



LifeWatch-WoRMS Nematoda Editor Workshop Report

Date: 21st – 25th February 2022

Venue: Online Zoom sessions



Attendees:

Bezerra, Tânia Nara (Ghent University, Belgium, Chief Editor) – Reporter

Eisendle, Ursula (Universität Salzburg, Austria)

Holovachov, Oleksandr (Swedish Museum of Natural History, Sweden)

Mokievsky, Vadim (Russian Academy of Sciences, Russia)

Peña Santiago, Reyes (University of Jaén, Spain)
Sharma, Jyotsna (University of Texas at San Antonio – Retired, U.S.A.)
Smol, Nicole (Ghent University - Retired, Belgium)
Venekey, Virág (Universidade Federal do Pará, Brazil)
Zhao, Zeng (Landcare Research, New Zealand)
Zullini, Aldo (University of Milano Bicocca – Retired, Italy)

WoRMS Data Management Team (DMT)

Bart Vanhoorne, Leen Vandepitte, Stefanie Dekeyzer, Wim Decock

Apologies: Not able to participate

Hodda, Mike (Commonwealth Scientific & Industrial Research Organisation, Australia)
Leduc, Daniel (National Institute of Water and Atmospheric Research, New Zealand)
Pérez-García, José Andrés (University of Havana, Cuba, Thematic Editor)
Tchesunov, Alexei (Lomonosov Moscow State University, Russia)
Vanreusel, Ann (Ghent University, Belgium, Chief Editor)

Introduction

The aim of the workshop is to bring the taxonomic editors of Nemys together to set priorities and clear goals for the extension on the integration of ecological and biogeographical information.

Even with the pandemic situation we all faced, the number of registration on Nemys is regularly increasing, showing the importance of Nemys as a tool for those working on Taxonomy and Ecology of nematodes and denoting the need of having a well-grounded website.

Objectives

In the Nemys editor team, there is a clear need of discussing pending issues, such as completion of assigned tasks, expansion of geographic distribution and improvement of displayed images for each species, among other things. Together with the WoRMS data management team (DMT) editors we will learn more about the use of the existing and newly developed tools and possibilities of the Nemys interface sharing thoughts and ideas on the further development of Nemys.

The objectives of this workshop are: (i) to evaluate the work that was done over the past years and the maintenance of the database, (ii) to work on expansion of the documented distribution of the species to apply the results on an article with ecological approach and (iii) to work on the expansion of good images to be displayed and exclusion of not clear or corrupted images, (iiii) to outline the next practices for outreach and scientific output for Nemys (e.g. scientific papers, presentations of the progress, plans and results at upcoming conferences).

Activities

Before the workshop, participants should take the online editor course on the Ocean Teacher e-Learning Platform <https://classroom.oceanteacher.org/course/view.php?id=702>, where one can learn about the functionalities and tools of the database. The videos remain accessible after the workshop.

Day 1: Monday, February 21th 2022

Before each session it was announced that the meeting would be recorded.

- A welcome was given by Tania Nara Bezerra, followed by an introduction and overview of the program given by Leen Vandepitte.
- Round (virtual) table, where all editors introduced themselves.

General impression and questions:

- Those who followed the online course found it very useful and well prepared.
- Evaluation of the work that has been done:
 - (i) where all tasks completed? – No;
 - (ii) If not, what was (were) the obstacles? – Different circumstances impaired the completion of the tasks;
 - (iii) Can we work on it, to avoid this situation being repeated? – Tania will follow up the accomplishment of the task.

Conclusion of first day:

- Feedback on the online course was given and it was discussed what are the priorities
- Among the 3 Excel files, which need to be completed, the file “species without basionym” is chosen as first priority to be finished.

