

## FAUNA OF PROTECTED AREAS - 12: BEETLES OF KALATOP-KHAJJAR WILDLIFE SANCTUARY, HIMACHAL PRADESH

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Kalatop-Khajjar Wildlife Sanctuary (30°32'-32°37'N & 75°58'- 76°07'E; ca. 20km<sup>2</sup>; 1185-2768m) is in the catchment of river Ravi on the western extremity of Dhauladhar Range of western Himalaya in Dalhousie subdivision, Chamba District. It receives about 2468mm rainfall and 672mm snowfall annually. Temperature ranges between -10°C and 35°C. The name Khajjar is derived from the Khajji Nag temple located near the unique saucer shaped alpine meadow of approximately 18ha with the presence of a lake in the centre and canopy of Deodar (*Cedrus deodara*) trees. The floristic composition varies from Cheer Pine (*Pinus roxburghii*), Ban Oak in the lower zone and pure Deodar in the middle reaches. Fir (*Abies pindrow*) and Spruce (*Picea smithiana*) with some alpine pasture and dense cover of grass as undergrowth are some of the features of the area.

Other than birds (Thakur *et al.*, 2002), butterflies (Thakur *et al.*, 2002) and grasshoppers (Mehta *et al.*, 2002) no information is available on other faunal groups from this Sanctuary. With this view, a preliminary study was conducted and qualitative sampling done during June 2002 in the Sanctuary to ascertain the beetle fauna, which resulted in the enumeration of 18 species belonging to 16 genera spread over nine families (Table 1).

### REFERENCES

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**Table 1. List of beetles of Kalatop-Khajjar Wildlife Sanctuary**

Coleoptera: Adephaga	<u>Hydrophilidae</u>
Carabidae	11. <i>Helochares</i> sp.
1. <i>Carabus boysi</i> Jatun	<u>Cantharidae</u>
<u>Dytiscidae</u>	12. <i>Themus</i> sp.
2. <i>Agabus debillipes</i> (Reg.)	<u>Coccinellidae</u>
3. <i>Rhantus sikkimensis</i> Reg.	13. <i>Coccinella septempunctata</i> (L.)
Polyphaga	<u>Tenebrionidae</u>
Scarabaeidae	14. <i>Sphenariopsis</i> sp.
4. <i>Brahmina coriacea</i> Hope	<u>Meloidae</u>
5. <i>Brahmina</i> sp.	15. <i>Denierella</i> sp.
6. <i>Clinteria</i> sp.	16. <i>Mylabris</i> sp.
7. <i>Mimela pictoralis</i> Blanchard	<u>Chrysomellidae</u>
8. <i>Mimela</i> sp.	17. <i>Cleorina</i> sp.
9. <i>Oxyoetonia</i> sp.	18. <i>Dercetina</i> sp.
10. <i>Popilla</i> sp.	



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## FAUNA OF PROTECTED AREAS - 13: HERPETOFAUNA OF DESERT NATIONAL PARK, RAJASTHAN, INDIA

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Desert National Park (DNP), a unique and the only habitat of its type in South Asia is present in the most arid zone of the Thar Desert. It covers an area of 3162km<sup>2</sup> spreading partly over Jaisalmer and Barmer districts of Rajasthan. Desert National Park (25°47'-26°46'N & 70°15'-70°45'E). The entire area is plain grassland with a few hills in its northwestern side and is dominated by sand dunes. Most of the dunes are of *burchan* (shifting & devoid of vegetation) type but fixed, tall and parallel dunes are also present. Inter-dunes, sandy plains, gravelly and stony areas with a few isolated ridges are other topographic units.

The climate of this region is characterized by extremes of temperature which sometimes touches 50°C during daytime at summer and falls up to 2°C during chilly winter nights. Dust-storms or *aandhi* are quite frequent in summer and may be as strong as 136km/hr. Droughts, very strong winds, low relative humidity, evaporation far exceeding precipitation, aridity index of 80% are characteristic features. The rainfall pattern is extremely erratic and annual rainfall is about 100-150mm, but it rains only about a period of three to seven days in a year, mostly during the months of July to September.

Despite extreme environmental conditions, some parts of the Desert National Park appear as vast expanses of grassland intermixed with shrubs and trees. The common grasses of this region are *Lasiurus sindicus*, *Aristida mutabilis*, *Enneapogon brachystachya*, *Cenchrus biflorus*, *Oropoetium thomeum*, *Indigofera cordifolia* and *Farsetia jacquemontii*. The common shrubs are *Euphorbia caducifolia*, *Ziziphus nummularia*, *Leptadenia pyrotechnica*, *Haloxyton salicornicum*, *Calligonum polygonoides*, *Areva pseudotomentosa*, *Crotolaria burhia* and *Calotropis procera*. The common trees are *Acacia senegal*, *Capparis decidua*, *Prosopis cineraria*, *Salvadora oleoides* and *Tocomella undulata*. *Albezia lebbek* and *Azardirachta indica* is also noticed in the area. Besides, a large number of climbers such as *Coculus pendulus*, *Asparapus racemosus*, *Sarcostemma acidum*, *Ephedra foliata*, *Rivea hypocrateriformis*, *Rhynchosia minima*, *Sarcostemma acidum* and *Coccinia grandis* are also found in association with shrubs and trees.

The study was carried out from February 1995 to December 2002. Amphibians were hand collected from moist places and from temporary run-offs in artificial depressions using a net. The specimens were preserved in 4% formalin or 90% alcohol. The specimens were taken to the laboratory for identification and identified using Mansukhani *et al.* (1970), Dutta (1987) and Chanda (2002). Intensive field surveys were conducted to search for reptiles. Small lizards were collected with hands and preserved in 4% formalin or 90% alcohol for identification. Larger lizards (like *Varanus* & *Uromastix* sp.) and snakes were captured using a long stick, collected in a glass jar, identified and released back. Specimens were identified following the manuals of Smith (1935, 1943),

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