

Indian Lepidoptera
(Insects as Umbrella species)

Issue Number 2008.4

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Flutter by
Butterfly
Floating flower
in the sky
Kiss me with your
Petal wings
Whisper secrets
Tell of spring
■ Author Unknown

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Contents

Editorial by Kishen Das K. R.

Butterfly fauna in and around Nagpur city of Maharashtra by Raju Kasambe* and Jayant Wadatkar**

Orange Migrant (*Catopsilia scylla* Linnaeus, 1763) - A butterfly species new to Sri Lanka by Michael and Nancy van der Poorten

What's going on here? By Dr. Torben B. Larsen

Butterfly Identification – Peacock Swallowtails by Kishen Das K. R.

Breakfast with Butterflies conducted by BNHS – Small note by Dr. V.Shubhalaxmi

Dear All,

As with every issue, this time too, I have some good and bad news to share. Let me start with bad news first. Our beloved entomologist from BNHS Naresh Chaturvedi breathed his last on March 9th. He has umpteen numbers of articles on Indian insects to his credit and has also encouraged numerous amateur entomologists to take the study of insects seriously. Let us pray for his soul to rest in peace.

There are reports of intensified logging in Mexican Monarch Butterfly Biosphere Reserve (MBBR). As most of you know this is where most of the Monarch butterflies over-winter and with increased logging, more butterflies will be exposed to harsh weather conditions and will perish affecting the entire monarch migration phenomenon. If this continues, soon we might witness the end of this wonderful event.

Now some good news. ButterflyIndia meet at West Bengal was once again a huge success with sighting of 194 odd species of butterflies. This also provides a platform for amateurs to interact with experts. Hopefully we will have somebody writing about their experience of this meet in the next issue.

We witnessed the danainae migration a little early this time due to untimely rains in the western ghats. Since not many people show interest and some are not willing to share information, it is getting harder to follow these migrations. It may be that people are worried that their credit will be taken away if they share information. If that is the case, I have more good news. Dr. Kumar Ghorpade, whom I always refer with respect and love as "Sir" has started a new journal on "Indian Basic Entomology" and itsit's called "Ayyaria". For more information please mail to journals_kg@yahoo.co.in. There is one more quarterly journal called "Journal of Biopesticides" which has been started recently. For more information on this visit- www.Jbiopest.com

I hope with the increase in number of journals and newsletters on our insects, we will have a better understanding of our insects.

There is a talk by Krushnamegh Kunte on 11th Apr 2008 on "Lives of deviant females: female-limited mimicry in butterflies". This starts at 4PM and venue is CES Seminar Hall, IISc, Bangalore.

In the previous issue, the scientific name of Black Rajah was wrongly mentioned as "*Charaxes dolon*". The right name is "*Charaxes solon*". Thanks to Dr. Torben Larsen for correcting this.

Happy insecting,
Kishen Das,
Editor,
Mysore

Butterfly fauna in and around Nagpur city of Maharashtra Raju Kasambe* & Jayant Wadatkar**

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Key Words:

Butterflies, Nagpur, Maharashtra, checklist, Blue Mormon *Papilio polymnestor*

Abstract:

The checklist of the butterfly fauna in and around Nagpur city, Maharashtra, is prepared with annotations on abundance and habitat preferences. Total 86 species were found by the authors to occur in the study area. However, 14 species of butterflies reported earlier by D'Abreu (1931) could not be found during the study. The family wise abundance of the total species (including those by D'Abreu) reported to occur in the study area is Papilionidae 12 species, Pieridae 15 species, Lycaenidae 23 species, Nymphalidae 39 species and Hesperidae 11 species. Authors hereby report 9 new species not reported earlier by D'Abreu in the study area.

Introduction:

Nagpur city (21⁰06' N and 79⁰03'E) is located at the center of India in Maharashtra state. Comprehensive checklist of the butterfly fauna was made in and around Nagpur city in a periphery of 25 kilometers. Butterfly fauna was studied in a radius of 25 kilometers from Nagpur city.

