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# Mai Po Wetland Habitats

## Fact sheet

### Freshwater



Freshwater habitat at Mai Po Nature Reserve. © Bena Smith/ WWF HK

#### Introduction

Freshwater habitats have never been abundant at Mai Po. Historically, a small freshwater marsh was located at the south-east side of Mai Po, at the present location of Fairview Park (residential housing complex), which was an important breeding site for Pheasant-tailed Jacana *Hydrophasianus chirurgus* and Watercock *Gallicrex cinerea*. However, this marsh no longer exists and therefore WWF set about creating some freshwater ponds at the southern end of the Nature Reserve in hope to provide suitable habitat for freshwater wildlife.

In the late 90's WWF established a series of freshwater ponds in the Reserve following the handover of 6 commercial fish ponds by the government. After pumping out the brackish water, the ponds were then allowed to fill naturally from rain water. These ponds are now specifically managed to attract amphibians, odonates (dragonfly and damselfly) and wintering ducks.

#### Ecological Value

Wintering duck, are attracted into the ponds to eat freshwater plants growing on the pond bunds or in the open water; Knot Grass *Paspalum paspaloides*, Barn-yard Grass *Echinochloa crusgalli* and Water Spinach *Ipomoea aquatica*, are particularly favoured fodder species. The interior plants also provide camouflage and cover from larger bird predators. Each winter period at times of high tide or at dusk, several thousand duck roost in the freshwater ponds; the highest count being 6,000 ducks in winter 2006/07. Freshwater ponds are also an important breeding habitat for amphibians and odonate. During summer, egg sacs of the Brown Tree Frog *Polypedates megacephalus* are commonly found on pond edge vegetation. Over 20 species of odonate could be encounter at freshwater pond from April to September and at least 14 species are proven to breed in the Mai Po ponds.



Garganey, a common duck on freshwater ponds  
© Neil Fifer

#### Our Management

The freshwater ponds at the Nature Reserve are mainly situated at the southern end of the Reserve and around the Education Center. WWF carries out a series of management work on these ponds annually to maintain their wildlife value. In summer, a selected few of the freshwater ponds will be completely drained for several days for sun-baking to kill off bacteria in the mud. Fish will also be removed from the ponds as they prey on odonate larvae and are known to undermine the earth bunds between ponds. After sun-baking, the freshwater pond is refilled with rain water. In order to prepare the freshwater pond for wintering ducks, grasses on the bunds between freshwater ponds will be cut in October. WWF research has shown that this management work significantly increases the attractiveness of the ponds to duck.



Buffalo introduced to control vegetation  
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