



HABITAT ANALYSIS OF GREAT INDIAN BUSTARD (*Ardeotis nigriceps*) AND EVALUATION OF GRAZING PRESSURE IN GHATIGAON BUSTARD SANCTUARY

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ABSTRACT: This study focuses on the habitat analysis of the Ghatigaon Bustard Sanctuary and the assessment of grazing pressure in the region. The research aims to evaluate and determine the habitat suitability for the Great Indian Bustard (*Ardeotis nigriceps*), a critically endangered and endemic species of the Indian subcontinent that is experiencing drastic population decline in its natural habitats. The habitat structure exhibits considerable diversity, as reflected in the shannon diversity index (H') values ranging from 1.94 to 2.17 based on sampling data from different sites, with species evenness ranging from 0.67 to 0.73. Grazing pressure analysis indicates that the area is not yet critically impacted by cattle grazing, with a total livestock population of approximately 35,055 within the sanctuary's 512 km² expanse remaining within the region's optimal carrying capacity of the region. This study provides valuable baseline data on habitat characteristics and grazing impacts, offering valuable insights for the development of recovery strategies for the Great Indian Bustard.

Keywords: Conservation, Great Indian Bustard (GIB), Grazing pressure, Habitat analysis, Semi-arid grasslands.

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INTRODUCTION

Bustards are terrestrial grassland birds, including global 25 species (Collar *et al.*, 2017). India has four: Great Indian Bustard (GIB), Lesser Florican,

Bengal Florican, and Houbara Bustard. The GIB, endemic to India with a large body and sexually dimorphic species. Males are over a meter tall. They prefer open, low-vegetation landscapes,