ACTION FOR ASAP FISHES

Developing a plan for urgent conservation action for Critically Endangered freshwater fishes in Southeast Asia

2020 - 2021

A project funded and coordinated by:
The IUCN SSC Asian Species Action Partnership (ASAP),
Shoal and Mandai Nature

IUCN SSC Species Survival Commission

ASAP! ASIAN SPECIES ACTION PARTNERSHIP

Shoal

Mandai NATURE

Southeast Asia is considered the region with the highest number of species facing immediate extinction. In response, **the IUCN SSC Asian Species Action Partnership (ASAP)**[1] was established to address the extinction risk facing the most threatened (listed as Critically Endangered on the IUCN Red List of Threatened Species™) land and freshwater vertebrates found in Southeast Asia.

With over 80 Critically Endangered species, freshwater fishes are currently the largest group of ASAP species. The fishes range from the some of the smallest in the world including liquorice gouramis (genus *Parosphromenus)*, to some of the largest, such as the Mekong giant catfish (*Pangasianodon gigas*). The threats to these fishes are varied and include impacts from agriculture (including land habitat loss and pollution), aquatic habitat loss, invasive species, overharvesting and water flow changes.

Fishes are also the most often neglected of the ASAP species with presently very little targeted conservation action underway. Aquatic species in general are overlooked globally amongst conservation actions and many of these species need urgent attention. In 2019 **Shoal**[2] was launched to escalate and accelerate action for threatened freshwater species and eliminate this gap in the global effort.

Undertaking the required amount of action individually for each of the ASAP fish species would be likely to be inefficient, if even possible. An action plan is required (following the IUCN One Plan Approach integrating both *in situ* and *ex situ* conservation needs) firstly to ascertain and set priorities, secondly to identify the most efficient methods for securing these fish populations, and finally to identify appropriate implementation methods.

The project will be housed in Mandai Nature, who has seconded one of its staff to the project and is hosting ASAP. **Mandai Nature** was recently established to further advance efforts in nature conservation and climate change mitigation in Asia by the parent entity of Wildlife Reserves Singapore (WRS) and Temasek. Mandai Nature will strenghten WRS's leadership in the conservation of Southeast Asian threatened species and build on the numerous prioritisation and planning processes undertaken for other species groups.

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1 The IUCN SSC Asian Species Action Partnership (ASAP) is an inter-institutional Partnership convened by the International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC), which focuses attention on a region that, without more serious conservation intervention, will see the demise of much of its unique diversity www.speciesonthebrink.org

2 Shoal is a new partnership aimed at engaging a wide range of organisations to accelerate and escalate action to save the most threatened fish and other freshwater species www.shoalconservation.org

Cover: Mekong Giant Catfish *Pangasianodon gigas* ©David Tan/Wildlife Reserves Singapore
Nyanasengeran Top: *Parosphromenus alfredi* ©Wentian Shi
Bottom: *Parosphromenus phoenicurus* ©Wentian Shi

The project

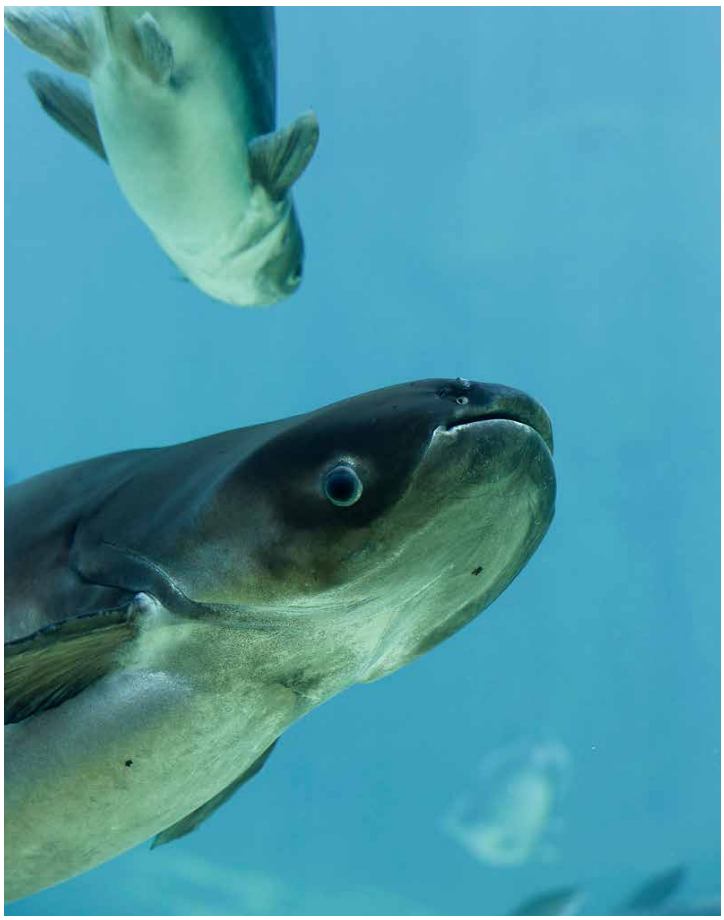
Project objective:
To produce an action plan that sets out clear, assigned, budgeted, practical steps for immediate and medium-term actions for ASAP fishes. This Action Plan will form the basis of a new programme of work under the Shoal–ASAP–Mandai Nature partnership.

