

MISCELLANEOUS NOTE

3. BURROWING HABITS OF THE GREATER BANDICOOT RAT (*BANDICOITA INDICA*)

(With a text-figure)

INTRODUCTION

The Greater Bandicoot Rat is one of our largest rodents, weighing on an average more than one kilogram. It is a confirmed commensal of man, always living in close vicinity of human dwellings and feeding on refuse and storage products. The Greater Bandicoot Rat is ~~not~~ ^{most} conspicuous for its large burrows which cause considerable damage to huts and godowns. Practically nothing is known of the biology of this animal in spite of its being one of most serious rodent pests of India. The present note is an account of its burrowing habits.

MATERIALS AND METHODS

This account is based on an investigation of the structure of eighty-three bandicoot burrows. All the burrows under study were currently or very recently occupied as evidenced by the presence of soil produced by fresh digging and sighting of the bandicoot rats by local inhabitants. The study involved a careful excavation of each burrow, noting down their dimensions and any contents. The excavations were carried out at three times of the year: 30 burrows during the second week of October 1972, 23 burrows during the fourth week of February 1973, and 30 burrows during the fourth week of July 1973. All the burrows were located in the vicinity of the Chatushringi hill in Poona.

RESULTS AND DISCUSSION

The burrow is a winding tunnel roughly circular in cross-section, its diameter ranging from 8 to 15 cm. The tunnel is of a fairly constant diameter throughout, and does not enlarge into any chamber-like spaces. The tunnel makes a number of twists and turns under the

ground and may lead to several blind alleys. The total length of the burrows excavated ranged from 44 to 520 cm. The maximum depth of the burrows ranged from 23 to 115 cm. A single burrow may open above ground by one to four separate openings. Fig. 1 is a sketch of one of the burrows and Table 1 provides more detailed statistics on the dimensions of the burrows.

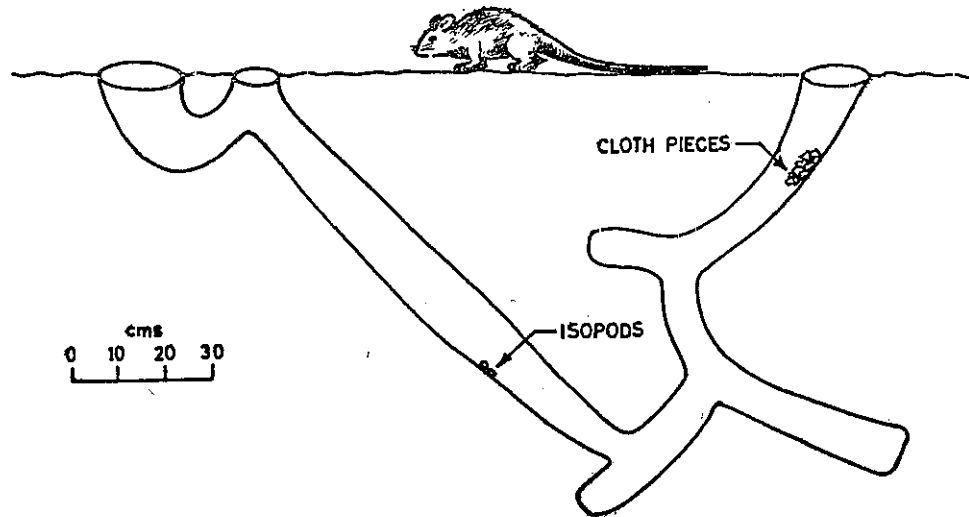


Fig. 1. Sketch of a burrow of the Greater Bandicoot Rat.

None of the excavated burrows were found to harbour any stored food materials. Many but not all of the burrows contained accumulations of cloth and paper pieces, particularly at the end of a blind alley or near a turning in the tunnel. We found a number of commensals in many of the burrows; these included isopods, spiders, centipedes, beetles and lizards. As we have covered a number of burrows in all the major seasons of the year, we may safely conclude that the burrow does not serve for food storage, but as a shelter for the Greater Bandicoot Rat.

TABLE I

CHARACTERISTICS OF THE BURROWS OF *Bandicota indica*

No. of openings	1	2	3	4
No. of burrows	40	28	13	2
Total length of tunnel (cm)	51-100	101-200	201-300	301 or greater
No. of burrows	20	42	17	4
Depth of tunnel (cm)	upto 50	51-70	71-90	91-110
No of burrows	26	27	23	7

Bandicoot burrows were found to be organized into colonies of 2 to 15 burrows. Distances between openings of neighbouring burrows in a colony ranged from 20 to 700 cm, the average separation being about 100 cm. The colonies are always next to a house or a grain storage godown generally lying at the back of the houses close to a fence or compound wall. The burrows often extend under the floor of the house and occasional burrow openings are produced inside the house especially if it has a mud flooring. The burrows within each colony are fairly compactly aligned next to each other and each colony is a clearly discrete entity. One colony may be separated from an adjacent colony by several hundred metres. Whether such colonies constitute a genuine deme will depend on the extent of migration of individuals from colony to colony. No data are as yet available on this problem.

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