

Study of fish fauna and habitats in fish conservation areas and surrounding sites in the Mun River, Northeast Thailand

Year: 2015–2016

Place of fieldwork: Thailand

Name: Eri Nakata

Key Words: Northeast Thailand, Mun River, Rasi Sarai dam, freshwater fishes, conservation

● Research background

In Rasi Salai district in the northern part of Sisaket Province, many flooded forests were lost when the Rasi Salai dam was constructed in the Mun River basin. Flooded forests are essential sites for egg laying and growth of larval and juvenile fishes. Fish conservation areas have been established independently by local inhabitants in pools. However, information on fish species and their habitats remains limited, and hence, comprehensive implementation of conservation strategies in these pools is not possible. In addition, the locations of conservation areas are often chosen using religious and social factors, placing them in such areas as in front of spirit forests and temples, and a formal conservation area is not yet under in consideration for fish habitats.

● Research purpose and aim

This study aims to create a proposal for conservation activities that considers a scientific viewpoint by inventorying fish fauna and ecology of the fish in the concerned area. Specially, I am focusing on how fish reproduce in a place where a flooded forest was lost. I hope to offer guidance to conservation activities by accumulating ecological information on the fish in the fish conservation areas. In addition, my aim is to use the activity to incorporate an ecological viewpoint by including an attitude survey of local inhabitants.

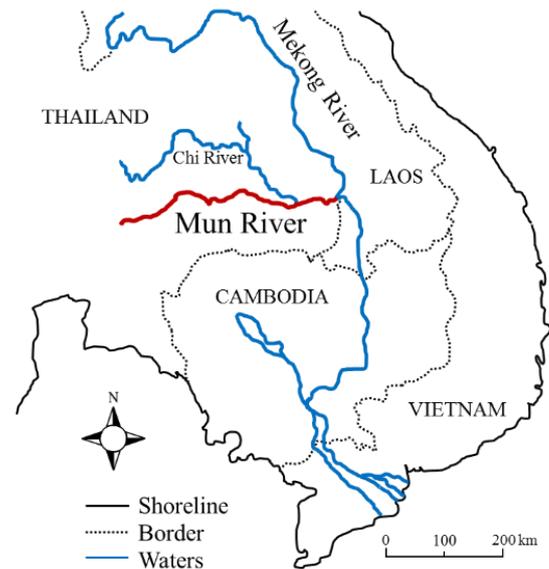


Fig.1. Location of the Mun River



Fig.2. A flooded forest



Fig. 3. The Rasi Salai Dam



Fig. 4. *Pangasius* sp.

- Results and achievements by fieldwork

I collected fish in the study sites at November 2015 and February 2016; after that I began identifying fish species at Kasetsart University. I have not yet identified all collected species, but I have so far confirmed 13 families and 22 genera. Upon comparing these results with those obtained in August 2015, I have concluded that larvae and juveniles of the Cyprinidae family (the family of carp) live in flora near the shore, which are swamps in the flooded forest. Conversely, Siluridae (the family of catfishes) live away from the shore. Additionally, I obtained local knowledge from residents about *Pangasius* sp., which are medium-sized silurid fishes. These fish engaged in seasonal migration before construction of the dam, but no longer do, and have subsequently gathered near live-boxes for fish farming. I consider this to mean that *Pangasius* sp. have adapted to the dam environment.

- Implications and impacts on future research

I will continue fish identification and recording by sketch. After that, I plan to collate the data and obtain habitat information. I am considering revisiting the research site in the rainy season (from June to October); I want to continue improving my command of the Thai language until that time.