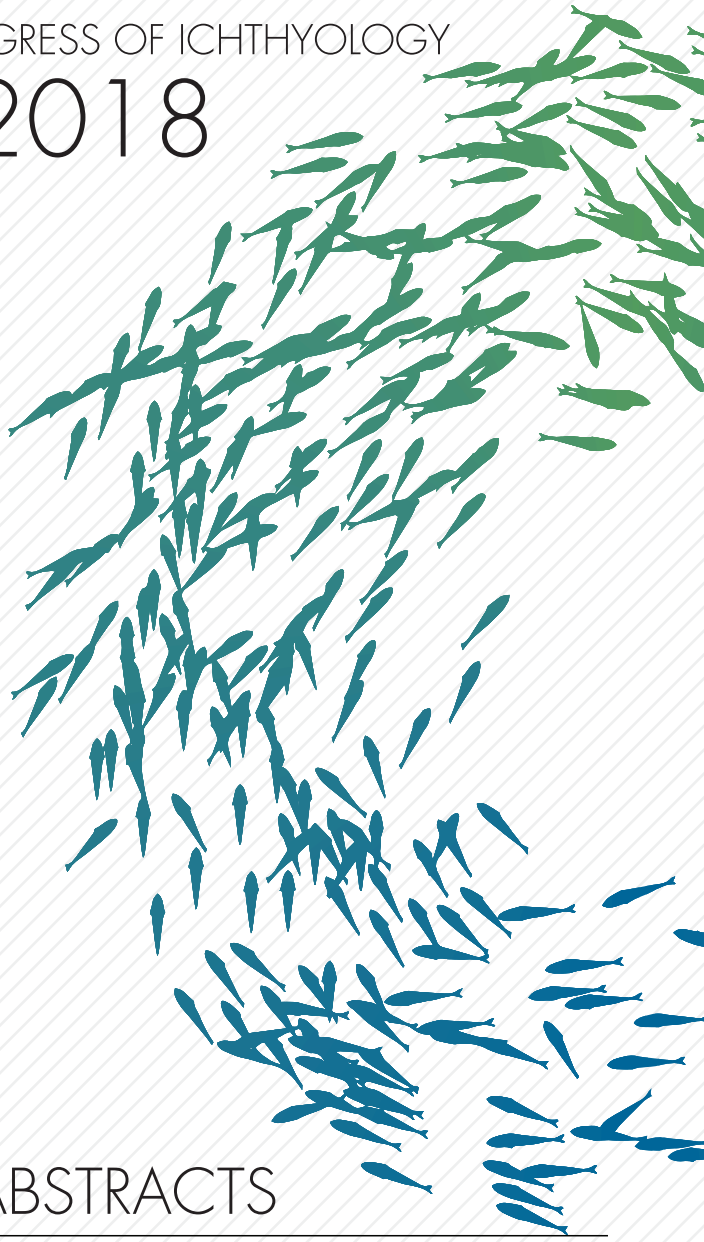
VII IBERIAN CONGRESS OF ICHTHYOLOGY

SIBIC2018



BOOK OF ABSTRACTS

sibic CCMAR UAlg UNIVERSIDADE DO ALGARVE

WHERE RIVERS MEET THE OCEAN

SIBIC2018

VII IBERIAN CONGRESS OF ICHTHYOLOGY

UNIVERSIDADE DO ALGARVE

Complexo Pedagógico

Campus Penha // Faro // Portugal

12-15 June

PRESIDENT OF SIBIC2018
Pedro Miguel Guerreiro, CCMAR, Centre for Marine Sciences at University of Algarve

COORDINATION
Pedro Miguel Guerreiro, CCMAR, Centre for Marine Sciences at University of Algarve
Frederico Oliveira, CCMAR, Centre for Marine Sciences at University of Algarve
Mafalda Rangel, CCMAR, Centre for Marine Sciences at University of Algarve

EDITION
Centro de Ciências do Mar
Universidade do Algarve
Sociedade Ibérica de Ictiologia

