Fauna of Protected Areas - 18:

A CHECKLIST OF BUTTERFLIES OF NAGARJUNASAGAR SRISAILAM TIGER RESERVE, ANDHRA PRADESH

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web supplement

As part of a larger project "All Taxa Biodiversity Inventory of Nagarjunasagar-Srisailam Tiger Reserve (N-STR)" (Rao *et al.*, 2004) a preliminary survey for butterflies was carried out from January 2003 to December 2003 to document the butterfly diversity in the area. Sampling for butterflies was done along transects passing through various habitats in seven selected monitoring sites (Fig. 1), within an area of 4km² each. Collections were made with the help of a sweep net and specimens were dry preserved following Arora (1990), and deposited in the field museum of Eco-Research and Monitoring Laboratories at the Project Tiger head quarters in Srisailam. Species identification was made using various field guides and other available literature (Antram, 2002; Evans, 1932; Gunathilagaraj *et al.*, 1998; Haribal, 1992; Kunte, 2000). Some of the rare butterflies were further identified using keys provided by Wynter-Blyth (1957). Species classification and scientific names are as per Kunte (2000) and Gunathilagaraj *et al.* (2000).

A total of 89 species comprising 58 subspecies, belonging to 64 genera, 13 subfamilies distributed over five families were collected from the monitoring sites, during the study period. The family Nymphalidae dominated with 27 species followed by Lycaenidae (24 spp.), Pieridae (17 spp.), Hesperidae (12 spp.) and Papilionidae (9 spp.). Generally, a large number of species was seen in the month of October, immediately after the rains. The species like *Acraea violae*, *Borbo bevani*, *Tarucus nara*, *Symphaedra nais*, *Ariadne merione merione*, *Pachliopta hector*, *Catopsilia pomona* to mention a few were commonly seen, while *Catopsilia pyranthe*, *Curetis dentata*, *Matapa aria*, *Hasora chromus chromus* were found to be seasonal. Rarely seen were the *Ampittia dioscorides dioscorides*, *Tajuria cippus*, *Hypolimnas bolina jacintha*, while *Arhopala amantes amantes* and *Matapa aria* were very rare. Seven butterfly species recorded from this region have protected status under the Wildlife Protection Act, 1972 (Arora, 2003). They are *Hypolimnas misippus* and *Pachliopta hector* included under Schedule I Part IV and five species *Melanitis zitenius zitenius*, *Rapala varuna oresis*, *Spindasis elima elima*, *Lampides boeticus* & *Appias albina darada* in Schedule II Part II. A list of the butterflies recorded during the survey along with their abundance, habitat preference and seasonality in N-STR is given in Table 1. Further research with reference to ecology, threats and conservation of butterflies in the area is in progress.

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Figure 1. Study areas in Nagarjunasagar-Srisailam Tiger Reserve (N-STR)

- 1 - Vijayapuri North (16°35'12"N & 79°19'69"E); 2 - Farahabad (16°16'58"N & 78°41'14"E);
3 - Appapur (16°10'38"N & 78°40'14"E); 4 - Palutla (16°09'34"N & 79°24'86"E); 5 - Sunipenta (16°48'17"N & 78°54'19"E);
6 - Peddacheruvu (15°58'20"N & 78°50'18"E); 7 - Thummalabailu (15°57'20"N & 78°55'20"E).

Table: List of Butterflies recorded from Nagarjunasagar-Srisaillam Tiger Reserve (N-STR), Andhra Pradesh

