

ความหลากหลายทางชีวภาพของปลาน้ำจืดในหนองหาร

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Abstract: Nong Han Luang (NHL) reservoir was selected as study area for this research. It is the biggest freshwater ecosystem in Northeast of Thailand which is located in Sakon Nakhon Province, Thailand. Their resources provide various goods and services to anthropogenic communities. The objectives of this study were 1) to determine species composition of freshwater fishes and their distribution, 2) to examine the diversity of freshwater fishes using diversity indices and 3) to establish check-list and simple database of freshwater fishes. Gill nets with about 2,000 m length and 2 m depth in different mesh sizes were used to collect the samples during March to April 2011. The results found that there were at least 23 species of freshwater fishes are existed in NHL which of those species subjected to 12 families. Littoral zone revealed higher species richness than limnetic zone. Cyprinidae was the major family and *Puntius brevis* and *Cyclocheilichthys apogon* were the most common native species. Moreover, the study found the prevalence of *Hampala dispar*, *Oxyeleotis marmoratus*, *Tetraodon leiurus*, *Henicorhynchus siamensis*, *Osteochilus hasselti* and *Notopterus notopterus*, such species adapted to NHL environmental conditions. The study revealed that Shannon Wiener Index of Diversity (H) values in Don Chaing Ban (1.95 and 2.00) were higher than Don Sawan (1.89 and 1.76) for both March and April, respectively. In contrast, the Simpson Index of Dominance (C) value in Don Sawan gave a bigger value. Freshwater fishes in NHL contribute to local livelihood from capture fisheries activities. However, local fishermen should be informed and followed fisheries conservation and responsibility practice. The results from this study implied various policies on aquatic biodiversity conservation and can be used as baseline information for fisheries resources management.

Key words: freshwater fishes; biodiversity conservation; aquatic environment; Nong Han Luang