

20. *Ariadne ariadne* Angled Castor
 21. *Charaxes bernardus* Tawny Rajah
 22. *Cynthia cardui* Painted Lady
 23. *Danaus chrysippus* Plain Tiger
 24. *Danaus genutia* Striped Tiger
 25. *Euploea core* Common Indian Crow
 26. *Euthalia nais* Baronet
 27. *Hypolimnas misippus* Danaid Eggfly
 28. *Junonia hierta* Yellow Pansy
 29. *Junonia lemonias* Lemon Pansy
 30. *Junonia orithya* Blue Pansy
 31. *Lethe europa* Bamboo Tree Brown
 32. *Melanitis leda* Common Evening Brown
 33. *Parantica aglea* Glossy Tiger
 34. *Phalanta phalantha* Common Leopard
 35. *Tirumala limniace* Blue Tiger

Hesperidae

36. *Badamia exclamationis* Brown Awl
 37. *Hasora chromus* Common Banded Awl
 38. *Matapa aria* Common Red-eye
 39. *Odonoptilum ransonnetti* Golden Angle
 40. *Pelopidas conjuncta* Conjoined Swift
 41. *Udaspes folus* Grass Demon

NOTE

BIRDS OF POBITORA WILDLIFE SANCTUARY

Bibhuti Prasad Lahkar

P.G. Department of Zoology, Cotton College, Guwahati - 1, Assam

The Pobitora Wildlife Sanctuary (PWLS) is the smallest protected area in Assam. It has been established for its role in the conservation of *Rhinoceros unicornis* in 1987. It is one of the richest and the most potential site for the diversity of birds in Assam. The PWLS is situated in Morigaon district located on 26°12' N to 26°15' N and longitude 92°20' E to 92°50' E. This sanctuary is about 16 sq. km. The altitude varies from 15-25m above MSL. The climate of Pobitora can be termed as "subtropical moist", the annual average rainfall varies from 2500mm-3200mm. Mean summer temperature is 37°C and mean winter temp. is 16°C. The forest type is a combination of eastern wet alluvial grasslands, low alluvial savannah woodland and tropical fringing forests.

The survey in PWLS was carried out during August 1997 to January 1998 as M.Sc. dissertation work. A total of 15 days was spent at different intervals during the study with a total of 60 hours. The birds were observed and identified with the help of field binocular (10x50x), their calls and the books by Ali and Ripley (1933a,b) and Sonobe and Usui (1993). There were 85 species of birds belonging to 35 families and the checklist is not a complete one.

Table 1. Checklist of birds in Pobitora Wildlife Sanctuary

Common name	Scientific name
Family: Pelecanidae	
1. Spotbilled Pelican	<i>Pelecanus philippensis</i>
Family: Phalacrocoracidae	
2. Little Cormorant	<i>Phalacrocorax niger</i>
3. Large Cormorant	<i>P. carbo</i>
Family: Ardeidae	
4. Pond Heron	<i>Ardeola grayii</i>

5. Cattle Egret
 6. Little Egret
 7. Median Egret
 8. Large Egret
 9. Gray Heron
 10. Purple Heron
 11. Black Bittern

- Bubulcus ibis*
Egretta garzetta
E. intermedia
Ardea alba
A. cinerea
A. purpurea
Ixobrychus flavicollis

Family: Anhingidae

12. Darter *Anhinga rufe*

Family: Ciconidae

13. Lesser Adjutant *Leptoptilos javanicus*
 14. Adjutant Stork *L. dubius*
 15. Openbill Stork *Anastomus oscitans*
 16. Black-necked Stork *Ephippiorhynchus asiaticus*

Family: Threskiornithidae

17. White Ibis *Threskiornis aethiopica*

Family: Anatidae

18. Lesser Whistling Teal *Dendrocygna javanica*
 19. Spotbill Duck *Anas poecilorhyncha*
 20. Shoveller *A. cygnea*
 21. Gadwall *A. strepera*
 22. White-eyed Pochard *Aythya nyroca*
 23. Greylag Goose *Anser anser*

