

**Letter to the Editor: Re Comment on Abass et al. (2024)**

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**Re Comment on Abass et al. (2024)**

In 2019, a landmark paper “Mahseer (*Tor* spp.) fishes of the World: status, challenges and opportunities for conservation” (Pinder et al., 2019) was published, which helped clarify and update the state of knowledge on taxonomy, distribution, and conservation status of this iconic group of freshwater fishes. It also highlighted that a key threat to mahseer conservation was the publication of taxonomic errors in the scientific literature, including the proliferation of these errors in citation networks. We thus consider it highly troubling that the recent paper “The mahseer: The tiger of water-an angler's delight in the Himalayas and the undisputed king of sport fishing” by Abass et al. (2024) re-introduces many errors into the mahseer knowledge base that had been resolved by Pinder et al. (2019).

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27 A major concern relates to what we consider as factual errors in the article that are both frequent  
28 and taxonomically important. The paper uses several invalid scientific names throughout the  
29 text, including ‘Tor mussullah’, ‘Tor progenius’ (*Tor progeneius* being the correct spelling, a  
30 name currently considered a synonym of *Tor putitora*), and *Tor khudree malabaricus*. While  
31 supposedly focusing on India, Figure 2 expands its focus to global *Tor* distribution, but contains  
32 glaring errors. It also includes some species described from SE Asia that are no-longer-valid  
33 (*Tor mekongensis*, *Tor douronensis*) and incorrect spelling of valid species names (‘Tor  
34 tombroides’ and ‘Tor tombro’ which should be *Tor tambroides* and *Tor tambra* respectively).  
35 The figure also omits two currently valid species, *Tor ater* and *Tor Polylepis*.

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37 We are also concerned by the incorrect information on distribution of the genus *Neolissochilus*  
38 (also considered as mahseers) provided in section 1.4. of Abass et al. (2024). For example, the  
39 authors mention that *Neolissochilus* is predominantly limited to the Brahmaputra River basin,  
40 which is erroneous. Subsequently the authors list several species as occurring in India which  
41 are actually only found in SE Asia (Myanmar, Thailand) (e.g., *Neolissochilus stracheyi*,  
42 *Neolissochilus stevensonii*, and *Neolissochilus paucisquamatus*). Moreover, *Neolissochilus*  
43 *thienamanni* is referred to as having a wide distribution in Borneo, Java, and Sumatra, but this  
44 species is endemic to Lake Toba, Sumatra (Lumbantobing, 2020).

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46 Further concerns relate to Abass et al. (2024) advocating the use of artificial breeding and  
47 stocking as the conservation ‘silver bullet’. This is despite the outcomes of recent international  
48 mahseer conferences (WWF Bhutan, 2019) which have concluded that hatchery-rearing and  
49 release should only be used as a last resort to sustain threatened populations - and in such cases,  
50 adhering strictly to IUCN Guidelines for Reintroductions and other Conservation

Translocations (IUCN/SSC, 2013). Abass et al. (2024) argued that Pinder et al. (2015) advocated the use of releases of hatchery reared fish (“*For instance, efforts in the carvery river in Karnataka, where hatchery raised mahseer are released have helped support the wild population*”). This is a gross misrepresentation of this work, as it actually revealed that the stocking of hatchery-reared, non-native *Tor spp.* was a major factor in the collapse of the endemic *Tor remadevii* population, which resulted *T. remadevii* being assessed as Critically Endangered on the IUCN Red List in 2018 (Pinder et al., 2018).

Additional (representative, but not complete) concerns include 1) a statement in the abstract which indicates that the evolutionary history of mahseers is being reviewed which does not find a mention subsequently anywhere in the paper, 2) incorrect mention of Cyprininae, being the subfamily to which mahseer belong to, instead of Torinae, 3) incorrect mention that mahseers occur in the Middle East when the western limit of distribution in Asia is Afghanistan, 4) wrong attribution of the legendary angling magnum opus ‘The Rod in India’ to MacDonald (1948) instead of Thomas (1873), 4) wrong maximum size limit of mahseer to be 2.75m without any reference, when the fish does not exceed 1.6m, 5) the number of valid species of mahseer being 16 as against the current correct number of 17, 6) incorrect attribution of the species name *zhobensis* and *chelynooides* to the genus *Tor*, when the correct nomenclature is *Naziritor zhobensis* 7) incorrect attribution of *Tor khudree* as an Endangered species on the IUCN Red List as against its current status of Least Concern, 8) incorrect distribution information of many species in Table 2 and Fig. 2, 9) incorrectly mentioning that mahseers are anadromous migrants, when they are a classic examples of tropical potamodromous fishes, and 10) several incorrect citations in the list of references.

Overall, the taxonomic ambiguities, factual errors and inappropriate conservation measures suggested by Abass et al. (2024) will diminish much of the knowledge advancement gained in the *Tor* genus over the last decade - knowledge which we believe is critical to the survival of some of these most iconic of fishes. The one point we can agree on with Abass et al. (2024) is that the mahseer is indeed the undisputed king of sport fishing – but we believe this makes it important to ensure all articles on these fishes are sufficiently rigorous to always advance and not reverse our contemporary knowledge.

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111