



ISSN Print: 2394-7500
ISSN Online: 2394-5869
Impact Factor: 8.4
IJAR 2020; 6(10): 747-750
www.allresearchjournal.com
Received: 26-08-2020
Accepted: 28-09-2020

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Studies on Wetlands Ornamental fishes in Kolkata

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Abstract

East Kolkata Wetlands (EKW) is prevalent not as it were for the nourishment angles but there are accessible a numbers of ornamental fishes. A add up to of 41 decorative angle species recorded from the EKW. These fancy angle speaks to 21 families beneath 10 orders. Family Cyprinidae is speaks to by a greatest of 12 numbers of species taken after by Channidae (4), Mastacembelidae (3), Ambassidae (2), Bagridae (2) Claridae (2) and Osphronemidae (2). At the same time family Anabantidae, Aplocheilidae, Badidae, Belonidae, Cobitidae, Gobiidae, Mugilidae, Nandidae, Notopteridae, Ophichthidae, Schilbeidae, Siluridae, Synbranchidae, and Tetraodontidae are speaks to by single species each. Out of 41 inborn fancy angle species, 00 are uncommon, 00 is scattered and rests 00 are common. From preservation point of see, the EKW is found to harbor 1 imperiled species and 7 defenseless, 12 Moo Risk-near debilitated and 12 Low Chance slightest concern ornamental angle species as per CAMP (1998) 'status' with 'report'.

Keywords: Wetlands Ornamental, Mastacembelidae, CAMP

Introduction

Angle keeping in aquariums has risen as an awfully prevalent practice and day by day individuals are getting pulled in towards this hobby. India, having a huge number of inborn angles of different ornamental traits has incredible potential to gain a huge foreign trade. West Bengal has risen as a pioneer State in ornamental angle exchange of India (Mukherjee *et al.* 2000; Ghosh *et al.* 2003; Singh and Ahmed, 2005) ^[11, 4, 12]. Among the wild capture fishes exported from the nation, West Bengal and the North-Eastern states are the major contributors (Mahapatra *et al.* 2006; Mandal *et al.* 2007) ^[9, 8]. The East Kolkata Wetlands (EKW) were assigned a "Wetland of Universal Importance" beneath the Ramsar Convention on Eminent 19, 2002. This wetland is prevalent for not only the nourishment angles but there are accessible a numbers of ornamental fishes. Although the fancy angle differences of West Bengal has been considered by a few specialists (Ghosh *et al.* 2002; Mahapatra and Lakra, 2012) ^[3, 10] but no such particular ponder on EKW has been made earlier by any workers.

Study Area

The ponder region of EKW could be a complex of common and human-made wetlands which may be a portion of the develop delta of Ganges River where its tributaries inevitably deplete into the Inlet of Bengal. The wetland lies at the east of Kolkata bordering the Salt Lake Township, West Bengal and is arranged between 22°25' to 22°40' N and 88°20' to 88°35' E. The EKWs amplify nearly similarly on both sides of a Dry Climate Stream Channel, which releases into the Kulti Pack. Out of add up to 12741.30 ha zone, add up to water area is approximately 5852.14 ha and incorporate salt bogs and salt meadows, as well as sewage ranches and settling lakes and secured mostly near approximately by 308 city-sewage-fed fisheries which is exceptionally wealthy in aquatic biodiversity.

Materials and Method

Within the show ponder, irregular fast field overviews were conducted during June, 2012-July, 2014 from the diverse lakes of EKW. Observation of diverse angle species was made at important fish gathering centres *viz.* Choubhaga (South), Bantala (South East), JhagraSisa (East), Mahisbathan (North) and Saheb Mara Bheri (West). The data with respect to their

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event was collected from nearby anglers as well as from angle vendors. The ornamental angles were categorised based on the criteria like colouration, body shapes, banding designs, finnages, suckers, transparent body and preying propensities. The angle example was taken to the research facility for recognizable proof and affirmation about the species. For recognizable proof Talwar & Jhingran (1991)^[3], Jayaram (1999)^[5], Vishwanath, Lakra and sarkar (2007)^[14] are taken after. For nomenclature Fishbase

(www.fishbase.org) and www.calacademy.org catalogue was counseled. Their preservation status is ascertained with the assistance of IUCN Ruddy information list (www.iucnredlist.org) and CAMP report 1998.