The city has got well-protected greenery in the following places viz., Vishvesharayya National Institute of Technology (VNIT) campus, National Environmental Engineering and Research Institute (NEERI) campus, Ambazari Garden, Telangkhedi Garden, Botanical Garden, Seminary Hills, Central Jail premises, Textile Mills, Government Medical College (GMC) campus and many other smaller city gardens. Also there are unprotected forests on the North and Western sides of the city (Gorewada and Ambazari range of forests).

D'Abreu (1931) had done a comprehensive study and collection of butterflies of the erstwhile Central Provinces (now Madhya Pradesh and Vidarbha), of which Nagpur was a part then. There are papers available about the butterfly diversity of Pohara-Malkhed Reserve Forest (Kasambe & Wadatkar, 2004) and of Amravati district (Wadatkar & Kasambe, 2003), in Vidarbha. However, there is no published literature about the butterflies of Nagpur after D'Abreu.

Materials and Methods:

Butterflies were observed in all representative areas like city gardens, grasslands, deciduous forests and scrub forests during monsoon and post-monsoon months in the years 2005, 2006 and 2007. Dead butterflies killed on roads were collected and identified using the available literature (Evans, 1932, Haribal, 1992, Kunte, 2000 and Wynter-Blyth, 1957). The dead specimens, though not many of them are in good condition, were kept in butterfly collection boxes. Many of the species were photographed in the wild whenever we had camera with us. Collecting live specimens was avoided during the study.

The present paper provides the checklist of butterflies in the area mentioned above with notes on abundance and habitat preference. Butterflies were categorized into five groups based on their occurrence during the study period on the basis of frequency of sightings. Accordingly, those species observed were categorized as:

A-Abundant- Seen on 80-100% of field visits in most habitats

C-Common- Seen on 60-80% of field visits in most habitats

U-Occasional/ Uncommon- seen on 40-60% of field visits in most habitats

R-Rare seen on 20-40% of field visits in most habitats

VR- Very Rare- seen on less than 20% of field visits

NF- Not found during the present study but reported earlier by D'Abreu (1931)

The habitat preferences are categorized as;

CG-City Gardens (Maharajbagh, etc.)

GR-Grasslands, open savanna countryside (Umred Road, Bhandara Road),

SF- Scrub Forest (Ambazari range, Koradi, Kamptee cantonement)

DF-Deciduous Forest (Gorewada range, Seminary Hills)

AG- Near cultivation, agriculture

Results and Discussion:

A total of 86 species were found during the study period by the authors in the study area. D'Abreu (1931) had reported total 177 species to occur in the erstwhile Central Provinces (now Madhya Pradesh and Vidarbha). Three forms of Common Mormon (*Papilio polytes*, *P.p. romulus* and *P. p. stichius*) were found to occur in Nagpur. Blue Mormon *Papilio polymnestor* seems to be the rarest of butterflies as it was seen only once in Maharajbagh garden in the city during the study period.

Familywise abundance of the species of butterflies reported till date is:

Papilionidae: 12%, Pieridae: 15%, Nymphalidae: 39%, Lycaenidae: 23% and Hesperidae: 11%. The Nymphalids dominate the familywise abundance amongst the diverse taxa with a maximum of 39 species reported from the study area.

Species of butterflies reported earlier to be found specifically in Nagpur (D'Abreu, 1931) but which could not be found during the study by the authors are Pailionidae: 4 species, Pieridae: 1 species, Lycaenidae: 2 species, Nymphalidae: 3 species and Hesperidae: 4 species. The reasons of why these species were not found during the study need to be investigated.

