

Review of

A freshwater biodiversity hotspot under pressure – assessing threats and identifying conservation needs for ancient Lake Ohrid

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General comments

The ms provide a very thorough and precise analysis of the threats to the Lake Ohrid fauna, flora and ecosystem. It synthesizes and describes the different threats processes and conservation actions, supporting each of them by relevant literature or expert knowledge. From a conservation point of view, it is a major contribution to the overall picture of this complex system. This ms comes through more as a discussion paper than as a scientific paper (with methods, results, etc.). It is however very well documented and if it is acceptable in the context of this BG Discussion issue, it will be a valid contribution to all stakeholders involved in the understanding and protection of the Lake Ohrid.

Specific comments

Abstract:

P. 5348, Line 8: It would be good to mention where this lake is situated.

P. 5348, Line 21: Should read: "Of the 11 classes of the IUCN (International Union for Conservation of Nature) threat classification scheme scored (Salafsky et al., 2008),....."
[Salafsky N, Salzer D, Stattersfield AJ, Hilton-Taylor C, Neugarten R, Butchart SHM, Collen B, Cox N, Master LL, O'Connor S, & Wilkie D (2008). A Standard Lexicon for Biodiversity Conservation: Unified Classifications of Threats and Actions. *Conservation Biology*. 22: 897-911.]

Threats:

P. 5352, Line 2: Should read: "...the International Union for Conservation of Nature (IUCN)...."

P. 5352, Line 3: Should read "IUCN threat classification scheme was...."

P. 5352, Line 3: it is not very clear to me why this threat classification scheme is used, as it is not mentioned anymore in the following text and the discussions are based on a different set of threat denomination (see Table 2).

P. 5352, Line 8: replace citation with (IUCN, 2001)

[IUCN. (2001). *IUCN Red List Categories and Criteria: Version 3.1*. IUCN Species Survival Commission. IUCN, Gland, Switzerland and Cambridge, UK.]

P. 5352, Line 21: Where do the major conservation concerns come from? On what basis were they selected? They are not independent from each other and are not related to the threats scoring. They would need some more explanations.

2.1. Watershed impacts

P. 5353, Line 26: The previous paragraphs all describe a specific threat, but this one describes a part of the ecosystem and not a threat and is somehow confusing.

P. 5353, Line 28: It is not clear what is affecting the springs or how they are affected.

2.2. Agriculture and forestry:

P. 5356, Line 3: Logging and subsequent silt runoffs are already mentioned in the paragraph 2.1., p.5353. This is related to the fact that the conservation concerns chosen, even if adapted and interesting for the various stakeholders active in this region, are not independent from each other.

2.3. Tourism and population growth:

P. 5357, Line 10: What are the impacts of the noise emission?

3.4. Biodiversity and species measures:

P. 5365, Line 11: I don't have access to this paper (Talevski et al., 2010), but after checking the IUCN Red List data, I found some discrepancies, with only 1 species assessed as Critically Endangered and 5 species assessed as Vulnerable (but no species assessed as Endangered). It might be worthy to add in the SOM (supporting on-line material) the list of the species occurring in the Lake and their Red List status.

3.5. International activities:

P. 5366, Line 6: Should read: "IUCN Red Listings....".

P. 5366, Line 6: replace citation by (Kottelat, M & Freyhof, J., 2007)

[Kottelat, M & Freyhof, J. 2007. Handbook of European Freshwater Fishes. Kottelat, Cornol, Switzerland and Freyhof, Berlin, Germany. 646pp.]

Tables and Figures :

Table 1 : Should read: "Summary chart of IUCN threat classification scheme,...."

Table 1: It is not clear how the scores were attributed to each threat category. The average seems somehow strange, especially as threats classes having single key threat seem over-represented in the most impacting threats.

Fig. 1: is a really interesting and useful figure.

Fig. 3: It would probably help to mention the name of the countries on this figure. The representation of the various areas is not very clear.

Technical corrections:

The English language of the ms should be improved, as there are some grammatical errors.

P. 5356. Line 3 "... into Lake Ohrid are causes for concern."

P. 5356, Line 21: Should not start the sentence by "Again". I don't think that this point was mentioned earlier.

p.5363, Line 28 "...agricultural and forestry practices."