

Discovering Biodiversity in Hong Kong Wetlands

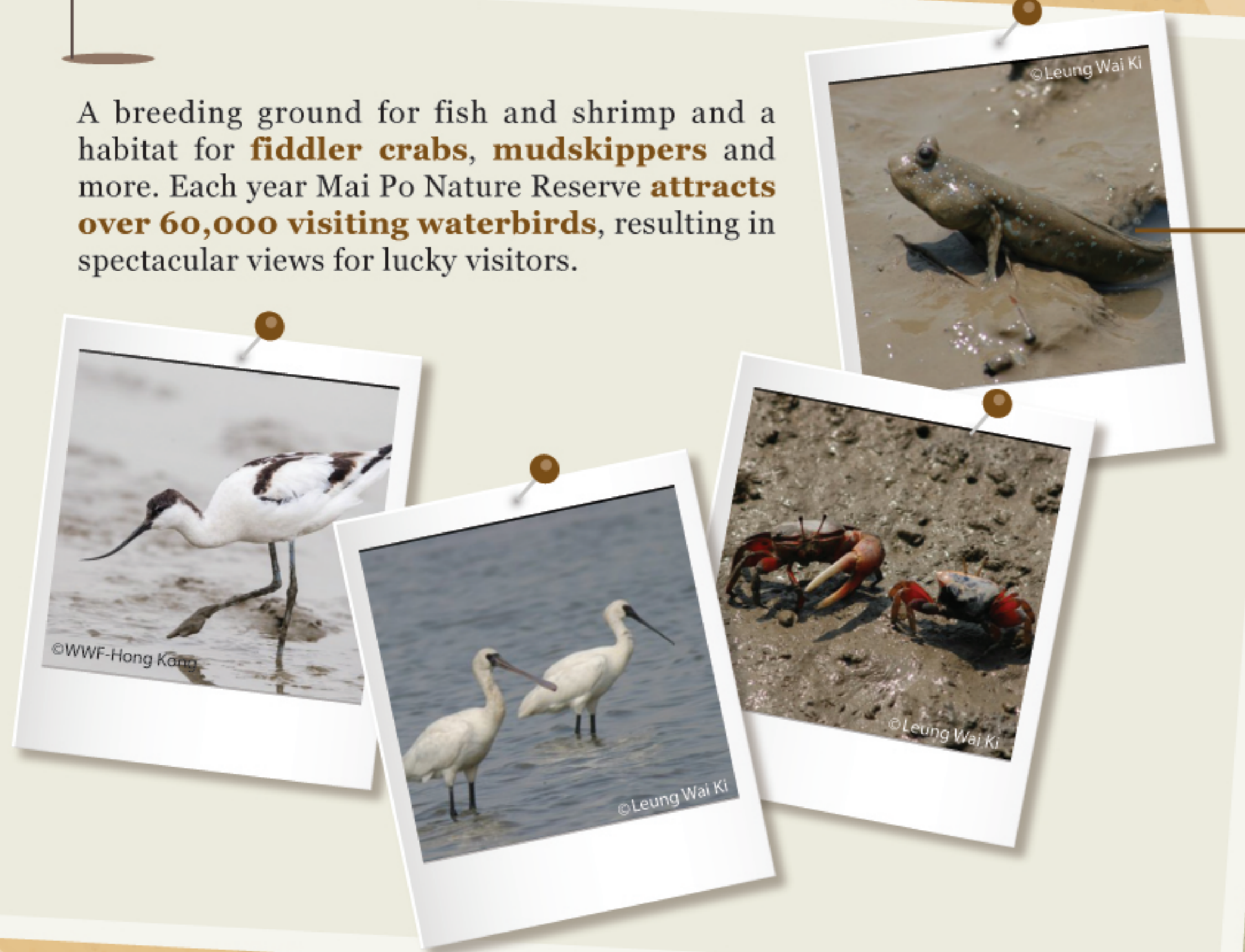
Biodiversity in Mai Po

Despite being a tiny spot on the world map, Hong Kong has incredibly rich biodiversity. Located in the **sub-tropics**, Hong Kong's hilly landscapes, distinct seasons and lengthy coastline has resulted in the formation of a large number of ecosystems, including streams, forests, wetlands, rocky shores, coral reefs and more. Hong Kong's biodiversity is truly remarkable – having just 0.01 per cent of the land area of the UK, **Hong Kong nonetheless has far more species: over 500 bird species and 3,300 flowering plants have been recorded here. The number of reptiles is 12 times greater than the UK – some of which are only found in Hong Kong.**

Biodiversity in Mai Po
 Located in northwest New Territories, the wetlands of Mai Po and Inner Deep Bay were listed as a **Ramsar Site** in 1995. As a wetland of international importance with a **high level of biodiversity**, these wetlands attract a huge number of migratory birds during their winter migration. Now it's time to explore Mai Po's biodiversity!

Mudflats

A breeding ground for fish and shrimp and a habitat for **fiddler crabs, mudskippers** and more. Each year Mai Po Nature Reserve attracts **over 60,000 visiting waterbirds**, resulting in spectacular views for lucky visitors.