Scientific Name	Common Name	Abundance	Habitat Preference	Seasonality
Nymphalidae				
<u>Satyrinae</u>				
<i>Lethe rohria rohria</i> Fabricus	Common Tree brown	R	OF, DF, BP	October and November
<i>Melanitis leda leda</i> Drury	Common Evening Brown	C	OF, DF, BP	September to December
<i>Melanitis phedima bela</i> Moore	Dark Evening Brown	C	OF, DF, BP	October to January
<i>Melanitis zitenius zitenius</i> Herbst**	Great Evening Brown	C	OF, DF, BP	October and November
<i>Mycalasis subdita</i> Moore	Tamil Bush brown	C	OF, DF, BP	October and November
<i>Ypthima asterope maharatta</i> Moore	Common Three - ring	C	OF, DF, BP	October to December
<u>Charaxinae</u>				
<i>Charaxes solon solon</i> Fabricus	Black Rajah	R	OF, DF, MP	May
<i>Polyura athamas athamas</i> Drury	Common Nawab	O	S, OF, DF	August to November
<u>Acraeinae</u>				
<i>Acraea violae</i> Fabricus	Tawny Coster	VC	S, OF, DF	September to April
<i>Ariadne merione merione</i> Cramer	Common Castor	VC	S, OF	May to October
<u>Danainae</u>				
<i>Danaus chrysippus chrysippus</i> Linnaeus	Plain Tiger	VC	S, OF, DF	April to September
<i>Danaus genutia genutia</i> Cramer	Striped Tiger	VC	S, OF, DF, BP	April to September
<i>Euploea core core</i> Cramer	Common Crow	VC	S, OF, DF, BP	November to May
<i>Euthalia aconthea meridionalis</i> Fruhstorfer	Baron	VC	S, OF, DF	December
<i>Hypolimnas bolina jacintha</i> Drury	Great Eggfly	O	OF, DF	August
<i>Hypolimnas misippus</i> Linnaeus*	Danaid Eggfly	VC	S, OF, DF	October to January
<i>Moduza procris undifragus</i> Fruhstorfer	Commander	O	S, OF	February
<i>Neptis hylas varmona</i> Moore	Common Sailor	VC	S, OF	January to March
<i>Phalanta phalantha phalantha</i> Drury	Common Leopard	VC	S, OF	February to May
<i>Precis almana almana</i> Linnaeus	Peacock Pansy	VC	S, OF, DF	July to October
<i>Precis hierta hierta</i> Fabricus	Yellow Pansy	VC	S, OF	January to December
<i>Precis iphita iphita</i> Cramer	Chocolate Pansy	VC	S, OF	November to December
<i>Precis lemonias lemonias</i> Linnaeus	Lemon Pansy	VC	S, OF	January to December
<i>Precis orithya ocyale</i> Hubener	Blue Pansy	VC	S, OF	September to February
<i>Symphaedra nais</i> Froster	Baronet	VC	S, OF, DF	October to February
<i>Tirumala limniace exoticus</i> Gmelin	Blue Tiger	VC	S, OF, DF, BP	April to June
<i>Vanessa indica pholoe</i> Fruhstorfer	Indian Red Admiral	O	OF, DF	December
Lycaenidae				
<u>Cretinae</u>				
<i>Curetis bulis</i> Westwood	Bright Sunbeam	R	S, OF	January to March
<i>Curetis dentate</i> Moore	Angled Sunbeam	R	S, OF	January to March
<u>Theclinae</u>				
<i>Arhopala amantes amantes</i> Hewitson	Large Oakblue	VR	DF, RE	May and June
<i>Nilasera centaurus pirithous</i> Moore	Centaur oakblue	R	DF, RE	May and June
<i>Rapala jarbus</i> Fabricus	Indian Red Flash	O	S, OF	September to December
<i>Rapala manae schistacea</i> Moore	Slate Flash	O	S, OF	October and November
<i>Rapala varuna oresis</i> Moore**	Indigo Flash	O	S, OF	September to December
<i>Rathinda amor</i> Fabricus	Monkey Puzzle	R	OF, DF	September to November
<i>Spindasis elima elima</i> Moore**	Scarce Shot Silver Line	C	S, OF	September to December
<i>Spindasis ictis</i> Hewitson	Shot Silver Line	C	S, OF	October and November
<i>Spindasis vulcanus vulcanus</i> Fabricus	Common Silver Line	C	S, OF	October to December
<i>Tajuria cippus</i> Fabricus	Peacock Royal	R	S, OF	November
<u>Polymmatinae</u>				
<i>Castalius rosimon rosimon</i> Fabricus	Common Pierrot	VC	S, OF	October to December
<i>Catochrysops strabo</i> Fabricus	Forget - me - not	VC	S, OF, GS	October to December
<i>Chilades laius</i> Cramer	Lime Blue	VC	S, OF, GS	September to December
<i>Everes lacturnus syntala</i> Cantlie	Indian Cupid	VC	S, OF, GS	May to September
<i>Freyeria trochylus</i> Freyer	Grass Jewel	VC	S, OF, GS	October to December
<i>Jamides celeno aelianus</i> Fabricus	Common Cerulean	VC	S, OF	October and November
<i>Lampides boeticus</i> Linnaeus**	Pea Blue	VC	S, OF, GS	October and November
<i>Leptotes plinius</i> Fabricus	Zebra Blue	VC	S, OF, GS	October to December
<i>Prosotas nora</i> C & R Felder	Common Line Blue	C	S, OF, GS	October to December
<i>Tarucus nara</i> Kollar	Rounded Pierrot	C	S, OF, GS	July to November
<i>Zizeeria maha ossa</i> Swinhoe	Pale Grass Blue	VC	S, OF, GS	September to December
<i>Zizina otis</i> Fabricus	Lesser Grass Blue	VC	S, OF	September to December
Pieridae				
<u>Pierinae</u>				
<i>Anaphaeis aurota aurota</i> Fabricus	Pioneer	VC	S, OF, DF, MP	March to May
<i>Appias albina darada</i> C & R Felder**	Common Albatross	C	S, OF, GS	June to July
<i>Cepora nerissa nerissa</i> Fabricus	Common Gull	VC	S, OF, GS, MP	July to December