PRINTING
Universidade do Algarve

DESIGN
Frederico Oliveira

ISBN: 978-989-95587-6-2
DL: 441889/18

ORGANIZING COMMITTEE

Pedro Miguel Guerreiro, CCMAR, Centre for Marine Sciences at University of Algarve
Jorge Gonçalves, CCMAR, Centre for Marine Sciences at University of Algarve
Sofia Engrola, CCMAR, Centre for Marine Sciences at University of Algarve
Florbela Soares, IPMA, Portuguese Institute for Sea and Atmosphere, Olhão
João Saraiva, CCMAR and FAIR-FISH International
Filipe Ribeiro, MARE, Marine and Environmental Sciences Centre at University of Lisbon
Paulo Gavaia, CCMAR, Centre for Marine Sciences at University of Algarve
Mafalda Rangel, CCMAR, Centre for Marine Sciences at University of Algarve
Pedro Lino, IPMA, Portuguese Institute for Sea and Atmosphere, Olhão
Rui Coelho, IPMA, Portuguese Institute for Sea and Atmosphere, Olhão
Ana Verissimo, CIBIO, Research Center in Biodiversity and Genetic Resources at Vairão
Mar Torralva Forero, University of Murcia
Ana Sánchez Pérez, University of Murcia
Amilcar Teixeira, CIMO, Mountain Research Center at Polytechnic Institute of Bragança
Jorge Palma, CCMAR, Centre for Marine Sciences at University of Algarve
Andreia Pinto, CCMAR, Centre for Marine Sciences at University of Algarve
Jorge Graça, CCMAR, Centre for Marine Sciences at University of Algarve
Rita Abecassis, CCMAR, Centre for Marine Sciences at University of Algarve

SCIENTIFIC COMMITTEE

Adelino Canario, CCMAR, University of Algarve
Alberto Teodorico Correia, CIIMAR, University of Porto and University Fernando Pessoa
Alexandra Silva, IPMA, Portuguese Institute for Sea and Atmosphere, Lisbon
Amadora Rodríguez Ruiz, University of Seville
Ana Almodóvar Pérez, Complutense University of Madrid
Ángel Pérez Ruzafa, University of Murcia
Beatriz Morales Nim, IMEDEA and University of the Balearic Islands
Bernardo Quintella, MARE, University of Lisbon
Carlos Fernandez Delgado, University of Cordoba
Carlos Granado Lorencio, University of Seville
Emanuel Gonçalves, ISPA, Instituto Superior de Psicologia Aplicada, Lisbon
Esther Isorna, Complutense University of Madrid
Estíbaliz Díaz, AZTI-Tecnalia

Fernando Cobo Gradín, University of Santiago de Compostela
Francisco Javier Sanz Ronda, University of Valladolid
Francisco José Oliva Paterna, University of Murcia
Henrique Cabral, MARE, University of Lisbon
Ibon Cancio, PiE, University of the Basque Country
João Manuel Bernardo, University of Évora
Jonathan M. Wilson, CIIMAR, University of Porto
Josep Rotllant, IIM, Marine research Institute, CSIC Vigo
Juan Miguel Mancera, University of Cadiz
Karim Erzini, CCMAR, University of Algarve
Lluis Zamora Hernández, University of Girona
Luisa Valente, CIIMAR, University of Porto
Manuel Biscoito, Natural History Museum of Funchal, Madeira
Maria Filomena Magalhães, CBA, University of Lisbon
Maria Teresa Dinis, CCMAR, University of Algarve
Maria Teresa Ferreira, ISA, University of Lisbon
Miguel Clavero, Doñana Biological Station, CSIC Seville
Pedro Pousão Ferreira, IPMA, Portuguese Institute for Sea and Atmosphere, Olhão
Pilar Drake, ICMAN, Institute of Marine Sciences of Andalusia, CSIC Cadiz
Raul Laiz Carrión, IEO, Spanish Institute of Oceanography, Malaga
Ricardo Serrão Santos, DOP, University of Azores
Rita Castilho, CCMAR, University of Algarve
Rui Oliveira, ISPA, Instituto Superior de Psicologia Aplicada, Lisbon
Silvia Zanuy, IATS, Institute of Aquaculture Torre de la Sal, CSIC Castellón

CAN INVASIVE ALIEN FISH SPECIES ACT AS EFFECTIVE HOSTS OF NATIVE FRESHWATER MUSSELS (UNIONIDAE) IN IBERIA?

