees, I startled a ♂ *T. tillagra* from a blade of grass.

January 29-31 were devoted to a visit to two small national parks in the east, in order to see a bit of true Nature. By the road we made a short stop at a village about 5 km W of Clayeng, Rayong Province, surrounded with *Gewea* plantations. By the road and deep in plantations there were pools, covered with dead *Gewea* leaves on banks and bottom. There were males and ovipositing tandems of *Copera marginipes*, several ♂ *Brachydiplax chalybaea*, fewer ♂ *C. servilia*, a ♀ *Neurothemis fluctuans* and some blue-faced ♂ *Pseudagrion*.

Closer to the evening we arrived at the Khao-Khitchakut National Park in Chantaburi Province. Right beneath the Krating Waterfalls, in a damp place among large boulders, we saw two red-legged ♂ *Copera vittata*. Then I started to scramble up the torrent, quite gentle in this season and on the smoothly eroded rocks of its bed I noticed two ghost-like ♂ *Protosticta k. khaosoidaoensis* - but it became too dark to see more.

The headquarters area was good for odonates. At about midnight, a ♂ *D. trivialis* was attracted by a lamp. Early next morning, January 30, I investigated the large pond at the headquarters. There were lot of *Copera ciliata*, all those photographed and observed being females, either mature with a white background or young with a reddish one. I came across a few *B. contaminata* and *I. senegalensis*, and photographed a ♂

*Pseudagrion australasiae* while the previous evening Nikita had taken a ♂ *P. williamsoni*. On a bush several hundred metres from the pond I picked up a ♀ *P. autumnalis*.

Later in the morning I again climbed to the Krating Waterfalls and, in the lower part, I encountered a young ♂ *Trithemis aurora*, while Nikita met a mature one and also saw a ♂ *P. jorina*. Having reached the upper fall, I found a path through bamboo thickets on a very steep slope, climbed up along it and entered the stream valley above the waterfalls. There was a true evergreen tropical forest: with a great diversity of ferns, crispy *Selaginella*, horned spiders and of course diverse exotic butterflies. The stream ran calmly, partly over smooth rocks and partly through a sandy bed. The sun had just appeared from behind the clouds and soon I noticed a *Vestalis g. gracilis* disappearing among herbs. For an hour I noticed three individuals. Then I saw *Aristocypha fenestrella*, the first chlorocyphid for me. I expected that creatures with so curious a build would demonstrate some curious behaviour but these violet-black males just sat on branches or stones or flew for short distances, seemingly unconcerned with my presence. Then *Zygonix iris malayana* appeared, flying in tree shade about a metre above rocky parts of the stream, with some stops in the air (a flight mode strongly resembling corduliids). After a while I surprisingly managed to capture a tandem. Lastly, I was amazed to see a very large dragonfly with wide orange wings that flew imperiously and elegantly to and fro over a long section of the river at about 3 m high. I had no hope of catching it but unexpectedly succeeded. It turned out to be a very young ♀ *Hydrobasileus croceus*. Unfortunately, my time in this fantastic place was restricted and already I was late. On my way back I found myself above the main waterfalls and saw many *A. fenestrella* and *Z. iris* really close to me and in full sunshine.

In the afternoon we drove half way back to the west and arrived to the Khao-Chamo-Khao-Wong National Park, Rayong Province. In the evening we made an excursion to the small local pond. On a bush there were a couple of perching ♂ *C. marginipes* and a ♂ *P. autumnalis*, some blue *Pseudagrion* males and, on a grassy bank, I found a ♂ and ♀ *T. aurora* and a weak-looking ♀ *Neurothemis a. atalanta*. Nikita saw a small libellulid with wing basal halves deeply black but failed to get it. Early next morning (January 31) we departed for the waterfalls and returned at noon. The valley looked gloomier than the Krating Waterfalls: the river fell more gently and hence the forest bordered it more densely and was partly over shaded. Besides, the weather was overcast and the sun only rarely appeared. Once in a short period of sunlight, in one of few small openings at the bank I saw a ♂ *A. fenestrella* and a ♂ *T. aurora* activated and, in the shade of a boulder, met with a ♂ *C. vittata*, while Nikita photographed a young, still grey, male of the same species.

