

Sahabat Alam Malaysia Friends of the Earth Malaysia

For Environmental Justice

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Letter to the Editor

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Promote Biological Control to Combat Rodent Attack

Padi farmers in Kepala Batas, Penang are crying out for help because of destruction to their rice crops, but their cries are not in vain for the state Agriculture Department has come to their rescue through the biological control of rats in the paddy fields.

Using barn owls to fight rodent populations is an old idea that is getting a second look by many sectors of the agriculture industry. This is, in part, due to pressure from environmental and consumer groups to reduce agrochemical use in the field. But credit must also be given to the notion that nature can often be a farmer's ally in battle against pests.

Recognizing the barn owl's value as expert rodent hunters, farmers can easily encourage their presence by providing nesting sites as the birds are attracted to almost any snug, dark cavity. The birds will tolerate a fair amount of noise and commotion around their nest as long as they are not directly threatened. So long as the food supply remains dependable, the owls will return again and again.

University Putra Malaysia's Assoc Prof Dr Hafidzi Mohd Noor in answering residents queries about barn owls (Star 16 Jan 2017) explained that barn owls were a form of biological control for rats. Compared to snakes, the owl is more suitable for reducing the number of rats, as a male owl can bring up to 10 rats back to its nest in a night.

The nocturnal owls, scientifically known as *Tyto alba*, have a voracious appetite, each adult consuming up to 2,000 rats a year. Researchers say barn owls in oil palm areas depend almost entirely on live rats for food.

Its unique intriguing looks make the owls unique with its many specialized characteristics and behaviours. Its flat heart shaped face which sharpens hearing and large round eyes to provide nocturnal vision boosted by the ability to turn its head 180 degrees makes it an amazing bird.

As hunters, barn owls are highly adapted creatures. The design of their wings renders them almost silent in flight, and their highly developed sense of hearing enables them to hunt in total darkness.

Each farmer, of course, should consider what best serves their needs as well as the needs of the owl. In any case, nest boxes should be placed in an area of low human activity or in locations in the trees or in farm buildings where there is more protection from the hot sun.

However it is important that the owls are not chased away or threatened. The Barn Owl is, on the average, a short lived creature. Many die before completing their first year. The causes of death include accidental pesticide poisoning, starvation, human predation, accidents with moving vehicles, fences and power lines, and attacks by the carnivorous mammals, eagles, other hawks and other owls.



It must be kept in mind, however, that barn owls will not be the ultimate solution to a farmer's rodent problems. Sustainable control can only be achieved by reducing the rodent carrying capacity of the environment, principally by reducing food and harbourage.

Another effective way to control rodents, and one that's often overlooked, is the snakes. Snakes consume more rats and mice than all other rodent eaters combined. However, snakes are still feared by most people, when people fail to understand or acknowledge a snake's role in the environment. Hopefully the mindset towards snakes would change in time because of their key link in the food chain.

Sahabat Alam Malaysia (SAM) urges the Ministry of Agriculture and Agro-Based Industry and extension agencies to aggressively promote biological control for pest and disease management in paddy fields.

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