Hands-on until 15:30h – Missing Basionym

Day 2: Tuesday, February 22th 2022

Taxonomy day - Entering data and solving doubts: Taxonomy

A Google Drive was created for the group, where we find programs (short and full versions), recorded sessions and chats, PowerPoint slides of presentations, Excel files with tasks to be completed: Accepted species without basionym; Accepted species without reference and Accepted species without specimen.

Questions from the forum and questions from the group:

- How can we indicate an original name? (Nicole) – Edit taxon; Aphia edit taxon details
- How to add a Type specimen museum without information? (Ursula) – Specimens; add specimen; (Unknown) – Private – Private author collection
- How to deal with multiple changes of a species to different genera and subgenera? (Nicole) –We only need to give the authority of the original description (with or without brackets) but adding the authority of the person who made some changes afterwards, immediately gives a nice indication of the changes e.g. *Viscosia abyssorum* (Allgén, 1933) Wieser, 1953. Consistency is recommended, so we shall keep on adding the author of the last combination, to all cases where it is needed. In future this will be added as an authority field, for all taxa.

- Discussion on Latin spelling e.g. *Anoplostoma vivipara* x *Anoplostoma viviparum* (Nicole)
- Is it possible to add a subgenus with the same genus name? (Nicole) – Yes
- Which year of publication shall be considered when two different years are found? (Ursula) – The year of the outcome of the publication. This is not usually a problem, unless the online version comes out in December and the printed version in January. Online publications, without page number, are not a final version.
- Dates of Web of Science for old articles are not always right (Ursula) – Web of Science and Google Scholar keep the first online information, they do not update their data.
- How to add translations of original descriptions? (Nic) – Bart gave three possibilities: (i) add a link to the new PDF; (ii) add a new PDF field; (iii) change the PDF, merging the translation to the original PDF article. DMT will help, indicating free software for editing PDF's or merging the PDFs themselves.
- What to do with added translations as a new PDF. Is it possible to merge them with the original articles? (Tania) – Point the old separate versions (original + translations) to DMT and they can merge them.
- How many undescribed species would be on the shelves? (Leen) – Almost impossible to answer this. Vadim suggested using the assumption of singletons, but old slides and samples mostly lack information and will probably be lost.
- Problem to access PDF's (Ursula) – One needs to login to be able to access the PDF's.

Conclusion of second day:

- Excel file with accepted species without basionym is priority and is to be finished by end of May 2022. Use the file from Google Drive; highlight in yellow the specimens you are working on and in green those that are completed.
- We shall keep on using the brackets and the authority of the last combination of the taxon.
- Aldo Zullini has an editor login, to be able to work during the workshop “hands-on”.

Hands-on until 15:30h – Missing Basionym

Day 3: Wednesday, February 23th 2022

Entering data and solving doubts: Distribution and addition of new images

- During the hands-on of Day 1, a case of wrong use of brackets was spotted and as a result the taxon was listed as taxon without basionym. (Virág)
- Figures of distribution were not very clear, on the online course. (Nic)
- Geounits – could they be more specific? One can always add new geounits (first check if it is really a new one), but the easiest way is to add the closest “higher level” genounit and detail it on the note field, e.g. Geounit – Island; beach mentioned on the note field.
- Bulk deletion of images with bad quality (and with watermark making the visualization not clear) from CDROM 2000, is not possible since it would leave some taxa without information. Replacement of these images can be done when one comes across it. This will give, in future, a cleaner appearance to the page.

- Problem of getting to the Google spreadsheets; even after updating the Firefox browser. (Nicole). Stefanie solved this issue, sending separate links by email.

Conclusion of third day:

- Basionym cannot have brackets, check and fix it when finding this mistake.
- Always enter the most specific geounit, when adding a new distribution.
- When possible, replace bad quality images by good and clear ones.
- Although it is another website <https://www.marineregions.org/gazetteer>, editors can login with the same password used for Nemys.
- Distribution notes need to be copied exactly as they are in the article.
- A recommendation of the WoRMS Steering Committee is to have at least one image identified by an editor for every species. When adding new taxa, do not just add them but also: distribution, image(s) and type specimen.

