

Barn Owl for Rodent Management in Lakshadweep Islands



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Barn owl (*Tyto alba*) has been an excellent predator of rodents in palm system. Absence of rat snake and barn owl population in Lakshadweep Islands as well as close spacing of coconut palms are few of the main reasons responsible for the flare up of rodent population in the Island system. About 40-50% yield loss is reported due to rodent damage in Island system. Introduction of few pairs of barn owls and the nesting boxes could be a very successful strategy in the biological control of rodents. This could form one of the classical bio-control approaches in rodent management.

Barn owls are mostly nocturnal and have powerful auditory mechanism. The face is characteristically heart-shaped and is white in most subspecies. This owl does not hoot, but utters an eerie, drawn-out shriek. Once the owl spots the rodents, it could successfully track, identify its tunnel and catches it

Crop loss due to rat menace is a major problem experienced by the farmers of Lakshadweep Islands. Since this region is declared as organic, use of chemical methods for rat control cannot be adopted and hence biological control measures against rat assume much significance.



Nesting box developed by KAU and the barn owl observing for prey at Kayamkulam



up. When large numbers of small prey are readily available, barn owl populations can expand rapidly, and globally the bird is considered to be of least conservation concern. Roosting sites include holes in trees, fissures in cliffs, disused buildings, chimneys and haysheds and are often small in comparison to nesting sites. As the breeding season approaches, the birds move back to the vicinity of the chosen nest to roost. The diet consumed can be ascertained from identifying the prey fragments in the pellets of indigestible matter that the bird regurgitates.

Kerala Agricultural University has designed effective nesting boxes that formed wonderful nesting and breeding chambers for the birds. One such nesting box installed at ICAR-CPCRI, Regional Station, Kayamkulam could attract barn owl into the chamber and started breeding. Careful introduction of barn owl into Lakshadweep Islands as part of classical biological control programme would be a clear success in the management of rodents in the Island system. In this regard, it is quite interesting to note that introduction of owls to control rats was attempted years back in Lakshadweep islands. Mr. Murkot Ramunny, who was the administrator of Lakshadweep during the period from November 1961 to April 1965 has narrated the efforts made by some of the officials of Department of Agriculture for introducing barn owls to the islands for controlling the rat menace in his book 'India's coral Islands in the Arabian sea: Lakshadweep'. He says "Our special officer (Agriculture) T.K.Mukundan, a retired Deputy Director of Agriculture, had bring in innovations. Rats were ruining coconuts. He collected a lot of



owls and took them along in the ship and let them loose on the islands. To the islanders he was known as Kooman Sahib ie owl Sahib. There everyone was a sahib"

Chemical methods cannot be adopted for managing rat menace since Lakshadweep islands are declared as organic and hence biological control methods assume much significance. In this background, Department of Agriculture under Lakshadweep administration has already initiated action for introducing barn owl from Kerala to the Islands for controlling rats. Recently three pairs (three adult male and three adult female) of barn owl were received at Kavaratti which were transported in a specially designed cage from Thiruvananthapuram zoo to Kochi and from there the owls have been transported by ship to Kavaratti. The 'operation rat hunt' will start soon after these birds get adapted to the Kavaratti island agro-climatic situations. The biological control impact is likely to be realized in the coming years in the Island. ■