BUTTERFLIES OF VANSDA NATIONAL PARK, GUJARAT

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Shull (1963) documented the butterflies of southern Gujarat. He recorded 145 species from the region. Since none of the records were from Vansda National Park, a study was initiated on inventorying the butterflies in the Park.

The National Park is spread over 23.99km² in Valsad Taluka of Valsad District and located between 20°51'16" & 21°21'22"N and 73°20'30' & 73°31'20"E. The area of Vansda National Park is hilly with altitude ranging from 110-360m. These hills are extensions of Sahyadri Range. The Park represents the northern zone of the Western Ghats in Gujarat State along with Purna Wildlife Sanctuary.

The average annual rainfall at the Park is 1850mm, which is the highest for Gujarat. May is the hottest month. Minimum and maximum temperature recorded is 8.8°C and 43.8°C respectively.

Vegetation of the Park is tropical moist deciduous type. Singh *et al.* (2000) have recorded 440 species of plants, which include 110 species of trees, 43 species of shurbs, 63 species of climbers, 199 species of herbs and 25 species of grasses.

Butterflies were collected during 5-12 March and 15-22 August 2000 from each habitat of the National Park using specimen nets. The collected specimens were narcotized adding menthol crystals in the bottle and then air dried for identification. All the specimens were examined carefully and identified using various references such as Talbot (1939, 1947), Wynter-Blyth (1957) and Gay *et al.* (1992). All the scientific names follow Varshney (1979, 1985, 1990) and classification and common English names are after Wynter-Blyth (1957). Based on the sightings, butterfly species were categorized into abundant (more than 65 sightings), common (15-65 sightings), uncommon (5-14 sightings) and rare (1-4 sightings).

Sixty-two species belonging to nine families were recorded (Table 1). Of the total, six species (9.68%) were abundant, 30 species (48.39%) were common, 19 species (30.64%) were uncommon and seven (11.29%) were rare in occurrence in the Park.

The largest family represented by Nymphalidae with 17 species, followed by Lycaenidae with 11 species. Families Acraeidae and Erycinidae were represented by one species each.

The most common species recorded belonged to family Nymphalidae (12 species out of 17), while the uncommon species belonged to family Hesperiidae (6 species out of 8).

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Table 1. Checklist of butterflies of Vansda National Park

Common name	Scientific name	Status	
Danaidae Blue Tiger Plan Tiger Striped or Common Tiger Common Indian Crow	Danaus limniace leopardus (Butler) Danaus chrysippus (Linnaeus) Danaus genutia (Cramer) Euploea core (Cramer)	C A C A	
Satyridae Bamboo Treebrown Common Treebrown Common Threering Common Fivering Common Evening Brown Dark-brand Bush Brown	Lethe europa (Fabricius) Lethe rohria Ypthima asterope mahratta Moore Ypthima baldus Melanitis leda ismene (Cramer) Mycalesis mineus (Linnaeus)	R U C U C R	
Nymphalidae Common Nawab Baronet Baron Gaudy Baron Commander Common Sailer Blue Oakleaf Great Eggfly Danaid Eggfly Yellow Pansy Blue Pansy Lemon Pansy Peacock Pansy Chocolate Pansy Grey Pansy Common Leopard Painted Lady	Polyura athamas (Drury) Symphaedra nais (Forster) Euthalia aconthea (Moore) Euthalia lubentina (Cramer) Moduza procris (Cramer) Neptis hylas (Linnaeus) Kallima horsfieldi philarchus (Westwood) Hypolimnas bolina (Linnaeus) Hypolimnas misippus (Linnaeus) Precis hierta (Fabricius) Precis orithya (Linnaeus) Precis lemonias (Linnaeus) Precis almanac (Linnaeus) Precis altites (Linnaeus) Precis altites (Linnaeus) Phalanta phalantha (Drury) Cynthia cardui (Linnaeus)	U C C R R A C C C C C C C C C A C	
Acraeidae Tawny Coster	Acraea violae (Fabricius)	R	
<u>Erycinidae</u> Plum Judy	Abisara echerius (Stoll)	U	
Lycaenidae Common Pierrot Angled Pierrot Rounded Pierrot Grass Jewel Tiny Grass Blue Plains Cupid Common Silverline Common Cerulean Angled Sunbeam Large Oakblue	Castalius rosimon (Fabricius) Castalius caleta (Hewitson) Tarucus nara (Kollar) Freyeria trochilus putli (Kollar) Zizula gaika hylax (Timen) Euchrysops parrhasius minuta Evans Spindasis vulcanus Jamides celeno aelianus (Fabricius) Curetis acuta Narathura (Eumolphus) amantes (Hewitson) Rapala airbus sorya (Kollar)	U U C R U C U U C	

Common name Scientific name		Status	
<u>Papilionidae</u>			
Common Rose	Atrophaneura aristolochiae (Fabricius)	С	
Common Mormon	Papilio polytes romulus Cramer	С	
Lime Butterfly	Papilio demoleus (Linnaeus)	С	
Tailed Jay	Graphium agammemnon	С	
Spot Swordtail	Graphium nomius (Esper)	U	
<u>Pieridae</u>			
Psyche	Leptosia nina (Fabricius)	U	
Common Jezebel	Delias eucharis (Drury)	С	
Common Gull	Cepora nerissa (Fabricius)	С	
Common Wanderer	Valeria valeria anais (Lesson)	U	
Common Emigrant	Catopsilia crocale (Cramer)	Α	
Lemon Emigrant	Catopsilia pomona (Fabricius)	С	
Mottled Emigrant	Catopsilia pyranthe (Linnaeus)	С	
Spotless Grass Yellow	Eurema laeta Boisduval	С	
Common Grass Yellow	Eurema hecabe (Linnaeus)	Α	
<u>Hesperiidae</u>			
Indian Skipper	Spialia galba (Fabricius)	U	
Common Banded Awl	Hasora chromus chromus (Cramer)	С	
Brown Awl	Badamia exclamationis (Cramer)	U	
Malabar Flat	Celaenorrhinus ambareesa (Moore)	R	
Dark Palm Dart	<i>Telicota ohara jix</i> Evans	U	
Indian Dart	Potanthus pseudomaesa	U	
Grass Demon	Udaspes folus (Cramer)	U	
Common Redeye	Matapa aria (Moore)	U	

Table 2. Composition and status of butterflies in the Park.

Family	No. of	No. of	f Status			
	genus	Species	Α	С	U	R
Danaidae	2	4	2	2	-	-
Satyridae	4	6	-	2	2	2
Nymphalidae	10	17	2	12	1	2
Acraeids	1	1	-	-	-	1
Erycinidae	1	1	-	-	1	-
Lycaenidae	10	11	-	4	6	1
Papilionidae	3	5	-	4	1	-
Pieridae	6	9	2	5	2	-
Hesperiidae	8	8	-	1	6	1
Total	45	62	6	30	19	7