



Rec. zool. Surv. India : 109(Part-1) : 41-47, 2009

FRESHWATER FISH FAUNA OF ANDHRA PRADESH WITH COMMENTS ON THE THREATENED AND ENDEMIC SPECIES

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INTRODUCTION

Andhra Pradesh is one of the eight maritime states of our country lying on the southeastern coast of the Indian Peninsula. Three major mountain ranges are located in the state. The Eastern Ghats which constitute a chain of hill ranges fringing the east coastal line, the Deccan plateau with the Sahyadri range of Adilabad district to the north border and the Horseley & other hills of the Chittoor and Anantapur districts to the south border of this state. Two major rivers of South India, viz., the Godavari and the Krishna River with their several tributaries form the chief perennial river systems of this state. There are a large number of medium and small sized rivers in addition to several Man made reservoirs in this state. Moreover, there are several wetlands including one of the National Wetlands, viz., Kolleru Lake in this state. The state is known to contain 158 species under 68 genera, 27 families and 10 orders of freshwater fishes (Barman, 1993). The freshwater fish fauna of this state has been reviewed in respect of the threatened and endemic freshwater fishes of our country. This has revealed that Andhra Pradesh contains 53 threatened freshwater fishes of India as per Molur & Walker (1998) and Menon (1999 and 2004). Out of the 53 threatened species, Endangered, Vulnerable, Rare and near threatened species are represented by 15, 27, 5 and 6 species respectively. Moreover, it has been found that this state also contains 33 Indian endemic freshwater fishes of which 21 species are also threatened and near threatened species of our country. Considering all the threatened, near threatened and Indian endemic freshwater fish species occurring in Andhra Pradesh, some conservation measures need to be suggested for their protection and conservation. The arrangement of the systematic list of the Fishes of Andhra Pradesh has been followed as per that of Jayaram (1999). The list of the species has been included alphabetically under the respective family. The contributing factors responsible for the threats to

the freshwater fishes or in their becoming threatened species have already been identified and described in Molur and Walker (Op. cit.), and are not dealt with in this paper.

SYSTEMATIC LIST OF THE THREATENED AND ENDEMIC FRESHWATER FISHES OF ANDHRA PRADESH

(I) LIST OF THE THREATENED SPECIES

(A) ENDANGERED SPECIES : (15 Species)

Order ANGUILLIFORMES

Family ANGUILLIDAE

1. *Anguilla bengalensis bengalensis* (Gray) (CAMP)

Order CYPRINIFORMES

Family CYPRINIDAE

2. *Cirrhinus cirrhosus* (Bloch) (Menon, 2004)
3. *Garra gotyla stenohynchus* Jerdon (CAMP)
4. *Hypselobarbus ~~carmuca~~* (Hamilton) (CAMP)
5. *Hypselobarbus jerdoni* (Day) (CAMP)
6. *Osteocheilus thomassi* (Day) (CAMP)
7. *Osteobrama neilli* (Day) (Menon, 2004)
8. *Labeo ariza* (Hamilton) (**Critically endangered species**) (CAMP)
9. *Tor khudree* (Sykes) (Menon, 2004)

Order SILURIFORMES

Family BAGRIDAE

10. *Hemibagrus punctatus* (Jerdon) (= *M. punctatus* (Jerdon) (CAMP))
11. *Mystus malabaricus* (Jerdon) (CAMP)

Family SILURIDAE

12. *Ompok bimaculatus* (Bloch) (CAMP)
13. *O. pabda* (Hamilton) (CAMP)

Family SCHILBEIDAE

14. *Pseudeutropius atherinoides* (Bloch) (CAMP)
15. *Silonia childreni* (Sykes) (CAMP)

(B) VULNERABLE SPECIES : (27 Species)

Order CLUPEIFORMES

Family CLUPEIDAE

1. *Tenualosa ilisha* (Hamilton) (Menon, 2004)

Order CYPRINIFORMES

Family CYPRINIDAE

2. *Barilius barila* (Hamilton) (CAMP)
3. *Garra gotyla gotyla* (Gray) (CAMP)
4. *Labeo dussumieri* (Valenciennes) (Menon, 2004)
5. *L. porcellus* (Heckel) (Menon, 2004)
6. *L. potail* (Sykes) (Menon, 2004)
7. *Osteobrama cotio cunma* Day (CAMP)
8. *Osteochilus nashii* (Day) (Menon, 1999)
9. *Punitus chola* (Hamilton) (CAMP)
10. *P. conchoniis* (Hamilton) (CAMP)
11. *Puntius sarana* (Hamilton) (CAMP)
12. *P. vittatus* Day (CAMP) (CAMP)
13. *Rohtee ogilbii* Sykes (Menon, 2004)

