O.16:1

UPDATE OF THE NATIONAL INVENTORY OF ICHTHYOLOGICAL BIODIVERSITY AND DEVELOPMENT AND IMPLEMENTATION OF THE SPANISH FISH DATABASE: A COLLABORATIVE PROJECT LED BY SIBIC

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Among vertebrates, freshwater fishes are one of the most imperilled groups. This is true especially for the Iberian Peninsula, where this group includes a high number of endemic and threatened species. Despite the large number of research and technical studies done on freshwater fishes, the data is disperse and not available for public use, for management or research. The main objective of the project is to compile the information of freshwater fishes found in research centres, public administrations, and available on the internet (technical reports, scientific publications, among others). Other goals include to create a database for the use of general public, a database for the use of managers and to create a web platform to facilitate the access to the information. The databases will integrate information about abundance, habitats, historical evolution, population trends, major threats, conservation actions, human impact (pollution, water extraction among others) and fishing intensity. The importance of the project includes the need to have accurate information on species distribution to help managers develop monitoring plans and conservation strategies. Moreover, the historical information on species distribution will help in the analysis of freshwater fish populations and the conservation status of the group. The project will also provide data for the Spanish National Inventory of natural heritage and biodiversity. This project is funded by Fundación Biodiversidad and Iberian Society of Ichthyology.

O.16:2

LIFE SEGURA-RIVERLINK: AN IMPLEMENTATION OF A *GREEN INFRASTRUCTURE* APPROACH TO RECOVER THE LONGITUDINAL CONNECTIVITY IN A HIGHLY FRAGMENTED RIVER BASIN.

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Habitat connectivity is a central factor in shaping aquatic and riverine biological communities, however, few tools exist to maintain and recover this attribute at large scale in fluvial systems. The SEGURA RIVERLINK is a LIFE

Programme project which aims to promote and support the environmental recovery of an important sector of the Segura River Basin (more than 50 Km long in its main river). The main purpose is to demonstrate and validate management measures for the development of a *Green Infrastructure* approach into the context of Mediterranean river basins characterized by a high impact in their connectivity. The project will recover the longitudinal connectivity removing a significant number of artificial barriers to restore fish passage and will also support other best practices of riverine restoration focused on the riparian forests. Restoration actions will include the removal of small weirs and the construction of effective fish passage systems. Monitoring activities will assess the performance of these actions with the hope of validating the *Green Infrastructure* approach to river basin management and its possible extension to the official River Basin Management Plan of the Segura River Basin.
The project will also develop a Land Custody Network to integrate private owners in the river management and in agreeing good practices, looking for increasing the links between the river and adjacent lands.
Outcomes: This project will protect local aquatic and riverine habitats, allow fish migration along an important sector of the Segura River, improve ecosystem services, build a cadre of scientific and social knowledge to improve river management quality and help local and regional governments to comply with EU Water Framework Directive and to facilitate the implementation and enforcement of EU policy and legislation on biodiversity conservation.

O.16:3

REHABILITATION OF RIVER MONDEGO FOR THE DIADROMOUS FISH: AN INTEGRATED MANAGEMENT APPROACH

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The conservation of diadromous fish populations depends upon the implementation of management actions that are spatially representative of these species ecological needs. Freshwater, estuarine and coastal habitats are administratively linked to different governmental agencies, often belonging to different ministries, which makes the application of an integrated management plan particularly difficult, especially when it involves changes in fisheries regulations, rehabilitation of habitats and poaching eradication.
The main goal of this project, presently ongoing in the Mondego river basin, is the implementation of an integrated management approach that will insure the compatibility between the conservation of the diadromous fish, and all the other water uses in this watershed namely, hydroelectricity production, water abstraction, professional fisheries and different recreational purposes. This project was boosted by the recent construction (i.e. 2011) of a fish passage at the Açude-Ponte dam at Coimbra, which enabled the migratory fish to surmount this impassable dam built in 1981. The main action of this project involves building naturalized fish passages in other five weirs, four of which are located upstream from Açude-Ponte dam, and at the same time contribute to a sustainable fishery of sea lamprey, allis shad and twaite shad. Several studies are also being performed regarding the management of the European eel population in this river basin. Also, this project intends to increase the public awareness concerning the conservation of diadromous fish, as well as the reduction of poaching and illegal fishing in River Mondego. The project is coordinated by the University of Évora, and includes as partners the Portuguese Environment Agency (APA), Portuguese Fisheries Agency (DGRM), the Institute for Nature Conservation and Forestry (ICNF), National Fisheries Institute (IPMA), three Municipalities (Coimbra, Vila Nova de Poiares and