

LifeWatch Data Grant 2015

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

Cephalopoda

Final Report

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1. Data grant background

Historically the Class Cephalopoda has been under-represented on WoRMS. As a consequence, and in contrast to the situation with other molluscan classes, WoRMS had remained largely unused by the cephalopod research community.

As a first step in rectifying this situation, Philippe Bouchet (Muséum National d'Histoire Naturelle) teamed up with Julian Finn (Museum Victoria) to propose this LifeWatch Data Grant 2015.

In 2014, the third and final volume of the FAO Species Catalogue, Cephalopods of the world. An annotated and illustrated catalogue of cephalopod species known to date, was published. The combined three volumes presented the most up-to-date treatment of cephalopod fauna described to date.

To bring WoRMS in line with the current literature Bouchet and Finn proposed that all cephalopod families, genera and species treated in the FAO volumes would be indexed, adding new taxa and where necessary correcting existing records.

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

As specified in the LifeWatch Data Contract, all 47 cephalopod families, 162 genera and 776 species detailed in the FAO Species Catalogues were to be added or updated. The major revision of the familial level classification of the incirrate octopods, as proposed by Strugnell et al. (2014), was to be incorporated.

3. Results of the project:

Over the course of this project, 263 records were created, 1258 records were changed, 6 records were checked.

All 1447 taxa, treated in the 47 chapters of the 3 FAO volumes, were assessed and where necessary added or revised:

VOLUME 1 – 6 families, 292 taxa

Family Nautilidae, 10 taxa; Family Sepiidae, 167 taxa; Family Sepiolidae, 90 taxa; Family Sepiadariidae, 10 taxa; Family Idiosepiidae, 12 taxa; Family Spirulidae, 3 taxa.

VOLUME 2 – 28 families, 778 taxa

Family Australiteuthidae, 3 taxa; Family Loliginidae, 169 taxa; Family Ancistrocheiridae, 9 taxa; Family Architeuthidae, 14 taxa; Family Bathyteuthidae, 7 taxa; Family Batoteuthidae, 3 taxa; Family Brachioteuthidae, 21 taxa; Family Chiroteuthidae, 44 taxa; Family Chtenopterigidae, 6 taxa; Family Cranchiidae, 110 taxa; Family Cycloteuthidae, 7 taxa; Family Enoploteuthidae, 62 taxa; Family Gonatidae, 36 taxa; Family Histioteuthidae, 53 taxa; Family Joubiniteuthidae, 6 taxa; Family Lepidoteuthidae, 5 taxa; Family Lycoteuthidae, 25 taxa; Family Magnapinnidae, 5 taxa; Family Mastigoteuthidae, 22 taxa; Family Neoteuthidae, 9 taxa; Family Octopoteuthidae, 19 taxa; Family Ommastrephidae, 71 taxa; Family Onychoteuthidae, 31 taxa; Family Pholidoteuthidae, 8 taxa; Family Promachoteuthidae, 5 taxa; Family Psychroteuthidae, 3 taxa; Family Pyroteuthidae, 15 taxa; Family Thysanoteuthidae, 10 taxa.

VOLUME 3 – 13 families, 377 taxa

Family Octopodidae, 262 taxa; Family Amphitretidae, 4 taxa; Family Vitreledonellidae, 3 taxa; Family Bolitanidae, 5 taxa; Family Alloposidae, 5 taxa; Family Argonautidae, 11 taxa; Family Ocythoidea, 3 taxa; Family Tremoctopodidae, 7 taxa; Family Cirroctopodidae, 8 taxa; Family Opisthoteuthidae, 55 taxa; Family Cirroteuthidae, 7 taxa; Family Stauroteuthidae, 4 taxa; Family Vampyroteuthidae, 3 taxa.

The major revision of the familial level classification of the incirrate octopods, as proposed by Strugnell et al. (2014), was incorporated.

266 vernacular names were edited.

136 distributions were edited.

4. (Brief) description of the work/methodology
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The three FAO Species Catalogues (*Cephalopods of the world. An annotated and illustrated catalogue of cephalopod species known to date*) formed the basis of this project. Working through all volumes, all treated taxa were cross-checked against the Tree Of Life web project (<http://tolweb.org/Cephalopoda>) and added or revised. Individual chapter references were added to all treated taxa. Where discrepancies were found, original publications were reviewed where available.

5. Problems encountered and how it was solved (or expected solutions).
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No significant problems were encountered during this project.

All requests to the WoRMS Data Management Team were handled promptly.

6. Other: remarks, suggestions, other information, bibliography, ...
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Jereb, P. & Roper, C.F.E. eds (2005). *Cephalopods of the world. An annotated and illustrated catalogue of cephalopod species known to date. Volume 1. Chambered nautilus and sepioids (Nautilidae, Sepiidae, Sepiolidae, Sepiadariidae, Idiosepiidae and Spirulidae)*. FAO Species Catalogue for Fishery Purposes [Rome, FAO]. 4(1): 262 pp. 9 pls.

Jereb, P. & Roper, C.F.E. eds (2010). *Cephalopods of the world. An annotated and illustrated catalogue of species known to date. Volume 2. Myopsid and Oegopsid Squids*. FAO Species Catalogue for Fishery Purposes [Rome, FAO]. 4(2): 605 pp. 10 pls.

Jereb, P., Roper, C.F.E., Norman, M.D. & Finn J.K. eds (2014). *Cephalopods of the world. An annotated and illustrated catalogue of cephalopod species known to date. Volume 3. Octopods and Vampire Squids*. FAO Species Catalogue for Fishery Purposes [Rome, FAO]. 4(3): 353 pp. 11 pls.

Strugnell J.M., Norman M.D., Vecchione M., Guzik M. & Allcock A.L. (2014). The ink sac clouds octopod evolutionary history. *Hydrobiologia*. 725: 215-235.