

LifeWatch Data Grant 2014

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

ASELLOTA (ISOPODA)

Final Report

KELLY MERRIN

TAMMY HORTON

JO TAYLOR



1. Data grant background

Prior to this work, there was 20 families, 111 genera and 343 accepted species of Asellote isopods in WoRDSS, the World Register of Deep Sea Species. These numbers were considered to be an underrepresentation of the asellote fauna in the deep sea as they are the dominant isopod group inhabiting this area and have been widely studied.

The WoRDSS database is missing many of the species that were published in the last 20 years. Since the original list was populated from OBIS, rarely-collected older taxa are missing. The list is also missing a number of recently described deep-sea families and approximately ten recently described genera. It is proposed that this project would undertake to provide the known depth ranges of all asellote species in WoRDSS and to include additional references and descriptions (where available). Identification resources for asellote families and genera will also be incorporated (where available).

Museum Victoria collections have representatives of many asellote families and high resolution images will be taken of preserved specimens to fill gaps in the WoRDSS list.

It is important to recognise that this editing, while focussing on the WoRDSS list will be providing information that will also be reflected in WoRMS, thus filling gaps for both projects.

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

The following results were expected by the end of the contract:

- Addition of approximately 300 records.
- Addition of references, identification keys and images where available.

3. Results of the project:

- List of the concrete completed actions (# added, # revised, # corrected, etc).
- Explanation if needed.

There are now 1007 accepted asellote isopod species in WoRDSS. 654 species were added in context and 10 species were newly added to WoRMS.

>600 geographical/ bathymetric distributions were added to 294 species.

Taxonomic status edited for >350 species (e.g. authority, references, notes, links).

48 references to published identification sources (keys to families and genera) were linked.

31 photographs of Asellotes were provided.

The literature in WoRMS is extensive and largely up to date, <15 references were added to the literature database.

4. (Brief) description of the work/methodology

Family level spreadsheets were created based on downloaded data from WoRMS and WoRDSS.

Type locality and depth range data was added from a spreadsheet downloaded from the Smithsonian Institute's World Isopod Database to provide a starting point for further research for a species inclusion or exclusion in WoRDSS.

Extensive searching through the literature provided the relevant data to support the addition of geographic and bathymetric distributions as well as improving and correcting the taxonomic status of many taxa.

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

No significant problems were encountered. Queries and minor problems were dealt with effectively and efficiently over e-mail communication.

Despite my best efforts, some papers remained too difficult to find and thus some additional localities were not included for some species. This did not influence the species inclusion or exclusion into WoRDSS.

Nomenclatural issues surrounding some taxa will be resolved in a future publication.

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

/