

## Structure and Distribution of Fish Community in the Sirikit Reservoir

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### Abstract

A study on structure and distribution of fish community in the Sirikit Reservoir was carried out between January and August 2009. There were 4 sampling events in 6 areas. The specimen were sampling by using electro-fishing and gillnet. It was found that the Sirikit Reservoir including 50 species of fish from 18 families. It Considering by number and weight, the reservoir was dominated by *Clupeichthys aesarnensis*, *Xenentodon cancila* and *Parambassis siamensis*, Fish abundance resulted from electro-fishing was  $3.77 \pm 0.54$  kg./hr and average standing crop was  $3.00 \pm 0.78$  kg./rai. Richness, diversity and evenness indexes were averaged at  $2.05 \pm 0.49$ ,  $1.67 \pm 0.37$  and  $0.62 \pm 0.12$ , respectively. There were 24 fish species every sampling such as *Xenentodon cancila*, *Clupeichthys gonionatus*, *Parambassis siamensis*, *Pangasius pleurotaenia* and *Pristolepis fasciatus* etc. The results from ranked of species from abundance curve and MDS analysis can divided fishes community into 3 similar groups. Both highest abundance and distribution were found in August at station No.6 (Ban Wang-num-ton). Although physical character of the reservoir which showed the similar manner of 2 reservoirs, there were no effect on the structure and distribution of the fish community. However, the proportion of herbivorous and carnivorous fish was nearly same value, the expected trend of fish species was declining and the abundance of fish Sirikit Dam were also changed. Thus, the herbivorous fish should be release for the sustainable of resources manage.

**Key words:** distribution, fish community, Sirikit reservoir

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