Project Update: June 2013

The basic aim of the first part 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 — has been successfully completed with fieldwork in July and in October and November 2012.

As the second part of the project the odonatological database founded in 2005 was closed for new entries in March 2013 and work on analyses for the publication of *Distribution Atlas of the Dragonflies of Sri Lanka* started. The database consists of over 11.600 faunistic records. All existing odonatological data known to the authors, extracted from museum collections, literature or submitted as unpublished field observations of numerous colleagues as well as those collected in the frame of Rufford Small Grant Project were included. Over 1.300 localities with odonatological data were geolocated and with the help of MS Excel, MS Access and ArcGIS different analyses and distribution maps were produced. In the continuation some analyses derived from the collected data are presented (Figs. 1-6).

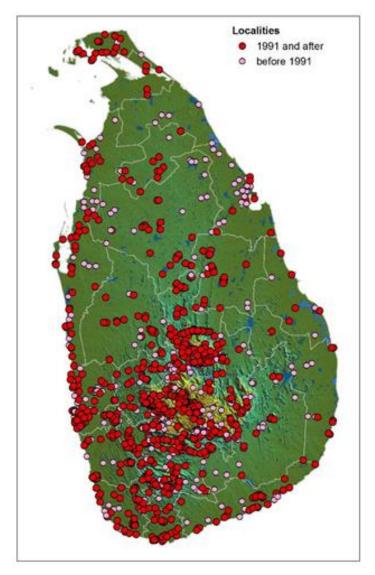


FIGURE 1. Sri Lanka overview map with more than 1300 dragonfly localities and age structure of data – localities with records after 1991 are marked with red dots [ex Distribution Atlas of the Dragonflies of Sri Lanka].

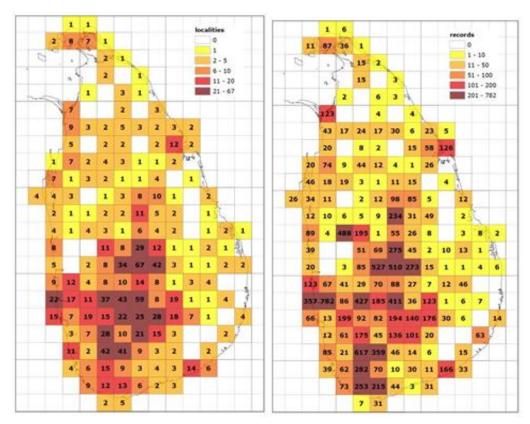


FIGURE 2. Number of odonatological localities per 20x20 km UTM squares [ex Distribution Atlas of the Dragonflies of Sri Lanka]. FIGURE 3. Number of odonatological records per 20x20 km UTM squares [ex Distribution Atlas of the Dragonflies of Sri Lanka].

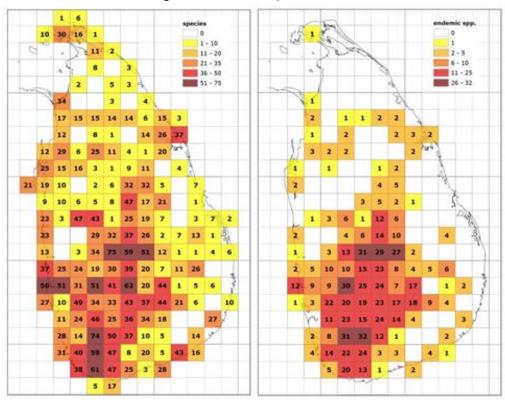


FIGURE 4. Number of dragonfly species per 20x20 km UTM squares [ex Distribution Atlas of the Dragonflies of Sri Lanka]. FIGURE 5. Number of endemic dragonfly species per 20x20 km UTM squares [ex Distribution Atlas of the Dragonflies of Sri Lanka].