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#	Common English Name	Scientific Name	Abundance	Habitat	Comments
	Swallowtails	Papilionidae			
1	Lime Butterfly	<i>Papilio demoleus</i>	A	CG, DF, AG	
2	Blue Mormon	<i>Papilio polymnestor</i>	VR	CG	
3	Common Mormon	<i>Papilio polytes</i>	C	CG, DH	
4	Common Jay	<i>Graphium doson</i>	C	CG	
5	Tailed Jay	<i>Graphium agamemnon</i>	C	CG, DF	
6	Spot Swordtail	<i>Graphium nomius</i>	U	DF, CG	
7	Common Rose	<i>Pachliopta aristolochiae</i>	C	DF, SF	
8	Crimson Rose	<i>Pachliopta hector</i>	C	DF, SF	
9	Common Mime	<i>Papilio clytia</i>	NF		D'Abreu
10	Banded Peacock	<i>Papilio crino</i>	NF		D'Abreu
11	Bar Swordtail	<i>Papilio antiphates</i>	NF		D'Abreu
12	Common Bluebottle	<i>Papilio sarpedon</i>	NF		D'Abreu
	Whites and Yellows	Pieridae			
13	Common Jezebel	<i>Delias eucharis</i>	U	SF, DF	
14	Small /Little Orange Tip	<i>Colotis etrida</i>	U	GR, SF	
15	Crimson Tip	<i>Colotis danae</i>	U	GR, SF	
16	White Orange Tip	<i>Ixias marianne</i>	U	GR, SF	
17	Yellow Orange Tip	<i>Ixias pyrene</i>	U	GR, SF	New Report
18	Common Gull	<i>Cepora nerissa</i>	C	SF, DF	
19	Pioneer or Caper White	<i>Anaphaeis aurota</i>	C	SF, CG	
20	Common Wanderer	<i>Pareronia valeria</i>	C	SF, CG	
21	Common Grass Yellow	<i>Eurema hecabe</i>	A	SF, GR	
22	Small Grass Yellow	<i>Eurema brigitta</i>	A	SF, GR	
23	Spotless Grass Yellow	<i>Eurema laete</i>	C	SF, GR	
24	Three Spot Grass Yellow	<i>Eurema blanda</i>	C	SF, GR	
25	Common Emigrant	<i>Catopsilia pomona</i>	A	CG	
26	Mottled Emigrant	<i>Catopsilia pyranthe</i>	C	CG, SF	
27	Salmon Arab	<i>Colotis amata</i>	NF		D'Abreu
	Blues	Lycaenidae			
28	Slate Flash	<i>Rapala manea</i>	VR	SF, DF	
29	Indian Red Flash	<i>Rapala melampus</i>	VR	SF, DF	
30	Common Silverline	<i>Spindasis vulcanus</i>	VR	DF, SF	

31	Rounded Pierrot	<i>Tarucus nara</i>	C	GR, SF	New Report
32	Common Pierrot	<i>Castalius rosimon</i>	U	GR, SF	
33	Red Pierrot	<i>Talicerca nyseus</i>	VR	CG	
34	Meadow Blue	<i>Polyommatus baeticus</i>	NF		D'Abreu
35	Zebra Blue	<i>Leptotes plinius</i>	C	GR, SF	
36	African Babul Blue	<i>Azanus jesous</i>	C	CG, SF	
37	Lesser Grass Blue	<i>Zizina otis</i>	C	GR, SF	
38	Tiny Grass Blue	<i>Zizula hylax</i>	C	GR, SF, DF	
39	Dark Grass Blue	<i>Zizeeria karsandra</i>	U	GR, SF	New Report
40	Pale Grass Blue	<i>Pseudozizeeria maha</i>	R	GR, SF	New Report
41	Lime Blue	<i>Chilades laius</i>	U	CG, DF, AG	New Report
42	Plains Cupid	<i>Chilades pandava</i>	U	GR, SF	
43	Tailed Cupid	<i>Everes argiades</i>	NF		D'Abreu
44	Grass Jewel	<i>Freyeria trochylus</i>	C	GR, SF	
45	Gram Blue	<i>Euchrysops cnejus</i>	U	GR, SF, AG	
46	Pea Blue	<i>Lampides boeticus</i>	U	GR, SF, AG	
47	Forget-Me-Not	<i>Catochrysops strabo</i>	C	GR, SF	
48	Common Cerulean	<i>Jamides celeno</i>	VR	DF, CG	
49	Dark Cerulean	<i>Jamides bochus</i>	U	DF, CG	
50	Common Lineblue	<i>Prosotas nora</i>	U	SF	New Report
	Brush-Footed	Nymphalidae			
51	Common Indian Crow	<i>Euploea core</i>	A	CG, SF, DF	
52	Blue Tiger	<i>Tirumala limniace</i>	A	CG, SF, DF	
53	Plain Tiger	<i>Danaus chrysippus</i>	A	CG, SF	
54	Striped or Common Tiger	<i>Danaus genutia</i>	C	SF, DF	
55	Yellow Pansy	<i>Junonia hierta</i>	U	SF, DF	
56	Blue Pansy	<i>Junonia orithya</i>	A	GR, SF	
57	Lemon Pansy	<i>Junonia lemonias</i>	A	GR, SF, DF	
58	Peacock Pansy	<i>Junonia almana</i>	C	SF, DF	
59	Grey Pansy	<i>Junonia atlites</i>	C	SF, DF	
60	Chocolate Pansy	<i>Junonia iphita</i>	U	DF, CG	
61	Painted Lady	<i>Cynthia cardui</i>	U	SF	
62	Danaid Eggfly	<i>Hypolimnas misippus</i>	U	DF	
63	Great Eggfly	<i>Hypolimnas bolina</i>	U	DF	
64	Angled Castor	<i>Ariadne ariadne</i>	U	SF, CG	

