Benefits of Migratory Birds in Oil Palm Plantations

When migratory birds migrate to and through Malaysia, they obviously need to find food. The majority of small birds feed to some degree on arthropods (insects, spiders, etc.). The more migratory birds can find suitable habitat in and around oil palm plantations, the better news this is for planters. A recent study on the effectiveness of birds in defending oil palms from predation by herbivorous insects² found that birds significantly decreased insect herbivory of oil palms (between 1.2 and 17.2-fold). Another study found that insectivorous birds probably prey on common oil palm pests such as Setora nitens, Metisa plana, and Segestes spp3.

How Can Oil Palm Plantations Benefit Migratory Birds?

A bird migration route can be pictured as a chain with many links, or a highway with many rest stops. Each stop or link may be small, but its role in the whole journey is vital. This is where plantations can play a valuable part. By setting aside even relatively small areas and letting them 'go wild', a plantation can provide cover and

a food source for migrant birds. Wetland areas can be particularly valuable, especially if the margins are left unmanicured. Roads, railway cuttings and river banks can form linear bird refuges if natural corridors of native trees and shrubs are encouraged to grow. Tall dead trees left standing, as well as other tall, mature trees, can be used by migratory birds of prey as hunting posts or roosting trees. Allowing ground cover and the growth of ferns and epiphytes on mature palms will also have a positive effect in encouraging insectivorous birds.

> ¹Li, Z.W.D. and Ounsted, R. (eds.), 2007. The Status of Coastal Waterbirds and Wetlands in Southeast Asia: Results of Waterbird Surveys in Malaysia (2004-2006) and Thailand and Myanmar (2006). Wetlands International, Kuala Lumpur, Malaysia.

> ²Koh, L.P. 2008. Birds defend oil palms from herbivorous insects. *Ecological Applications*, 18(4), 2008, pp. 821-825

> ³Desmier de Chenon, R., and A. Susanto. 2005. Ecological observations on the diurnal birds in Indonesian oil palm plantations (inventory, feeding behaviour, impact on pests). Pages 187-220 in Proceedings of the International Palm Oil Congress (PIPOC) 2005. Malaysian Palm Oil Board (MPOB), Kuala Lumpur, Malaysia.

About

Biodiversity for Busy Managers is an initiative by the Malaysian Palm Oil Council and Wild Asia to develop useful and practical resources for those on the front line of land development. The idea is to inform managers and planners about the key biodiversity issues that apply to oil palm plantation development, and provide practical know-how to mitigate negative impacts on biodiversity in plantations. For more information, visit: www.wildasia.org





Biodiversity for Busy Managers Insight Guide Series

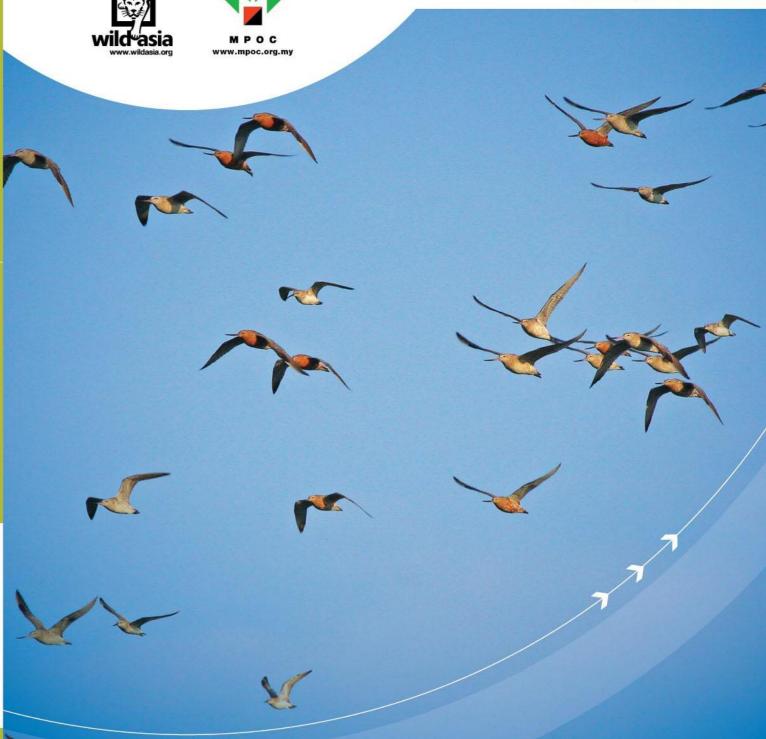
Biodiversity for Busy Managers Insight Guide Series

MIGRATORY BIRDS IN MALAYSIA

What Planters Need to Know







Introduction to Migratory Birds

Why do some birds migrate, while others stay in the same area their whole lives? It's all a question of making the most of available resources. Birds which breed further from the Equator can take advantage of seasonal abundance of food and habitat to nest and raise their young during the northern spring and summer seasons. However, winter in these areas drastically affect the availability of food, forcing birds to migrate to warmer places, such as Malaysia.



Bird migration is so amazing that, for centuries, scientists refused to believe it could happen! Swallows were thought to hibernate in mud at the bottom of lakes during winter! Small birds were thought to 'hitch a ride' on larger birds' backs! The truth about migration has gradually been revealed through satellite tracking studies via tiny transmitters attached to a bird's body. What we now know as fact is hardly less incredible than the mistaken beliefs of the early scientists! For example, the Arctic Tern, a small seabird weighing about 100g, travels an average of 70,900 km each year, from its breeding grounds in Greenland or Iceland to the South Atlantic off the coasts of Brazil or West Africa. During the average tern's lifetime of up to 34 years, they fly a remarkable 2.4 million kilometres – the equivalent of travelling around the Earth 60 times or completing three round trips to the Moon! The Ruby-throated Hummingbird, averaging around 2g in weight, annually flies over 700km across the open sea of the Gulf of Mexico! One female Bar-tailed Godwit, a medium-sized wading bird, flew non-stop from Alaska to North Island, New Zealand, a continuous journey of 11,500km lasting more than eight days! Untold millions of birds of many species migrate through Malaysia each year.

How many birds are there?

Total species recorded in West Malaysia	660
Total species recorded in East Malaysia	615
Total species endangered or threatened with extinction in Malaysia	116
Total migratory species in Malaysia	283



Migratory Birds and Plantations – an Opportunity for Conservation

The decline of migratory birds is a global phenomenon with complex causes, including habitat loss, pollution, hunting and climate change, among others. In our region, as elsewhere, the most significant impact on migratory bird populations has been the loss of natural habitat on which these birds depend.

This provides oil palm plantations with a conservation opportunity. If relatively small modifications are made to traditional ways of plantation management over a wide area, this could have a significant positive effect in providing sustenance and shelter for migratory birds, which may in turn slow down the rate of decline of many species.