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Research Article

STATUS STUDY OF ELEPHANT IN KARANJIA DIVISION, ODISHA

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ABSTRACT

In 2010 total 32 elephant counted from Karanjia division. The age group consists of Adult bull 22%, Sub-Adult bull 9%, Adult cows 37%, Sub-Adult cows 16% and Calf 16%. Adult/Sub-adult unknown and Juvenile were not found during the census period. Similarly in 2012 census total 23 elephants were counted and the age group comprises of Adult bull 13%, Sub-adult bull 4%, Adult cows 4%, and sub-adult cow 48%, Calf 22%, juvenile 9%. During the census period Adult/Sub-adult unknown were not found. Comparison between the two census period 2010 and 2012 in 2012 the more different age group sighted in comparison to 2010.

Keywords: Elephant, Karanjia, Age group, Census.

INTRODUCTION

Despite the long and spectacular evolutionary history of the proboscidea, extending back to the Eocene, there are only two living representatives-the African elephant (*Loxodonta Africana*) and the Asian elephant (*Elephas maximus*). While an estimated 1.3 million Loxodonta range over a vast area of the African continent (Douglas-Hamilton 1980), Elephas has been reduced to a number of relatively small populations comprising 36-54 thousand individuals in south and Southeast Asia (Oliver 1978; Sukumar 1985). During the past century between 30 and 50 thousand elephants have been captured for domestication in the Indian sub-continent alone. The off take has been consistently very much higher in the northeast than in south india. The reason for this disparity lies in the method of capture. In the north elephants have been traditionally captured in stockades and thus entire herds are taken at one time. By contrast, in the south elephants were usually captured solitary in pits. The Kheddah method introduced by Sanderson (1878) was confined only to the Mysore state and less than 2000 elephants were captured between 1874 and 1971.

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India holds by far the largest number of wild Asian elephants, estimated at about 26,000 to 28,000 or nearly 60% of the population of the species (Bist 2002: data from Project elephant Directorate in 2011). *E. maximus* is placed in Schedule 1 and part 1 of Indian wildlife Protection Act 1972 conferring it the highest level of protection. Historically, the significance of the elephant in Indian culture and Mythology, as well as its economic and military role in subcontintental armies, has also contributed to a remarkable level of tolerance and support of people towards its survival and conservation (Sukumar 2011) of a country experiencing strong economic growth, growing and dispersing elephant populations at regional scales, shrinkage and fragmentation of elephant habitat, and increasing human-elephant conflict emphasize the urgent need for appropriate long-term policies to manage and conservation the species.

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The populations of Asian elephant in India have been affected adversely by growing human population and the resultant destruction of natural habitat for settlement

Given its long history of about 4500 in taming the elephant (Sukumar 2011), India also presently manages 3400-3600 elephants in captivity (Bist 2002). Captive elephants have been used for a variety of purpose in India including warfare, logging, cultural and religious ceremonies, recreation in zoos and circuses and more recently for wild tourism and protection of sanctuaries and National parks. However with declining work due to the ban on timber logging in the country and use of modern machinery, the traditional interest among private owners and state forest departments in managing captive elephants is diminishing.

E. maximus is very high conservation value and regarded as key stone species (Western 1989: Shoshani *et al.*, 2004) flagship species (Phanthavong and Santiapillai, 1993: Santiapillai and Jackson, 1992) and heritage species (Anon, 1992). The ecological importance of elephants described by Whyte (2004) meets the criteria of umbrella species defined by Miller *et al.* (1999). Therefore, areas containing some elephant populations are local and international importance. Compared with their cousin in African, Asiatic elephants are less studied on behavior, numbers and populations. Scientific and intensive studies have been carried out in only some range countries such as India and Sri Lanka. However, anecdotal information has long been recorded. In ancient times, people realized the importance and benefits of elephants as beast of burden and as an animal used in battle. As a result, knowledge on natural history of elephants has been accumulated. In addition, during colonial period hunting of elephants for trophy added up information on biology and ecology elephants.

