1st Freshwater Mollusk Conservation Society Meeting in Europe

Bridging the gap between freshwater mollusk research and conservation in the Old and New World

Verbania, Italy, 16th-20th September 2018

Book of Abstracts

Edited by

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Overview and Oral Presentations

Abstract ID: {day}.{serial number}

17th September, Monday

Duration: 08:30 – 10:30

Abst. ID	Author(s)	Title
01.01	Invited speaker: Heidi Dunn (USA)	Introduction to the Freshwater Mollusk Conservation Society
01.02	Invited speaker: Mary Seddon (GBR)	Contrasts between global level threats and regional threats to Freshwater Molluscs 2008 to 2018
01.03	Invited speaker: Jürgen Geist (DEU)	Common pitfalls in freshwater mussel conservation and how to avoid them

Duration: 11:00 – 13:00

Abst. ID	Author(s)	Title
01.04	Skujienė G, Skuja J (LTU)	*Unio crassus* in Lithuania: distribution, pecularities of monitoring, conservation
01.05	Feind S, Geist J, Kuehn R (DEU)	Genetic diversity and differentiation of the endangered thick shelled river mussel (*Unio crassus* Philipsson, 1788) – conservation units and lineages from Belgium to Romania
01.06	Wengström N, von Proschwitz T (SWE)	Conservation status of freshwater mussels in Sweden
01.07	Ożgo M, Urbańska M, Marzec M, Geist J (POL)	Discovery of a mussel hotspot in NE Poland: a call for research and conservation focus on multiple species systems
01.08	Vikhrev IV, Bolotov IN, Konopleva ES, Kondakov AV, Aksenova OV, Bespalaya YV, Lunn Z, Chan N,. Gofarov MYu (RUS)	Exploring the lost world: studying freshwater mussel biodiversity hotspot in Myanmar
01.09	Riccardi N, Froufe E, Teixeira A, Varandas S, Moro G, Lopes-Lima M (ITA)	Freshwater mussels in Italy: from no-name species and no-right species to useless regulation

18th September, Tuesday

Duration: 14:00 – 16:00

Abst. ID	Author(s)	Title
02.11	Aldridge A, Ćmiel A, Lipińska A, Lopes-Lima M, Sousa R, Teixera A, Zając K, Zając T (GBR)	Remarkable reproductive spurting behaviour of the endangered thick shelled river mussel, *Unio crassus*
02.12	Soler J, Boisneau C, Jugé P, Richard N, Guerez Y, Morisseau L, Wantzen KM, Araujo R (ESP)	*Margaritifera auricularia* (Spengler, 1793) and its relationship with fish communities in French rivers: the discovery of new hosts and a potentially harmful guest
02.13	Teixeira A, Benaissa H, Lopes-Lima M, Sousa R, Varandas S, Rassam H, Ghamizi M (PRT)	Fish hosts of the critically endangered *Unio foucauldianus* Pallary, 1936 (Mollusca: Unionidae)
02.14	Moore T, Clearwater SJ, Collier KJ, Duggan IC (NZL)	Glochidial development of the New Zealand freshwater mussel (*Echyridella menziesii*) on non-indigenous fish
02.15	Wagner A, Schiller T, Schneider J, Grunicke F, Kuhr A, Lange M, Berendonk T (DEU)	Identification of suitable habitats for captive-bred freshwater pearl mussels by empirical studies in Vogtland rivers (Germany)
02.16	Chowdhury M Motiur R, Roy A, Suonia H, Pulkkinen K, Marjomäki TJ, Taskinen J (FIN)	Growth and disease susceptibility of brown trout affected by *Margaritifera margaritifera* infestation

Duration: 16:30 – 18:10

Abst. ID	Author(s)	Title
02.17	Bertucci A, Pierron F, Thébault J, Klopp C, Bellec J, Gonzalez P, Baudrimont M (FRA)	Transcriptomic responses of the endangered freshwater mussel Margaritifera margaritifera to trace metal contamination in the Dronne River, France
02.18	Dury P, Vincent B, Bourré N (FRA)	Breeding freshwater pearl mussel *Margaritifera margaritifera* in Britany
02.19	Clearwater S (NZL)	Development of freshwater mussel restoration protocols in New Zealand

FISH HOSTS OF THE CRITICALLY ENDANGERED *UNIO FOUCAULDIANUS* PALLARY, 1936 (MOLLUSCA: UNIONIDAE)

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Unio foucauldianus Pallary, 1936 (Unionidae) is a critically endangered freshwater mussel, with a small geographical distribution restricted to Morocco. As many other unionids, the life cycle of this species includes an obligatory parasitic phase using fish as hosts. Therefore, the knowledge of fish hosts is essential to develop any efficient conservation strategy devoted to this species. In this study, we used two approaches to assess the fish hosts of *Unio foucauldianus*: determination of infestation rates of fishes under natural conditions through a monthly (from January to June) sampling in Laabid (Oum Er Rbia basin) and N'Fis (Tensift basin) Rivers and laboratorial trials to assess metamorphose rates using different fish species from both rivers. The natural infestation of fish showed a peak of infestation in May and juveniles only metamorphosed in the following native fish species: *Luciobarbus ksibi* (Boulenger, 1905), *Carasobarbus fritschii* (Günther, 1874), *Luciobarbus zayanensis* (Doadrio, Casal-López & Yahyaoui, 2016), *Labeobarbus maroccanus* (Günther, 1874) and *Luciobarbus magniatlantis* (Pellegrin, 1919). Given the increasing pressure on native fish species due to human activities, including the increased number of non-native fish introductions that did not function as hosts of *U. foucauldianus*, urgent conservation measures are needed to mitigate some of the threats on native ichthyofauna. Only an integrated framework comprising knowledge of the freshwater mussel biology and their native fish hosts can help the conservation of *U. foucauldianus* in Morocco.