Project overview
The Action Plan for the urgent conservation of ASAP fish species will be developed through expert input alone. There will be no further research or field surveys conducted. The project will facilitate implementation of critical actions as soon as possible. The project will be led and coordinated by representatives from the three project partners (ASAP, Shoal, Mandai Nature). A core team of experts will be identified to provide information, advise on the prioritisation and design the final set of actions. Other experts will be consulted, and the project will conclude with the action plan presented in a final report.

Data and information collation
The primary process of the project is to collate, sort and analyse the information available on each of the species. The aim is to provide sufficient information to understand the most important and efficient conservation strategies required and how these may be related between species, such as suitable groupings of species for actions thematically, for example geographically, threat-based etc. These data are being held in a shared database. Initial data have been collated for each species based on information from the IUCN Red List, but more information, much of it unpublished, is now available for many of the species, and will be further assessed and analysed. Data gaps will be filled, as far as possible, by expert inputs. It is assumed that there will still be many fundamental data gaps. Filling many of these gaps will undoubtedly be part of the final set of proposed actions.

Planning and prioritisation
As the data are being collated and sorted, the project team will begin to analyse the information and prepare a process for developing an action plan. Towards the end of the process, the core team of experts will meet to confirm the data (if necessary) and to set conservation priorities for the fishes. The purpose of this workshop will be to identify priority actions in the short, medium and long term, and not as an information compiling exercise.

Right: Giant Carp *Catlocarpio siamensis*



Final output

The project will conclude during 2021 with a written action plan based on the conclusions of the meeting after expert review. The action plan will include immediate, budgeted priority conservation actions assigned to named parties wherever possible for implementation to specified timelines.

Project team and advisors

The project team, comprising of representatives from the three project partners (ASAP, Shoal and Mandai Nature), will be coordinating the project. Experts will be consulted to oversee the quality of the project and to develop the action plan. Expertise will be drawn from the IUCN SSC Freshwater Fish Specialist Group and a core team of advisors will be invited to participate in the data collation and prioritisation process. Other experts from commercial breeding facilities, will be consulted on specific areas of expertise as and when required.

Long-term sustainability

To ensure longer term sustainability and improve capacity around conservation of freshwater fishes in Southeast Asia, Nathaniel Ng, a research officer from Mandai Nature has been appointed to work closely with the consultant on each of the stages of this work with the additional aim of building the capacity of the individual to take on a potential future role of overseeing freshwater fish conservation within Mandai Nature as part of the Shoal–ASAP–Mandai Nature partnership.

Clockwise from top: Jullien's Golden Carp *Probarbus jullieni* ©Wildlife Reserves Singapore/David Tan; *Parosphromenus alfredi* ©Ji Yuhan; *Parosphromenus ornaticauda* ©Wentian shi; Mekong Giant Catfish *Pangasianodon gigas* ©Wildlife Reserves Singapore/David Tan

Back page: Mekong Giant Catfish *Pangasianodon gigas* ©Wildlife Reserves Singapore/David Tan

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