



for a living planet®

Mai Po Wetland Habitats

Fact sheet

Inter-tidal Mudflat



The Deep Bay inter-tidal mudflat © WWF-HK

Introduction

The Deep Bay mudflat is a restricted area under the Wild Animals Protection Ordinance (Cap 170) and forms a large portion of the Ramsar Site. Situated in the lower reaches of the Pearl River estuary, the Deep Bay mudflat receives a large input of silt and organic matter each year, which provides food to a wide variety of wildlife. Of particular note is its importance to migratory waterbirds.

Humans have utilized the inter-tidal mudflat areas for at least the last 150 years. In the mid 19th Century, the mudflat was used by the local community to culture oysters, a practice which continued until the 1970s. Thereafter rapid urban development and reclamation on the Shenzhen part (western side) of Deep Bay in the 80s and pollution has had a severe impact. Sediment from reclamation and river channel dredging work around Deep Bay has caused the height of the mudflat to rise by some 20cm in the past 3 decades and thus some mudflat areas have become drier and prone to invasion by mangrove.

Ecological Value

The Deep Bay inter-tidal mudflat is the main feeding ground for migratory waterbirds passing through and wintering in Hong Kong. Every winter, the mudflat provides a “dining table” to an average of 50,000 wintering waterbirds, including bird species of global conservation concern such as, Black-tailed Godwit *Limosa limosa* and Saunders’s Gull *Larus saundersi*. At other times of the year, thousands of migratory shorebirds (spring and autumn) and resident egrets also feed on the mudflat.

There is a vast benthic invertebrate diversity in the mudflat sediments and on the mudflat surface - recent research recorded over 80 species of aquatic invertebrates (excluding insects). These mud-dwelling worms (Oligochaeta and Polychaeta) and shells (Gastropoda and Bivalvia) are the main food for shorebirds (or waders) which have long narrow bills enabling them to extract invertebrates beneath the mud surface.

Besides waterbirds, the mudflat is also utilized by thousands of mudskippers (a goby fish) and fiddler crabs. These are also important food items for waterbirds such as egrets and herons. The mudflat is also habitat for the Mangrove Water Snake *Enhydryis bennetti*.



Large numbers of waterbirds rely on the mudflat
© Neil Fifer

Our Management

The Mai Po Management Plan identifies the inter-tidal mudflat as a habitat of high conservation importance owing to its support for thousands of migratory waterbirds. Therefore some management is necessary to help retain the mudflat area and prevent invasion by plants.

The mudflat is extensive, but WWF-HK manages a 43ha area in front of the floating bird-watching hides. Within this area, approximately 31,000 mangrove seedlings are cleared each summer to keep the mudflat open. This work requires special permission from the government.