

MOVEMENT PATTERN AND HABITAT UTILIZATION BY ELEPHANTS IN RAJAJI NATIONAL PARK

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The field data collection was completed in December 1992. In January 1993 the radio telemetry data was analysed using SEAS (Spatial Ecology Analysis System). The habitat data was also analyzed and a paper was presented in the international symposium on "Conservation of Elephants" held at Mudumalai in June. This has been written up as a paper for the proceedings. The data on group size, activity pattern and elephant damage is also being analyzed for the final report.

In addition we carried out a study in Rajaji Wildlife Sanctuary to estimate elephant densities by comparing two methods, the direct count and the indirect count (dung density

counts). This work was started in January 1993. Data was collected during last summer (March-June) and is being done now for winter. Fourteen permanent transects, of 3 km each were replicated five times for direct counts (70 replicates : 210 km). Twenty-three randomly placed transect, of 2 km each, were traversed to estimate dung density for the indirect method. During last summer 98 dung piles were marked and monitored to find out the decomposition rates and the domestic elephant was observed for 12-hour periods, 6 times a month to determine defaecation rates. Meteorological data (temperature, rainfall and relative humidity) were collected every day the data will be analyzed after the winter data collection is over.

IBEX PROJECT ACTIVITIES IN 1993

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The first three months of 1993 were spent in collecting winter data in the field on habitat use and feeding. Along with this attempts were made at tranquilising ibex, whenever there was a group nearby on approachable terrain. All the attempts were unsuccessful, in that the drug did not completely take its effect on the animals. Tranquilisation attempts were continued till the middle of June, when ibex started moving to the higher altitudes for the summer. From April to the first week of September, data for the

summer were collected, both on habitat use and on feeding. The research fellows were in Dehradun in September and October, in connection, first with the Annual Research Seminar, and later with the purchase of a laptop computer and its accessories for the field. From October 25 to December 4, the research Fellows resumed field data collection, after which one of them returned to Dehradun to analyse plant and pellet samples collected in the field.

