

Ichthyofauna of Wan Reservoir, Maharashtra

V. B. Sakhare and A. D. Chalak

*Post Graduate Department of Zoology
Yogeshwari Mahavidyalaya, Ambajogai-431517 Maharashtra
E-Mail: vbsakhare@rediffmail. com*

ABSTRACT

A systematic study on ichthyofauna of Wan reservoir near Parli (Vaijyanath) of Beed district in Maharashtra was carried out for one year from June 2012 to May 2013. The study revealed the presence of 34 species of fishes belonging to 7 orders. Of the 7 orders, order cypriniformes dominated with 17 species falling under 12 genera of which genus *Puntius* is abundant with 4 species of them dominating the catch. Next in abundance are the fishes coming under the order siluriformes in which *Mystus* is dominant with 2 species, while the order anguilliformes has only one dominant species.

Key words: Ichthyofauna, Freshwater ecosystem, India.

INTRODUCTION

Fishes are the keystone species which determine the distribution and abundance of other organisms in ecosystem they represent and are good indicators of the water quality and the health of the ecosystem. Nearly 20% of the world's freshwater fish fauna is already extinct or is on the verge of extinction (Moyle and Leidy, 1992). Fish constitutes about half of the total number of vertebrates in the world. They live in almost all conceivable aquatic habitats; 21, 723 living species of fish have been recorded out of 39, 900 species of vertebrates. Out of these 8, 411 are freshwater species and 11, 650 are marine. India is one of the mega biodiversity countries in the world and occupies the ninth position in terms of freshwater mega biodiversity (Mittermeier and Mitemeir, 1997). In India there are 2, 500 species of fishes of which 930 live in freshwater and 1, 570 are marine (Kar *et al.* 2003).

Ichthyodiversity refers to variety of fish species; depending on context and scale, it could refer to alleles or genotypes within fish population to species of life forms within a fish community and to species or life forms across aqua regimes (Burton *et al.* 1992). In the field of freshwater ichthyodiversity of Maharashtra there is valuable contribution by many workers (CIFRI, 1997, Dahanukar *et al.* 2003, Hiware, 2006,

Sakhare, 2001, 2007, Sakhare and Jetithor, 2012, Mali, 2011, Mohite *et al.* 2012).

The present research work is intended to know the ichthyofauna of Wan reservoir near Parli (Vaijyanath) city in Maharashtra. The reservoir was constructed in year 1963 across the river Wan. It is the oldest reservoir in district with water spread area of 347 ha. The reservoir has an opportunity to irrigate 7567 ha of agricultural land.

MATERIALS AND METHODS

Fishes were collected with the help of fishermen on monthly basis for one year (June 2012 to May 2013) from different fishing centers around Wan reservoir. After systematic identification the specimens were preserved in 5% formalin and deposited in the Post Graduate and Research Department of Zoology of Yogeshwari Mahavidyalaya, Ambajogai. The identification of fishes were carried out with the help of standard literature (Day 1878, Jayaram 1981 and Talwar and Jhingran, 1991).

RESULTS AND DISCUSSION

The fish fauna is an important aspect of fishery potential of a waterbody. Fish fauna of Indian reservoirs has been studied by several workers and it has been found that the distribution of fish species is quite variable because of geographical and geological conditions of the area. During the present investigation altogether 34 species of fishes belonging to 24 genera falling under 7 orders have been identified (Table 1). Of the 7 orders, order cypriniformes dominated with 17 species falling under 12 genera of which genus *Puntius* is abundant with 4 species of them dominating the catch. Next in abundance are the fishes coming under the order siluriformes in which *Mystus* is dominant with 2 species, while the order anguilliformes has only one dominant species. Hiware (2006) studied ichthyofauna of four district of Marathwada region of Maharashtra. Sakhare (2007) reported 29 fish belonging to 20 genera falling in 4 orders from Yeldari reservoir of Parbhani district. The present investigation on ichthyofauna is somewhat similar to that of Sakhare (2007).

Table 1: Ichthyofauna of Wan Reservoir, Maharashtra

<p>Order: Osteoglossiformes Suborder: Notopteroidei Family: Notopteridae 1. <i>Notopterus notopters (Pallas)</i> 2. <i>Notopterus chitala (Ham.)</i></p>
<p>Order: Anguilliformes Suborder: Anguilliformes Family: Anguillidae 3. <i>Anguilla bengalensis(Gray)</i></p>
<p>Order: Cyprniformes Suborder: Cyprinedei Family: Cyprinidae</p>

