

Project Update: August 2012

As first part of proposed project odonatological fieldwork has been conducted in Sri Lanka in July 2012. During 16 field days between 4 July and 24 July 2012, more than 100 localities have been surveyed and 70 species have been recorded. Many odonatologically unexplored areas have been visited and many valuable new data on endangered endemic species distribution and biology have been gathered. Rich photographic collection has been made as well.

Fieldwork has been planned to cover odonatological »white spots« in eastern, central and south-western part of the island and many new records have been obtained from these parts of the island. Special focus has been set to on 10 critically endangered endemic species according to the IUCN Red List of Threatened Species 2011, viz. *Sinhalestes orientalis*, *Drepanosticta adami*, *Drepanosticta hilaris*, *Drepanosticta montana*, *Elattonneura leucostigma*, *Anisogomphus solitaris*, *Heliogomphus ceylonicus*, *Heliogomphus nietneri*, *Heliogomphus lyratus* and *Macromia flinti*. For most of them, known localities were revisited and surveyed. However, in majority of cases the data on their localities and biology are extremely scarce and some are known only from more than a century old single records.

As regards critically endangered species which are in the focus of the project, unfortunately, the first phase of the fieldwork has only been partly successful. Most probably the habitat destruction is the main reason of their absence and lack of records in last decades, however, more fieldwork in different season might yield results. The area around Rambodde in central Sri Lanka, the type locality of critically endangered *Sinhalestes orientalis*, *Heliogomphus ceylonicus* and *H. nietneri*, is a sad example of large scale habitat destruction, executed in colonial times and also afterwards. These species were described from Rambodde area 150 years ago and never found since. For *Drepanosticta adami*, *Anisogomphus solitaris*, *Heliogomphus lyratus* and *Macromia flinti*, broader surroundings of formerly known localities were also visited without success, but with the exception of *Drepanosticta adami* the habitats don't seem severely degraded so fieldwork in different season might be more successful. For *Drepanosticta hilaris*, *Drepanosticta montana* and *Elattonneura leucostigma* new localities have been found, but still, their distribution is very limited and habitats severely degraded due to tea and other crops cultivation, forest clearing and draining of small streams for irrigation and domestic use.

For larger group of endemic species also included on the IUCN Red List of Threatened Species, viz. *Drepanosticta austeni*, *Drepanosticta submontana*, *Drepanosticta walli*, *Elattonneura caesia*, *Elattonneura oculata*, *Cyclogomphus gynostylus*, *Gomphidia pearsoni*, *Heliogomphus walli*, *Macrogomphus lankanensis*, *Microgomphus wijaya* and *Tetrathemis yerburii*, valuable new data on distribution were gathered.

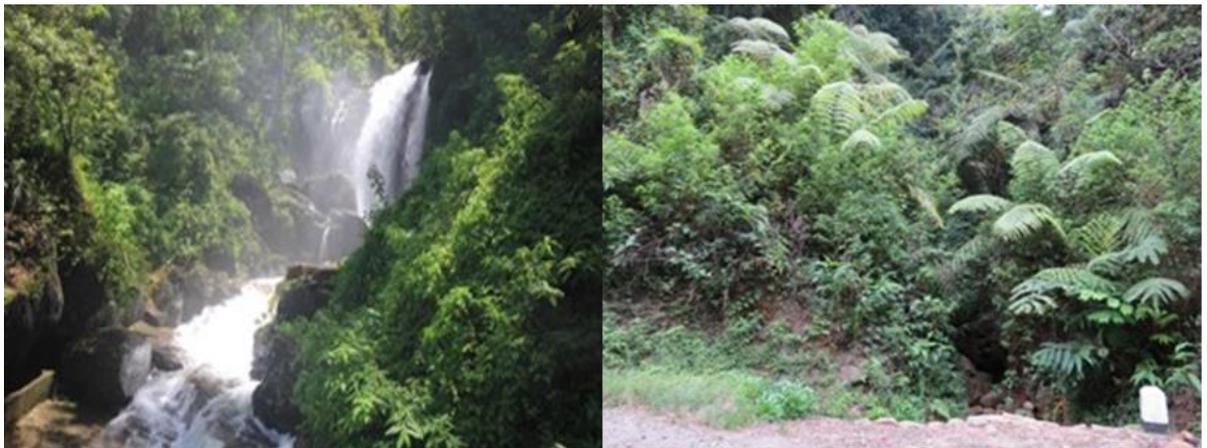
In logistic and financial terms the first part of fieldwork has been executed according to the plan. In total, 2260 GBP have been spent from the Rufford Small Grant budget so far.

The basic aim of the project - to collect new faunistic data on endangered dragonfly fauna of Sri Lanka and to improve knowledge on globally endangered dragonfly species, their distribution, biology and habitats is fulfilling as planned. The next phase of fieldwork will be

executed in September/October 2012. All faunistic data will be entered into the database by the beginning of November 2012, when it will be closed for new entries and ready for analyses for the publication of Distribution Atlas of the Dragonflies of Sri Lanka.



Left: Hills east of Nuwara Eliya in Central part of Sri Lanka are converted into vast tea plantations and almost no natural forest has been left. (Photo: M. Bedjanič). Right: From the biodiversity point of view the area around Rambodde in central Sri Lanka is badly degraded and only small pockets of natural vegetation can be found along streams and slopes. (Photo: M. Bedjanič).



Left: Narrow belt of dense natural vegetation around Rambodde Falls still ensures suitable conditions for survival of some endangered endemic dragonfly species. (Photo: M. Bedjanič). Right: Small stream at the road near Haputale in Central Sri Lanka represents habitat of two endemic damselflies *Drepanosticta montana* and *Elatoneura leucostigma*, both critically endangered species according to the IUCN Red List of Threatened Species. This small pocket of natural montane vegetation is surrounded by tea plantations and drained for irrigation and drinking water... (Photo: M. Bedjanič).



Left: Endemic damselfly *Drepanosticta hilaris* is listed as critically endangered on the IUCN Red List of Threatened Species. In July 2012 it has been found at some localities in vicinity of Rambodde and Pundaluoya. (Photo: M. Bedjanič). Middle & Right: Male and female of critically endangered *Drepanosticta montana*. (Photo: M. Bedjanič).



Left: After almost 80 years, endemic protoneurid *Elatoneura leucostigma* has been rediscovered in 2009 near Haputale. In July 2012, small population has been found at another locality nearby. (Photo: M. Bedjanič). Right: Gin Ganga River near Deniyaya in south-western part of Sri Lanka flows close to Sinharaja Biosphere Reserve and represents suitable habitat for more than a dozen endemic dragonfly species. (Photo: M. Bedjanič).



Left: Endemic gomphid *Burmagomphus pyramidalis sinuatus* is rarely seen but in July 2012 it has been quite common in Gin Ganga River near Deniyaya. (Photo: M. Bedjanič). Right: Also for endangered small libellulid *Tetrathemis yerburii* many valuable new data were gathered during fieldwork in the frame of Rufford Small Grant project. (Photo: M. Bedjanič).