Mangroves

Mai Po Nature Reserve is **home to seven out of eight mangrove species native to Hong Kong**. It holds the largest mangrove forest in the SAR, which provides habitat to many unique creatures including the **Mai Po Bent-winged Firefly**, a species which takes its name from this special place.



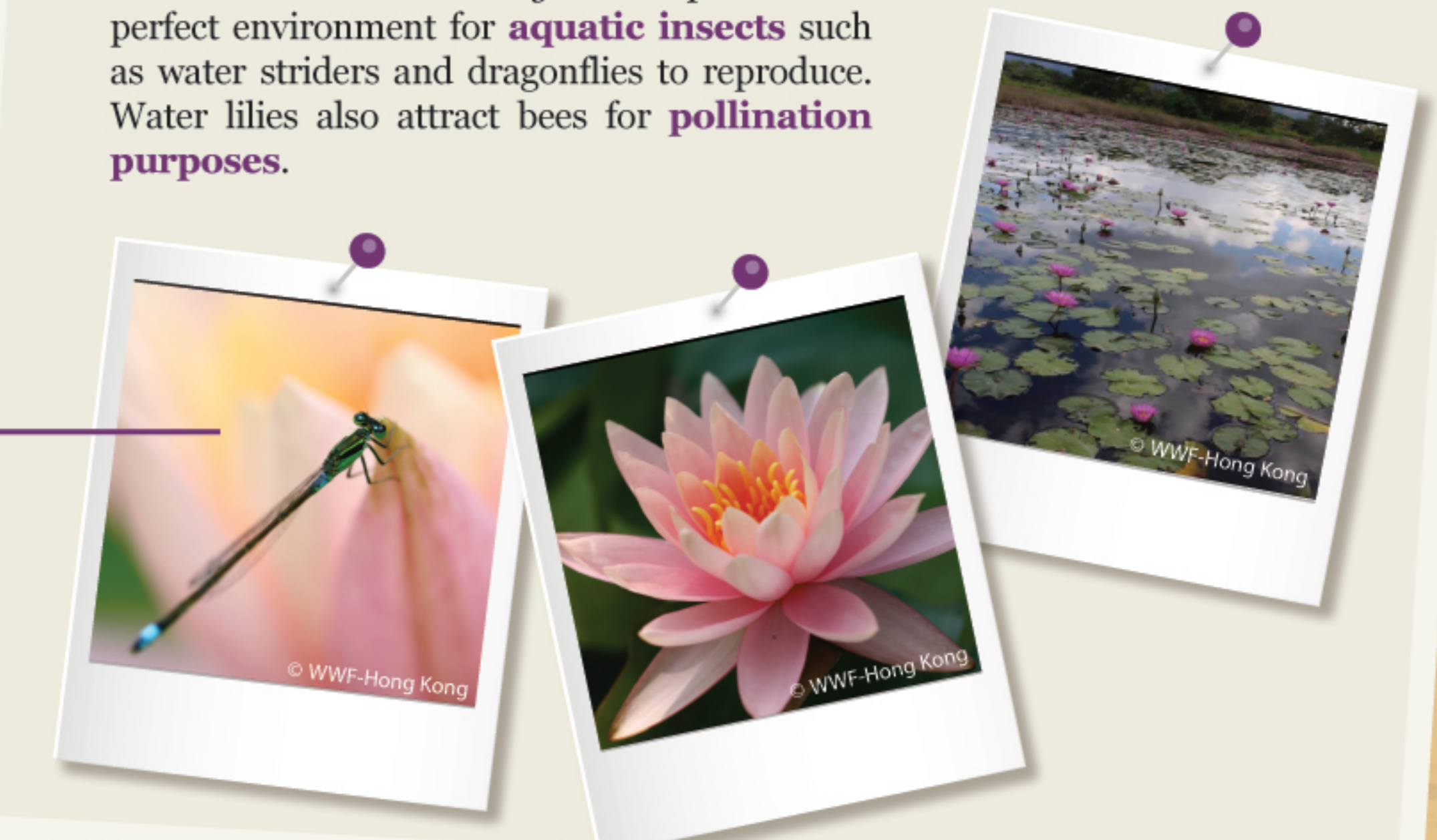
Gei wai

Gei wai is used to cultivate fish and shrimp in a **traditional, sustainable way**. In winter, juvenile shrimp and fish are brought by the tides to the *gei wai* and fed on **fallen leaves from mangroves** and other **organic matter**. In summer, the fishing community harvests and sells them as seafood. As shrimp and fish are the primary food source for waterbirds, these birds often spend a lot of time in and around the *gei wais*.



Freshwater gei wai

The Reserve's freshwater *gei wais* provide the perfect environment for **aquatic insects** such as water striders and dragonflies to reproduce. Water lilies also attract bees for **pollination purposes**.



Vocabulary explanation

Ramsar Sites

The Ramsar Convention on Wetlands is an intergovernmental treaty adopted on 2nd February 1971 in the Iranian city of Ramsar. The mission of the Convention is "the conservation and wise use of all wetlands through local, regional and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world". Ramsar Sites are wetlands that included in the list of Wetlands of International Importance. There are 2,247 Ramsar Sites around the world currently in 2016. The convention was extended to Hong Kong in 1979 to protect 1540-hectare Mai Po Inner Deep Bay Ramsar Site.

