FOREWORD
Primate ethology and ecology have assumed great importance in the recent years. Far reaching studies have been made both in the field and the laboratory. Comparative studies of primates have yielded valuable information and been useful in appreciating many of the complex facets of human behavior often times difficult of comprehension. As Sanderson (1957) has so aptly said "Even it can never be vouchsafed to us to comprehend the meaning of life, there is no reason why we should not endeavour to understand its mechanism, and where better to start than with the study of ourselves, our cousins and our ancestors—in short, with the great assemblage of life that we call Monkey Kingdom. For, if we can once come to understand ourselves, all else might then become fairly obvious". Hence the need for a study like this.

In spite of the considerable impetus given to primate studies all over the world, most species have been studied only for a short time, many for a year or even less. Such studies do not provide us with adequate time depth or sampling of enough societies of a species to allow valid generalisations to be made about the species as a whole.
There is a lot of urgency in completing such an intensive study. The human population is expanding into areas that were primarily sanctuaries for these animals and the religious regard in which these were held is fastly vanishing especially in India. Many of the troops in urban and rural areas are in danger of being eliminated from much of their former range.

**RESEARCH OBJECTIVES**

The objective of the conducted research is to bring out a broad sample of data on the bonnet macaque extant in South India which would permit valid generalisations to be drawn about the species specific behavior. This will obviate inferences being drawn from idiosyncratic behavior which generally happens when one examines only a few groups that too for a short time only.

The significance of valid generalisations so drawn allows comparisons to be made between the bonnet macaque and other species of primates for a number of purposes. The evolution of human behavior is being studied by using more and more of primates material as a major source. Laboratory studies of primate behavior tend to become stereotyped and their findings have to be checked by intensive field data in terms of a rich and sometimes even changing environment (Harlow, 1962). Behavior is also being used as another source of information about taxonomic relationships and an extensive and objective description of species specific behavior of each taxon is needed. Finally, control of primates as pests
Studies of bonnet macaque (*Macaca radiata*) are still meagre. The first study of bonnet macaque social behavior was made by Nolte (1955, 1958) over a brief period of 3 weeks. In 1961-62, the summer of 1963, Simonds spent about a year in the field working on the social behavior of this species in a cultivated area. A team of Japanese primatologists along with Dr. Parthasarathy spent 1961-63 in northern Mysore State working with bonnet monkeys and Hanuman langur (Sugiyama *et al*., 1964). Their main work was on the langurs but they did contain some observations on the bonnets.

Barring these no attempts have been made to study the bonnet monkey and hence this work was undertaken.

The locale of the present study is urban Bangalore and its environs. Location of troops in different sectors was done by individual recognition that formed the basis for recording the data. The monkeys exhibit some physical variation or other so that one can learn to consistently recognise them in a troop. It was possible to discriminate the monkeys in a troop of 20-50 within a week or two by careful observation. Only in the case of young ones and juveniles there was some difficulty.

Marking the monkeys with paints etc., for easy identification was rarely resorted to as it tended to disrupt the troop. Feeding and baiting was also discouraged as the purpose of the research was to observe troops in natural conditions without undue disturbance.
The observations brought out in this research deal with the structure of the troop, locale, home range size, internal troop organization, inter and intra-troop relations, interspecies relations, use of habitat, socio-ecological setup, expressive movements and certain other supplemental studies. Careful observations have made it possible to study dominance hierarchies and the like. Variations between groups to study the nature and causes of these variations. This search for causes has been based on the observations of inter-troops, inter-species and habitat use. For the last information on predators, food sources, refuge areas, and habitat selection has been gathered.

In addition to purely ecological and ethological studies, cytological and biochemical studies have also been made by the author.

Data was recorded by taking written notes and observations were also made by the use of binoculars. When necessary photographs in the field were taken and used to corroborate factual observations. On many days long observations were made from sunrise to sunset, tracking the monkeys while they were moving in their respective home range. Daily rhythm was studied as and where necessary so as to assess their pattern of behavior with regard to mobility, resting, grooming, feeding and so on.

Detailed procedure of the observations is placed in the textual matter in suitable places. Different facets of behavior have been treated as different chapters and so dealt here.