# Report on 3rd NORTHEAST BUTTERFLY MEET- 2016

Venue:

Tale Wildlife Sanctuary, Ziro, Arunachal Pradesh Date: 16<sup>th</sup> to 19<sup>th</sup> September 2016

Organized by: Butterflies of North-Eastern India Group

Butterflies of North-Eastern India Group

#### **Local Host:**



Ngunu Ziro, Arunachal Pradesh

#### In collaboration with:

Department of Environment & Forests, Arunachal Pradesh
District Administration, Ziro
Ziro Butterfly Meet
Arunachal Tourism

#### **Supported by:**

Ashoka Trust for Research in Ecology and the Environment (ATREE)

WWF-India

Aaranyak

BAMOS Nature Conservation Society
flutters.org

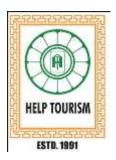
Apatani Youth Association

### **Collaborators:**























## <u>Organizers of Northeast Butterfly Meet-2016:</u>

Kamal Azad, Biologist, National Tiger Conservation Authority, RO, Guwahati Monsoon Jyoti Gogoi, PhD Scholar, Assam University, Silchar Punyo Chada, Ngunu Ziro, Arunachal Pradesh Nawangla Bhutia, BAMOS Nature Conservation Society Mohammad Arif Hussain, Aaranyak, Guwahati Firoz Hussain, Tourism Entrepreneur, Jorhat Samrat Sengupta, PhD Scholar, Assam University, Silchar Dipankar Lahkar, Aaranyak, Guwahati

## Report prepared by:

Monsoon Jyoti Gogoi Kamal Azad

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We are grateful to the following dignitaries for their valuable support to the Northeast Butterfly Meet:

Deputy Commissioner, Ziro, Arunachal Pradesh

D. Raji, District Tourism Officer, Ziro, Arunachal Pradesh

Isaac Kehimkar, Deputy Direstor (Natural History), Bombay Natural History Society, Mumbai, India

Young James, Chairman, Hong Kong Lepidopterists Society, Hong Kong

Dr. Sarala Khaling, Regional Director, ATREE, Gangtok

Dr. Bibhab Talukdar, Secretary General, Aaranyak, Guwahati

Dr. Anupam Sharma, Head, Assam Landscape, WWF-India

Dr. Bibhuti Lahkar, Program Secretary, Aaranyak, Guwahati

Kishen Das, Founder, flutters.org

Ms. Chong Shong Wu, Finance Secretary, Hong Kong Lepidopterists Society, Hong Kong

Dr. Tage Kanno, Ziro, Arunachal Pradesh

Tajum Yomcha, Research Officer, Namdapha National Park, Arunachal Pradesh

Reddy Bei-RFO Talle WLS, Arunachal Pradesh

Dr. Rajib Rudra Tariang, Assistant Professor, Digboi College

Rohit George, ATREE and

Ngunu Ziro Team

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#### 1. BACKGROUND

Northeast India (NE India) has one of the richest diversity of butterflies in the oriental region. 962 species of butterflies have been reported from this region (Evans, 1932) but the expected species diversity is more than 1000 species based on recent records. Although Northeast represents only 7.7 % of Indian landmass, it has 66.85% of butterfly diversity of the Indian region (*Pers. Comm.* Gogoi 2015). Around 66.81% is under forest cover of the total geographic area of Northeast India (<a href="https://data.gov.in">https://data.gov.in</a>) with number of important protected areas. Much of these areas still need faunal documentation especially for the lesser known fauna.

Butterflies of North-eastern India is a group created on 2013 with a vision of increasing the knowledge of butterflies in Northeast India by creating a network of individuals across all the 8 states of the region. The focus of the group is to document the butterfly diversity and to identity butterfly hotspots in the states of Assam, Arunachal Pradesh, Meghalaya, Nagaland and Sikkim. The group also aims to motivate young students in their academic research by teaching them identification techniques and other tools necessary for Lepidoptera research. So far the Facebook page of this group has more than 6000 members. The members of the group regularly post photographs of butterfly species with their location. The group has an expert panel to identify butterflies with proper identifications keys if members find it difficult to identify butterflies.

The major objective of the group is to make a baseline database from important butterfly sites in Northeast India, which will help in conservation evaluation of the region. The group also aims to increase the knowledge of butterflies among local communities.