Amílcar Teixeira[1], Ana R Dias[2], Fernando Miranda[1], Manuel Lopes-Lima[3] Simone Varandas[4], Elsa Froufe[5], Ana F Filipe[3,6], Pedro Beja[3,6], Ronaldo Sousa[2]

[1]CIMO-IPB- Mountain Research Centre, Polytechnic Institute of Bragança, Campus de Santa Apolónia, 5300-253 Bragança, Portugal (amilt@ipb.pt), [2]CBMA- Centre of Molecular and Environmental Biology, Department of Biology, University of Minho, Campus de Gualtar, 4710-057 Braga, Portugal,[3]CIBIO/InBIO- Research Centre in Biodiversity and Genetic Resources, University of Porto, 4485-661 Vairão, Portugal,[4]CITAB-UTAD- Centre for Research and Technology of Agro-Environment and Biological Sciences, University of Trás-os-Montes and Alto Douro, 5000-801 Vila Real, Portugal,[5]CIIMAR/CIMAR- Interdisciplinary Centre of Marine and Environmental Research, University of Porto, Matosinhos, Portugal, and [6]CEABN/InBio, Centro de Ecologia Aplicada "Professor Baeta Neves", Instituto Superior de Agronomia, Universidade de Lisboa, Tapada da Ajuda, 1349-017 Lisboa, Portugal

The freshwater biodiversity of Mediterranean areas is severely threatened by several human activities, including habitat loss and fragmentation, river regulation, pollution, overexploitation, climate change and introduction of invasive alien species (IAS). These human disturbances drastically affect native fish and mussel populations and possibly conservation measures are needed to implement to revert major problems. Particularly at risk may be affiliate species such as freshwater mussels (Bivalvia, Unionoida) that have an obligatory parasitic phase of a short-term larval stage on fish host gills and fins. In Iberia, the identification of effective fish hosts for unionid species and the impact of IAS remain unclear. In this study, field and laboratorial studies were performed to assess the fish hosts for *Anodonta anatina*, *Unio delphinus* and *Potomida littoralis*. For *in situ* monitoring done in Douro basin (Northern Portugal), results showed an effective infestation for native (*Luciobarbus bocagei*, *Squalius carolitertii, Squalius alburnoides* and *Pseudochondrostoma duriense*) but also for non-native (*Lepomis gibbosus*, *Alburnus alburnus*, *Gambusia holbrooki* and *Gobio lozanoi*) fishes. The highest infestation rate and prevalence were observed for *L. bocagei* and *S. carolitertii*, but also for *L. gibbosus*. However, in laboratorial experiments significant differences were found. In fact, for *U. delphinus* and *P. littoralis* only native fishes (mainly endemic cyprinids) showed to be effective hosts, since viable juveniles were produced. *A. anatina* exhibited a more generalist behavior, with a wide range of native (endemic cyprinids of north and south Iberia) and non-native (*Australoheros facetus, Oncorhynchus mykiss, Esox lucius, Phoxinus phoxinus, A. alburnus* and *G. lozanoi*) fish host species. Overall, our results showed: 1) the importance of native fish species for the maintenance of a good conservation status of native unionids; 2) some invasive fish species can also function as hosts of *A. anatina* and 3) basic ecological data using field monitoring and laboratorial experiments are fundamental to design future conservation measures such as reproduction in captivity and propagation of threatened unionids.

Financial support by FCT-PTDC/AGR-FOR/1627/2014. Also funded by Project 3599 - Promoting Scientific and Technological Development Production and the Constitution of Thematic Networks (3599-PPCDT) reimbursed by FEDER.