

Freshwater Fish Specialist Group Newsletter • 2012 / 1



Pangio ammophila, a new species of eel-loach described by FFSG member Rajeev Raghavan and colleagues

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Freshwater Fish Specialist Group Annual Meeting

By Peter Burgess

For a few days in early May, sixty-five (65) of the world's leading freshwater fish specialists assembled in the historic town of Chester. This international delegation, representing 18

countries, gathered for the annual meeting of the FFSG: its theme for 2012 being "Global challenges in caring for and conserving freshwater fishes".



Participants of the FFSG meeting

32,000 and counting...

One astounding fact to emerge from the meeting was the sheer number of fish species – marine and freshwater –

that have been discovered and described in recent years. For example, since 1976, nine thousand (9000) species have been added to the growing list of known fish species living today (currently around 32,000 species) - that averages almost 5* new fish species every week! And there's no sign of a slow-down: for in the first four months of this year, a further 75 new species of fish were described, most being freshwater species.

*4.8 to be more precise.



Species in decline

While new fish species are continually being discovered, sadly many others are facing extinction. According to the IUCN's "Red list" for fish (Red lists are inventories of the World's threatened animals and plants), over 75% of threatened fishes are freshwater species.

Major threats to the World's freshwater fish populations were discussed during the meeting, and included: water pollution; deforestation; over-fishing; and water extraction for irrigation. Case studies were presented for several important freshwater fish regions including Ghana, The Gambia, Brazil, Mexico, Mekong Basin, India, Japan, Arabian Peninsula, and Australia. Clearly, freshwater fishes are under threat in all parts of the globe.

The full article will be available in the next issue of the Practical Fishkeeper



Freshwater Fish Specialist Group represented at IUCN SSC Chairs' meeting

By Katalin Csatadi & James Lewis

Programme Officers, IUCN SSC Freshwater Fish Specialist Group & Amphibian Specialist Group

Along with many IUCN-SSC Specialist Groups, Professor Gordon McGregor Reid, Chair and Dr Katalin Csatadi, Programme Officer of FFSG travelled to Abu Dhabi to participate in a major (once in 4 years) IUCN-SSC Chairs Meeting, in 19-28 February 2012. The intense agenda included: a SSC Freshwater Conservation Sub Committee Meeting and Workshop; a subgroup meeting on Conservation Threat Assessments for Fishes in the Western Hemisphere; a subgroup meeting on Integrating Activities of Freshwater and Marine Fish Groups and participation in several technical workshops including on Revised Criteria for Captive Breeding and Re-introduction, and on Strategic Conservation Planning.



IUCN SSC Chairs' meeting participants













Freshwater Conservation Subcommittee meeting



Proposed logo of FSCS

Chaired by Mexico's Prof Topis Contreras MacBeath, the Freshwater Conservation Subcommittee was founded in 2009. The steering committee currently involves 14 members that are professionals with various background and experience. Since the foundation of the committee, members have met once or twice annually to further discuss the role and actions of FCSC. This years' meeting gave the members the

opportunity to 1) input to the strategic framework of IUCN, 2) finalize the mission and vision of the group, 3) carry out a stakeholder analysis and 4) outline the initial projects of the group.

The final vision of the group is now: Stemming the loss of freshwater biodiversity at a global level. The main mission points were lined up and a mission statement is under construction. The stakeholder analysis showed that the composition of the Steering Committee is good, however further members need to be recruited to assure that important/influential organisations are being represented. The members agreed that representatives of some important organisations (such as: Birdlife International, World Commission on Dams, and Wetlands International) are going to be invited occasionally but will not be organic part of the steering committee.

Over twenty project ideas have arisen in the topics of knowledge, policy, and action during the session dedicated for this exercise and six of these were put to a further stage when the project ideas are going to be written up and evaluated. The possible future programs include development of a Census of Freshwater Life, analyses of impacts of dams, invasive species, and studies of protected

areas and identifying opportunities for ex-situ conservation.



Members of FCSC participating the Abu Dhabi meeting

The next meeting of the FCSC committee is going to happen online to ensure the continuity of the work.





Subgroup meeting on Integrating Activities of Freshwater and Marine Fish Groups

Members of several Specialist Groups, such as the Shark, the Salmon, the Snapper, Seabream & Grunt, the Seahorse & Pipefish, the Sciaenidae, the Tuna & Billfish, the Hawkfish & Sandperch and the Freshwater Fish Specialist Group got together to identify issues of possible joint efforts for the marine/freshwater fish groups. A list of 10 possibilities were outlined for the group to discuss and it was suggested that we ask what is the biggest problem we face in getting conservation of fishes as this would help us identify what we should be trying to do collaboratively. The group recognized there are many such problems – most significantly, that fish species are not viewed as beautiful or charismatic by the public, and they are viewed mainly as agricultural product. This issue addressed one of the initial points and formed the main subject of discussion for the meeting. It was suggested that raising the status of fish should be done by 1) Influencing fisheries sectors and polices through getting in touch with the UN Food and Agricultural Organisation and key people in governments and offering them fish conservationists' expertise in protecting fisheries and by 2) Public outreach. A committee, consisted of freshwater and marine experts was put together to start working on these issues.

About IUCN and the SSC Chairs' meeting

IUCN, the <u>International Union for Conservation of Nature</u> is the world's oldest and largest global environmental organisation. Out of its six commissions it is the Species Survival Commission that takes approximately 60% of the organisation. The Commission is chaired by Simon Stuart, based in Bath, UK. The SSC includes several various working groups – taxonomic Specialist Groups (for example the FFSG), thematic Specialist Groups (such as the Sustainable Use Specialist Group), Red List Authorities (such as the Seahorse, Pipefish & Stickleback) and Regions (for example the Southeast Asia Region).