One of the main activities of the Butterflies of North-eastern India group is to organise the Northeast Butterfly Meet which is an annual gathering of butterfly enthusiasts in the region. The meet encourages participation of young students at minimal cost so that the students get the opportunity to study butterflies in best sites with special training from experts. Most sites of Northeast India are data deficient. The annual event aims to conduct meetings in best sites in different landscapes which will further provide database and help in conservation of the landscape.

The Northeast Butterfly Meet, Season-I was conducted in 2014 in Jeypore/Dihing Patkai Wildlife Sanctuary with an objective to bring together butterfly enthusiasts from across the country to initiate interaction and exchange knowledge and ideas on butterflies, their distribution and conservation efforts. The main aim of the meet was to discuss the current trend and status of butterflies in Northeast India. The meet also wanted to highlight the lesser known sites of the region that need conservation priority. Jeypore rainforest is the home to endemic butterflies like Pallid Forester and 290+ butterflies (Gogoi, 2013), but the area was not known despite its rich potential. Jeypore rainforest is the only undisturbed and last remaining forest lin upper Assam. 30 people participated in this two-day programme. The main components of the meet were field tour and interactions among the participants and researchers working on butterfly specifically distribution, discovery of new species, extension of range distribution and conservation efforts. In this meet, key participants included students (M.Sc. and PhD), nature enthusiasts and wildlife photographers.

The meet focused on the rich biodiversity of Jeypore with especial reference to butterflies and added 10 new butterfly species to Jeypore butterfly diversity list and one new record for India.

The Northeast Butterfly Meet, Season-II was organized in Bornadi Wildlife Sanctuary and Khalingduar Reserve Forest, Assam. The broad objectives, of the Meet were i) to provide a common platform to the butterfly enthusiasts, and wildlife professional to discuss, interact and exchange knowledge and ideas on butterfly diversity, range distribution and conservation ii) to explore lesser known protected areas with rich butterfly diversity iii) to provide preliminary concept on use of technical tools for wildlife related work. This was a four-day long program with field tours and with technical sessions on Photography, butterfly taxonomy and with preliminary concept of statistics, ecological monitoring software and GIS mapping. 47 participants from across the country participated in this meet.

#### 2. OBJECTIVES OF NORTHEAST BUTTERFLY MEET-2016

#### The key objectives of the Meet are:

- i) to provide a common platform to the butterfly enthusiasts, and wildlife professionals to discuss, interact and exchange knowledge and ideas on butterfly diversity, range distribution and conservation
- ii) to explore lesser known protected areas with rich butterfly diversity with documentation of butterflies of that protected area during field trips
- iii) to provide preliminary concept on use of technical tools for wildlife related work for new comers who want to develop a career on wildlife conservation.

#### 3. OUTCOMES

#### The following outcomes are achieved during Northeast Butterfly Meet:

- 1. A list of butterfly will be prepared after the meet. As part of the vision of this season-III meet the group will come up with a booklet of butterflies of Ziro valley:
  - During the Meet butterfly documentation was conducted in the Talle Valley Wildlife Sanctuary. 112 species of butterflies were documented by the participants. Some of the significant species recorded during meet were Scarce Evening Brown (Very Rare, photographed for the second time from India in this meet), Bhutan Glory (rare and threatened), Brown Gorgon (rare), Confusing Threering (lesser known species), Yellow Owl (rare), Manipur Jungle Queen (rare). A list of butterflies is attached in the Annexure2.
- 2. **New to science?** A specimen of an interesting species of Zygaenid moth was collected during the meet. The moth was first photographed in 2010 and is awaiting description.



Photo: Monsoon J. Gogoi

3. A network of researchers will be established to share knowledge, ideas and career opportunities for wildlife conservation

46 participants from the states of Arunachal Pradesh, Assam, Karnataka, Kerala, Sikkim and West Bengal participated in this meet. Mr. James Young, Chairperson and Ms. Chong Shong Wu, Finance Secretary of the Hong Kong Lepidopterist Society, Kishen Das from flutters.org, Dr. Sarala Khaling and Rohit George from Ashoka Trust for Research in Ecology and the Environment (ATREE), Dr. Rajib Rudra Tariang, Assistant professor, Digboi College were participated as experts in the program. The list of participants is attached in the Annexure 1.

