

## **Soft release of barn owl from nestlings for the purpose of rat control.**

### **ABSTRACT**

Barn owl (*Tyto javanica*) is common throughout the oil palm plantations in Peninsular Malaysia. Its significant role in providing biological control of rodent pest is well established. However, in Sabah and Sarawak, local population of the owl is not particularly known. Therefore, several translocation programs have been implemented to establish sustainable barn owl populations in Borneo; with certain degree of success. Past experience has shown that introducing adult owls from their original residence in Peninsular Malaysia to Sabah and Sarawak were largely unsuccessful or would take longer time to become established in their new homes. In this introduction program a soft release approach was implemented for acclimatization purposes to ensure a promising success of introducing Barn owls in a plantation. In this study, three pairs of owlets of 17 days to 35 days old, were retrieved from their respective nest boxes in the field. The six owlets were secured from Felda Sahabat Lahad Datu, Sabah were translocated to Wilmar's Sapi Plantations in Telupid, Sabah where an aviary with newly furnished facilities are provided. The owlets were harvested from an established population in Lahad Datu, which originally brought in from the Peninsular Malaysia. The aviary is equipped with three feeding arenas (with individual nest boxes installed) and one holding area for hand feeding and treatment purposes. The six owlets are closely monitored and raised for six months where food intake, body weight and body measurements were recorded. The owlets were manually fed with rats supplied from the plantation twice a day, in small quantities and gradually increased in accordance with their growth in size. After six months of rearing, two Barn owls of 6.5 and 6.7 months old respectively were chosen for release based on their opposite sex and different parental origin for greater breeding fitness. Transmitters were attached on the body of the candidates for radio tracking and mapping of foraging area. The owls were released after being latched inside a nest box 100m from the aviary for 48 hours for acclimatization. The owls were radio tracked and radio fixes plotted to analyze the home range and exploratory behavior. The rearing of the first batch of the six owlets from nestlings was a success with zero fatality. This indeed contributed substantially to a successful step towards the establishment of the local barn owl nucleus population. Subsequent transfer of owlets has been planned and the second batch is now being fed and raised in the aviary for the next release.

**Keyword:** Barn owl *Tyto javanica*; Soft release; Acclimitisation; Oil palm plantation; Nest boxes.