METHODOLOGY

Study Area

Karanjia (Figure 1) sub-division of Mayurbhanja is adjacent to Keonjhar district with total geographical area of 31 sqkm. Karanjia is 55 km from keonjhar and 120 km from Baripada head quarters of Mayurbhanj district. It is nearer to Jharkhand State and Keonjhar districts.

Figure 1. Location Map of the study area.

Total count method with direct sighting was applied for estimation of elephant population. The division was divided into several census units covering all its forest ranges. These units were covered simultaneously by unit members (Forest staffs). Different habitat including waterholes were searched either for direct sighting or get evidences to follow their movement paths. Only direct sighting was taken into consideration for their counting and age group estimation. The field data were compiled for estimation of elephant population in the study area.

RESULT AND DISCUSSION

In 2010 total 32 elephant counted from Karanjia division. The age group consists of Adult bull 22%, Sub-Adult bull 9%, Adult cows 37%, Sub-Adult cows 16% and Calf 16%. Adult/Sub-adult unknown and Juvenile were not found during the census period. Similarly in 2012 census total 23 elephants were counted and the age group comprises of Adult bull 13%, Sub-adult bull 4%, Adult cows 4%, Sub-Adult cow 48%, Calf 22%, juvenile 9%. During the census period Adult/Sub-adult unknown were not found. Comparison between the two census period 2010 and 2012 in 2012 the more different age group sighted in comparison to 2010.

CONCLUSION

Karanjia division is one of the major places for the migratory elephants (Table 1). Both the interstate and intra state migration occurred in the division for the last few years. As it is neighbor to the Jharkhand state and presently Jharkhand state face severely mining problem so the elephant migrated to Karanjia in search of space, food and water. Similarly in Keonjhar division nearer to Karanjia and the elephant of keonjhar division also face the same problem so they are also migrated to Karanjia in search of space and food. Besides these division most area under the similipal sanctuary area. Similipal elephants also migrated to peripheral area during the paddy season. So it is very important to continue monitoring and survey the status of elephant in particular places.

Table 1. Year Wise population status of elephant in Karanjia Division.

Year	Adult-Bull	Adult cows	Sub-Adult Bull	Sub-Adult cows	Adult/Sub-Adult unknown	Juvenile	Calf	Total
2010	07	12	03	05	00	00	05	32
2012	03	01	01	11	-	02	05	23

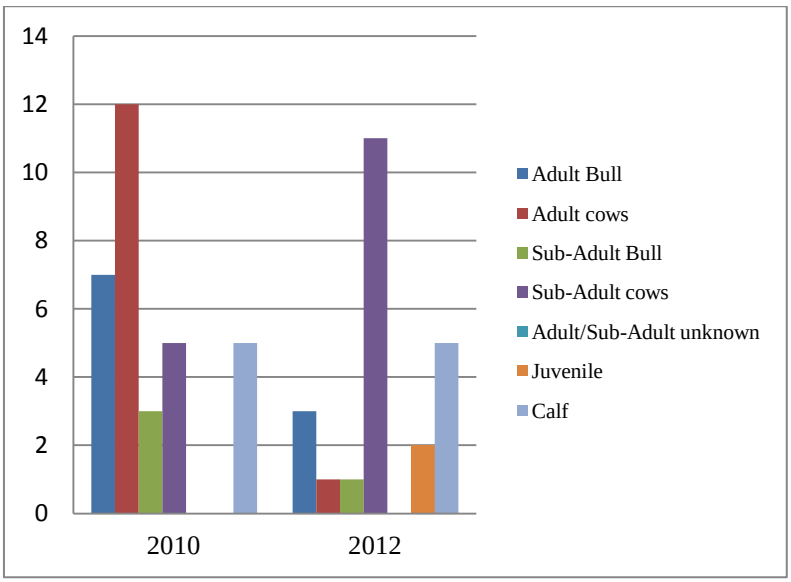

Figure 1. Population composition of elephant in Karanjia.

