LifeWatch Data Grant 2015

Filling the gaps in the World Register of Marine species (WoRMS)

Bivalvia

Final Report

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1. Data grant background

A large part of the bivalve contents of WoRMS is based on volume 1 of Markus Huber's Compendium of Bivalves [Aphia SourceID 145153], published in 2010 and indexed in WoRMS shortly after.

Volume 2 (and final) of the Compendium was published in May 2015, covering 7 families not previously treated, notably the large families Tellinidae, Lucinidae and Thyasiridae; and also including updates (additional species, new synonymies, new combinations, rectifications) for the families covered in volume 1.

The goal of this project was to index volume 2 in WoRMS/MolluscaBase, so that these databases may present to the general public a state-of-the art listing of Recent marine bivalve diversity.

2. Agreed deliverables (as specified in the Data Grant contract)

- Revision of an estimated number of 450 names (considered valid by Huber and marked as changes and additions to Volume 1) in WoRMS.
- Implementation of 623 taxonomic acts (mainly the recognition of new synonyms; marked by Huber as novelties of Volume 2 with the string 'herein') into WoRMS.
- Addition of an estimated number of hundreds (probably in the order of 500) of new combinations to WoRMS.

3. Results of the project:

The following actions were carried out on WoRMS/MolluscaBase:

- 2,212 bivalve names added (653 currently accepted)
- 2,999 bivalve names revised (554 currently accepted)
- 7 bivalve names checked (2 currently accepted)

4. (Brief) description of the work/methodology

Chapters 5 (“Listing”) and 6 (“Special Remarks”) of volume 2 of Huber's Compendium were compared to the treatment of bivalves in WoRMS. Emphasis was placed on the families not previously treated and on updates marked by the author on chapter 5. Additions and updates were carried out in WoRMS whenever they did not contradict the ICZN code and/or more recent or specialized literature.

5. Problems encountered and how it was solved (or expected solutions).

When moving a species-level name (say, A) from the synonymy of B to that of C, all alternative generic combinations of A had to also be moved, one by one, from B to C. In the next few months, I intend to go through the dataset once more to make sure I have not missed any of these alternative combinations and/or introduced any inconsistencies during the course of this work.

6. Other: remarks, suggestions, other information, bibliography, …

To help tackle the difficulty described above, it would be great to see a data validation check being implemented in Aphia using the field 'Orig. name'. Such check could warn editors if two or more names are found with identical values of 'Orig. name', but linked to different 'accepted names'.