Result and Discussion

The think about brings almost a add up to of 41 numbers of angle species having ornamentally important. They are belongingto 21 families under 10 orders (Table 1).

Table 1: They are belongingto 21 families under 10 orders

Order 1: Anguilliformes
Family 1: Ophichthidae Pisodonophisboro (Hamilton): Kucho
Order 2: Beloniformes
Family 2: Belonidae Xenentodoncancila (Hamilton): Bok Fish
Order 3: Cypriniformes
Family 3: Cobitidae Lepidocephalusguntea (Hamilton): Ghunte
Family 4: Cyprinidae Amblypharyngodonmola (Hamilton): Mourala Daniorerio (Hamilton): Zebra Esomusdanricus (Hamilton): Dwarke Labeobata (Hamilton): Bata Labeocalbasu (Hamilton): Kalbos Laubucalabuca (Hamilton): BaroDwarke Puntiuschola (Hamilton): Punt Puntiusguganio (Hamilton): Punt Puntiusophore (Hamilton): JatPunt Puntiussticto (Hamilton): TantPunt Puntiusconchonus (Hamilton): KankonPunt Salmostomabacaila (Hamilton): Chela
Order 4: Cyprinodontiformes
Family 5: Aplocheilidae Aplocheiluspanchax (Hamilton): Techoka
Order 5: Mugiliformes
Family 6: Mugilidae Rhinomugilcorsula (Hamilton): Khosla
Order 6: Perciformes
Family 7: Anabantidae Anabas testudineus (Bloch): Koi
Family 8: Ambassidae Chandanama (Hamilton): Chanda Parambassisranga (Hamilton): RangaChanda
Family 9: Badidae Badisbadis (Hamilton): Bhada
Family 10: Channidae Channapunctatus (Bloch): Lata Channagachua (Hamilton): Cheng Channastriatus (Bloch): Sol Channamarulius (Hamilton): sal
Family 11: Gobiidae Glossogobiusgiuris (Hamilton): Bele
Family 12: Nandidae Nandusnandus (Hamilton): Nados
Family 13: Osphronemidae Trichogasterfasciata (Bloch & Schneider): Kholse Trichogasterlalia (Hamilton): LalKholse
Order 7: Osteoglossiformes
Family 14: Notopteridae Notopterusnotopterus (Pallas): Folui
Order 8: Siluriformes
Family 15: Bagridae Mystusvittatus (Bloch): Tangra Mystusgulio (Hamilton): Nona Tangra
Family 16: Claridae Clariasbatrachus (Linnaeus): Magur Heteropneustesfossilis (Bloch): Singhi

Family 17: Siluridae Ompokpabda (Hamilton): Pabda
Family 18: Schilbeidae Pseudeutropiusatherinoides (Bloch): Batasitangra
Order 9: Synbranchiformes
Family 19: Mastacembelidae Mastacembelusarmatus (Lacepede): Ban Macrognathuspancalus (Hamilton): Pankal Macrognathusaculeatus (Bloch): Peacock Eel
Family 20: Synbranchidae Ophisternonbengalense (McClelland): Bero
Order 10: Tetraodontiformes
Family 21: Tetraodontidae Tetraodoncutcutia (Hamilton): Puffer

The family shrewd dispersion of decorative angle species is shown in shape of bar graph in figure 1.

