



*Journal of Advances and  
Scholarly Researches in  
Allied Education*

*Vol. XI, Issue No. XXI,  
April-2016, ISSN 2230-7540,  
ISSN 2230-7540*

## **UNDISTURBED AND DISTURBED HABITATS OF GREAT INDIAN BUSTARD WILDLIFE**

AN  
INTERNATIONALLY  
INDEXED PEER  
REVIEWED &  
REFEREED JOURNAL

# Undisturbed and Disturbed Habitats of Great Indian Bustard Wildlife

Dr. Archana Singh\*

Assistant Professor, Department of Zoology, Sai Meer Degree College, Uttar Pradesh

**Abstract** – The current correspondence deals with investigations of a chilling mountain range in undisturbed and disturbed environments of the Indian Bustard Wildlife Sanctuary in the Indian state of Maharashtra. Underground living things are satisfactory indicators of an exacerbation, as they respond quickly to characteristic changes. The bugs bed underground were collected two unique areas with varying degrees of discomfort using traps to catch, scented traps and manual combination strategies. 19 and 16 insect species were collected separately from intact and disturbed forest regions. Among the subfamilies reported in the study, he established a Myrmicinae- Zone with 7 species (35%) in front, followed by Formicinae with 6 species (30%), Pseudomyrmecinae with 3 species (15%) and Ponerinae with 2 species (10%) all Dolichoderinae and Dorylinae each with a creature rating (5%). The insect species *Anochetus graeffi*, *Meranoplus bicolor* and *Polyrhachis tibialis* were determined by the absence of frustrated objections, while *Leptogenys chinesis* was not found in an undisturbed forest site. The appearance consistency of the Shannon Wiener ( $H'$ ) paper for the undisturbed Boondock commercial (2.76) was somewhat higher than that for the angry wood commercial (2.46). Creeping and terrifying abundance and underground abundance generally did not exactly match the devastated and undisturbed forest areas.

**Words Key** – Big Upset Indian Bustard Wildlife

-----X-----

## INTRODUCTION

Extensive human activities such as deforestation, urbanization, elevation, planning, and mining have created significant problems for the vegetation of various characteristic natural conditions throughout the world. Irritation is any event in which biomass is eliminated and that is perceived by a change of area or by a stress that limits open resources or modifies the microclimate or habitat development. Ants expect a host of natural conditions as they develop in different combinations with different plant species, including seed spreaders, leaf and seed hunters, and sometimes as pollinating ants everywhere except Iceland, Greenland and Antarctica, develop multitudes of species, with greater grade, stature and dryness. Some creepy crawling species assume a mutuality relationship with several distinctive living things, including gutted animals and vertebrates. For example, insects protect aphids and several homopterous from their stalkers to get sugar-rich game plans out of them. Ants can perch on foliage, ruined logs, underground, on internal logs, or under rocks, and can adhere in the same way. Parasitic nurseries on the ground. In insect house practices, encourage the mixing of regular substances in the soil and improve the airway properties of the soil. The concepts basic to the tracker pieces underground for Critters in natural environments because they make minimal use

of various insects and animals loose so that the insects can be used as natural controls for insect problems. Ants have seen incredibly fragile facial alterations in factors common environmental conditions and in its disruptive effects on this path it has become common to use it as a type of indicator (Hoffmann and Andersen 2003). Shrub force extensions can similarly reduce the exuberance of subterranean insect species, especially cryptic trash species and explicit pursuers, and appear to have strong changes in species space, although general degrees of good social events. Different sense in a really solid contact pressure. Planning and the abundance of spooky creatures in the various areas are absolutely necessary. With this in mind, we endeavor to examine the mass of underground faults in the undisturbed and disturbed environments of the current assessment area scheme. The Great Indian Bustard Wildlife Sanctuary is located in the Ahmednagar and Solapur region in the Indian state of Maharashtra. This port brings together various cities, road and rail package associations, terminals, archives, agricultural fields, and minimal mechanical units, scattered patches of "wooded islands" and program patches of drought prone areas. DPAP). That said, this refuge is generally home to the endangered bird species of the Great Bustard. In both cases, anthropogenic activities are actually developments in the housing field that negatively

affect the various environments of the study area. However, there is currently no relationship on the type, magnitude and impact of the effects of disturbances on generally floating vegetation in the study area. So here is the essential outline of this type of exam room.

