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## STATUS OF BULE BULL (*BOSELAPHUS TRAGOCAMELUS*) IN SEA COST OF BHAVNAGAR TO ALANG IN BHAVNAGAR DISTRICT, GUJARAT, INDIA

VAGHELA V. M, DODIA P.P

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**Abstract:** The Blue bull is the biggest Asian antelope. Blue bull (*Boselaphus tragocamelus*) is also called **Nilgai** in Gujarat and all over country. The estimated population of nilgai in Gujarat is approximately 100000. But there is no any prominent data base work was carried out in Bhavnagar so we decided to do work on Blue bull in coastal area of Bhavnagar district. Bhavnagar having about 150 Km coastal area from this we select Bhavnagar to Alang coastal area it is about 50 Km. By the primary survey, We select the eight deferent sites and monitor regularly at every fortnight and during our study we find out total 146 animals from 08 different potential sites. Out of 146 animals 76 are males 61 are females and 09 are juvenile. We also find out the group size and crop raiding.

**Keywords:** Blue bull, Bhavnagar, Coastal area, Crop damage, Group, Female, Male, Juvenile, Population.

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**Introduction:** The Blue bull is the biggest Asian antelope. Blue bull (*Boselaphus tragocamelus*) is also called **Nilgai** in Gujarat and all over country. The estimated population of nilgai in Gujarat is approximately 100000. Nil meaning blue and *gai* meaning a bovine animal (literally 'cow'). Nilgai have thin legs and a robust body that slopes down from the shoulder. They show marked sexual dimorphism, with only the males having horns. They also possess a tubular shaped "pennant" of long, coarse, hair on the midsection of the throat. In contrast, females and young are tawny brown in color, although otherwise with similar markings to the male; they have no horns and only a very small "pennant". Blue bull is one of the most commonly seen wild animal in Bhavnagar as well as Gujarat, central and northern India. The mature male appear Ox like that's why they are also known as Blue bull.

Habitat of Blue bull is mainly grassland, open forest area, barren land, coast line, wood land and crop land, where they used grass, leaves, bud and fruits as a food and mostly they avoid dense forest area. It can survive for days without water.

Blue bull (*Boselaphus tragocamelus*) is found in Bhavnagar district but there is no any prominent database work carried out related to their Status, Ecology and their Impact on Agriculture crop.

As Blue bull (*Boselaphus tragocamelus*) plays an important role to maintain the ecosystem, it is essential to know about their population, growth rate, mortality, food habit and the crop damage caused by Blue bull (Aryal A. 2007).

The main threat to this species is the loss of habitat mainly due to human population explosion. However, nilgai are a crop menace, causing large-scale damages. It has been declared as vermin in many part of India, and they may be legally hunted after obtaining a permit from government agencies. Nevertheless the local belief, that nilgai are a cow and

hence sacred, has protected it against hunting. This work will be helpful for the regulation of crop damage caused by the Blue bull (*Boselaphus tragocamelus*), the study will also help in management of Blue bull population.

**Study area:** Bhavnagar district is located near the gulf of Khambhat on cost line of Gujarat state. A distance between Bhavnagar and Alang is about 50 Km. this area was selected for study. Area surveyed during November-2013 to November 2014.

**Methodology:** The data collection was start with the preliminary survey of the study area. From preliminarily survey the population of selected potential sites was monitored regularly. All the required data has been collected from the potential sites. The area was visited regularly at every fortnight. The data have been collected by direct observation of the animals. Interviewing local people and farmers for collecting information. Camera and binocular was used to minimize disturbance to the animal for data collection.

**Result and Discussion:** In our study we find out total 146 animals from 08 different potential sites. Out of 146 animals 76 are males 61 are females and 09 are juvenile. From site -1 13 animals 13 are males 00 are females and 00 are juvenile. From site -2 25 animals 04 are males 21 are females and 00 are juvenile. From site -3 23 animals 10 are males 13 are females and 00 are juvenile. From site -4 02 animals 02 are males 00 are females and 00 are juvenile. From site -5 04 animals 04 are males 00 are females and 00 are juvenile. From site -6 50 animals 26 are males 20 are females and 04 are juvenile. From site -7 20 animals 12 are males 05 are females and 03 are juvenile. From site -8 09 animals 05 are males 02 are females and 02 are juvenile. Nilgai normally prefer open Barren land and agriculture land for resting. They utilized grass and leaf of various wild plants as well as numerous crop plants as food. During early morning and late

evening they become active and during noon they remain inactive and take rest in open field. Specific group pattern also observed during the study. It was observed that generally group size between 02 to 25 animals. We also noted that some males remain isolate.

It was found that site -I is having largest group size (25). It is due to the habitat type, Habitat of the site - I is saline land soil having high salinity, except prosopis there was no any flora so the land remain open which increase visibility of the blue bull and get safety. Interview of local people and farmers were taken to get information from the surrounding area, we comes to know that due to heavy weight the Blue bull cause damage to the agricultural crop when they passes through crop field, they also use various crops as food e.g. Cotton, sorghum, wheat, bajra, ground

nut, maize, brinjal, bhindi, green pea etc. Percentage of damage to crop by Blue bull is about up to 30 %. It was also observed that the population is increasing due to absence of any natural controller like wolf, leopard or lion. In past wolf was found at the costal area of Bhavnagar. Wolf was main predator of Blue bull in this area but at present most of the villagers are lives in its farm instead of in village and industrial development the habitat of wolf is destructed now it become locally extinct. Probably this may be the main reason for increasing in Blue bull population.

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**Table: 1 Group size of blue bull at various sites**

Site No.	Site name	No. of male	No. of female	No. of Juvenile	Total
1	Khar(avana/Ghogha)	13	00	00	13
2	Pipaliya pull	04	21	00	25
3	Bhumbhali	10	13	00	23
4	Ghogh	02	00	00	02
5	Knda	04	00	00	04
6	Kotiyak to Hathab	15/11	12/08	04	50
7	Khadsaliya	12	05	03	20
8	Soshiya/Alang	05	02	02	09
	<b>Total</b>	<b>76</b>	<b>61</b>	<b>09</b>	<b>146</b>

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Mr. Viral M. Vaghela/Research Student/Zoology Department /Sir P.P. Institute of Science, Maharaja Krishnakumarsinhji Bhavnagar University/Bhavnagar-364002/Gujarat India  
Phone: 9426147553/ viral\_dncs@yahoo.co.in

Dr. P. P. Dodia/Associate Professor/Zoology Department /Sir P.P. Institute of Science, Maharaja Krishnakumarsinhji Bhavnagar University/Bhavnagar-364002, Gujarat India /Phone: 9374610744/ ppdodia@yahoo.co.in