We departed from the Reserve and made an excursion to the banks of the Khao-Chamao River just south of Khao-Chamao village. It was quite large and nearly stagnant, with some muddy pools on the technically disturbed ground at the bank. We found quite a rich set of libellulids. Over the water there were male *C. servilla* and one ♂ *Brachydiplax farinosa*; *O. sabina* were startled from the grass and, over a muddy pool, we observed a ♂ *D. trivialis* as well as a lot of young and a few mature ♂ *T. aurora*, the former concentrated in grass at the bridge. Several times we also saw a cautious *N. fluctuans* while, in a steep bushy part of the bank, we observed *P. autumnalis* of both sexes, occupying bush and grass leaves hanging just above the water; and we saw a blue ♂ *Pseudagrion* sp.

So, we saw only 45 odonate species (a bit less than a total of 49 species occurring in the part of Novosibirsk Province east of the Ob River), of which there were no aeshnids, gomphids, corduliids or euphaeids. Macromiids were represented only by two exuvia. All the same, since we visited seldom-visited areas (especially Rayong Province), we were able to record *Aciagrion pallidum*, *Onychargya atrocyana*, *Epophthalmia* sp., *Pseudothemis jorina* for the first time for Chon Buri Province as well as *Aristocypha fenestrella*, *Prodasineura autumnalis*, *Brachydiplax farinosa*, *Brachythemis contaminata*, *Neurothemis intermedia atalanta*, *Trithemis aurora* for Rayong Province and *Hydrobasileus croceus* for Chantaburi Province. This followed from the distribution maps in the atlas by Hämäläinen & Pinratana (1999) and was approved personally by Matti Hämäläinen. You may see my odonate photos at my Internet site at: <http://pisum.bionet.nsc.ru/kosterin/odonata/thailand.htm> and photos by both me and Nikita are submitted to 'The Asian Dragonfly Home Page' by Eric Gibert: <http://www.asia-dragonfly.net/index.php>

## WELCOME to NEW MEMBERS

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**Postscripts**

1. Robert D. Boyd from Mobile, Alabama, who is not a member of WDA, sent an interesting extract from his local "Mobile Register" of 4 October 2005:

**Dragonflies work better than sprays**

Here in Grand Bay the mosquito hawks, or dragonflies if you prefer, have been much thicker than usual, but the mosquitoes have been less. Maybe the government should spend more on raising dragonflies and less on spraying down the highways wide open.

Robert tells me that Grand Bay is to the west/southwest of Mobile and adds that during the past summer there has been a noticeably large increase in the number of dragonflies in his front yard. He speculates on the reason for such an influx, wondering if it could be the result of unusually hot weather, or even maybe related to the devastation caused on the Mississippi Gulf Coast by Katrina. ([rdboyd@aol.com](mailto:rdboyd@aol.com))

2. As many will know, Ronnie Barker (of *The Two Ronnies*, *Porridge* and many other TV successes) died in mid October and the following is an excerpt from The Times two weeks after his death:

**Barker charity has the last laugh**

A wildlife charity is benefiting from one of Ronnie Barker's last jokes. The comedy actor and writer, who died a fortnight ago, had in May sent the Devon Wildlife Trust a doodle of a dragonfly with RAF roundels which he called "R.A.F. Dragonflyter", for an online auction of celebrities' doodles to be sold on eBay. A spokesman for the Trust said: "it is a great honour to have the doodle."

**The WDA is in its ninth year. It has its roots in Slovenia but its branches spread all over the world.**

**Our membership is now 291 and we have members in 40 countries.**





January 2006

DEADLINE: Contributions for Echo should be sent to Vincent Kalkman (kalkman@nmm.nl). Next issue of Echo will be a short one with only small notes on activities of members and will appear in the second AGRION of 2006. Longer contributions for Echo will appear in the first issue of AGRION of 2007.

### **Fieldguide to the Dragonflies and damselflies of Peninsular India published on internet - Subu Subramanian**

The Indian subcontinent is one of the biologically richest regions of the world. The subcontinent is rich in odonates and about 500 species are known. The dragonflies of the region are taxonomically well described thanks to the monumental work of Fraser. However, the natural history and distribution of most of the species is barely known. This lacuna is largely due to the lack of user-friendly field guides for amateur naturalists and students. As an initiative to generate interest in dragonflies among naturalists and students, the Indian Academy of Sciences Bangalore, is publishing a field guide on peninsular Indian odonates (Subramanian, 2005). This book is being published as part of the Project 'Lifescape'. This project aims at producing user-friendly field guides and other resources to encourage field based biology research among students.

