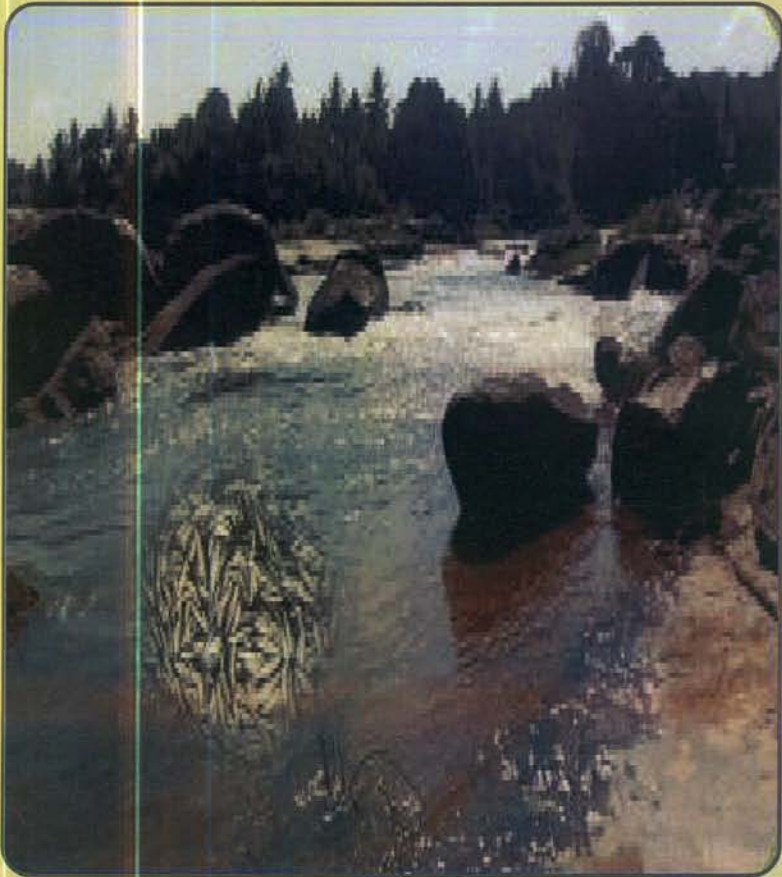


*Diversity and conservation status
of Ichthyofauna in Inland water
bodies of Karnataka*



Published by
Dr. B. K. Das, Director,
ICAR – Central Inland Fisheries Research Institute,
Barrackpore, 700120

Diversity and conservation status of fishes in Inland water bodies of Karnataka

The peninsular state of Karnataka is blessed with vast freshwater resources such as rivers, reservoirs and tanks. East flowing rivers like Cauvery, Godavari, Krishna, North Pennar, South Pennar, Palar and West flowing Mandavi, Kali, Gangavalli, Aghanashini, Sharavathi, Chakra, Varahi, Netravathy and Barapole form major river systems of Karnataka with 5813 km of total length. Tungabhadra, Ghataprabha, Malaprabha, Bhima and Vedavati are the tributaries of river Krishna. The tributaries of Cauvery include Harangi, Hemavathy, Lakshmanathirtha, Kabini, Shimsha, Arkavathi and Suvarnavathy while that of Godavari comprises of Pravara, Puma, Manjra, Pranahita, Indravathy and Sabari. There are 82 reservoirs in Karnataka with water spread area of 2.72 lakh hectare built over these rivers and its tributaries. The unabated growth in population and urbanization leads to over-exploitation of these rivers and reservoirs. Habitat degradation, water abstraction, pollution and introduction of invasive alien species also contribute to the depletion and in the long run extinction of several indigenous species.