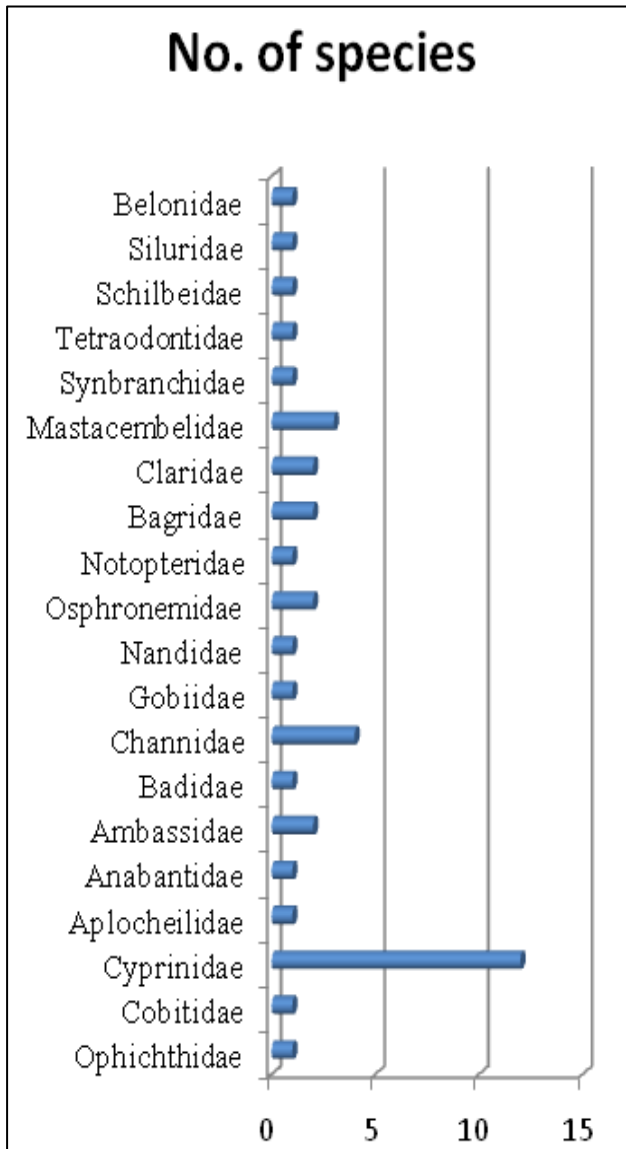


Fig 1: Family shrewd conveyance of the angle species number

Out of 41 inborn fancy angle species, 24 are uncommon, 12 is intermittent and rests 05 are common. The interviews with CAMP Report 1998 and IUCN Ruddy list 2012 uncover that one endangered species Ompokpabda and 7 numbers of Powerless species (Anabas testudineus, Clarias batrachus, Heteropneustes fossilis, Mystus vittatus, Puntius conchonius, Puntius schola and Rhinomugil corsula) are recorded from the think about region. The preservation status of the fancy angles are appeared in figure 2.

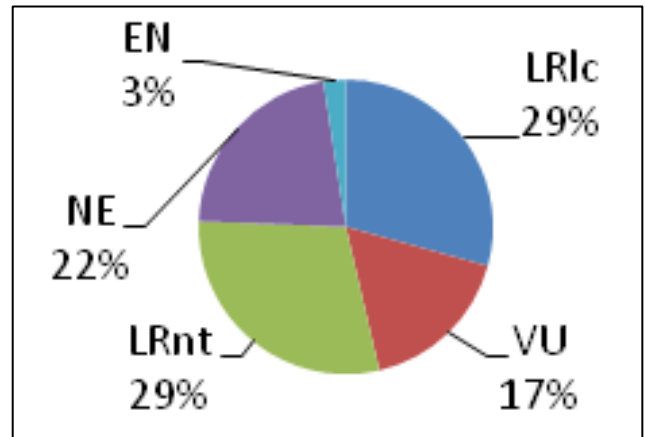


Fig 2: Preservation status of the decorative angles

[LRlc: Low Risk least concern; VU: Vulnerable; LRnt: Low Risk-near threatened; NE: Not Evaluated; EN: Endangered] The India is favored with decorative angle differing qualities. It contains a bright prospect in decorative angle exchange and can too contribute a lion's share in Indian angle send out. To boost up the nearby economy and for self-employment, these local fancy fishes can play a key part. The esteem of the whole industry like innate germplasm resource of decorative fish, ornamental plants and support activity in related supplies can offer assistance the in reverse downtrodden people to preserve their vocation. To guarantee angle welfare and environmental security as well as feasible development of this industry, participatory involvement with appropriate co-ordination is required from all concerned partners. With appropriate instruction and technical guidance, neighborhood fisher people can be organized and prepared for ecofriendly collection procedures, subsequently as it were the desired ornamental fish species are collected and the bye-catch are released back into the water body, and the environment concerned is also not exasperates.