The book is divided into three parts. The first part gives an account on the natural history of Odonata. The second part gives larval and adult keys for the identification of families. The third section gives species accounts for 26 damselflies and 34 dragonflies of peninsular India. The book is illustrated with colour photographs or scans of specimen of all the species described. In addition to this the book also provides a checklist of the odonates for the region (178 species) and a glossary of technical terms. A novelty of the book is the introduction of common English names to all species. The first edition of this book will be downloadable at the Indian Academy of Sciences. An announcement of this will appear on [www.asia-dragonfly.net](http://www.asia-dragonfly.net).

### **A pocket guide to the Dragonflies of Peninsular Malaysia and Singapore - Bert Orr**

In October 2005 my book on the Dragonflies of Peninsular Malaysia was published (Orr, 2005. A Pocket Guide to the Dragonflies of Peninsular Malaysia and Singapore - Natural History Publications (Borneo) Sdn Bhd.). The book is small format (17.5cm X 11.5 cm), with 132 pages, and illustrated throughout with watercolour, pen and ink and line drawings. Over 98% of the 233 known species for the region are figured, enabling identification of almost all male specimens, and by association, most females. The book also includes illustrations of a representative selection of larvae.

Published by Natural History Publications (Borneo) Sdn Bhd, it may be purchased online at the price of \$10 plus postage ([www.nhpborneo.com](http://www.nhpborneo.com)).\* The publisher Datuk C. L. Chan, himself an accomplished botanical artist, produces an impressive range of high quality books on Borneo and south east Asia covering all areas of Natural History and local ethnology. Apart from his many original titles, he has reprinted several classics such as Smythies' Birds of Borneo. He also published my previous book 'Dragonflies of Borneo' and still has stock available at \$ 72.

The Peninsular Malaysian guide was produced with the aim of providing an identification guide to a tropical fauna which is both comprehensive, (or nearly so), and affordable by students and naturalists living in the region. It is meant to complement the Odonata chapter by Orr *et al*, in Yule and Yong (eds) (2004), Freshwater Invertebrates of the Malaysian Region, which includes larvae and family keys as well as a technical introduction to odonatology.

\* Although this appears to be the correct address, it won't open with the current colour scheme. Proof Reader.

### **News from Mindanao - Reagan Villanueva. (reaganjoseph@lycos.com)**

Currently, my larval study is increasingly successful with the rearing to emergence of the larva of *Vestalis melania*, *Heteronaias heterodoxa* and *Diplacina nana*. *Risioenemis atripes*, *R. flammea*, *Coelliccia dinoceris*, *Euphaea amphicyana* and *Rhinocypha colorata* larvae were found in the field from males and/or females in transformation. Study on the Philippines and (hopefully the Sulawesi) *Diplacina* larva is currently being prepared. Larval papers on other groups are also in early stages of preparation.

During the past few years a dramatic shift of *Rhinocypha* population is observed in some areas in Davao City-Bukidnon, Mindanao. In 1999-2001 only *Rhinocypha turconii* and *R. sanguinolenta* can be seen in Marahan and Epol-Datu Salumay areas, respectively. In 2002 an increasing number of *R. colorata* was seen in these areas

followed by a decreasing number of the former species. This is clearly observed in *R. sanguinolenta* - *R. colorata* population shift in Epol, Davao City.

The population shift coincides with the increasing human population in the area due to the opening of the Davao-Bukidnon road. *R. sanguinolenta* is expected to vanish in these areas unless efforts to conserve them are made as this species tends to prefer intact forest streams.

### **Fishing the Road – Looking for Odonata in Sarawak’s Kelabit Highlands - Rory Dow**

This is a brief account of some of the dragonflies found on a visit made by Graham Reels and myself to the Kelabit Highlands, a mountainous region in eastern Sarawak near the border with Kalimantan. Our visit was from March 28 until April 7 of 2005, and was part of a longer collecting trip to Sarawak. The Kelabit Highlands, named after the indigenous Kelabit people, have never been surveyed for dragonflies, although J. C. Moulton collected some odonates in the area in 1911 on an expedition to Mount Batu Lawi, notably including the type of *Stenagrion dubium*, and *Matronoides cyaneipennis*, the latter previously only known from Mt Kinabalu in Sabah. Our visit only covered a small part of the area, but it was a start.