East Asian-Australasian Flyway (EAAF)

East Asian-Australasian Flyway (EAAF) is one of the nine global flyways and is home to over 50 million migratory waterbirds, it extends from the Arctic Circle and Southeast Asia to Australia and New Zealand. Mai Po and Inner Deep Bay lies at the heart of this flyway.

Vulnerable (VU)

Being developed by the International Union for Conservation of Nature (IUCN), the IUCN Red List of Threatened Species classifies species into several categories according to their conservation status, aiming to provide relevant information to catalyze action for biodiversity conservation. Vulnerable is one of the categories that indicates the species inside are vulnerable to become endangered.

Biodiversity in Mai Po

Ecosystem diversity

Mudflats, mangroves, *gei wais*, freshwater *gei wais*, reedbeds

Species diversity

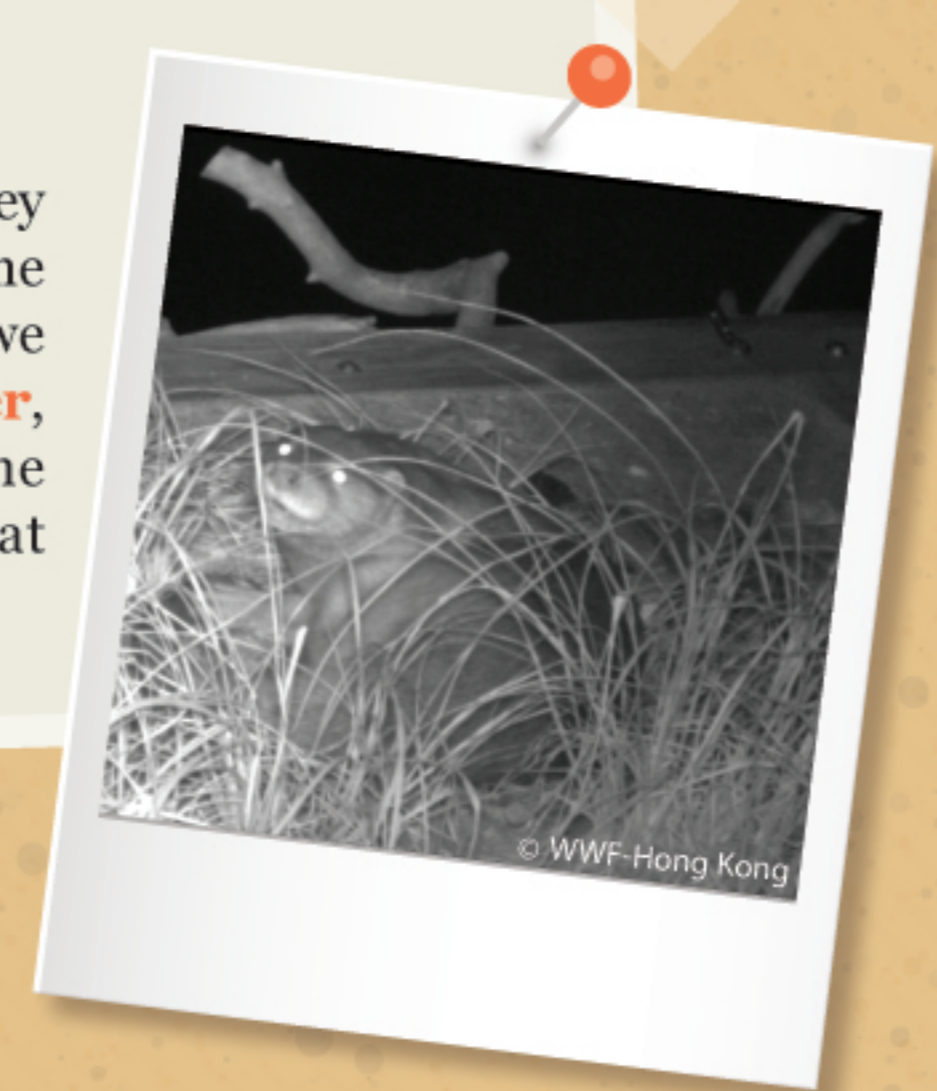
- Over 400 species of birds
- Over 100 butterfly species and 250 moth species
- Over 50 of dragonfly and damselfly species
- Over 10 shrimp species
- Over 250 plants species
- Over 20 mammal species
- Over 20 reptile species

Genetic diversity

With rich food sources and comparatively little human disturbance, Mai Po provides various creatures with an ideal breeding ground and therefore helps maintain the rich genetic diversity of the area.

Did you know?

During an ecological survey conducted in 2016, with the aid of infrared cameras we discovered a **Eurasian otter**, a vulnerable species, in the southern part of a *gei wai* at Mai Po.



Ramsar Site

Over the years, ecologists have discovered over 20 new-to-science species here, including *Parasesarma maipoensis* and a number of spiders!



Lucky visitors may even see some rare and important mammals in Mai Po Nature Reserve!