## LITERATURE REVIEW

A considerable number of ecological assessments have been carried out in the Indian desert, some of which are being moved to the Desert National Park elsewhere. Roonwal (2012) studied the wildlife of the Indian desert. In his in-depth review, he covered broad topics including, over a wide period of time, zoogeography, nature, science, physiology, and animal welfare. Rathore (2013), Krishna (2014) and Sharma (2015) have worked on the herpetology of the Thar desert. Rahmani and Manakadan (2010) showed, in addition to the situation of the Indian bustard in the desert of Rajasthan, a phenomenal stress in the desert national park. Rahmani (2013) orchestrated a new one of the birds of the desert of Thar and reported changes in two or three years. Furthermore, Rana et al. (2011) also organized a Vogel distribution plan for Thar. Studies on mammalian fauna in the region have been more extensive, particularly with respect to rodents, insectivores, and primates. Prakash (2014), a renowned expert on small vertebrates in the Indian desert, examined the idea of desert warmblood creatures and added it to his zoogeography. The range faarista of the desert Thar was developed by Ghosh et to the. (2013) in a multi - author volume in which the assessment openings in this room were particularly noted. Saxena (2011) focused on the wild and risky existence of the Indian desert, reporting on various gatherings of vertebrate animals and their degraded delegates. Recently, Saxena (2008) studied the fauna of invertebrates normal in the desert of India, while Srivastava and Saxena (2008) monitored the range and population renewal of terrestrial and aquatic fauna in some waters of the desert.

Although several organizations and researchers have carried out various flora and fauna audits in the Indian desert, the biodiversity of the Desert National Park has not yet been fully studied. In a later appropriation of the India Zoological Study, several producers have provided an overview of some of the vast fauna collections of DNP ( Editor-in-Chief, 2004).

Laxminarayan (2010) found 40 species of rodent lice ( Mallophaga ) from birds in Rajasthan. As reported by Mishra 85 Kaul (1973) and Kaul et al. (2013) the essential parasite ( Anoplura : Pediculus humanus and P. h. Corporis ) overwhelms the human being and everything that is considered to live between the hair and the body. Besides these 7 species, there are rodents and gerbils in the area. The required end-to-end evaluations have not yet been carried out at the Siphonaptera there. However, Lyengar (2014) and Kaul et al. (2011) recorded classes of creatures, which

are for ectoparasites in rodents. Ghose (210) recorded 13 types of neuroptera.

Hemiptera, which include marine plants and insects, aphids, coccidia, and mealybugs, were the target of Bhargava (2013). Thus 12 species of marine hemiptera were discovered, which have a place with 7 families in a natural lentic environment near Jodhpur. Ghosh et al. (2014) and Varshney (2009) have so far recorded 53 species in a desert area. Recently, Srivastava 8B Saxena identified (2008) 9 species of hemiptera and their periodic example in the Indian desert. No they are however no specific open data set with DNP.

The beetle fauna of the area is well known thanks to Vazirani (2010) who recorded 29 species of marine insects representing 4 new species and 7 species of beetles. Sewak (2011) defined a day and part of the family showed the behavior of the habitat of 17 tenebrionids in the desert, also recorded 24 species of reeds, mostly in desert trees. Tak (2012) listed 28 species of marine insects that have a spot with the Heliplidae family, Gyrinidae and exclusively explained 96 species of beetles from the IGNP domain with one spot with different families. Recently, Srivastava 8B Saxena identified (2008) 16 species of beetles and their example from an accident in the Indian desert. No records for errors terrifying specific DNP, although several types are listed in the locations of Barmer and Jaisalmer.

## MATERIAL AND METHODS

### Learning zone

The Wildlife Sanctuary of India Bustard is in the area biogeographic of the peninsula of the Deccan is between 18.0 and 21'00 "in length and 75.0 11" 38 "east longitude. As shown by Champion and Seth (2012), the forest area subtype is 6A / C1, the southern tropical thorn forests are represented by this paradise. This assessment was carried out from January 2010 to December 2010 in six regions of two forest areas with different disruptive effects. Site undisturbed: three lots of only 110 hectares ( Nannaj ), 100 hectares ( Nannaj ) and 50 hectares ( Tuesday ) were chosen as representatives for insect housing. These properties are the least disturbed place of refuge and are also considered a problem of settlement for the Indian bustard. Human activity is almost nil in this environment. This forest region with lots of trees, shrubs, herbs and extraordinary oases of peace. The forest floor e has a large mass of SIM garbage. ile to that of a disturbed wooded area. Angry Region - Similarly, three plots of 100 hectares ( Tuesday, private land ), 40 hectares ( Tuesday ) and 90 hectares ( Nannaj ) have been selected as agents of the underground beast reserve. These parcels are severely disturbed due to activities such as excessive growth, agricultural development, mining, deforestation, wood fires, etc. The region of this region is affected by human activities. This recognizable

habitat of comfrey grasses, hedges, and hardly any tree species like neem and glericidia is accessible. One area was divided into lots based on roads and trails.