Scientific Name	Common Name	Abundance	Habitat Preference	Seasonality
<i>Colotis danae danae</i> Fabricus	Crimson Tip	VC	S, OF, GS	August to November
<i>Colotis etrida</i> Boisduval	Small or Little Orange Tip	C	S, OF, GS	May and June
<i>Colotis eucharis eucharis</i> Fabricus	Plain Orange Tip	C	S, OF, GS	May to July
<i>Delias eucharis</i> Drury	Common Jezebel	VC	S, OF, DF	August to October
<i>Ixias marianne</i> Cramer	White Orange Tip	UC	S, OF, GS	April to July
<i>Ixias pyrene sesia</i> Fabricus	Yellow Orange Tip	UC	S, OF, GS	May to August
<i>Leptosia nina nina</i> Fabricus	Psyche	R	S, OF, GS	February and March
<i>Paretonia valeria hippia</i> Fabricus	Common Wanderer	VC	S, OF, DF, RE	August to October
Coliadinae				
<i>Catopsilia crocale</i> Cramer	Lemon Emigrant	VC	S, OF, GS, MP	July to December
<i>Catopsilia pomona</i> Fabricus	Common Emigrant	VC	S, OF, DF	July to December
<i>Catopsilia pyranthe</i> Linnaeus	Mottled Emigrant	C	S, OF, DF	April to August
<i>Colias fieldii</i> Menetries	Dark Clouded Yellow	C	S, OF, GS	April to July
<i>Eurema blanda silhetana</i> Wallace	Three Spot Grass Yellow	C	S, OF, GS	September to November
<i>Eurema hecabe simulata</i> Moore	Common Grass Yellow	VC	S, OF, GS	April to July
Hesperiidae				
Coeliadinae				
<i>Badamia exclamationis</i> Fabricus	Brown Awl	O	S	November and December
<i>Hasora chromus chromus</i> Cramer	Common Banded Awl	C	S, OF, DF	October to December
Pyrginae				
<i>Caprona agama agama</i> Moore	Spotted Angle	O	RE, BC	October to December
<i>Caprona ransonnetti potiphera</i> Hewitson	Golden Angle	O	RE	October and November
<i>Spialia galba galba</i> Fabricus	Indian Skipper	VC	AH	September to December
Hesperiinae				
<i>Ampittia dioscorides dioscorides</i> Fabricus	Bush Hopper	O	DF	October
<i>Borbo bevani</i> Moore	Bevan's Swift	VC	AH	September to February
<i>Matapa aria</i> Moore	Common Redeye	VR	DF, RE	October
<i>Notocrypta curvifascia curvifascia</i> Felder & Felder	Restricted Demon	R	RE	October and November
<i>Pelopidas mathias mathias</i> Fabricus	Small Branded Swift	C	S, RE	October and November
<i>Suastus gremius gremius</i> Fabricus	Indian Palm Bob	C	S, RE	October and November
<i>Telicota ancilla bambusae</i> Moore	Dark Palm Dart	R	RE, BC	October and November
Papilionidae				
Papilioninae				
<i>Graphium agamemnon menides</i> Felder & Felder	Tailed Jay	R	OF, DF, RE	August to October
<i>Graphium sarpedon teredon</i> Felder & Felder	Common Blue Bottle	VC	OF, DF	May to August
<i>Pachliopta aristolochiae aristolochiae</i> Fabricus	Common Rose	O	S, OF, DF	July to September
<i>Pachliopta hector</i> Linnaeus*	Crimson Rose	C	S, OF, DF	April to October
<i>Papilio demoleus</i> Linnaeus	Lime Butterfly	VC	AH, MP	January to December
<i>Papilio polytes polytes</i> Linnaeus	Common Mormon	C	S, OF, DF, MP	April to June
<i>Papilio polytes romulus</i> Cramer	Common Mormon	O	OF, DF, RE	March to June
<i>Papilio polytes stichius</i> Hubner	Common Mormon	C	OF, DF, RE	August to December
<i>Pathysa nomius nomius</i> Esper	Spot Sword Tail	VC	OF, DF, MP	July to September

Note

S - Scrub forest; OF - Open forest; AH - All habitats; GS - Grass lands; DF - Dense forest; RE - Riparian forest; MP - Mud puddles;

BP - Bamboo Patches; VC - Very common; C - Common; O - Occasional; R - Rare; VR - Very rare.

Only those subfamilies that are represented during the study period are mentioned.

(*) Indicates species comes under Schedule I Part IV and (**) Schedule II Part II of The Wildlife (Protection) Act, 1972.

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