

## **Effects of water level fluctuation on waterbirds distribution and aquatic vegetation composition at Natural Wetland Reserve, Peninsular Malaysia.**

### **ABSTRACT**

The effects of water level fluctuations on waterbirds distribution and aquatic vegetation composition was determined using distance sampling point count method and direct visual observation at Paya Indah Natural Wetland Reserve, Peninsular Malaysia. A total of 2563 waterbird individual of 28 species and 8 families were detected in three habitats, that is, marsh swamp (68.59%), open water body (18.42%), and lotus swamp (12.99%). *Porphyrio porphyrio* was the most dominant species in marsh swamp (45.39%), and lotus swamp (23.42%), whereas *Dendrocygna javanica* (42.16%) was the most abundant in open water body. The highest water level for marsh swamp (2.313 m) and lotus swamp (2.249 m) was recorded in January, 2008 and for open water body (2.572 m) in January and April, 2008. In contrast, the lowest water level for marsh swamp (2.048 m) and lotus swamp (1.834 m) was determined in October, 2008 and for open water body (2.398 m) in January, 2009. Pearson test indicates weak linear correlationship between water level and waterbird abundance in lotus swamp habitat (

**Keyword:** Waterbirds; Water level; Aquatic vegetation; Wetland.