A total of 243 fish species distributed under 104 genera, 38 families and 14 orders reported from the inland water bodies of Karnataka are listed here

Order and Family	Genera	Species
O: Anguilliformes		
F: Anguillidae	Anguilla	<i>Anguilla bengalensis</i> , <i>A. bicolor</i>
O: Beloniformes		
F: Adrianichthyidae	Oryzias	<i>Oryziasmelanostigma</i> , <i>O. setnai</i>
F: Belonidae	Strongylura, Xenentodon	<i>Strongylurastrongylura</i> , <i>Xenentodoncancila</i>
F: Hemiramphidae	Hyporhamphus	<i>Hyporhamphuslimbatus</i> , <i>H.xanthopterus</i>
O: Clupeiformes		
F: Clupeidae	Tenualosa	<i>Tenualosailisha</i>
F: Engraulidae	Setipinna	<i>Setipinnaphasa</i>
O: Cyprinodontiformes		
F: Aplocheilidae	Aplocheilus	<i>Aplocheiluslineatus</i>
F: Poeciliidae	Gambusia	<i>Gambusiaaffinis</i>
O: Elopiformes		
F: Megalopidae	Megalops	<i>Megalopsocyprinoides</i>
O: Gonorynchiformes		
F: Chanidae	Chanos	<i>Chanoschanos</i>
O: Mugiliformes		
F: Mugilidae	Rhinomugil	<i>Rhinomugilcorsula</i>
O: Osteoglossiformes		
F: Notopteridae	Chitala	<i>Chitalachitala</i>
	Notopterus	<i>Notopterusnotopterus</i>
O: Cypriniformes		
F: Balitoridae	Bhavanaia, Balitora	<i>Bhavanaiaaustralis</i> , <i>Balitoramysorensis</i>
F: Cobiitidae	Botia,	<i>Botiaalmorhae</i> , <i>B. striata</i> , <i>Lepidocephalichthysthermalis</i>
F: Nemacheilidae	Acanthocobitis	<i>Acanthocobitisbotia</i> , <i>A. mooreh</i> , <i>A. rubidipinnis</i>
	Indoreonectes	<i>Indoreonectesesevezardi</i>
	Longischistura	<i>Longischisturastrata</i>
F: Psilorhynchidae	Psilorhynchus	<i>Psilorhynchus tenure</i>
F: Cyprinidae	Amblypharyngodon	<i>Amblypharyngodonmelettinus</i> , <i>A. mola</i>
	Bangana	<i>Banganaariza</i> , <i>B. dero</i>
	Barbodes	<i>Barbodesbovanicus</i> , <i>B. carnaticus</i> , <i>B. wynaadensis</i>
	Barilius	<i>Bariliusbakeri</i> , <i>B. barila</i> , <i>B. barna</i> , <i>B. bendelisis</i> , <i>B. canarensis</i> , <i>B. gatensis</i>
	Catla	<i>Catla catla</i>