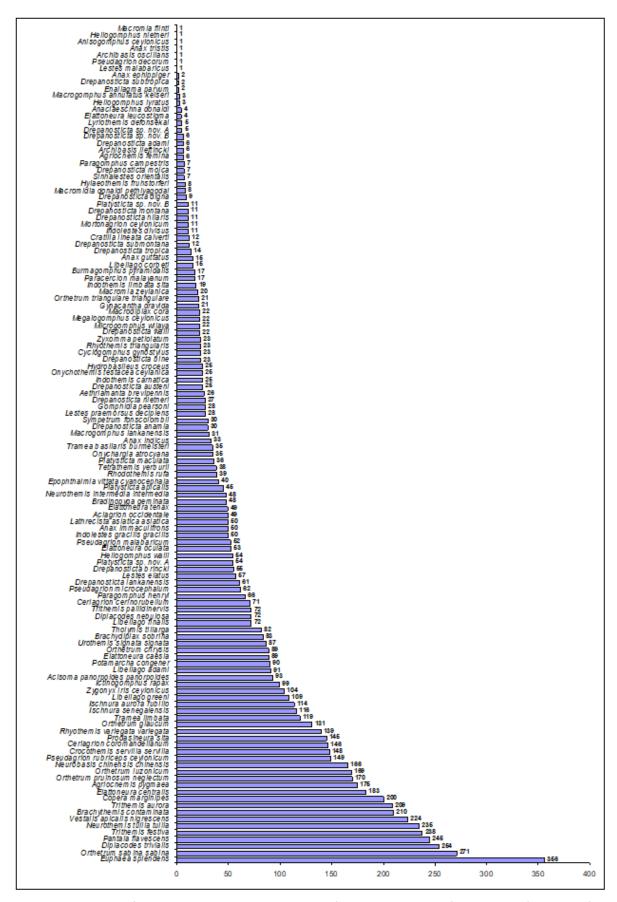


FIGURE 6: Example of data analysis summary: Number of recorded localities for all dragonfly species from Sri Lanka [ex Distribution Atlas of the Dragonflies of Sri Lanka].

All this and much more will be presented in the book "Distribution Atlas and Biology of the Dragonflies of Sri Lanka, with IUCN Red List Assessments of Threatened Endemic Species", which forms the final output of many years of work and publication of which is also partly supported by the Rufford Small Grant Project. For all 124 dragonfly species known from Sri Lanka their detailed distribution, seasonal phenology etc. will be presented. For endemic species, which represent 50% of the fauna, information on biology and threat status will be given together with global IUCN assessments. Due to substantial broadening of initial concept and contents the publication of the book has been delayed and is scheduled for July/August 2013.

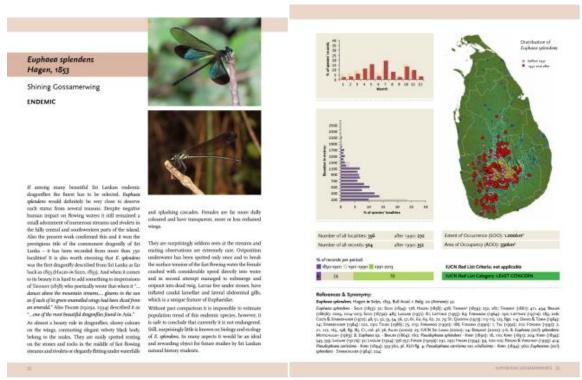


FIGURE 7: Draft pages on the endemic Euphaea splendens from the book "Distribution Atlas and Biology of the Dragonflies of Sri Lanka, with IUCN Red List Assessments of Threatened Endemic Species" [ex Bedjanič, M., K. Conniff, N. van der Poorten, A. Šalamun: in prep.]

Also based on results gathered in the frame of the Rufford Small Grant Project it was possible to finish some scientific papers with descriptions of new taxa (e.g. Bedjanič, M., 2013. Paragomphus campestris sp. nov., a new endemic species from Sri Lanka (Anisoptera: Gomphidae). *Odonatologica* 42(1): 45-52.) and additional ones were accepted for publication and are in print (e.g. Conniff, K. & Bedjanič, M., 2013. Two new endemic representatives of the genus Archibasis from Sri Lanka (Zygoptera: Coenagrionidae). *Odonatologica* 42(3) and Bedjanič, M. & N. van der Poorten, 2013. On the synonymy of two enigmatic endemic Clubtails from Sri Lanka (Anisoptera: Gomphidae). *Agrion* 17(2)).