Hands-on until 15:30h – Missing Basionym / Distribution

Remember: on the Google spreadsheet do not forget to highlight in **yellow** taxa which you are busy with and in **green** those you have finished.

Day 4: Thursday, February 24th 2022

Entering data and solving doubts: Miscellaneous

- Feedback on online course – other chapters (source, specimens, notes, attributes, vernaculars, links, other tools) was asked by Stefanie
- Citation of David Gibson’s entries was discussed. The general citation is already changed to “Nemys editors” and we are going to contact David Gibson to find a solution for the parasitic nematodes on Nemys
- Identification keys – The identification keys on the page are not updated and it was discussed if they should remain or be taken offline.
- Nicole has a compilation of identification keys. This compilation can be added to Nemys.
- Apparently a difference in layout between Nemys and WoRMS is an issue, which can sometimes impair editors to upload data on Nemys. It was suggested to adjust the layout of Nemys page.
- Stars – All data added by editors are represented by a full yellow star. When we come across an empty or half star, we need to confirm the information. This will turn it into a full star.
- References without PDF – the best way of searching for literature (not found elsewhere) is to send an email to the list of editors
- pjn.com.pk and Pakistan Journal of Nematology 2005-2017 at Naturhistoriska Riksmuseet are available in the Swedish Museum of Natural History, Sweden (Alex)
- In the department of Nematology of Ghent University, there is much old literature not yet on Nemys. Nic will check it as soon as she can be back to the lab.
- Distribution, always use the “pick” option when adding a source to distribution
- Basionym spreadsheet, it was decided to define a deadline for the completion.

Attention: All data **must** be entered on Nemys. Data entered on WoRMS are **NOT** automatically uploaded on Nemys.

Conclusion of fourth day:

- Tania and Alex will contact David Gibson to solve the situation with parasitic nematodes on Nemys. Information on parasitic nematodes is required to provide a proper classification to the Genbank and Darwin Tree of Life project backbone.
- Identification keys – New identification keys are not priority. The old keys will remain on Nemys, since they display the date of the last update.
- When uploading a new reference, on the taxon page source, editors can choose the “identification resource” flag. This allows all articles saved as such to be found, when searching by source type.
- Nicole will provide the compilation of keys, to be uploaded to Nemys and look for old literature available at Nematology department of Ghent University
- DMT can adjust the colors/fonts of Nemys to be as close as possible to those of WoRMS
- To all editors that uploaded data on WoRMS, please check if this information is also on Nemys and if not, please add it manually or ask the DMT to do it.
- Deadline for basionym spreadsheet – End of May 2022

Day 5: Friday, February 25th 2022

Entering data and solving doubts: General evaluation online editor workshop

- Our taxonomic article needs to be concluded
- The next step is a second article, compiling ecological information on distribution and habitat
- Why does the original description not appear on the upper field sometimes? (Ursula) – the original description needs first to be added to the original description. (Stefanie)
- Do the responsibilities within the group need to change? Do we need new editors?
- We need more interaction. A solution for this is to have regular online meetings. DMT will try to participate in the meetings.
- What about the next conferences? Meiofauna conference in New Zealand. We can have another “side event” as we had the last two conferences (Crete and Évora) if some of the editors are present.
- Will the online course remain available after the workshop? – Yes
- DMT asked us to complete an anonymous evaluation of the online course. This will help them to improve, change or adapt when necessary.
- A template for the preparation of the report is placed on the Google folder
- The report is expected to be sent by the end of March/half of April.

Conclusion of fifth day:

- Vadim needs one or two months to send the last draft of the Taxonomic article to the editors to amend/add information to it.