We arrived in Bario, the major settlement in the Kelabit Highlands, on a small twin-engine plane. Bario sits on a plateau at about 1030 m, with mountains arising nearly all around, mostly still with their original forest cover. There is no road yet into the Kelabit Highlands, but Bario has a solar powered Internet service, and I had arranged accommodation and a guide beforehand by email. However, we soon realised that getting our guide, and other locals, to understand the kinds of habitat we wanted to find was not going to be easy, and we spent most of the first 3 days in disturbed habitats in the vicinity of Bario, before beginning to find our way into pristine forest habitats during the rest of our stay. Even around Bario we found plenty of odonates; Bario is famous for its rice growing, and the abundant rice fields mean that the place is teeming with *Ischnura senegalensis*, *Agriocnemis femina*, *Diplacodes trivialis* (not all that common, in my experience, at lower altitudes in Sarawak) *Orthetrum sabina* and *testaceum* and other, mostly widespread, species.

Getting just a little bit away from the main parts of Bario, but still in disturbed habitats in mostly agricultural land, plenty more dragonflies became apparent. *Neurobasis longipes* and *Heliocypha biseriata* are common on low gradient streams. Pools and ditches in disturbed kerangas (tropical heath forest) yield *Aciagrion borneense* and *Nannophya pygmaea*. *Hemicordulia tenera* was encountered on a number of occasions in a variety of habitats. I was surprised to find *Onychothemis coccinea* and *Libellago stictica*, both species I have only seen on pristine streams in primary forest elsewhere in Sarawak, on a disturbed stream flowing through Bario itself. *Prodasineura verticalis* and *Elattoneura analis* are common and *Pseudagrion pilidorsum* seems quite plentiful on more open stretches of streams. Interestingly we found no *P. microcephalum*, so common elsewhere in Borneo; another conspicuous absence was *Ictinogomphus decoratus*.

As soon as one gets a bit further out of the settlements and onto higher gradient streams, sometimes in primary forest, sometimes still in quite disturbed habitat, the fauna starts to change. *Neurobasis* become replaced by *Vestalis amnicola* and the stunning *Matronoides cyaneipennis* (the latter at low densities). *Heliocypha biseriata* is replaced by the beautiful red and black *Rhinocypha spinifer*. *Macromija* species (I have at least *euterpe*, *westwoodii* and probably *corycia* in my material) make an appearance. On smaller streams one can find large highland *Devadatta podolestoides*, *Stenagrion dubium*, *Coeliccia ?nemoricola*, at least two probably undescribed platystictids and much more. Perhaps the most spectacular odonate we encountered in the area was *Sieboldius japponicus*, a huge gomphid that I had never seen before, but that seems common in the Kelabit Highlands. On a boat trip down the Pa’dapur River we stopped counting early in the day at about 25 *Sieboldius*. Graham managed to catch one while sitting in the rather unstable longboat, holding a cigarette with one hand and wielding a net with the other.

One of the many fascinating things about the Kelabit Highlands is the variety of habitats, from pristine high gradient mountain streams to swamps. The variety of dragonflies is just as great; I have specimens of at least 55 species from the area, and sight records of a number more. There is insufficient space here to do more than just present a small selection, a full list will hopefully be published elsewhere in the not to distant future. The only real disappointment was that we had hoped to find *Rhinoneura* in the area, and did not, but I still hope to find these spectacular chlorocyphids in the region when I return in 2006.

The Kelabit people are among the friendliest and most welcoming anywhere. It is impossible to walk around Bario and its environs without people approaching you to say hello. When one is walking along a path with a net, they often ask what you are doing, and then answer the question for themselves, much to everyone’s amusement; obviously you are *fishing the road*.

## Commercial Odonate Fishery at Cao Hai, Guizhou Province, southwest China - Keith Wilson

In August 2005 I travelled from Guangzhou to Weining in west Guizhou, Province, southwest China and visited a large montane lake known as Cao Hai. To my surprise I found the local Hui and Yee people actively engaged in commercial fishing for odonate larvae destined for human consumption.

