

**Fourth CEN workshop on the environmental requirements of freshwater pearl mussel
*Margaritifera margaritifera***

**RPS Belfast, Elmwood House, Belfast, UK
13-14 February 2013**

Brief summary

Background

Freshwater pearl mussel (*Margaritifera margaritifera*) is threatened throughout its range as a result of environmental pressures such as river engineering, pollution, nutrient enrichment and illegal pearl fishing. Even in countries considered to be strongholds for this species (e.g. Scotland) many populations are ageing and losing reproductive viability with the likelihood that further populations will become extinct. It is therefore all the more important to understand the ecological requirements of pearl mussel when catchment developments threaten their well-being.

The workshop in Belfast was the fourth in a series on this subject. The first was held in February 2011 where 19 pearl mussel experts from six countries in Europe met to share their experience in research and management and to attempt to apply the results to define the environmental needs of mussels. A second workshop, attended by 21 people from seven countries, was held in Aberdeen in March 2012, followed by a third in Portugal (with 20 people from 10 countries) immediately before the International Meeting on Biology and Conservation of Freshwater Bivalves. All four workshops have been arranged as part of the programme of a Task Group of the European Committee for Standardization (CEN).

The ultimate aim is to produce a CEN guidance standard applicable around Europe; this would allow a consistent approach by those needing to comment on catchment developments that might be damaging to pearl mussel populations.

Participants

Table 1 lists the participants and their affiliation. Of the 24 who attended, 14 were from mainland Europe, 8 were from the UK, and 2 from the Republic of Ireland.

Table 1: Workshop participants

Name	Affiliation	Country
Phil Boon	Scottish Natural Heritage	UK
Iain Sime	Scottish Natural Heritage	UK
Mark Young	University of Aberdeen	UK
Susan Cooksley	James Hutton Institute	UK
Louise LaVictoire	Freshwater Biological Association	UK
Roger Sweeting	Freshwater Biological Association	UK
Jo Harkness	Environment Agency	UK
Tony Waterman	Northern Ireland Environment Agency	UK
Evelyn Moorkens	Ecological consultant	Republic of Ireland
Ian Killeen	Ecological consultant	Republic of Ireland
Manuel Lopez Lima	Porto University	Portugal
Paz Ondina	University of Santiago de Compostela	Spain
Sabela Lois	University of Santiago de Compostela	Spain
Marie Capoulade	Association Bretagne Vivante - SEPNB	France
Pierre-Yves Pasco	Association Bretagne Vivante - SEPNB	France
Jürgen Geist	Technische Universität München	Germany
Christine Schmidt	Ecological consultant	Germany
Robert Vandre	Ecological consultant	Germany
Frankie Thielen	Natur & Umwelt (Fondation Hellef fir d'Natur)	Luxembourg
Håkan Söderberg	Miljö och Naturavdelningen	Sweden
Lennart Henrikson	County Administrative Board	Sweden
Bjørn Larsen	Norwegian Institute for Nature Research	Norway
Paul Aspholm	Ecological consultant	Norway
Panu Oulasvirta	Ecological consultant	Finland

Programme

The full programme is shown in Annex 1. Most of the work entailed a page-by-page discussion of the draft text, either making amendments immediately or noting them for later action. The main topics covered were:

- Water quality
- Hydromorphology
- Fish hosts
- Biotic factors and other interactions
- Assessing the status and condition of *Margaritifera* populations
- Information needed for conservation and management of *Margaritifera* populations
- Information needed to assess plans or projects on rivers with *Margaritifera*

Outputs from the workshop

Rather than produce a detailed report of the workshop the main output is a revised draft of the document written in the style of a CEN guidance standard. The proposal to develop guidance at a European level was first discussed and approved at one of the working groups of CEN. Working Group 2 (WG 2) of the CEN Technical Committee on Water Quality (TC 230) has the title 'Biological and Ecological Methods' and comprises a series of Task Groups, one of which (TG 1) covers invertebrates. WG 2 is chaired by Roger Sweeting who is leading work on captive breeding of pearl mussels at the Freshwater Biological Association in the UK. Phil Boon (Scottish Natural Heritage (SNH)), who arranged and chaired the workshop, is also a member of the group and represents SNH and the Joint Nature Conservation Committee in the UK.

Future work

Phil Boon and Evelyn Moorkens will revise the text of the draft standard by the end of March 2013. As part of this process Roger Sweeting will compile a new section of the standard setting out various international standards that should be used for water quality analysis. The draft text will be discussed at the annual meeting of WG 2/TG 1 on 28 May 2013 at the Lithuanian Standards Board in Vilnius.

The Task Group will be asked for their views on the best way to proceed, especially regarding the most appropriate format for the CEN document. Once published, this guidance, based on scientific evidence, will contribute to pearl mussel conservation by providing a consistent way of assessing potential impacts on populations.

Professor Philip J Boon
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Scottish Natural Heritage
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UK

6 march 2013

Workshop programme

Workshop Day 1 – Wednesday 13 February

Session 1: Introduction

09.00-09.15: Round table introductions

09.15-09.30: (a) Aims and objectives of the workshop (b) Brief introduction on the work of CEN – Phil Boon (UK)

Session 2: Brief informal reports on current work on freshwater pearl mussel

09.30-10.15 News updates from participants

Session 3: Revising the CEN guidance standard – section by section

10.15-10.35: Introduction, Scope

10.35-10.50: Tea/coffee

10.50-12.30: Ecological requirements – water quality

12.30-13.10 Lunch

13.10-15.00: Ecological requirements – hydromorphology

15.00-15.45: Ecological requirements – fish hosts

15.45-16.00: Tea/coffee

16.00-16.30: Ecological requirements – biotic factors and other interactions

16.30-17.00: Data on the status and condition of *Margaritifera* populations

17.00-17.30: Key information needed to inform conservation management of *Margaritifera* populations

17.30: End of Workshop Day 1

Workshop Day 2 – Thursday 14 February

Session 3: cont: Revising the CEN guidance standard – section by section

09.00-10.00 Terms and definitions

10.00-10.45 Normative references

10.45-11.00 Discussion on future work required, timetable, etc.

11.00: End of workshop