65	Common Castor	<i>Ariadne merione</i>	A	SF, CG	
66	Common Baron	<i>Euathalia aconthea</i>	U	DF, CG	
67	Common Sailer	<i>Neptis hylas</i>	U	DF, CG	
68	Short-banded Sailor	<i>Neptis columella,</i>	R	DF	
69	Commander	<i>Moduza procris</i>	U	DF, CG	
70	Black Rajah	<i>Charaxex dolon</i>	R	DF, SF	
71	Tawny Rajah	<i>Charaxex polyxena</i>	R	DF, SF	
72	Common Leopard	<i>Phalanta phalanta</i>	U	GR, CG, SF	
73	Baronet	<i>Euthalia nais</i>	U	SF, DF	
74	Tawny Coster	<i>Acraea violae</i>	A	CG, SF	
75	Common Nawab	<i>Polyura athamas</i>	U	DF	
76	Common Three Ring	<i>Ypthima asterope</i>	U	GR	
77	Common Four Ring	<i>Ypthima huebneri</i>	R	GR	
78	Jewel Fourring	<i>Ypthima avanta</i>	NF		D'Abreu
79	Common Five Ring	<i>Ypthima baldus</i>	U	GR	New Report
80	Joker	<i>Byblia ilithyia</i>	C	GR, SF	
81	Bamboo Treebrown	<i>Lethe europa,</i>	R	DF	
82	Common Bushbrown	<i>Mycalesis perseus</i>	C	DF	
83	Tamil Bushbrown	<i>Mycalesis subdita</i>	R	CG, SF	New Report
84	Long-brand Bushbrown	<i>Mycalesis visala</i>	R	SF, DF	
85	Nigger	<i>Orsotriena meda</i>	NF		D'Abreu
86	Dark Bushbrown	<i>Mycalesis mineus</i>	NF		D'Abreu
87	Great Evening Brown	<i>Melanitis zitenius</i>	U	SF, DF	
88	Common Evening Brown	<i>Melanitis leda</i>	A	SF, DF	
89	Plum Judy	<i>Abisara echerius</i>	R	DF, CG	
	Skippers	Hesperiidae			
90	Common Banded Awl	<i>Hasora chromus</i>	A	CG, DF	
91	Plain Banded Awl	<i>Hasora chabrona</i>	NF		D'Abreu
92	Rice Swift	<i>Borbo cinnara</i>	C	CG, SF, DF, AG	
93	Straight Swift	<i>Parnara guttatus</i>	U	SF	
94	Bevan's Swift	<i>Borbo bevani</i>	U	SF	
95	Blank Swift	<i>Baoris kumara</i>	U	SF	
96	Indian Skipper	<i>Spialia galba</i>	U	SF	

97	Brown Awl	<i>Badamia exclamationis</i>	NF		D'Abreu
98	White-speckled Bush Hopper	<i>Taractrocera maeivius</i>	NF		D'Abreu
99	Pale Palm Dart	<i>Telicota augias</i>	NF		D'Abreu
100	Dark Palm Dart	<i>Telicota ancilla</i>	R	SF	New Report

Orange Migrant (*Catopsilia scylla* Linnaeus, 1763) - A butterfly species new to Sri Lanka
By Michael and Nancy van der Poorten
26th Feb 2008

For the first time in many decades a butterfly species new to Sri Lanka has been identified in the Kurunegala district. A male *Catopsilia scylla* was observed and studied 2 Km from Wariyapola along the road to Kurunegala on the 18th of February, 2008. The race to which this species belongs is yet to be determined.