	Cirrhinus	<i>Cirrhinuscirrhosus</i> , <i>C. fulungee</i> , <i>C. mrigala</i> , <i>C. reba</i>
	Chela	<i>Chela cachius</i>
	Ctenopharyngodon	<i>Ctenopharyngodonidella</i>
	Cyprinus	<i>Cyprinus carpio</i> var. <i>communis</i> , <i>C. carpio</i> var. <i>nudus</i> , <i>C. carpio</i> var. <i>specularis</i>
	Danio	<i>Danio rerio</i>
	<i>Cabdio</i>	<i>Cabdio morar</i>
	Devario	<i>Devarioaequipinnatus</i> , <i>D. devario</i> , <i>D. fraseri</i> , <i>D. malabaricus</i> , <i>D. annandalei</i>
	Dawkinsia	<i>Dawkinsiaarulus</i> , <i>D. filamentosus</i>
	Thynnichthys	<i>Thynnichthys sandkhol</i>
	Tor	<i>Tor khudree</i> , <i>T. putitora</i> , <i>T. tor</i>
	Esomus	<i>Esomus barbatus</i> , <i>E. danricus</i> ,
	Garra	<i>Garrabicornuta</i> , <i>G. gotylagotylya</i> , <i>G.</i> <i>gotylastenorhynchus</i> , <i>G. hughi</i> , <i>G.</i> <i>lissorhynchus</i> , <i>G. mclellandi</i> , <i>G. mullya</i>
	Haludaria	<i>Haludariafasciata</i>
	Hypophthalmichthys	<i>Hypophthalmichthys molitrix</i> , <i>H. nobilis</i>
	Hypselobarbus	<i>Hypselobarbus curmuca</i> , <i>H. dobsoni</i> , <i>H.</i> <i>dubius</i> , <i>H. jerdoni</i> , <i>H. kolus</i> , <i>H. kurali</i> , <i>H.</i> <i>lithopidos</i> , <i>H. micropogon</i> , <i>H. mussullah</i> , <i>H.</i> <i>pulchellus</i>
	Labeo	<i>Labeoangra</i> , <i>L. bata</i> , <i>L. boga</i> , <i>L. boggut</i> , <i>L.</i> <i>calbasu</i> , <i>L. dyocheilus</i> , <i>L. fimbriatus</i> , <i>L.</i> <i>gonius</i> , <i>L. kontius</i> , <i>L. pangusia</i> , <i>L. porcellus</i> , <i>L. potail</i> , <i>L. rohita</i>
	Laubuka	<i>Laubukalaubuca</i>
	Oreichthys	<i>Oreichthyscosuatis</i>
	Osteobrama	<i>Osteobramabelangeri</i> , <i>O. cotio</i> , <i>O. cunma</i> , <i>O.</i> <i>neilli</i> , <i>O. peninsularis</i> , <i>O. vigorsii</i>
	Osteochilichthys	<i>Osteochilichthys brevidorsalis</i> , <i>O. thomassi</i>
	Osteochilus	<i>Osteochilusnashii</i>
	Parapsilorhynchus	<i>Parapsilorhynchusprateri</i>
	Pethia	<i>Pethiaconchonus</i> , <i>P. guganio</i> , <i>P. narayani</i> , <i>P.</i> <i>ticto</i> , <i>P. straita</i>
	Puntius	<i>Puntius amphibious</i> , <i>P. bimaculatus</i> , <i>P.</i> <i>cauveriensis</i> , <i>P. chelynooides</i> , <i>P. chola</i> , <i>P.</i> <i>dorsalis</i> , <i>P. melanostigma</i> , <i>P. parrah</i> , <i>P.</i> <i>sahyadriensis</i> , <i>P. sophore</i> , <i>P. thomassi</i> , <i>P.</i> <i>vittatus</i>
	Raiamas	<i>Raiamas bola</i>
	Rasbora	<i>Rasboracaverii</i> , <i>R. daniconius</i> , <i>R. dusonensis</i> , <i>R. labiosa</i> , <i>R. rasbora</i> ,
	Rohtee	<i>Rohteeogilbii</i> ,
	Salmophasia	<i>Salmophasiaacinaces</i> , <i>S. bacaila</i> , <i>S.</i> <i>balookee</i> , <i>S. belachi</i> , <i>S. boopis</i> , <i>S. horai</i> , <i>S.</i> <i>novacula</i> , <i>S. phulo</i> , <i>S. sardinella</i> , <i>S. untrahi</i>
	Schismatorhynchus	<i>Schismatorhynchusnukta</i>
	Systemus	<i>Systemussarana</i> , <i>S. spilurus</i>
O: Perciformes		
F: Ambassidae	Chanda	<i>Chandanama</i>
	Parambassis	<i>Parambassisbaculis</i> , <i>P. thomassi</i> , <i>P. ranga</i>
F: Anabantidae	Anabas	<i>Anabas testudineus</i>
F: Badidae	Dario	<i>Dario huli</i>
F: Channidae	Channa	<i>Channagachua</i> , <i>C. marulius</i> , <i>C. orientalis</i> , <i>C.</i> <i>punctata</i> , <i>C. striata</i>
F: Cichlidae	Etroplus	<i>Etropluscanarensis</i> , <i>E. maculatus</i> , <i>E.</i> <i>suratensis</i> ,
	Oreochromis	<i>Oreochromismossambicus</i> , <i>O. niloticus</i>

