



## **Tropical wetlands – problems and potentials as paleo-monsoon archives**

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Paleoclimatic and paleoenvironmental information is still scarce for Southeast Asia despite the fact that this large region is home to numerous natural lakes and wetlands that may contain long sedimentary archives.

During the past years we have been surveying lakes and wetlands in different parts of Thailand to select the most promising and longest sedimentary sequences for paleoenvironmental studies. Our survey of more than 30 lakes shows that only very few lakes and wetlands still contain soft sediments. The sediments in the majority of the lakes and wetlands have been dredged and excavated during the past 10 years to provide open and clear water for fishing and recreation. Dredging and excavation using large caterpillars has disturbed and in some cases completely destroyed the sedimentary records. Stiff clays now drape most of the lake bottoms.

Based on our extensive survey, we found five sites, from which we successfully obtained intact sediment sequences: Lakes Kumphawapi and Pa Kho in northeast Thailand, Nong Leng Sai in northern Thailand and Sam Roi Yod and Nong Thale Pron in southern Thailand. All of these sites contain a detailed sedimentary record covering the past 2000 years, two of the sites cover parts of or, the entire Holocene; and two sites have sediments covering the last Termination and MIS 3, respectively.