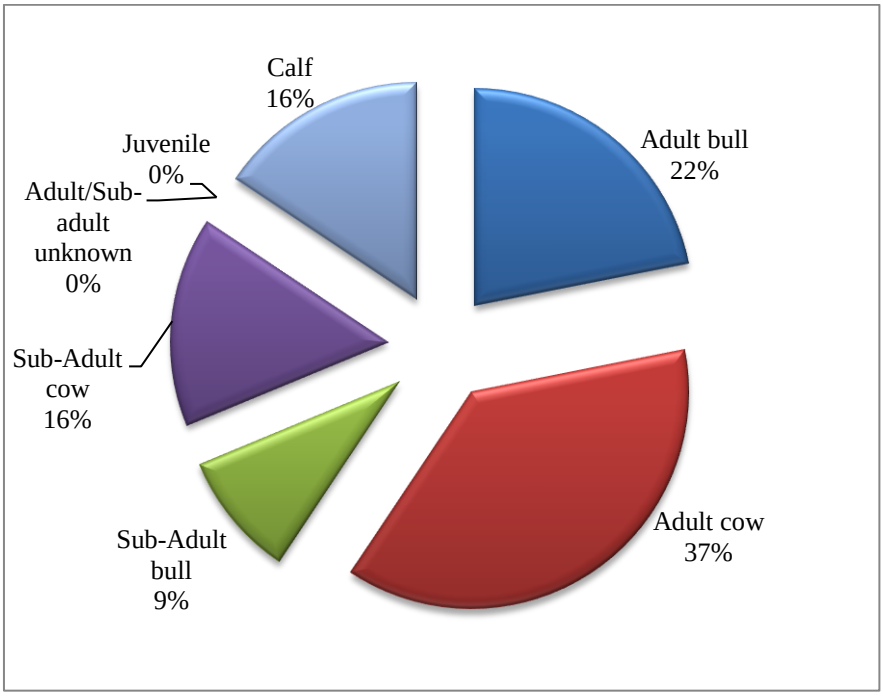

Figure 2. Population Composition of Elephant in 2010.

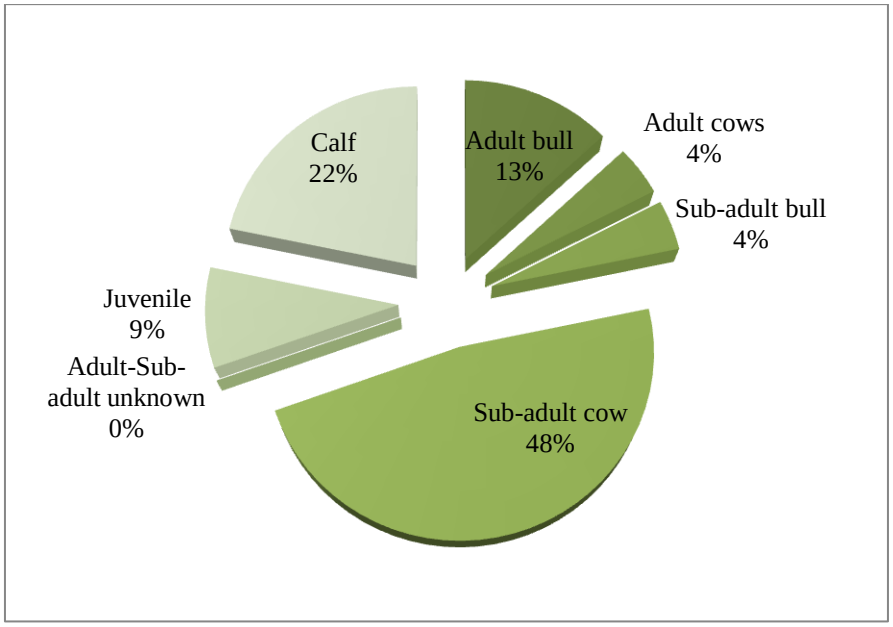

Figure 3. Population composition of Elephant in 2012.

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