Conclusion

The display consider result recommends that the East Kolkata Wetlands is harboring as numerous as 41 fancy angle species are exploited for their nourishment esteem alone. In any case, their fancy esteem is yet to be realized and they can be reasonably utilized for ornamental trade. An organized exchange of these angle species for aquarium purpose will get more financial benefit for the dependents of the wetland.

Reference

1. Bose BC. 'Calcutta sewage-fisheries culture', Proc. Nat. Inst. Sci., India, 10. | 3. CAMP report (1998). Conservation Assessment and Management, 1944.
2. Plan (C.A.M.P.) workshop, Freshwater fishes of India, NBFGR, Lucknow, 22-26 September, 156(4).
3. Ghosh A, Mahapatra BK, Datta NC. Studies on Native Ornamental Fish of West Bengal with a Note on Their Conservation. *Envirment& Ecology*. 2002;20(4):787-793 | 5.
4. Ghosh A, Mahapatra BK, Datta NC. Ornamental Fish Farming- Successful Small Scale Aqua Business in India. *Aquaculture Asia*. 2003;VIII(3):14-16.6. ISI (2001). Report on Environmental Conservation and Valuation of East Calcutta Wetlands 999-2000, World Bank aided 'India Environmental Capacity Building' Technical Assistance Project. | 7.
5. Jayaram, K. C. The freshwater fishes, of the Indian Region. Narendra Publishing House, Delhi. 1999;551(8).
6. Kundu N, Pal M, Saha S. East Kolkata Wetlands: A Resource Recovery System Through Productive
7. Activities. *Proceedings of Taal 2007: The 12th World Lake Conference*, 2008;9:868-88.
8. Mandal S, Mahapatra BK, Tripathi AK, Verma MR, Datta KK, Ngachan SV. Agribusiness Opportunities of Ornamental Fisheries in North-Eastern Region of India. *Agricultural Economics Research Review*. 2007;20(10):471-488.
9. Mahapatra BK, Vinod K, Mandal BK, Bujarbaruah KM. Ornamental Fisheries in North Eastern India, *Research Bulletin No. 49*, ICAR Research Complex for NEH Region, 2006
10. Umroi Road, Umiam, Meghalaya, Mahapatra BK, Lakra WS. Indigenous ornamental fish diversity of West Bengal Conservation and Management for sustainability. 23rd All India Congress of Zoology & National Conference on Conservation and Management of Faunal Resources for CMFRI, Chennai, 2012;(12):7-8
11. Mukherjee M, Chattopadyay M, Datta SK, Biswas S. Problems and prospects of aquarium fish trade in West Bengal. *Fishing Chimes*. 2000;20(1):90-93. | 13. Preliminary Study on Biodiversity of Sewage EFD Fisheries of East Kolkata Wetland Ecosystem. Submitted to Dept. of Environment, Govt. of W. B. by Institute of Wetland Management and Ecological Design. <http://www.docudesk.com> |
12. Singh AK, Ahmed SH. Ornamental Fish Culture in Bihar: Prospects as a Cottage Industry. *Fishing Chimes*. 2005;25(6):9-18.
13. Talwar PK, Jhingran AG. Inland fishes of India and adjacent countries. Volumes I & II, Oxford & IBH Publishing Co. Pvt. Ltd, New Delhi. 1991;1158
14. Vishwanath W, Lakra WS, Sarkar UK. Fishes of Northeast India. Published by the Director, NBFGR, Lucknow, U.P, India, 2007;264:17. www.calacademy.org.catalogue, 1st November, 2014 | 18. www.ekwma.com, 1st November,
15. 2014 | 19. www.fishbase.org, 1st November, 2014 | 20. www.iucnredlist.org, 1st November, 2014 | 21. www.kolkatawetlands.org, 1st November, 2014