The IUCN-SSC Chairs' meetings main purpose is to provide attendees with an important opportunity to network, build partnerships and learn about the vast array of work currently underway across the SSC network. This years meeting (and in fact the meeting in 2008) became possible thanks to the generous support from the Environmental Agency of Abu Dhabi and the Mohamed bin Zayed Species Conservation Fund.





Over three hundred scientists, more then ever, gathered together for this years meeting. Apart from members of the various Specialist Groups, representatives of zoos, NGOs and for-profit organisations contributed to the meeting as well. The FFSG was represented by Gordon McGregor Reid, Chair and Katalin Csatadi, Programme Officer. Representing the Freshwater conservation Subcommittee, Conservation International and IUCN, Tolilitzin Contreras MacBeath, Ian Harrison and Will Darwall, members of FFSG Steering Committee participated in the conference as well.

The meeting was an invaluable opportunity for networking, meeting old friends and make new ones all with a focus on driving forward species conservation in the coming years. A huge thank you goes out to all those who made this opportunity possible and especially the SSC staff who worked tirelessly to make the meeting such a success.



Arabian Oryx (*Oryx leucoryx*), a conservation success story in the UAE: from Extinct in the Wild to Vulnerable. © Topis Contreras MacBeath













Second Workshop for Evaluation of Extinction Risk of Brazilian Freshwater Fishes

By Roberto E. Reis

FFSG Regional Chair for South America

Ichthyologist, conservation biologists, and IUCN Officers met from May 21st to 25th in Iperó, São Paulo State, at the National Academy of Biodiversity in a workshop designed to evaluate the extinction risk of fish species in the upper Paraná and Iguaçu rivers of south-eastern Brazil, and selected families of Amazonian fishes. The workshop was conducted by the Chico Mendes Institute of Biodiversity Conservation (ICMBio),



Participants of the Second Workshop for Evaluation of Extinction Risk of Brazilian Freshwater Fishes

an organ of the Brazilian Ministry of Environment, and coordinated by two ICMBio centrers, the National Center for Research and Conservation of Continental Fishes (CEPTA) and the

One of the working groups working at the National Academy of Biodiversity in Iperó, São Paulo

National Center for Research and Conservation of Amazonian Biodiversity.

The 72 participants of the workshop were divided into six groups according to their region and expertise (catfishes, tetras and other groups) and worked separately during the five days. Every morning all experts gathered together to check and validate the assessments. At the end, 424 fish species were evaluated, 53 being categorised as threatened, being seven as Critically Endangered, 35 as Endangered, and 11 as Vulnerable. In addition, 10 species were listed as Near Threatened, and 51 were found to be Data Deficient, what points to the need of additional investigations on their biology, ecology, fisheries and conservation status.



This was the second workshop, the first having occurred in October last year. The entire freshwater fish fauna of Brazil is to be assessed until the end of 2014 and several additional workshops are being planned. The next workshop is now planned to occur later this year, from 5 to 9 November and fishes from the Paraíba do Sul and nearby coastal rivers, and a some additional fish families from the Amazon will be assessed.













IUCN Anguillid Specialist Sub-Group

By Matthew Gollock

Chair, IUCN SSC Anguillid Specialist Sub-Group

For 30 years or more there has been growing concern amongst stakeholders in relation to the decline in recruitment and/or populations of a number of species within the family Anguillidae – referred to as 'eels'. There are various causal factors that have been linked to the declines in eels that include barriers to migration; disease; pollution; changes in oceanic currents; exploitation; and habitat loss. Due to their complex, catadromous life cycle (feeding and growing in a range of salinities, and breeding in the ocean) it is generally believed that these pressures will be having synergistic and/or cumulative effects.

Beyond the growing awareness that a number of eel species are exhibiting a decline in recruitment and/or populations, there is a greater concern in relation to our dearth of knowledge of the biology of many of these species. These knowledge gaps and the lack of long-term datasets are ultimately hampering conservation and management efforts. Further, the catadromous nature of eels means that management and conservation can be extremely difficult – the vast majority of efforts having focussed in the freshwater environment.

The newly established Anguillid Specialist Sub-Group operates as a sub-group of the FFSG, and aims to coordinate effective conservation and management activities to the benefit of eel species, as well as acting as advocates and increasing awareness of the threats to them. The

ASSG will serve as an expert body to work with the IUCN Species Programme Freshwater Biodiversity Unit and Red List Unit to help conduct Red List assessments for eels, and regularly review the conservation status of the species. Additionally it will act as global network for those working in the field of eel conservation; stimulate and promote scientific research on the ecology of, and threats to, eels; support CITES, at both the national and international level, in eel related issues; and work governments, research institutions, conservation organisations and communities to develop and implement effective conservation measures.



European eel (*Anguilla anguilla*). © David Curnick













Welcome and Good bye

Dr Rema Devi, Chair of the South Asian region has retired from her position. We would like to thank her for her years of dedication for FFSG and wish her

a nice, well deserved rest. The new Chair of the group has been identified, further news to follow after official appointment.

Dr Gene Helfman has resigned from his position as Co-Chair of the North America region. We would like to express our gratitude to Gene, a 'founding father' of freshwater fish conservation and a huge source of

inspiration to us for his work with FFSG. We have started to search for a new Co-Chair for the region.

Dr Junxing Yang, professor of ichthiology has accepted the post of Regional Chair to

China, replacing the late Fang Kullander. Dr Junxing went to school together with Fang and he took the position with gratitude and he is looking forward to working with FFSG.





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http://ffsg.wufoo.com/forms/freshwater-fish-specialist-group-registration-form/









FFSG is a joint partnership between IUCN-SSC and Wetlands International. FFSG is generously supported by Chester Zoo, The North of England Zoological Society.