<p>4. <i>Catla catla</i> (Ham.) 5. <i>Cirrhinus mrigala</i> (Ham.) 6. <i>Cirrhinus Cirrhosus</i> (Ham.) 7. <i>Labeo rohita</i> (Ham.) 8. <i>Labeo calbasu</i> (Ham.) 9. <i>Ctenopharyngodon idella</i>(Val.) 10. <i>Hypophthalmichthys molitrix</i>(Val.) 11. <i>Cyprinus carpio</i>(Linn.) 12. <i>Osteobrama cotio</i>(Ham.) 13. <i>Rohtee ogilbii</i>(Sykes) 14. <i>Puntius kolus</i>(Sykes) 15. <i>Puntius sophore</i>(Ham.) 16. <i>Puntius ticto ticto</i>(Ham.) 17. <i>Puntius sarana sarana</i>(Ham.) 18. <i>Salmostoma clupeoides</i>(Day) 19. <i>Rasbora daniconius</i>(Ham.) 20. <i>Amblypharyngodon mola</i>(Ham.)</p>
<p>Order: Perciformes Suborder: Percoidae Family: Centropomidae 21. <i>Chanda nama</i> (Ham.) 22. <i>Chanda ranga</i> (Ham.)</p>
<p>Order: Siluriformes Family: Siluridae 23. <i>Wallago attu</i> (Schneider) 24. <i>Ompak bimaculatus</i> (Bloch) Family: Bagaridae 25. <i>Rita rita</i> 26. <i>Mystus seenghala</i> (Sykes) 27. <i>Mystus cavassius</i> (Ham.) Family: Clariidae 28. <i>Clarias batrachus</i> (Linn.) 29. <i>Heteropneustes fossilis</i>(Bl.)</p>
<p>Order: Synbranchiformes Family: Mastacembelidae 30. <i>Mastacembelus armatus</i>(Lac.) Family: Gobidae 31. <i>Glossogobius giuris giuris</i> (Ham.)</p>
<p>Order: Channiformes Family: Channidae 32. <i>Channa marulius</i> (Ham.) 33. <i>Channa gachua</i> (Ham.) 34. <i>Channa punctatus</i> (Ham.)</p>

REFERENCES

- [1] Burton, P. J. A. E. Balisky, L. P. Coward, S. G. Cumming and D. D. Kneshwaw, 1992. The value of managing biodiversity. *The Forestry Chronicle*. 68(2): 225-237.
- [2] Central Inland Fisheries Research Institute (CIFRI). 1997. Ecology and Fisheries of Bhatghar reservoir, Golden Jubilee Special Bulletin No. 73.
- [3] Datta Munshi, J. S. and Srivastava, M. P. 1988. Natural history of fishes and systematics of freshwater fishes of India. Narendra Publishing House, Delhi.
- [4] Day, F. 1878. The fishes of India, being a natural history of fishes known to inhabit the seas and freshwaters of India, Burma and Ceylon. Text and Atlas in 4 parts, London.
- [5] Dahanukar, Sanjay, Raut, R. and Mabaleshwarkar, M. 2003. Long-term changes in freshwater fish species composition in North Western Ghats, Pune District. *Current Science*. 84(6): 816-820.
- [6] Hiware, C. J. 2006. Ichthyofauna from four districts of Marathwada region, Maharashtra, India. *Zoos' Print Journal*. 21(1): 2137-2139.
- [7] Jayaram, K. C. 1981. The Freshwater Fishes of India. A Handbook. Zoological Survey of India, Calcutta.
- [8] Kar, D. A. Kumar, C. Bohra and L. K. Sigh, (Eds) 2003. fishes of Barak drainage, Mizoram and Tripura; In: Environment, pollution and management, APH Publishing Corporation, New Delhi, 604: 203-211.
- [9] Mali, R. P. 2011. Ichthyofaunal diversity in Godavari river at Nanded region, Maharashtra. *Ecology and Fisheries*. 4(1): 63-66.
- [10] Mittermeier, R. A. and C. G. Mitemeir, 1997. Megadiversity Earth's biologically wealthiest Nation. In mc Allister, D. E. A Lttamiltion and B. Harvery (Eds). Global fresh water Biodiversity sea wind cemex, mexico city, pp: 1-140.
- [11] Mohite, J. S., Sakhare, V. B. and Rawate, S. G. 2012. Ichthyofauna of Osmanabad district, Maharashtra, *Ecology and Fisheries*, 5(1): 55-58.
- [12] Moyle, P. B. and Leidy, R. A. 1992. Loss of biodiversity in aquatic ecosystems: evidence from fish faunas. In: Fiedler, P. L. and Jain, S. K. (eds.). Conservation Biology: The Theory and practice of nature conservation, preservation and management, pp 127-169, Chapman and Hall, New York.
- [13] Sakhare, V. B. 2001. Ichthyofauna of Jawalgaon reservoir in Solapur district of Maharashtra. *J. Aqua. Biol.* 16(1&2): 31-33.
- [14] Sakhare, V. B. 2007. Reservoir Fisheries and Limnology, Narendra Publishing House, Delhi, pp 187.
- [15] Sakhare, V. B. and Jetithor, S. G. 2012. Fisheries of Harni (Katgon) reservoir, Maharashtra, In: Perspectives in Ecology (Eds. V. B. Sakhare and J. S. Mohite), Oxford Book Company, Jaipur, pp204-212.
- [16] Talwar, P. K. and Jhingran, A. G. 1991. Inland Fishes of India and adjacent countries. Vol. 1 and 2. Oxford and IBH Publishing Co. Pvt. Ltd. New Delhi.