In flight, the butterfly looked very similar to *Catopsilia pomona*, but it was chrome-yellow below, and showed white and yellow scales above. Despite its name, there is no "Orange" in this population, at least so far. Its flight was also very similar to that of *C. pomona*, but its wing beats seemed less powerful, and it often flew low to the ground. Later that day, several more males were seen flying around a few tall shrubs of *Cassia surattensis*, an ornamental shrub planted along roadsides under the road beautification program in Sri Lanka. The location was visited the next day, and by 10 am several females arrived at the *C. surattensis* plants and began ovipositing. The females deposited their eggs very rapidly, mostly on the underside of mature leaves, though a few were laid on the upper side of the leaves as well. Females preferred a more vertical position to oviposit. The white eggs were very small and spindle shaped, and appeared to have a more slender stalks than those of *C. pomona*.





To get an idea of how far its range extended from Wariyapola, we drove north-west towards Puttalam (about 15 Km), east towards Anuradhapura (about 25 Km), and south-east all the way to Kurunegala. *C. scylla* was seen throughout the area traversed, but mostly in the vicinity of *Cassia surattensis* plants. Although *C. scylla* is known to oviposit on *Cassia fistula* and *Cassia tora* in other countries, only a few of these plants were encountered on our journey. Although some of them carried eggs, no adults of *C. scylla* were seen near the plants.



I suspect that *C. scylla* is as widely distributed in the island and as is *C. surattensis*, but this needs confirmation. Its flight period and the number of broods in a year are yet to be determined. It is likely that it will be similar to *C. pomona* with peak populations coincident with the onset of the monsoonal rains. However, given its predisposition to laying eggs on older leaves and the ability of the larva to feed on them, *C. scylla* may have different flight period/s and population peaks, specially if adult resources are not limiting after emergence. During the period under observation (18th Feb - 26th Feb), *C. scylla* was by far the more abundant species.

C. scylla has a wide distribution in Asia and is found in southern Myanmar, the Malay Peninsula, Thailand, Vietnam, Java, Sumatra and Australia but has not been recorded from India or Sri Lanka in the past. It is rather puzzling that a common butterfly with enormous potential to multiply very rapidly and sustain large populations could have gone undetected for so long, unless it is a recent arrival and has established itself due to optimal conditions here. The assumption may be valid, particularly in Sri Lanka where collecting butterflies was a common hobby among the English and Europeans for at least 75 years, and a species such as this could not possibly have gone undetected under such intense collecting pressure. When it appeared on our shores is not certain. It may have been here since the first introduction of *C. surattensis*, but if this were so, it has gone undetected for a long time; *C. surattensis* has been recorded in Sri Lanka for at least 17 years (see Flora of Ceylon, Vol. VII, pp81-82). Small populations may have survived on a few of these exotic plants and perhaps on our local *C. fistula* as well. But when the government started mass scale planting of *C. surattensis* along newly renovated roads, the butterfly populations may have multiplied very rapidly. On the other hand, it may have arrived as eggs, larvae or pupa on some plant material during a second wave of importation of plants from Thailand or Singapore, and passed through quarantine undetected; a possible theory, but needs confirmation. But why import plants of *C. surattensis* at great expense when seeds would suffice? - the plant produces a great many viable seeds and are easy to propagate. It is highly unlikely for *C. scylla* to have flown across the sea because of the large distances involved, unless it came from India across the Palk Straits, in which case, it would be a short distance though still formidable for a butterfly - the assumption would be that India is already colonized. However, to date, *C. scylla* has not been reported from India. Another possibility is that adults came across on ships, though this may be difficult to prove!