Several conservation organizations working in the region viz. ATREE, WWF-India, Aaranyak, BAMOS Nature Conservation Society, flutters.org, and Help Tourism along with District Administration Ziro, District Tourism Office Ziro, Department of Environmet and Forest Arunachal Pradesh, Apatani Youth Association (AYA) have participated in the Northeast Butterfly Meet.

4. Mr. James Young, Chairperson of the Hong Kong Lepidopterist Society has conducted a technical session on butterfly taxonomy. During his presentation he elaborated the use of morphological tools like spots, scales and genitalia, genetics and photography in different wavelength of light in identification of butterfly species. Rohit George from ATREE has conducted a session on Indian Biodiversity Portal and a small session on QGIS.

#### 5. WHAT NEXT

The next Northeast Butterfly Meet- 2017 was decided to organize in Sikkim and BAMOS Nature Conservation Society will be the Local host of the Meet.

#### 6. REFERENCES

Evans, W. H. (1932). The Identification of Indian Butterflies. (2nd Ed), Bombay Natural History Society, Mumbai, India. 464pp.

Gogoi, M.J. (2013). A preliminary checklist of butterflies recorded from Jeypore-Dehing forest, eastern Assam, India. Journal of Threatened Taxa 5(2): 3684–3696; doi:10.11609/JoTT.o3022.3684-96.

## 7. ANNEXURE 1. LIST OF PARTICIPANTS

Sl No	Name of Participants	Addross of participants
1	Name of Participants  Dr. Rajib Rudra Tariang	Address of participants  Digboi, Assam
2	Prajjwal Ray	Jalpaiguri, West Bengal
3	Rishab Kumar Modi	Jalpaiguri, West Bengal
4		Bangalore, Karnataka
5	Sujith Karad	Kerala
6	Gopala krishnan	Kerala
7	Sandex varghese	Kerala
8	Rubul Baruah	Guwahati, Assam
9	Dhiman Baruah	Guwahati, Assam
10	Bhaskor Barukial	Bokakhat, Assam
10		•
	Brojo Kumar Basumatary	Borpeta Road, Assam
12 13	Swapna D Ray	Bongaigao, Assam Kerala
13	Mary Anto	
	Francis Anto	Kerala
15	Saurav Gupta	Dulia jaan, Assam
16	Rupalim Sarma	Nalbari, Assam
17		Pune, Maharashtra
18	Debanga Mahalia	Tangla, Assam
19	Jitumani Mahanta	Guwahati, Assam
20	Aditya Das	Digboi, Assam
	Pramod Saikia	Dehradoon/WII
22	Swati Bhadra	Itanagar, Arunachal Pradesh
23	Manas Sarama	Tezpur, Assam
24	Abhijit Kowar	Titabar, Assam
25	Gayatri Dutta	North Lakhimpur, Assam
26	Nalini Konch	North Lakhimpur, Assam
27	Jaspreet Kaur	North Lakhimpur, Assam
28	Gaurab Nandi Das	Kaziranga, Assam
29	Manjit Gogoi	Bokakhat, Assam
30	Kuru Tubin	Ziro, Arunachal Pradesh
31	Tadu Dobyu	Ziro, Arunachal Pradesh
32	Liter Ingo	Ziro, Arunachal Pradesh
33	Kishen Das	USA
34	Young James	Hong Kong
35	Chong Shong	Hong Kong
36	Dr. Sarala Khaling	Gangtok, Sikkim
37	Rohit George	Gangtok, Sikkim
38	Tajum Yomcha	Namdapha National Park
39	Kamal Azad	Guwahati, Assam
40	Monsoon Jyoti Gogoi	Bokakhat, Assam

41	Arif Hussain	Bokakhat, Assam
42	Nawangla Bhutia	Yoksum, Sikkim
43	Firoz Hussain	Jorhat, Assam
44	Punyo Chada	Ziro, Arunachal Pradesh
45	Dr. Tage Kanno	Ziro, Arunachal Pradesh
46	Hibu Tatu	Ziro, Arunachal Pradesh