- First we need to finish the taxonomic article. After concluding the taxonomic article, our next step is an Ecological article, compiling distribution and habitat information.
- We will keep the actual editors responsibilities, with clear deadlines
- Aldo Zullini is not sure yet if he wants to be part of Nemys. He will decide it and let us know his decision
- Jyotsna, who had thought of leaving the group, decided to stay
- Good news is the publication of Mike Hodda, adding about 3000 genera and 3000 species to Nemys. Thanks Mike!
- We need editors focusing on animal parasitic nematodes. Alex and Nic will contact researchers they know.
- Editors' proposed tasks need to be updated. This will be done with the help of DMT.
- We need effective participation of taxonomic editors.
- It was decided to have 4 online short - update - meetings per year. Since the deadline for the basionym is the end of May, the best occasion for the next meeting is the beginning of June. A Doodle will follow, to decide which is the best date/time for it.
- The online course will remain available after the workshop:
<https://classroom.oceanteacher.org/course/view.php?id=702>

Attention: Missing Basionym spreadsheet shall be finished by end of May

Outcome

The workshop provided the editors to meet and gave the opportunity to discuss pending issues, review the task list and recognize why some tasks were not completed. Following the online course helped to learn/review how to better use the available tools to update the webpage. Due to different time zones, not all editors were able to participate in this online meeting, but even so 10 out of the 15 editors were able to be present and interact through Zoom (platform chosen by DMT for the workshop). This workshop once again highlighted the need for regular meetings.

Action points

- **All Editors:** Excel spreadsheets, missing basionym; missing distribution and missing original description need to be completed **by the end of 2022**. These spreadsheets are on the Google drive created by the DMT.
- **All editors:** Excel spreadsheet with accepted species without basionym is priority is to be finished **by end of May 2022**. Highlight in yellow the specimens you are working on and in green those that are completed.
- **All editors:** When adding new taxa, do not just add them but also: distribution, image(s) and type specimen. **Continuous.**
- **All editors:** When uploading a new reference, add also image(s), distribution information and type specimen. **Continuous.**
- **All editors:** It was decided to have 4 online short - update - meetings per year. Since the deadline for the basionym is the end of May, the best occasion for the next meeting is the

beginning of June. A Doodle will follow, to decide which is the best date/time for it. **Four times per year: June; September and December.**

- **Tania:** Will send a Doodle to decide the date of the meetings. **Begin April 2022.**
- **Tania and Alex:** will contact David Gibson to solve the situation with parasitic nematodes on Nemys. **April 2022.**
- **Nicole Smol:** Will provide the compilation of keys, to be uploaded to Nemys and look for old literature available at the Nematology department of Ghent University. **Continuous.**
- **DMT:** Will adjust the colors/fonts of Nemys to be as close as possible to those of WoRMS. **April/May 2022.**
- **All editors:** check if uploaded data on WoRMS is also uploaded on Nemys and if not, add it manually or ask the **DMT** to do it. **Continuous.**
- **Vadim:** Will send the last draft to the editors to amend/add information to it. **May 2022.**
- **Aldo Zullini:** Will decide if he wants to be part of the editors team and let us know his decision. **April 2022.**
- **Alex and Nic:** Will contact researchers they know, working on animal parasitic nematodes. **April/May 2022.**

Acknowledgments

The organization of this workshop and the support of the WoRMS Data Management Team (DMT) are supported by LifeWatch Belgium, part of the E-Science European LifeWatch Infrastructure for Biodiversity and Ecosystem Research. LifeWatch is a distributed virtual laboratory, which is used for different aspects of biodiversity research. The Species Information Backbone of LifeWatch aims at bringing together taxonomic and species-related data and at filling the gaps in our knowledge. In addition, it gives support to taxonomic experts by providing them logistic and financial support for meetings and workshops related to expanding the content and enhancing the quality of taxonomic databases.

We are grateful to the LifeWatch program for providing (financial) support and also to the WoRMS Data Management Team at Flanders Marine Institute (VLIZ) for making the arrangements which allowed the workshop to happen. The valuable contribution by participants is also very much appreciated.