



FRESHWATER INVERTEBRATES: MONITORIZATION AND ASSESSMENT OF ECOLOGICAL STATE

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When assessing the state of preservation of a specific area, it is necessary to assess the situation of its continental water masses (lakes and rivers). For this, we must refer to the European Union Water Framework Directive (Directive 2000/60/EC), an important change in concepts by integrating the state of the aquatic ecosystem in the water quality concept. This Directive legally introduces organisms inhabiting these water masses as quality indicators of the ecological state. Among these biological indicators (bio-indicators) included in the WMD are: phytobenthos, macrophytes, fishes and aquatic macroinvertebrates. Use of the latter as bio-indicators presents various advantages, as both a fundamental part of the trophic networks and being sensitive to environmental stress due to anthropic disturbances, as well as being present in the majority of continental water masses, including those which naturally like fish or whose presence is very rare. This has meant aquatic invertebrates have been widely used previously in Europe and the Iberian Peninsula to assess water quality and today the ecological state of aquatic ecosystems. The most important groups of macroinvertebrates used in relation to their sensitivity regarding anthropic disturbances likewise the different sampling methods and indexes used in the Iberian Peninsula to monitor and assess the ecological state of continental waters are commented on, from the IBMWP widely used in most of the Peninsula to the multimetric methods currently being applied and developed.

CONGRESS ON

FRESHWATER ECOLOGY IN PROTECTED NATURAL SPACES, FROM AWARENESS TO APPLICATION

8th, 9th and 10th February 2012

Txingudi Wetlands – Plaiaundi Ecological Park
Irun · Gipuzkoa · Spain

INFORMATION AND REGISTRATION

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PROGRAM

Wednesday 8th February	
Morning 9:30 a.m. – 1:00 p.m.	Reception of attendees and handing out documentation (from 9:00 a.m. to 9:30 a.m.). Welcome, presentation and inaugural conference. Inauguration of the exhibition “ <i>Odonata. Water wings</i> ” by Iñaki Mezquita Guided visit through the Txingudi Wetlands. .
Afternoon 3:30 p.m. – 7:00 p.m.	TOPIC 1: Global change and alteration of the species aquatic cycle Consequences of global warming on continental aquatic systems. <i>Brian Moss. Director of the Biological Sciences Faculty of Liverpool University.</i> Vulnerability of aquatic ecosystems against global change factors. <i>Presentation Carrillo Lechuga. Department of Ecology. Granada University.</i> TOPIC 2: Ecology applied to management and handling of freshwater systems The role of toxic microalgae in Doñana National Park and their impact on the massive deaths of aquatic birds: early warning network and management strategies. <i>Eduardo Costas. Madrid Complutense University.</i> Wetland management in Peñalara Natural Park. <i>Ignacio Granados. Peñalara Natural Park Research and Management Centre. Community of Madrid.</i>
Thursday 9th February	
Morning 9:30 a.m. – 1:00 p.m.	TOPIC 3: Environmental indicators Freshwater invertebrates: monitorization and assessment of ecological state. <i>Antonio Torralba. Oviedo University Energy, Environment and Climate Change Cluster.</i> Aquatic birds as wetland bioindicators. <i>Andy J. Green. Department of Applied Biology, Doñana Biological Station, Senior Council of Scientific Research.</i> TOPIC 4: New challenges in water ecology research Resurrection ecology: Egg banks resistant to lacustrine sediment and population regeneration. <i>José M^a Conde Porcuna. Department of Ecology. Granada University.</i> Role of coastal wetlands in the CO₂ exchange with atmosphere: contribution of Doñana National Park aquatic compartment. <i>Gabriel Navarro. Andalusian Institute of Marine Sciences. CSIC.</i>
Afternoon 3:30 p.m. – 7:00 p.m.	TOPIC 5: Invading exotic species Doñana, a wetland laboratory open to the world. <i>Fernando Hiraldo Cano. Doñana Biological Station. Senior Council of Scientific Research.</i> CLOSING ACT Conference and showing of the documentary “Invaders”. <i>Luis Miguel Domínguez.</i>
Friday 10th February	
Morning	Technical visit – to be decided.

PRESENTATION OF PROPOSALS FOR POSTERS UNTIL 30TH DECEMBER 2011