Description: “♂♀. 60-65mm. Fore wing elongate; costa regularly and widely arched; apex moderately acute; outer margin short, slightly concave; tornus obtuse; inner margin long, about four fifths the length of costa; cell less than half the length of wing; vein 11 from cell well basad; vein 10 from near end of cell; 7+8 and 9 on a long stalk; 6 from the stem of 7+8, and 9 at about a third from end to apex; 5 from the cell, with *mdc* oblique and at least half as long as *ldc*. Hind wing very broad; costa strongly arched; apex not well marked; outer margin very slightly arched; tornus angular, well marked; inner margin almost straight from the base, slightly concave near apex; cell short and broad; *mdc* and *ldc* slightly oblique, the latter attenuate in its upper half; precostal vein short, curved slightly basad; vein 8 strongly angular near base. Antenna short and stout, not half length of fore wing; club long and gradual, truncate at apex. Palpus with third segment short and oval. Male with secondary sexual characters. Forewing underside near base of inner margin with a long hair pencil directed forwards; hind wing upper side, in area 7 near the base, with an oval patch of androconia.

♂ Upperside of forewing white; costa edged with black; outer margin with a narrow black border, wider at the apex, its inner edge dentate, from apex to tornus, and of nearly even width throughout. Hind wing rich cadmium-yellow, slightly paler towards the base, usually with small black marginal spots towards the veins.

♂ Underside rich cadmium or chrome-yellow. Fore wing with posterior area below the cell and vein 2 pure white; the yellow however, extends down to the tornal angle in a curve. Both wings with a discocellular spot, pinkish and ringed with darker brownish-pink; similar spots on the hind wings usually in the base of cell and in area 7 and 5, and below the origin of vein 2; usually a post-discal series of lunular diffuse markings of similar brownish-pink scales.

Antenna and upper side of head reddish-brown; thorax clothed with fuscous-grey hairs, abdomen yellow; underside of palpi, thorax and abdomen yellow.

♀ resembles the ♂. Upperside of forewing dull creamy white with a marginal black border; a post-discal series of ill-defined diffuse black spots curved strongly inwards anteriorly; often a small discocellular black ring. Hind wing as in the ♂, of a duller shade of yellow that turns to pale pinkish-white towards the basal area above the cell; a post-discal series, somewhat obsolescent, of dull brownish-black lunular markings; marginal spots much larger and duller in colour than in the ♂.

Underside as in the ♂, but all black markings on upper side replaced by rich pinkish-red tints.” From Talbot, G., *The Fauna of British India including Ceylone and Burma, Butterflies Vol 1*, 1947.

Note: If any of you happen to see any butterfly looking similar to Orange Emigrant in India, please mail to info@srilankaninsects.net

**What's going on here?
By Dr. Torben B. Larsen**



During courtship male Danaid butterflies need to powder their females with a special pheromone if they are to have any chance of mating. A better name for the substance might be 'love dust'. Rape – as performed by some Heliconiinae – of the nature of the *Cethosia* would be quite impossible: the female cannot be coerced. The love dust is dispensed with a set of usually bright yellow brushes that are extruded from the abdomen. The smells are universally considered pleasant to the human nose – violets, vanilla, heliotrope and are amongst those mentioned. The pheromone(s) are complex. Some are metabolized from the larval host plants but these do not contain one essential ingredient – pyrrolizidine alkaloids. So the first act of a male Danaid after hatching and going in quest of reproductive success is to fly off in search of plants containing these substances. These are few and widely scattered among different plant families and may be difficult to find, so males often find them because of the presence of males of other Danaids – I have seen up to thirty at one such 'pyrrolizi-diner'. What is happening in the photo is that a male *Euploea core* Linné has found the corpse of a *Tirumala aglea* Stoll and is ingesting the alkaloids from it. During the day at least seven other Danaids of several species found it as well – then the ants took over. Now ... that's recycling!