The journey, by train, took two days. The first train was a comfortable inter-city train from Guangzhou to Guiyang, the provincial Capital, with a journey time of 24 hours. The second train, an inter-city train from Guiyang to Neijing (Yunnan), was less comfortable with far more passengers than seats. My small group had to stand the entire six-hour journey in the middle aisle, continuously hassled by



food and beverage trolleys, cleaners, restless passengers etc. We left the train at Weining, which is very close to our destination, the Cao Hai National Nature Reserve. Cao Hai is a shallow, high altitude lake. My GPS instrument measured an elevation of ca 2,215 M and produced coordinates taken at the Weining edge of the lake of North 26° 51.442', East 104° 167.194'. The lake is a ground water fed system with no surface feeder streams or rivers. It is located in a shallow basin surrounded by karst limestone mountains. The water quality is alkaline due to the calcareous nature of the catchment and it supports a high diversity of aquatic plants including lilies, several species of rooted submerged aquatic macrophytes dominated by *Potamogeton* spp., and many clumps of emergent rushes and sedges. The lake also supports large swathes of the calcium-loving stonewort (*Chara* sp.).

Throughout the lake many Dutch-style fyke nets were set to trap fish, frogs and odonates. These traps consist of tubular nets (similar to a fisherman's keep net) with inscales (conical devices which allow fish and odonate larvae to swim through but not back out) and long leaders (flat upright nets designed to guide quarry towards the inscaled catching chambers). I examined the catch of one fyke net, which contained many bitterlings, small crucian carp and rice eels in addition to *Anax parthenope* larvae. Given the extremely high density of fyke nets the high numbers of small fishes and absence of large fishes was not unexpected. The commercial odonate

fishery is based entirely on the capture of *Anax parthenope* (Selys, 1839) larvae. The larvae are dried and sold at retail prices by merchants for ca 100 yuan per kg (US\$ 13/kg). Each kg contains several thousand *Anax* larvae. In Weining we encountered several dried food merchants supplying odonates with each trader holding stock of millions of dried larvae.

The commercial fishery appeared to have no significant impact on the local population of *Anax parthenope*. During my short visit from 15<sup>th</sup> August 2005 to 19<sup>th</sup> August 2005 I observed many thousands of *Anax partheope* exuviae, which had successfully avoided entrapment in fyke nets and used clumps of emergent vegetation or the outside of fyke nets for support during emergence.



In a local restaurant in Weining my group ordered a dish of odonates and were promptly served with a dish of freshly fried and seasoned larvae. Surprisingly they were quite tasty; a bit like oily crisps with no strong or unpleasant flavours. Other odonates observed at Cao Hai included: *Ischnura asiatica* (Brauer), *Ischnura aurora* Brauer, *Ischnura rufostigma* Selys sp., *Cercion calamorum* Ris, *Cercion v-nigrum* (Needham), *Crocothemis servilia* (Drury), *Orthetrum albistylum* Selys, and *Sympetrum flaveolum* Linnaeus.



### Hainan, China, August 2005 - Graham Reels

On 24<sup>th</sup> August 2005 I boarded a flight from Hong Kong to Haikou, the capitol of Hainan Island. My companions were a team of five biologists from the Hong Kong-based conservation charity, Kadoorie Farm & Botanic Garden. Our destination was Yinggeling – a mountainous area near the centre of this large island, containing some of the best primary forest remaining here or indeed anywhere in southeastern China. This extensive reserve has not previously been studied by biologists, and it was hoped that the forest would prove to be a treasure trove of biodiversity. In particular, interest was focused upon the possibility of discovering a population of the Hainan Gibbon – the world's most endangered ape, with currently only a tiny population of little more than a dozen individuals clinging on precariously in the nearby Bawangling National Nature Reserve.

A previous KFBG-led survey of Yinggeling in May 2005, which I had been unable to join, yielded several interesting dragonflies, including the first Hainan records of *Sinolestes edita*, and only the second record of the endemic *Burmargiolestes xinglongensis*, as well as two potentially undescribed species. I was hopeful of adding to the tally. Our modest team also included a botanist, an ornithologist, a herpetologist, a lepidopterist and a myrmecologist.

On the 25<sup>th</sup> our ranks were swollen to expedition proportions by the addition of about twenty biologists from various institutes and organizations in Hainan and southern China, and we proceeded to bounce for several hours along dirt roads to the village of Yaxin (350 m), at the edge of the reserve. On the way we stopped briefly at

the village of Nankai Xiang, which lies beside a broad, fast-flowing boulder river. I took the opportunity to explore and soon saw a male *Lamelligomphus hainanensis* perching in typical fashion on a boulder. After I had vouchered this my eye was caught by a very large euphaeid with orange-tinged wings – clearly a *Dysphaea*, but, equally clearly, not *basitincta* (the only member of this genus previously recorded for Hainan). This turned out to be *D. gloriosa*.