Family: Accipitridae

24. Common Pariah Kite *Milvus migrans*
 25. Grey-headed Fishing Eagle *Ichthyophaga ichthyeatus*
 26. Pallas's Fishing Eagle *Haliaeetus leucoryphus*
 27. White-backed Vulture *Gyps bengalensis*
 28. Pied Harrier *Circus melanoleucus*
 29. Crested Serpent Eagle *Spilomys cheela*
 30. Crested Hawk-Eagle *Spizeatus carrhatus limnaeetus*
 31. Kestrel *Falco tinnunculus*

Family: Phasianidae

32. Swamp Partridge *Francolinus gularis*

Family: Rallidae

33. White-breasted Waterhen *Amauornis phoenicurus*
 34. Indian Moorhen *Gallinula chloropus*

Family: Jacanidae

35. Bronze-winged Jacana *Metopidius indicus*

Family: Charadriidae

36. Red-wattled Lapwing *Vanellus indicus*

Family: Scolopacidae

37. Spotted Green Shank *Tringa guttifer*

Family: Columbidae

38. Spotted Dove *Streptopelia chinensis*
 39. Ring Dove *S. decaocto*
 40. Red Turtle Dove *S. tranquebarica*

Family: Psittacidae

41. Rose-ringed Parakeet *Psittacula krameri*

Family: Cuculidae

42. Crow-Pheasant *Centropus sinensis*

Family: Apodidae

43. Palm Swift *Cypsiurus parvus*

Family: Alcedinidae

44. Small Blue Kingfisher *Alcedo atthis*

Family: Dacelionidae

45. White-breasted Kingfisher *Halcyon smymensis*

46. Brown-headed Storkbilled Kingfisher *Pelargopsis capensis*
Kingfisher
- Family: Cerylidae**
47. Lesser Pied Kingfisher *Ceryle rudis*
- Family: Coraciidae**
48. Roller *Coracias benghalensis*
- Family: Upupidae**
49. Hoopoe *Upupa epops*
- Family: Megalaimidae**
50. Lineated Barbet *Megalaima lineata*
51. Blue-throated Barbet *M. asiatica*
- Family: Hirundinidae**
52. Common Swallow *Hirundo rustica*
- Family: Meropidae**
53. Small Green Bee-eater *Merops orientalis*
54. Chestnut-headed Bee-eater *M. leschenaulti*
- Family: Corvidae**
55. Black-headed Oriole *Oriolus xanthornus*
56. Black Drongo *Dicrurus adsimilis*
57. Bronze Drongo *D. aeneus*
58. Tree Pie *Dendrocitta vegabunda*
59. House Crow *Corvus splendens*
60. Jungle Crow *C. macrorhynchos*
61. Common Wood Shrike *Tephrodomis pondicerianus*
62. Iora *Aegithina tiphia*
63. Gold-mantled Chloropsis *Chloropsis cochinchinensis*
- Family: Lanidae**
64. Grey backed Shrike *Lanius tephronotus*
65. Rufous-backed Shrike *L. schach*
- Family: Sturnidae**
66. Indian Myna *Acridotheres tristis*
67. Jungle Myna *A. fuscus*
68. Orange-billed Jungle Myna *A. javanicus*
69. Pied Myna *Sturnus contra*
70. Grey-headed Myna *S. malabaricus*
71. Hill Myna *Gracula religiosa*
- Family: Pycnonotidae**
72. Red-whiskered Bulbul *Pycnonotus jocosus*
73. Redvented Bulbul *P. cafer*
- Family: Muscicapidae**
74. Magpie Robin *Copsychus saularis*
75. Grey-headed Flycatcher *Culicicapa ceylonensis*
76. Red-breasted Flycatcher *Muscicapa parva*
77. Collared Bushchat *Saxicola torquata*
78. Jungle Babbler *Turdoides striatus*
79. Tailor-Bird *Orthotomus sutorius*
- Family: Passeridae**
80. Paddyfield Pipit *Anthus novaeseelandiae*
81. Large Pied Wagtail *Motacilla maderaspatensis*
82. White Wagtail *M. alba*
83. Yellow Wagtail *M. flava*
84. House Sparrow *Passer domesticus*
85. Spotted Munia *Lonchura punctulata*
- Family: Nectarinidae**
86. Purple Sunbird *Nectarinia asiatica*