Butterfly Identification – Peacock swallowtails

Text by Kishen Das , Photographs by Kishen Das and C. Susanth

Mysore

Word: “Peacock”

Noun:

- 1) European butterfly having reddish-brown wings each marked with a purple eyespot
- 2) Male peafowl; having a crested head and very large fanlike tail marked with iridescent eyes or spots

Species: There are three species of peacock swallowtails in South India, namely Common Banded Peacock (*Papilio crino*, 80-100mm), Paris Peacock (*Papilio paris*, 90-140mm), and Malabar Banded Peacock (*Papilio buddha*, 90-100mm).

Identification:

Peacock swallowtails can be very easily identified in the field because of their huge size and dazzling green and blue color combination. Common Banded Peacock has its distribution in parts of South India and West Bengal. The wings are heavily dusted with dazzling green scales and the tail is green-tipped. UPF has a bluish green discal band which narrows down towards costa. UPH also has a broader bluish green discal band and its not clearly defined. There is a pale tornal redspot on the UPH. This butterfly is usually found in scrub jungle, deciduous forests and semi-evergreen habitats. During peak summer males can be seen puddling. Although this butterfly is found through out the year it's more common in July.

Paris Peacock is found in Western Ghats, Nilgiris, Orissa, Kumaon, Sikkim, Assam and Burma. Upper wings are relatively less dusted compared to other two swallowtails. UPF has a very narrow green discal band. On the UPH, there is a well defined blue patch. There is one tornal red spot on UPH and series of red spots along the termen on the UNH. Best time to watch this butterfly is when it is mud-puddling or later afternoon after it has settled down on plants.

Malabar Banded Peacock is probably the most beautiful butterfly in India. This species is endemic to Western Ghats and more commonly found between Northern Kerala and Southern Goa. It can also be often seen in the tea estates in Coorg. Since it is a canopy flier, it is hard to get a closer look at this gorgeous butterfly and hence carrying a binocular would always help! This butterfly is black with a broad bluish green central band on UPF. The UNF and UNH are black without any green or blue scaling. Krushnamegh has seen it mud-puddling, although I have only seen it flying rapidly among the canopies. So far I have not been able to photograph this species in spite of sighting it at least thousand times☺.



Malabar Banded Peacock

Common Banded Peacock

Paris Peacock



Common Banded Peacock

Paris Peacock

Host Plants: Zanthoxylum rhetsa and Chroloxylon swietenia

What you can do? It would be interesting to study the male-female ratio in the peacock swallowtails and also to observe the activities of females as they are hardly seen in the field.

BREAKFAST WITH BUTTERFLIES

By Dr. V.Shubhalaxmi

Early Sunday morning on 4 November 2007, 200 Mumbai Kars flocked with their families for a date with butterflies of Sanjay Gandhi National Park. These butterfly lovers have been waiting for this event for the last one year as the Conservation Education Centre of BNHS, every year holds this unique program 'Breakfast with Butterflies'. For past three years, the event has been luring people from all walks of life. The program had a few movie and television personalities among their audience. Like every year, this year too the event was a success.

The programme started at 8.00 am with an inaugural talk followed by a walk in the wild area around CEC for around an hour and a half. As the weather was cloudy, we could not spot the expected number of butterflies that are generally seen in this season. However, we spotted 30 species of butterflies. The most memorable were Gaudy Baron, Blue Oak Leaf, Commander and Blue Mormon. This event was all about exploring various aspects of the mystifying world of Butterflies. The trail was followed by a sumptuous breakfast. Thereafter an informative audio visual on 'Butterflies of India' was conducted which was followed by a marathon series of indoor sessions such as Butterfly baiting, Tips on Gardening for Butterflies, Early stages of Butterflies, Tips on Butterfly Photography and Butterfly Quiz were conducted. Along with these sessions for adults, activities for children were carried out. Activities like Treasure Hunt, Crossword and Face painting were a hit amongst the younger participants. The programme concluded with audio-visual jingle 'Ek Kahani Titli Ki' to complete the event. An informative programme kit comprising of education material and souvenirs was provided to every participant. A dedicated team of 20 volunteers of CEC helped us to make this event a huge success. Now we look forward to another event- Brunch with Birds.