### Sampling protocols

The insects were assembled from January 2010 to May 2010 using traps, scents, and manual collection methods. A) The traps contained a 0.5 liter plastic cup with an estimated opening of 12 cm, which was made at the height of the advance. On all occasions, a trap was installed in each of the five 20 by 20 meter squares taken aimlessly from an acre lot at each location. Each beaker was passed through 25 ml of a mixture of ethanol and glycerin. The catches were placed between 3:00 p.m. and 5:00 p.m. and accumulated after 48 hours. . The centered traps were used as traps, but instead of a mixture of ethanol and glycerin, 25ml of sugarcane juice and a mixture of ethanol were added. C) A manual of a multitude of underground insects from each inspection area was carried out for 30 minutes to bring together professionals of all the species found in the plaza after capture. To investigate the mess, we used three distinctive insect grouping strategies to gather the most limited number of creepy crawling species from an area study. The assembled underground insect models were designed, washed and secured in discrete plastic vials with 70% alcohol and brought to the lab for uncovered testing. The insect shots were advanced with the Sony camera and at the species level with trinocular amplification seen the focal point of the sound frame , in the keys to account for the requests, etc. Species assortment was verified using Shannon-Wiener and Simpson assortment records . The Shannon-Wiener Assortment Protocol and Simpson Assortment Document (D) were dictated using the standard formula provided by verifiable standard systems.

### RESULTS AND DISCUSSION

In the area of evaluation they were represented 20 species creeping underground (about 3,527 individuals) with 14 classes six subfamilies. The transport of the species in the different subfamilies showed a prevalence of Myrmicinae with 7 species (35%), followed by Formicinae with 6 species (30%), Pseudomyrmecinae with 3 species (15%), Ponerinae with 2 species (10%) . and finally Dolichoderinae and Dorylinae , each with a creature rating (5%). A total of 19 and 16 underground creeping species have independently accumulated in undisturbed and disturbed forest regions. Of the 20 types of underground beetles, almost 16 types (80%) were common for both types of wood, while another 3 types (15%) were found mainly in undisturbed forest areas. Twenty major species crawled gruesome Anochetus graeffei , Meranoplus bicolor and Polyrhachis tibial point by point, while due to angry objections, Leptogenys chinesis was not present in any intact areas. The number of disturbing animals consisting of undisturbed

forest disturbances (2198) was greater than what appeared apart from disturbed forest areas (1329). In the undisturbed forest objection, the sub - family Myrmicinae (7 species) varies even more the Formicinae (6 species), Pseudomyrmecine (3 species) and Ponerinae , Dolichoderinae , at least only cerapachyinae , one of which with only one species of each creature. Although disturbed in forest areas, the sub - family Myrmicinae (6 types) has been varied as Formicinae (5 species), Pseudomyrmecinae (2 types), and Ponerinae , Dolichoderinae , cerapachyinae is at least unique for the integration of a single class of organisms always. The sub - family Ponerinae , Dolichoderinae, and cerapachyinae contain the most species in both types of forest areas as ever, the amount of scary creatures accumulated movements. The three most common subterranean creeping species at the undisturbed Boondock site are Monomorium indicum (9.19%), Tapinoma melanocephalum (9%) and Camponotus compressus (8.69%) and from the disturbed forest site are Paratrechina longicornis ( 13.24 %)). Solenopsis gemonata (11.73%) and Tapinoma melanocephalum (9.55%) The range of the Shannon-Wiener document ( $H'$ ) for the location of the undisturbed forest area (2.76) was partially higher than that of the location of the disturbed forest (2, 46)). Basically, the Simpson (D) record value for an undisturbed forest location is 0.086, while it is 0.067 for a disturbed forest location. The variety of species and the abundance of the two habitats were essentially phenomenal. From the above results it can be seen that the species richness, distribution and species richness in the undisturbed forest area were higher if they appeared different than in the disturbed forest area. This is the direct result of the extinction and development of characteristic environmental factors under the influence of movement through various human activities. Related reviews insects, birds and butterflies underground have shown that the richness and variety of species decline as it increases the disturbances. Studies in different regions of the world Numerous studies have shown that common environmental factors, pollution, irritation and intermittency, on the contrary, affect the appalling variety and frequency. There are more species in forests than in disturbed areas. Our results are consistent with these. Living spaces with tall trees harbor a wide variety of underground insects. In this regard, climatic factors such as cantilevered cover and bedding on the ground can provide the insects with adequate regular environmental factors . This is a direct side effect of the complexity of the living space and the heterogeneity was high in the undisturbed parts of the city when distinguished by the disturbed location. Climate diversity leaves nationwide coverage, installation, and research to several lurid creeping species - objections at least uncontroversial. All things considered the relative abundance of Myrmicinae because of objections was more because flouted can alter the conditions characteristic of movement and can be found in different types of areas around the globe. They are