Order SILURIFORMES

Family BAGRIDAE

14. *Mystus bleekeri* (Day) (CAMP)
15. *M. montanus* (Jerdon) (CAMP)
16. *M. vittatus* (Bloch) (CAMP)
17. *Sperata aor* (Hamilton) (= *Aorichthys aor* (Hamilton) (Menon, 1999))
18. *Sperata seenghala* (Sykes) (= *Aorichthys seenghala* (Sykes) (Menon, 1999))

Family SCHILBEIDAE

19. *Ailia coila* (Hamilton) (CAMP)
20. *Proeutropiichthys taakree taakree* (Sykes) (CAMP)

Family PANGASIIDAE

21. *Pagasius pangasius* (Hamilton) (Menon, 2004)

Family SISORIDAE

22. *Bagarius bagarius* (Hamilton) (Menon, 2004/CAMP)

Family CLARIIDAE

23. *Clarias batrachus* (Linnaeus) (CAMP)

Family HETEROPNEUSTIDAE

24. *Heteropneustes fossilis* (Bloch) (CAMP)

Order PERCIFORMES

Family CHANNIDAE

25. *Channa orientalis* Bloch & Schneider (CAMP)

Order PERCIFORMES

Family MUGILIDAE

26. *Rhinomugil corsula* (Hamilton) (CAMP)

Family ANABANTIDAE

27. *Anabas testudineus* (Bloch) (CAMP)

(C) RARE SPECIES : (5 Species)

Order CYPRINIFORMES

Family CYPRINIDAE

1. *Puntius gelius* (Hamilton) (Menon, 1999)
2. *Rasbora caverii* (Jerdon) (Menon, 2004)
3. *Salmostoma horai* (Silas) (Menon, 1999)
4. *Schismatorhynchus nukta* (Sykes) (Menon, 2004)
5. *Thynnichthys sandkhol* (Sykes) (Menon, 2004)

(D) NEAR THREATENED SPECIES : (6 Species)

Order CYPRINIFORMES

Family CYPRINIDAE

1. *Barilus evezardi* Day (CAMP)
2. *Cirrhinus fulungee* (Sykes) (CAMP)
3. *Labes pangusia* (Hamilton) (CAMP)

4. *Puntius guganio* (Hamilton) (CAMP)

5. *P. terio* (Hamilton) (CAMP)

Family BALITORIDAE

6. *Glyptothorax lonah* (Sykes) (CAMP)

(II) LIST OF THE ENDEMIC SPECIES : (33 Species)

Order CYPRINIFORMES

Family CYPRINIDAE

1. *Barilius evezardi* Day (Maharashtra and Andhra Pradesh) (Near threatened species) (**Near threatened species**)
2. *Salmostoma boopis* (Day) (Peninsular India : Western Ghats : Karnataka : Dakhin Kannad (South Canara) and Maharashtra)
3. *Salmostoma horai* (Silas) (**Rare species**) (Karnataka : coorg (Cauvery river) and Andhra Pradesh)
4. *Salmostoma untrahi* (Day) (Orissa : Mahanadi River and Andhra Pradesh)
5. *Thynnichthys sandkhol* (Sykes) (**Rare species**) (Peninsular India : Deccan : Krishna and Godavari river)
6. *Osteobrama neilli* (Day) (**Endangered species**) (Krishna river (Deccan) and Pennar river in Cuddapah district, Andhra Pradesh)
7. *Osteobrama vigorsii* (Sykes) (Deccan : (Godavari and Krishnadrainage systems), Mahanadi river at Hirakud dam, Orissa and Andhra Pradesh)
8. *Rohtee ogilbii* Sykes (**Vulnerable species**) (Peninsular India : Krishna and Godavari river systems)
9. *Hypselobarbus curmuca* (Hamilton) (**Endangered species**) (Deccan : Krishna, Godavari and Cauvery river systems)
10. *Hypselobarbus jerdoni* (Day) (**Endangered species**) (Karnataka : Dakhin Kannada (South Canara) and Andhra Pradesh)
11. *Tor musullah* (**Endangered species**) (Maharashtra and Andhra Pradesh)
12. *Osteocheilus thomassi* (Day) (**Endangered species**) (Karnataka, Kerala and Andhra Pradesh)
13. *Puntius melanampyx* (Day) (Peninsular India : Karnataka, Kerala, Tamil Nadu and Andhra Pradesh)
14. *Osteochilus nashii* Day (= *Cyprinion nashii* (Day)) (**Vulnerable species**) (Deccan : Krishna and Godavari, Coorg, Dakhin Kannada, Nilgiri and Ananmalai drainages)
15. *Cirrhinus cirrhosus* (Bloch) (**Endangered species**)
16. *Cirrhinus fulungee* (Sykes) (**Near threatened species**)

