

## **Lake Manguao Aquatic Biodiversity Conservation Project**

### **Project activities prior to RSG funding**

A first part of the project was realized in December 2007. As the RSG was just approved during that time, this entire period was financed using the Coccinella Program funds. Activities focused on biodiversity surveys (collection of stream macro invertebrates) of the Lake Manguao catchment and of other Palawan sites. Consultations with local authorities and the Western Philippines University (WPU) were held and a Memorandum of Agreement on the Aqua Palawana Program between WPU and the International Research Institute of Entomology (IRIE) was prepared and finally signed and notarized. During a subsequent one-week stopover in Singapore, the taxonomic study on the Palawan Decapods was started (for details see below), and a working plan for the next visit at Raffles Museum of Biodiversity Research (RMBR) was arranged for which funding was applied for at the same time.

([http://rmbbr.nus.edu.sg/news/index.php?entry=/visitors/20061204-hendrik\\_freitag.txt](http://rmbbr.nus.edu.sg/news/index.php?entry=/visitors/20061204-hendrik_freitag.txt))

### **The work on the scientific project objectives was continued from January to March.**

Some data of the project phase in December have been included in taxonomic studies on Palawan Hydraenidae (minute moss beetles) [1] <[https://service.nhm-wien.ac.at/cgi-bin/nph-http/?Cmd=new#\\_ftn1](https://service.nhm-wien.ac.at/cgi-bin/nph-http/?Cmd=new#_ftn1)>, and Heptageniidae (riffle mayflies) [2] <[https://service.nhm-wien.ac.at/cgi-bin/nph-http/?Cmd=new#\\_ftn2](https://service.nhm-wien.ac.at/cgi-bin/nph-http/?Cmd=new#_ftn2)>.

A conference poster about the project was designed and printed.

### **RSG 1<sup>st</sup> Intermediate Report**

This phase was started on April 4 (arrival Palawan) and focused on the following activities:

- An information board was set up in the village at Lake Manguao (see picture with sitio Capitan, his wife and WPU students) and a similar but more simple board was placed at the Aquatic Biology Department of the WPU, both of them allowing a change of the information sheets displayed.
- A handout was prepared and translated into Tagalog. Several meetings with local experts and NGOs (WPU Forestry Department; Aborlan Campus; Katala Foundation; Conservation International) were arranged aiming at getting inputs on rainforestation farming and requesting collaboration options. The only rainforestation demonstration site in Palawan at Aborlan was visited.

- Two meetings were held with the local community at the Lake, where the proposed activities were discussed, the project's intention was explaining and the handouts were distributed.
- A one-week workshop on rainforestation farming was attended at the Institute of Tropical Ecology at the Leyte State University; the most experienced and advanced institution on this field in the Philippines. This led to the establishment of additional professional contacts and served as a preparation for the forthcoming workshop on this topic in Palawan.
- Four field surveys were undertaken at the Manguao catchment (8 sites). WPU students, and once a teacher from the University of San Carlos (USC), joined them. This way these surveys served as training and a field lesson at the same time (freshwater fauna, scientific sampling methods, ecosystem types). The Manguao field station was used during all surveys at the Lake. A special preparation was not necessary so far as it was recently prepared by another project group of the WPU.
- 12 days were spent for the sampling of 22 comparative sites on Palawan and Balabac Islands (Balabac survey joined by Municipality officials; most other surveys joined by one or more local environmentalists and students).
- Several meetings with officials of the Municipality of Taytay (Lake Manguao area), the Municipality of Balabac, the WPU president and the Campus Dean were held to clarify formalities.
- A "PowerPoint" presentation on the project's objectives, history, results and recent activities was prepared (several versions for different occasions).
- An international convention of the Philippine Society for the Study of Nature was attended at the Palawan State University from May 2nd to 5th, where a Poster of the project was presented and a contact was established to an environmental scientist (Rico Ancog) from USC, Cebu, working on reforestation. He joined a project survey later on and will assist in a forthcoming workshop.
- The Conference on "Biodiversity Crisis on Tropical Islands" was attended in Brunei, June 10th to 13th. (The conference fee was kindly paid by the "Kirschenhofer Foundation" Vienna.) A poster was presented and an oral presentation about the project (see above) was given at the conference. (<http://www.ubd.edu.bn/news/conferences/bcti1206/programme.htm>). This conference visit was included in the project's program as it fitted perfectly by the topic, the locality and the schedule. (The conference took place just before the project phase in Singapore and it was easy to reach during a stopover on the budget flight from the Philippines to Singapore via nearby Kota Kinabalu.) Besides, the Island of Banggi was

visited and sampled during this stopover, as it is located just opposite Balabac Island on the Malaysian side. Both islands are the biogeographical "stepping stones" between Borneo and Palawan.

- The scientific project part in Singapore focused on freshwater Crustaceans sampled during the previous project phase. Several new species and records of the decapods genera *Atyoida*, *Atyopsis*, *Caridina*, *Geosesarma*, *Insulamona*, *Labuanium*, *Parathelphusa* could be distinguished using the specialized library and the reference collection at the RMBR. The regarding publications (5) are in preparation with Singaporean, Japanese and Chinese co-authors of appropriate specialization. The stay at the RMBR was co-financed by a per diem fund of this institution. An oral presentation on the project was given at the National University of Singapore (hosting the RMBR; see <http://www.dbs.nus.edu.sg/eventlist/seminars/poster/2007/hendrik.pdf> <<http://www.dbs.nus.edu.sg/eventlist/seminars/poster/2007/hendrik.pdf>>