known as Myrmecinae (GM) generalized pragmatic social issue. Savitha, S. et al. They obtained similar results. The relative abundance of *Paratrechina longicornis*, *Solenopsis geminata*, and *Tapinoma melanocephalum* was high in the highlands. This is the normal presence of ideal microhabitats for recently named subterranean insect species. Savitha, S. et al. They obtained similar results. Drawn in 2008. *Tapinoma melanocephalum* originated from a Dominant Dolichodrinae (DD) vital social event and tends to be warm and open areas. They are extraordinarily powerful, intense, and have an inexorably powerful effect on various insects. *Solenopsis geminata* are orchestrated by Andersen (2000) as socially useful cryptic species and the relative abundance is widened for the settlement of introduced insect species (Tschinkel 1988; Suarez et al. 1998). From species distribution records, it is generally believed that the distribution of the creepy creepy underground has shifted to both types of environments. This is a direct consequence of the abundance of underground insect species and the frequency can vary with shade coverage and the complexity of characteristic environmental factors and the degree of disturbance. .

## CONCLUSION

The current assessment generally concludes that the variety of spooky creatures in these two natural environments is special in terms of the size, richness, and bite of the species. Errors can be used effectively in metrics because they react quickly to changes in the overall environment. While studying various taxa as indicators of oscillating impact, the subterranean creatures continued best when they deviated from various yellow animals (eg, 8-legged creatures and hemipterus) in the disturbed region. Conditions for them, for example, the resolution of objections, the opening of maintenance, the open apologies of justifications, etc. Fundamentally detailed investigations of disturbed living spaces are necessary, depending on the extent of the disturbing effects, the type of irritation, the physico-chemical properties of the soil, the climatic components, the lovely vegetation, etc.

## REFERENCE

- Andersen AN (2000). A global ecology of tropical wood ants: functional groups associated with stress and environmental disturbances. In: *Ants: standard methods to measure and monitor biodiversity* (Eds. D. Agosti, JD Majer, LE Alonso and TR Schultz); pp. 25-34.
- Andersen, AN (1995). A classification of Australian ant communities based on functional groups that form in parallel with plant life in terms of stress and disturbance. *Journal of Biogeography* 22: pp. 15-29.
- Bestelmeyer, BT, and K. Wiens. (nineteen ninety six). The impact of land use on the structure of terrestrial ant communities in the Argentine Chaco. *College. Apl.* 6: pp. 1225-1240.
- Blair, RB (1996). Land use and diversity of bird species along an urban slope. *Environmental Applications* 6: pp. 506-519.
- Bolton, B. (1994). Guide to identify the types of ants in the world. Cambridge, Messe: Harvard University Press, 222 pp.
- Champion, H. and Seth, SK (1968). A revised survey of forest types in India. Government. of India Publication, New Delhi.
- Christ, TO (2009). Biodiversity, Species Interactions, and Functional Roles of Ants (Hymenoptera: Formicidae) in Fragmented Landscapes: An Overview - *Myrmecological News*. 12: pp. 3-13 p. |
- Dolphin and Buffa (2000). Some plant-ant interactions in Córdoba (Argentina). *Zool. Betica* 11: pp. 3-15. |
- Farji-Brener and Ruggiero (1994). Formica leaf cutter (*Atta Acromyrmex*) in Argentina: Model of biodiversity and geographic size of the display. *J. Biogeog.* 21: pp. 391- 399
- Fowler, HG and Claver, S. (1991) Leafcutter ant assemblages: effects of latitude, vegetation and behavior. In *Ant-Plant Interactions* (CR Huxley and DF Cutler, ed.), pp. 51-59.

---

### Corresponding Author

**Dr. Archana Singh\***

Assistant Professor, Department of Zoology, Sai Meer Degree College, Uttar Pradesh