## 8. ANNEXURE 2. CHECKLIST OF BUTTERFLIES OBSERVED DURING NEBM-2016

O. AIN	NEAURE 2. CHECKLIST OF B	OUT TERFLIES OBSERVED DURING NEDW-2010
SL No	ENGLISH NAME	SCIENTIFIC NAME
<b>FAMILY</b>	PAPILIONIDAE	
1	Lesser Batwing	Atrophaneura varuna astorion
2	Common Windmill	Byasa polyeuctes polyeuctes
3	Great Windmill	Byasa dasarada dasarada
4	Common Bluebottle	Graphium sarpedon sarpedon
5	Redbreast	Papilio alcmenor alcmenor
6	Great Mormon	Papilio memnon agenor
7	Common Peacock	Papilio polyctor ganesa
8	Paris Peacock	Papilio paris paris
9	Blue Peacock	Papilio arcturus
10	Yellow Helen	Papilio nephelus chaon
11	Red Helen	Papilio helenus helenus
12	Lime Butterfly	Papilio demoleus demoleus
13	Veined Jay	Graphium chironides chironides
14	Glassy Bluebottle	Graphium cloanthus
15	Brown Gorgon	Meandrusa lachinus lachinus
16	Bhutan Glory	Bhutanitis lidderdalii
<b>FAMILY</b>	PIERIDAE	
17	Indian Cabbage White	Pieris canidia indica
18	Large Cabbage White	Pieris brassicae
19	Hill Jezabel	Delias belladonna lugens
20	Dark Jezabel	Delias berinda
21	Green vein White	Pieris napi montana
22	Chocolate Albatross	Appias lyncida hippoides
23	Tree Yellow	Gandaca harina
24	Plain Puffin	Appias indra indra
25	Spot Puffin	Appias lalage lalage
26	Common Grass Yellow	Eurema hecabe
27	Small Grass Yellow	Eurema brigitta
28	Three spot Grass Yellow	Eurema blanda
<b>FAMILY</b>	NYMPHALIDAE	
29	Chestnut Tiger	Parantica sita
30	Chololate Tiger	Parantica melaneus plateniston

31 Glassy Tiger Parantica aglea melanoides
 32 Striped Blue Crow Euploea mulciber mulciber

33 LilacineBushbrown *Mycalesis francisca* 

34 Lilacfork Lethe sura 35 Straight banded Treebrown Lethe verma 36 Rusty Forester Lethe bhairava 37 Himalayan Fivering Ypthima sakra 38 Large Threering Ypthima newara 39 Three-ring sp Ypthima sp. 40 **Confusing Threering** Ypthima confusa 41 KhasiFivering Ypthima affectata 42 Scarce Evening Brown Cyllogenes janetae 43 Stichophthalma sparta Manipur Jungle Queen

44 Popinjay *Stibochiona nicea* 

45 Common Nawab *Charaxes athamas athamas* 

46 Brown Prince Rohana parvata

47 Blue Admiral Kaniska canace canace
 48 Black Prince Rohana parisatis
 49 Circe Hestinalis nama
 50 Grand Duchess Euthalia patala

51 Panther Neurosigma doubledayi
 52 Commodore Auzakia danava danava

53 Bicolour Commodore Parasarpa zayla

54 Green Commodore
 55 White Commodore
 56 Red Lacewing
 59 Sumalia daraxa daraxa
 Parasarpa dudu dudu
 Cethosia biblis tisamena

57 Orange Staff Sergeant
 58 Bhutan Sergeant
 59 Studded Sergeant
 60 Broad banded Sailer
 61 Pale Green Sailer
 Athyma cama
 Athyma jina
 Athyma asura
 Neptis sankara
 Neptis zaida

62 Great Yellow Sailer Neptis radha radha63 Pallas Sailer Neptis sappho

64 Common Lascar Pantoporia hordonia hordonia
65 Common Palmfly Elymnia shypermenestra undularis

66 Scarce Tawny Rajah Charaxes aristogiton

67 Common Map *Cyrestis thyodamas thyodamas* 

68 Tabby Pseudergolis wedah 69 Blue Pansy Junonia orithya 70 Striped Ringlet Ragadia crito

71 Chocolate Pansy
 72 Indian Red Admiral
 73 Indian Fritillary
 74 Junonia iphita iphita
 75 Vanessa indicaindica
 76 Argynnis hyperbius