17. *Labeo kawrus* (Sykes) (Maharashtra and Andhra Pradesh)
18. *Labeo potail* (Sykes) (**Vulnerable species**) (Deccan : Krishna and Tungabhadra drainages)
19. *Schismatorhynchos nukta* (Sykes) (**Rare species**) (Peninsular India : Deccan : Krishna river systems)
20. *Garra gotyla stenorhynchus* (Jerdon) (**Endangered species**) (Western Ghats : Cauvery and Krishna river systems)
21. *Garra mccllelandi* (Jerdon) (Tamil Nadu and Andhra Pradesh)

Family BALITORIDAE

22. *Noemacheilus anguilla* Annandale (Peninsular India : Western Ghats : Maharashtra, Karnataka and Andhra Pradesh)
23. *Schistura denisoni* Day (= *N. denisoni denisoni* Day) (Rajasthan, Madhya Pradesh, Maharashtra, Karnataka, Kerala and Andhra Pradesh)
24. *Indoreonectes evezardi* (= *N. evezardi* Day) (Western Ghats : Maharashtra, Madhya Pradesh and Andhra Pradesh)
25. *Nemacheilus moreh* (Sykes) (Peninsular India : Maharashtra, Tamil Nadu and Andhra Pradesh)
26. *Longischistura striata* Day (= *N. striatus* Day) (Western Ghats : Kerala, Karnataka and Andhra Pradesh)

Order SILURIFORMES

Family BAGRIDAE

27. *Rita gogra* (Sykes) (Rivers of Deccan up to Krishna river system)
28. *Mystus malabaricus* (Jerdon) (**Endangered species**) (Peninsular India : Kerala, Karnataka, Maharashtra and Andhra Pradesh)
29. *M. montanus* (Jerdon) (**Vulnerable species**) (Assam, Kerala, Karnataka, Maharashtra, Madhya Pradesh and Andhra Pradesh)
30. *Hemibagrus punctatus* (Jerdon) (= *M. punctatus* (Jerdon)) (**Endangered species**) (Western Ghats : Kerala, Tamil Nadu, Karnataka and Andhra Pradesh)

Family SCHILBEIDAE

31. *Proeutropiichthys taakree taakree* (Sykes) (**Vulnerable species**) (Peninsular India)
32. *Silonia childreni* (Sykes) (**Endangered species**) (Peninsular India : Western Ghats : Krishna, Godavari and Cauvery river systems)

Family SISORIDAE

33. *Glyptothorax lonah* (Sykes) (Deccan Plateau, the Vindhyas, Orissa Hill ranges and Andhra Pradesh) (**Near threatened species**)

DISCUSSION

The ever-increasing pressure of population demands future requirement for development and employment generation on one side and production of food grains and livestock on the other side. All these requirements directly affect the land, forest and water resources equally. Andhra Pradesh is of no exception in this respect. The population pressure on these natural resources has affected the fish fauna of this state as well as the rest of the states of our country also. The list of the freshwater fishes of this state shows that this state contains 15 endangered, 27 vulnerable, 5 rare and 6 near threatened species of freshwater fishes of India. Out of 15 endangered species, 1 species, *Labeo ariza* (Hamilton) has been designated as a critically endangered species. Andhra Pradesh also contains 33 endemic freshwater fishes of our country. Among these 33 endemic species 21 are also threatened and near threatened species. Careful evaluation for the responsible factors for the present threat of the fishes is very much needed right now. In this respect the more it will be delayed to adopt the protection and conservation measures to control the responsible factors, less will be the options left to us to protect and conserve them.

ACKNOWLEDGEMENTS

I am thankful to Dr. Ramakrishna, Director and to Dr. N.C. Nandy, Joint Director Zoological Survey of India, and Kolkata for necessary facilities and encouragement for this work.

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