

**First meeting of the Unionid CEN Standard Group
14.00 GMT, 15.00 CET, Tuesday 26th January – by Zoom**

Minutes

Present: Phil Boon (Chair), Juergen Geist, Evelyn Moorkens, Ian Killeen, Panu Oulasvirta, Nicoletta Riccardi, Tadeusz Zając, Joachim Reis, Martin Österling, Ronaldo Sousa, Manuel Lopes-Lima, Niklas Wengström, Jelena Hinić, Noé Ferreira Rodríguez

1. Chairman's introduction (Phil Boon) welcomed everyone and introductions followed.
2. Evelyn Moorkens gave a brief introduction to the background of the CEN proposal.
3. Phil Boon provided a short summary of how CEN standards are developed and published.

He emphasised the length of time needed and that if we are to get a CEN standard approved by the end of the COST project then we need to move fast. After a consensus draft is reached by the group of experts involved, the work must then be approved by the National Standards Bodies (NSBs) across Europe, and the draft must then go to a public enquiry stage for comment by the NSBs. After review, the document is sent for an approval vote by the NSBs. The final text is issued by CEN, but published by the NSBs in their own countries.

4. Update on the present position of the COST proposal with CEN (Phil Boon)

The outcome of the recent meeting of the CEN Invertebrates group (CEN/TC 230/WG 21) was positive, agreeing that an expert group should be set up and a draft document prepared. There are a number of different types of CEN documents, including a European Standard (EN), a Technical Specification (TS), and a Technical Report (TR). Phil proposed that we proceed towards a CEN Standard and propose this for approval at a later meeting.

5. Brief general comments or questions from group members about the CEN proposal (All)

Nico mentioned a new species of *Anodonta* to add, and will send the paper to Evelyn. Manuel said that 7 more species will be added in a paper to be published over the next few months. It was agreed that we will not worry about taxonomy just yet.

6. Group discussion on each section of the proposed CEN standard (All)

- (a) Scope of the standard (see section 3 of the proposal)

Evelyn noted that the emphasis was on condition assessment, and the standard will not force researchers into narrow methodologies, but that standard methodologies were important for comparative condition monitoring.

Joachim stressed that training needs to feature strongly – this was included in the FPM standard and could be done in a similar way.

Tadeusz wondered about the extent of habitat to be considered.

Nico noted that the wording in the proposal document saying “Additional sections of the standard will focus on monitoring threats and pressures on rivers with mussel populations” is incorrect as rivers are not the only water bodies where unionid mussels occur.

(b) Structure of the standard – what are the types of information that should be included in each of the following? (see section 4 of the proposal):

- (i) Overview of the diversity of mussel species and their habitats
- (ii) Systematic survey methods in relation to different habitat types
- (iii) Ecologically relevant endpoints in assessing condition of the mussel populations
- (iv) Assessing habitat condition in relation to mussel occurrence
- (v) Data reporting
- (vi) Monitoring of threats and environmental pressures
- (vii) Management options

Panu proposed that the geographical occurrence of each species should be shown, including occurrence within different countries, as some species have a limited distribution in some countries.

Ian mentioned that the occurrence of multiple species at the same sites must be considered, as it is a complication.

Tadeusz considered that an emphasis on functional habitat should be made. He shared his screen and demonstrated a database produced for the COST project that may be useful in assisting with the CEN standard.

Juergen referred to the guide to freshwater bivalves of Britain and Ireland (Killeen, Aldridge and Oliver, 2003), which shows the principal habitats of different species according to water-body type (pH, flow, upland, etc.). This may be an approach that could be used for summarizing the main habitat types for unionids.

Nico noted that it is not always possible to distinguish species in the field. Ian agreed that this is complicated, as is a determination of juveniles of different species, and their similarity to *Pisidium* and *Sphaerium* species.

Tadeusz commented on the role of parasites in mussel condition. Niklas mentioned the requirement to report mass mortality events. Nico emphasised the importance of preserving samples for analysis. Evelyn explained that the purpose of the FPM standard is to provide key monitoring techniques, but Phil agreed that investigative monitoring techniques that could be triggered by noted kills or declines could also be mentioned as part of the standard.

Phil explained that the Annexes provided in a standard are either 'normative' or 'informative'. The former is part of the standard but the latter is included just to provide useful information.

7. Volunteers to draft text for each section (All)

The following volunteers agreed to provide a first draft of each section:

- (i) Overview of the diversity of mussel species and their habitats - Manuel and Tadeusz
- (ii) Systematic survey methods in relation to different habitat types - Ian
- (iii) Ecologically relevant endpoints in assessing condition of the mussel populations – Nico and Evelyn
- (iv) Assessing habitat condition in relation to mussel occurrence - Tadeusz
- (v) Data reporting - Jelena
- (vi) Monitoring of threats and environmental pressures - Ronaldo and NOé
- (vii) Management options - Joachim

8. Deadlines for text production

Each section should be submitted by the end of March and will be discussed at the next meeting in mid-April.

9. Any other business

Ian asked whether flow charts, figures or photographs were allowed in CEN standards. Phil said that while flow charts and figures are allowed, they cannot have labels with words due to translation requirements. They can be labelled (A, B, C etc.) to allow for a legend in different languages. Phil said that while photographs are allowed, too many are frowned upon as this raises the price that NSBs have to charge when selling a standard.

10. Date of the next meeting

Mid-April, to be decided by doodle poll.