Status of Feral Elephants in the Andaman Islands, India.

A study funded by the Ministry of Environment and Forests, Government of India



N. SIVAGANESAN AJITH KUMAR



SÁCON-Technical Report 1

Sálim Ali Centre for Ornithology and Natural History

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ABSTRACT

Elephants taken to Andaman Islands from the mainland for timber operations in carly 1960's and abandoned subsequently have become feral in the Interview Island Sanctuary and Diglipur Forest Division. The present population of these elephants has been unknown. These feral elephants have been a matter of concern because of their possible impact on natural vegetation in this area and the increasing incidences of crop raiding by them. The present study of the feral elephants in the Interview Island Sanctuary and Diglipur Forest Division was carried out by one of us (N. Sivaganesan) from January to April 1993. The objectives were to estimate the present population, assess the impact of the feral elephants on the native vegetation and to evaluate incidences of crop raiding. Population estimation based on direct sighting was not possible because of dense vegetation. Therefore, population in Interview Island was estimated from dung density. Data on vegetation and feeding were recorded along fresh feeding trails. Impact on native vegetation was quantified using belt transects. Habitat use was quantified from tracks and signs of elephants during each visit to the field. All villages subjected to frequent crop depredation by elephants were visited and fresh damages were quantified.

In Interview Island Sanctuary the population of elephant was estimated at 70 animals. No poaching was reported. In Diglipur only two herds consisting of eight animals were found. Bark of various evergreen species dominated the diet of elephants in Interview Island, whereas Calamus spp., and bamboo constituted most of the diet in Diglipur. Some major food species such as Calamus spp., Areca triandra, Caryota mitis and Licuala peltata are declining at an alarming rate in Interview Island because of feeding pressure by elephants. Uprooting of larger trees by elephants has also caused the formation of gaps in the evergreen forest. Edge and shore areas are, however, the most heavily used habitats. Biotic pressures, availability of perennial water and terrain affect the habitat use in Interview Island. Crop raiding was noticed only in Diglipur Forest Division. Among crops, paddy was the most frequently damaged (68.7%) followed by banana (18.7%). Crop damage was noticed in numerous places along the 20 km forested border. Loss of lowland forests to cultivation is presumably the major reason for crop depredation. The feral elephants in Interview Island Sanctuary present us an opportunity to study the long term impact of the introduction of a large herbivore into an island ecosystem. In Diglipur, preventing crop damage may not be possible through out its range. Electric fencing might be feasible in most of the legalized villages which are situated adjacent to lowland forests.

Key word Index : crop raiding, debarking, Diglipur Forest Division, dung density, encroachment, feral elephants, Interview Island Sanctuary, habitat degradation, tree mortality, uprooting.