The following morning the entire expedition, including cooks and more than a dozen porters, commenced the arduous climb to Camp 1, located at 1,000 m within the forest. Two freshly-slaughtered pigs, numerous cabbages and squashes, and several sacks of rice from the village were to be our chief sustenance for the coming week.

At about 500m the trail crossed a small brook in logged secondary forest, at which I found the very beautiful *Coeliccia scutellum* and the astonishing Hainan endemic, *Pseudolestes mirabilis* – a megapodagrionid sufficiently odd to have been given its own family (Pseudolestidae) by some authorities. The short hind wings are black and metallic gold on the upper surface, and silver on the underside. Individuals perch horizontally in a characteristic 'arrowhead' posture, with both pairs of wings angled backwards. Males face off by hovering face to face using only the forewings, the hindwings hanging downwards, motionless and turned inwards so that the silver



***Pseudolestes mirabilis***

using only the forewings, the hindwings hanging downwards, motionless and turned inwards so that the silver

undersides face forward – rather similar to the white expanded tibiae used to such good effect by various male chlorocyphids, but far more spectacular. They continue this display whilst slowly rising upwards through the understorey. In five separate visits to Hainan with KFBG, I have seen this species present in good numbers in almost every upland forest, but this forest edge record was unusual.

After a few hours walk we reached Camp 1, inside the forest proper, and I spent some time exploring the small stream which ran through the clearing. This yielded more *Pseudolestes* and several individuals of another south China megapodagrionid, *Agriomorpha fusca*. Nothing else revealed itself before the inevitable afternoon downpour set in, although a *Macromia* did zip past at a moment when I had temporarily put down my net (as they are wont to do).

In the following days, the weather followed a predictable pattern of clear mornings and sodden afternoons, during which Camp 1 became a mud-bath and the two cooks performed heroics, somehow managing to serve up mountains of hot tasty food under their makeshift shelter, while the increasingly mildewed expedition members eked out whatever zoological and botanical findings they could from the forest. Frustratingly, prodigious exertions on my part only yielded two further species – the rather common *Coelliccia cyanomelas* and the platystictid *Drepanosticta zhoui*.

On the 28<sup>th</sup> the expedition moved on to Camp 2, set beside a bigger stream, and within a day's walk of still bigger streams. The forest here was truly magnificent, with an average canopy height of 30 m, and individual trees reaching 70 m. On the 29<sup>th</sup>, exploring the larger streams, I added two more Hainan endemics to the reserve list, finding a sizable population of the euphaeid *Bayadera kirbyi* on one large stream, and the aeshnid *Planaeschna celia* on another – the latter representing only the second specimen of this recently-described species.

On the 30<sup>th</sup>, the villagers carried up fresh supplies of rice and vegetables, as well as two slaughtered dogs, for the expedition's nourishment. I was leaving the following day and, upon reflection, decided to take my chances with the left-over pork, even though it was getting decidedly ropery after several days ripening in the heat and humidity.

The descent back to Yaxin proved eventful. Several billion leeches had gathered along the slippery trail to enthusiastically greet our small party, and much effort was wasted in trying to fend them off. There were, however, compensations with streams at lower elevations yielding *Calopteryx melli*, *Euphaea ornata*, *Rhinocypha fenestrella* and *Tetrathemis platyptera*.

Generally, I was disappointed by the relatively small number of species encountered. It seems that late August is a little too late for many upland stream species in Hainan. I hope to return at a more appropriate time. Nevertheless, the reserve list currently totals 41 species, which is not a bad start. An application to upgrade Yinggeling to a National Nature Reserve will be submitted in the spring of 2006. It is without doubt the best forest I have seen in southeast China. But they're still looking for those gibbons.

**John Michalski** ([jmichalski@easthanoverschools.org](mailto:jmichalski@easthanoverschools.org)) visited Papua New Guinea for the second time in the summer of 2004, and continues work on a large monograph on the Odonata of New Guinea and the neighbouring islands, hopefully to reach press in late 2006 or early 2007. In the mean time, a variety of papers will shortly be submitted describing new taxa of *Nososticta*, *Papuagrion*, *Pseudagrion*, *Argiolestes*, *Neurobasis*, *Huonia*, *Paramecocnemis*, and *Lieftinckia*, as well as a taxonomic discussion of *Oreagrion*. Some of these papers will include generic and family revisions, and co-authors include Dr. Thomas Donnelly, Steffen Oppel and Steven Richards.