

Session V – Large Lakes, Deltas, and Transboundary Partnerships: Fostering Science, Cooperation, and Sound Management
1:30 PM

The Ecology and Management of Poyang Lake, China

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Abstract

Poyang Lake, located in the northwestern corner of China's Jiangxi Province, is an area recognized for its importance to a wide variety of water birds. This importance is greatly illustrated by the fact that over 98% of the world's Siberian Cranes relies on Poyang Lake, as well as approximately 60% of the world's White Naped Cranes and over 50% of the world's Swan Geese. This paper addresses the factors that contribute to habitat selection by and reliance on identified feeding guilds made up of a variety of water birds found at Poyang Lake and builds on six months of research during the wintering season of 2004-2005. I also assess potential impacts to the lake from a proposed dam to be located at the outlet of the lake. The factors being looked at during this time address comparing short-term trends during a single wintering season with trends within the context of long-term ecological monitoring. The primary points of research comprise mapping selected macrophyte distributions within two lakes and establishing different levels of dependency between feeding guilds on habitat containing *Vallisneria spiralis* and the behavior of water birds within that habitat. Variations in scale and temporally dependent influences on habitat selection will be compared between trends observed within the single wintering season and those within data collected over the last six years. These observations are attempting to correlate effectively the relationships that have been hypothesized to exist between fluctuating water levels present at Poyang Lake, the distribution of *V. spiralis* and the numbers and distribution of selected water birds, as well as outline the threats most relevant to these relationships within the region containing Poyang Lake. This approach is then extrapolated to the whole lake and to other foraging guilds of water birds that depend upon the lake.