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**BOOK REVIEW**

# To fix or not to fix? A review of Mrosovsky's 'Predicting extinction'

**Nicolas Pilcher***

**Marine Research Foundation, 136 Lorong Pokok Seraya 2, Taman Khidmat 88450 Kota Kinabalu, Sabah, Malaysia**

*'Predicting extinction: fundamental flaws in IUCN's Red List system, exemplified by the case of sea turtles ' by Nicholas Mrosovsky, published by N. Mrosovsky (http://members.seaturtle.org/mrosovsky), printed by University of Toronto Press, ISBN 0-9734777-0-9 (softback 2004), 70p*

'Predicting extinction' is a lucid account of the history of the IUCN Red Listing process, and makes use of the listing of marine turtles to identify flaws in the system. I believe the author did a good job of highlighting some of the inconsistencies in the application of the criteria to justify listing of one species or another, and in proving the system is not as generally applicable as the IUCN objectives might state. The author acknowledges that the system is not perfect, and suggests ways to improve it, or at least address some of the inconsistencies. However, I came away from reading this book feeling that there was an unnecessary degree of personal attack on the system, where the objective statement of fact and conclusion might have more conducive to discussion and been better suited to a global audience who may be unaware that the author has been prominent in the debate over the efficacy of the Red List process for years.

Regardless, the author does a good job of summarising the pertinent facts and highlighting conflicts between the delineation and application of criteria and the actuality of conservation status of various species. The author argues against the use of the precautionary principle and indicates the IUCN process is not entirely objective in its application of criteria for listing. I personally would disagree that the process should disregard entirely the precautionary principle and list species as Data Deficient, because today we are faced with an immense amount of data on all marine turtle species, but I would say that at discrete population levels a system intended to accurately represent the conservation status of a species needs to allow to some extent for differing life histories and survival rates.

I felt at times that only one side of an argument was provided or addressed — not always as there are numerous instances in which a balanced point of view was put forth — which reinforced the impression of attack rather than constructive criticism. An interesting question to pose would be 'How many species are accurately assessed using the criteria?' and then find out whether the system is as flawed as the author suggests or simply not applicable to certain species. In one instance, arguing the case of the green turtle, the author indicates '… the use of the precautionary principle in 1982 resulted in green turtles being grouped with species in much graver predicaments…' and suggests green turtles were listed as Endangered when they possibly should have been listed as Data Deficient. I would suggest there was, at that time, a wealth of data which would automatically disqualify a Data Deficient listing also, but this was disregarded to make the argument against the Endangered listing. The point, I believe, should have simply been 'what listing would be appropriate to represent the global situation with regard to the green turtle?' No large amount of calculations to come up with absolute numbers is required, I think, but rather a look at the overall balance of growing versus declining populations, to arrive at a reasonable interpretation of their status. This of course leads to an argument of what is reasonable, and the author does a wonderful job of outlining the ways in which objectivity can be and has been disregarded in the application of the criteria.

Should we abolish the process for sea turtles altogether, given that we have sufficient data to make all of them more than just Data Deficient, but their natural life history parameters and the disparity among distinct populations prevents accurate global representation? Do we disregard the declining populations and ignore the precautionary principle to arrive at a less critical listing? (another way to look at this would be to suggest that all green turtles are doing fine, just because some populations are growing steadily). I think the arguments put forth are valid, but the conclusions leave us in a difficult situation if we are to attempt to arrive at a listing that is acceptable to all. The important overriding point that the author makes, however, is that the

*Email: pilcher@tm.net.my

listing process is flawed and has been abused by various parties in the past, and that there is a need for a better and more transparent approach using the best available science in dealing with Red List application.

I think it would be impractical to expect the IUCN Red List Authority to have different standards for different species, if they are to meet the objectives of a globally-comparable process, and it would be similarly impractical to require that all species undergo discrete population assessments as part of the Global Listing process. The revamping of the Red List, so that it is subsequently globally applicable, should not only consider the problematic cases as the author suggests. It should be able to address both simple and problematic cases on an equal footing, which is a complex task. It is for this reason that I doubt the process will be restructured from within in a major way in the near future. I see instead a division of effort through which IUCN continues to refine the listing process and independent groups take the results one step further and address regional populations.

It is high time this argument is brought to the public arena, and I trust a working solution to the issues raised in this manuscript can be delineated. Practical and appropriate solutions are needed to resolve the present disparity between application of the IUCN Red List criteria and the actual conservation of marine turtle species, and this manuscript should be used as a stepping stone in the process.

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