So far the Pobitora WLS has received focus only for conservation of Rhino; the ponds, swamps, marshyland, grassland and other seasonal and perennial wetlands have also been provid-

ing suitable habitat to a number of avifauna in the sanctuary. Around 25% of the total area under wetlands of the sanctuary harbours a large number of waterbird species of both Oriental and Palearctic region (Talukdar, 1995). Places where waterfowls are abundant are Tamulidova, Haaduk Beel, Pagladova, Sarudova, Chitalmari Beel and Naitoli Beel. During the present study, it was found that bird like White Ibis, Greylag Goose, Spot-billed Pelican, White-eyed Pochard etc. are more abundant in Tamulidova and Sarudova Beel. The rare migratory Spotted Greenshank was recorded in Salmari Beel.

The survey showed that Pobitora is an important Sanctuary for a number of globally threatened species viz. Spot-billed Pelican, Greater Adjutant Stork, Lesser Adjutant Stork, White-eyed Pochard. Near-threatened species like Oriental Darter, Asian Open-billed Stork, Grey-headed Fishing Eagle has also been recorded. Another notable record was Orange-billed Jungle Myna.

During the present study siltation has been identified as one of the major threats to the diversity of both resident and migratory waterbirds. Illegal fishing and collection of firewood becomes a threat to this Sanctuary. Conservation measures should be taken up immediately by the Forest Department as well as local NGOs to preserve the habitat of the Sanctuary.

Acknowledgement

I am thankful to Arup Kr. Hazarika, Lecturer of Zoology in Cotton College, Mrigen Baruah, Range Officer, Pobitora WLS and Bibhab Kr. Talukdar and Md. Firoz Ahmed of Aaranyak Nature Club for their guidance as well as help.

References

- Ali, S. and Ripley, S.D. (1983a). *Handbook of Birds of India and Pakistan*. Oxford University Press, New Delhi
Ali, S. and Ripley, S.D. (1983b). *A Pictorial Guide to Birds of the Indian Subcontinent*. Oxford University Press, New Delhi
Sonobe, P. and Usui, S. (eds.) (1993). *A Field Guide to Waterbirds of Asia*. Wildlife Society of Japan, Tokyo
Talukdar, B.K. (1995). Diversity of waterbirds of Pobitora Wildlife Sanctuary. *Pavo*. 34(1&2):17-21.

NOTE

FEEDING IN SOME SPECIES OF TERRESTRIAL MOLLUSCS FROM KUMAON HIMALAYAN FORESTS

Brijeshwar Prasad Oli

Department of Zoology, D.S.B. Campus, Kumaon University, Nainital 263 002

Terrestrial molluscs, as primary consumers, play an important role in matter and energy transport from producer level to upper trophic levels, thus composing an important part in terrestrial ecosystem functioning.

Important contributions have been made by Mason (1970) who worked on 20 species of snails, Stern (1968, 1975) on *Arion rufus* and *Agriolimax reticulatus*, Jennings & Barkham (1976, 1979) on *Arion ater*, *A. fasciatus*, *A. hortensis*, *A. intermedius*, *A. subfuscus*, *Deroceras reticulatum* and *Limax marginatus*, Seifert & Shutov (1978, 1981) on *Bradybaena fruticum*, *Helix vulgaris* and *Eobania vermiculata*, Lazaridou-Dimitriadou & Daguzan (1978) on *Euparypha pisana*, Charrier & Daguzan (1980) on *Helix aspersa*, and Staikou & Lazaridou-Dimitriadou (1989) on *Helix lucorum*, & others. In India, Gupta & Oli (1998) have estimated that *Anadenus altivagus* consumes approximately 22.9