Vanessa cardui 74 Painted Lady 75 Spotted Jester Symbrenthia hypselis 76 Common Jester Symbrenthia lilaeakhasian 77 Himalayan Sergeant Athyma orientalis 78 **Major Sergeant** Abrota ganga 79 Large Silverstripe Argynnis childreni 80 Cruiser Vindula erota erota **FAMILY RIODINIDAE** 81 Punchinello Zemeros flegyas indicus 82 Lesser Punch Dodona dipoea 83 Tailed Punch Dodona eugenes Striped Punch Dodonia adonira 84 85 Dark Judy Abisara fylla **FAMILY LYCAENIDAE** 86 Forest Pierrot Taraka hamada 87 Megisba malaya Malayan 88 Blue Tit Chliaria kina cachara 89 Common Hedgeblue Acytolepis puspa 90 Pale Hedge Blue Udara dilecta 91 Albocerulean Udara albocaerulea 92 Pale Grass Blue Pseudozizeeria maha 93 Lesser Grass Blue Zizina otis otis 94 Dark Grass Blue Zizeeria karsandra 95 Common Lineblue Prosotas nora nora 96 BhutiaLineblue Prosotas bhutea 97 Pointed Lineblue Lonolyce helicon merguiana 98 Green Sapphire Heliophorus tamu 99 Purple Sapphire Heliophorus epicles 100 Golden Sapphire Heliophorus brahma major **Bispot Royal** 101 Ancema ctesia 102 Common Flash Rapala nissa ratna 103 Shot Flash Rapala buxaria **FAMILY HESPERIIDAE** 104 Mussorie Spotted Flat Celaenorrhinus pero 105 Tytler's Multispotted Flat Celaenorrhinus ratna tytleri 106 **Spotted Demon** Notocrypta feisthameli alysos 107 Notocrypta curvifascia curvifascia Restricted Demon 108 Austen Swift Caltoris cahira austeni 109 Large Branded Swift Pelopidas sinensis 110 Blank Swift Caltoris kumara kumara 111 Himalayan Swift Polytremis discreta 112 Yellow Spot Swift Polytremis eltola

## 9. PHOTOGRAPHS (SOME) OF BUTTERFLY SPECIES OBSERVED DURING NEBM-2016



Brown Gorgon, Photo: Nawangla Bhutia



Bhutan Glory, Photo: Kishen Das



Hill Jezabel, Photo: Gaurab Nandi Das



Yellow Owl, Photo: Gaurab Nandi Das



Manipur Junglequeen, Photo: Gaurab N. Das



Lilacfork, Photo: Monsoon J. Gogoi







Scarce Evening Brown, Photo: Gaurab N. Das

Bhutan Sergeant, Photo: Monsoon J. Gogoi



Large Silverstripe, Photo: Monsoon J. Gogoi



Chestnut Tiger, Photo: Nawangla Bhutia



Commodore, Photo: Gaurab Nandi Das



Himalayan Fivering, Photo: NawanglaBhutia



Green Commodore, Photo: Gaurab Nandi Das



LilacineBushbrown, Photo: Gaurab Nandi Das



Confusing Threering, Photo: Monsoon J. Gogoi



Forest Pierrot, Photo: Gaurab Nandi Das



Blue Tit, Photo: Nawangla Bhutia



Albocerulean, Photo: Rishab K. Modi



Bi-spot Royal, Photo: Nawangla Bhutia



Lesser Grass Blue, Photo: Gaurab Nandi Das



Pale Hedge Blue, Photo: Gaurab Nandi Das





Golden Sapphire, Photo: Monsoon J. Gogoi



Azure Sapphire, Photo: Nawangla Bhutia



Common Flash, Photo: Monsoon J. Gogoi



Striped Punch, Photo: Monsoon J. Gogoi



Tailed Punch, Photo: Monsoon J. Gogoi



Yellow spot Swift, Photo: Gaurab Nandi Das



Himalayan Swift, Photo: Nawangla Bhutia



Large Branded Swift, Photo: Nawangla Bhutia

## 10. PHOTOGRAPHS OF THE EVENT



Inaugural session of NEBM-2016 at Ziro, Arunachal Pradesh, Photo: Sujith Karad



**Group Photo of the Participants of NEBM-2016** 



Mothing, NEBM-2016, Photo: Sujith Karad



Pange Valley Base Camp, NEBM-2016, Photo: Sujith Karad



Participaants, during Field work, Photo: Rubul Baruah



**Group Discussion, Photo: Sujith Karad**