F: Gerreidae	Gerres	<i>Gerreserythrourus</i> , <i>G. filamentosus</i> , <i>G. limbatus</i>
F: Gobidae	Glossogobius	<i>Glossogobiusgiuris</i>
	Psammogobius	<i>Psammogobiusbiocellatus</i>
	Sicyopterus	<i>Sicyopterusgriseus</i>
F: Osphronemidae	Macropodus	<i>Macropodusspechti</i>
	Osphronemus	<i>Osphronemusgoramy</i>
	Trichogaster	<i>Trichogasterlalius</i>
	Pseudosphromenus	<i>Pseudosphromenuscupanus</i>
F: Pristolepididae	Pristolepis	<i>Pristolepismarginata</i>
O: Siluriformes		
F: Amblycipitidae	Amblyceps	<i>Amblycepsmangois</i>
F: Claridae	Clarias	<i>Clariasbatrachus</i> , <i>C. dussumieri</i> , <i>C. gariepinus</i>
F: Heteropneustidae	Heteropneustes	<i>Heteropneustesfossilis</i>
F: Loricardiidae	Hypostomus	<i>Hypostomusplecostomus</i>
	Pterygoplichthys	<i>Pterygoplichthysdisjunctivus</i> , <i>P. pardalis</i>
F: Pangasiidae	Pangasius	<i>Pangasiuspangasius</i>
	Pangasianodon	<i>Pangasianodonhypophthalmus</i>
F: Siluridae	Ompok	<i>Ompokbimaculatus</i> , <i>O. malabaricus</i> , <i>O. pabda</i> , <i>O. pabo</i>
	Pterocryptis	<i>Pterocryptiswynaadensis</i>
	Wallago	<i>Wallago attu</i>
F: Bagridae	Batasio	<i>Batasiosharavatiensis</i>
	Hemibagrus	<i>Hemibagrusmaydelli</i> , <i>H. punctatus</i>
	Horabagrus	<i>Horabagrusbrachysoma</i> ,
	Mystus	<i>Mystusarmatus</i> , <i>M. bleekeri</i> , <i>M. cavasius</i> , <i>M. gulio</i> , <i>M. keletius</i> , <i>M. malabaricus</i> , <i>M. montanus</i> , <i>M. oculatus</i> , <i>M. tengara</i> , <i>M. vittatus</i>
	Rita	<i>Rita gogra</i> , <i>R. kuturnee</i> , <i>R. rita</i>
	Sperata	<i>Sperataaor</i> , <i>S. seenghala</i>
F: Schilbeidae	Ailia	<i>Ailiacoila</i>
	Clupisoma	<i>Clupisomagaru</i>
	Eutropiichthys	<i>Eutropiichthysgoongwaree</i> , <i>E. vacha</i>
	Neotropius	<i>Neotropiusatherinoides</i> , <i>N. khalvalchor</i>
	Proeutropiichthys	<i>Proeutropiichthystaakree</i>
	Pseudeutropius	<i>Pseudeutropiusmitchelli</i>
	Silonia	<i>Silonia children</i> , <i>S. silondia</i>
F: Sisoridae	Bagarius	<i>Bagariusbagarius</i> , <i>B. yarrelli</i>
	Gagata	<i>Gagatacenia</i> , <i>G. itchkeea</i>
	Glyptothorax	<i>Glyptothoraxannandalei</i> , <i>G. lonah</i> , <i>G. madraspatanus</i> , <i>G. trewavasae</i>
O: Symbranchiformes		
F: Mastacembalidae	Macragnathus	<i>Macragnathusaral</i> , <i>M. pancalus</i>
	Mastacembelus	<i>Mastacembelusarmatus</i>
O: Syngnathiformes		
F: Syngnathidae	Microphis	<i>Microphiscuncalus</i>
O: Tetraodontiformes		
F: Tetraodontidae	Carinotetraodon	<i>Carinotetraodon imitator</i> , <i>C. travancoricus</i>

International Union for Conservation of Nature and natural Resources (IUCN) categorizes, the above listed fishes as critically endangered (5), endangered (22), near threatened (18), vulnerable (13), least concern (156), not evaluated (15) and data deficient (14).

IUCN status of fishes from inland water bodies of Karnataka

IUCN status	Fishes
Critically endangered	<i>B. bovanicus</i> , <i>B. wynaadensis</i> , <i>H. pulchellus</i> , <i>P. prateri</i> , <i>H. punctatus</i>
Endangered	<i>B. striata</i> , <i>B. canarensis</i> , <i>D. arulius</i> , <i>G. hughi</i> , <i>H. curmuca</i> , <i>H. dubius</i> , <i>H. micropogon</i> , <i>H. mussullah</i> , <i>L. potail</i> , <i>P. cauveriensis</i> , <i>S. nukta</i> , <i>T. sandkhol</i> , <i>T. khudree</i> , <i>T. putitora</i> , <i>N. pulchellus</i> , <i>S. nagodiensis</i> , <i>E. canarensis</i> , <i>B. sharavatiensis</i> , <i>P. mitchelli</i> , <i>S. children</i> , <i>P. wynaadensis</i> , <i>G. madraspatanus</i>
threatened	<i>B. yarrelli</i> , <i>B. bagarius</i> , <i>W. attu</i> , <i>O. pabo</i> , <i>O. pabda</i> , <i>O. bimaculatus</i> , <i>A. coila</i> , <i>C. dussumieri</i> , <i>M. malabaricus</i> , <i>O. mossambicus</i> , <i>C. chitala</i> , <i>T. tor</i> , <i>O. belangeri</i> , <i>L. pangusia</i> , <i>H. molitrix</i> , <i>G. bicornuta</i> , <i>A. bicolour</i> , <i>A. bengalensis</i>
Vulnerable	<i>C. travancoricus</i> , <i>G. trewavasae</i> , <i>G. itchkeea</i> , <i>H. brachysoma</i> , <i>S. horai</i> , <i>S. belachi</i> , <i>P. chelynooides</i> , <i>L. laubuca</i> , <i>H. kolus</i> , <i>C. carpio var. communis</i> , <i>C. cirrhosus</i> , <i>B. mysorensis</i> , <i>H. xanthopterus</i> ,

The maintenance of biodiversity is extremely essential for a healthy ecosystem. The knowledge of conservation status of each species will help for conservation as well as restoration of an ecosystem.



Mystus malabaricus

Amblypharyngodon mola



Pangasius pangasius



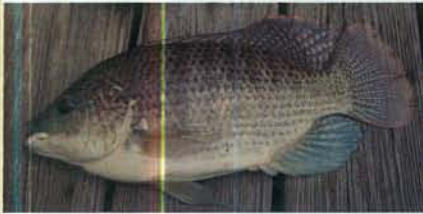
Xenentodon cancila



Wallago attu (Freshwater shark)



Barbodes carnaticus



Oreochromis niloticus



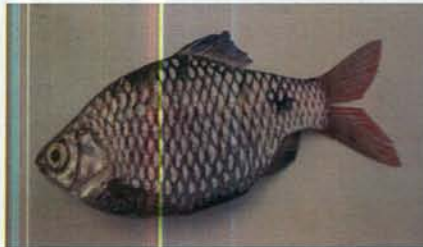
Channa striatus



Mystus vittatus



Puntius sophore



Pethia conchonus



Chanda nama



Prepared by
V. L Ramya
Jesna.PK
Sibina Mol.S
M. Feroz Khan
T. D. Jagadeesh
M. E. Vijay Kumar
Preetha Panikkar
M. Karthikeyan and Ajoy Saha

Bangalore Research Centre
ICAR-Central Inland Fisheries Research Institute
Hesaraghatta Lake Post, Bangalore - 560089
Telefax: 080-28479889