Seahorse, Pipefish and Seadragon Specialist Group

IUCN Species Survival Commission

2020 Report



Amanda Vincent

Chair

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Red List Authority Coordinator

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Location/Affiliation

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Number of members

37

Social networks

Facebook: Seahorse, Pipefish and Seadragon

Specialist Group

Instagram: IUCNSeahorse Twitter: @IUCNSeahorse Website: www.iucn-seahorse.org



Mission statement

To promote the long-term conservation of the world's Syngnathiform fishes (seahorses, pipe-fishes, seadragons and their relatives) through the illumination and alleviation of threats to wild populations and their ocean habitat.

Projected impact for the 2017-2020 quadrennium

The Seahorse, Pipefish and Seadragon Specialist Group (SPS SG) will seize these four years to understand and help reduce pressures on syngnathids in at least three geographic areas -Southeast Asia, South Africa and Atlantic South America – that are home to species of particular conservation concern. We will do this through integrated research, management support and policy development. We plan a special effort to urge reduction in perverse incentives (such as fuel subsidies) and to foster enhanced enforcement of existing laws. We hope other Specialist Groups will join us in promoting such changes, which would be of broad benefit. At the same time, we will be making a real effort to reduce the number of our species that are assessed as Data Deficient on the IUCN Red List by expanding our knowledge base. These four years will further see us grow our membership, with respect for diversity of sex, ethnic background, taxonomic focus and technical experience. We are particularly keen to engage youth and non-scientists to add to our effectiveness. Using all members, we plan to raise the profile of our species to help grow the constituency of their supporters.

Targets for the 2017-2020 quadrennium

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Red List: (1) monitor and evaluate priority species (redo Red List assessments); (2) redo Red List assessments for priority Data Deficient species.

Research activities: (1) marshal obscure/grey information on Data Deficient species; (2) promote research agenda for all species; (3) collate new data and knowledge.

Plan

Planning: (1) complete priority action statement for Knysna Seahorse (*Hippocampus capensis*; Endangered – South Africa); (2) complete priority action statement for White's Seahorse (*Hippocampus whitei*; Endangered – Australia); (3) complete priority action statement for Estuarine Pipefish (*Syngnathus watermeyeri*; Critically Endangered – South Africa); (4) complete priority action statement for Luzon River Pipefish (*Microphis pleurostictus*; Endangered – Philippines); (5) complete priority action statements for Vulnerable species; (6) monitor and evaluate perverse subsidies for Southeast Asian marine environments; (7) determine priority Data Deficient species.

Policy: (1) select priority regions in which to promote greater implementation of rules and laws that affect syngnathids; (2) create scoping document on implementation for most relevant rules and laws that affect syngnathids in the following regions: Southeast Asian marine, South African estuarine, India and Southeast Asian freshwater, and Brazil and Argentina marine; (3) disseminate scoping document to resource managers and policy makers; (4) complete matrix on perverse incentives that affect syngnathids in Southeast Asian marine environments; (5) complete scoping document on perverse incentives for Southeast Asian marine environments.



Map of all our IUCN SSC SPS SG members around the world Photo: Lily Stanton

Network

Capacity building: mentor next generation leaders/succession planning.

Membership: grow the SPS SG membership in strategic ways by taxon, region, discipline, etc.

Proposal development and funding: source funding for SPS SG programmo officer and

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Synergy: (1) collaborate with aquariums; (2) collaborate with multiplier organisations; (3) tighten links with other IUCN units; (4) develop strategic partnerships/synergies with multiplier organisations.

Technical advice: develop urgent action response capacity.

Communicate

Communication: (1) catalyse campaign to effect change in Southeast Asian marine environments; (2) develop outreach capacity for syngnathid conservation issues; (3) create synopsis of issues for donors, policy makers and the public; (4) deploy social media campaign; (5) create a taking action toolkit; (6) create a set of communication tools for the SPS SG.

Scientific meetings: (1) catalyse joint meetings with Specialist Groups for other marine taxa; (2) hold annual meetings of the SPS SG.

Activities and results 2020

Assess

Red List

i. Draft assessments for priority Data Deficient species, Short-snouted Seahorse (*Hippocampus hippocampus*) and Long-snouted Seahorse (*H. guttulatus*), are under review and will be submitted and updated to the IUCN Red List of Threatened Species in 2021. (KSR #1, 32)

Research activities

- i. Species focal points were assigned for our threatened species including: Estuarine Pipefish, Knysna Seahorse, White's Seahorse, Tiger-tail Seahorse (*H. comes*; Vulnerable), Spotted Seahorse (*H. kuda*; Vulnerable), Patagonian Seahorse (*H. patagonicus*; Vulnerable), Three-spot Seahorse (*H. trimaculatus*; Vulnerable), Long-snout Seahorse (*H. reidi*; Near Threatened). (KSR #1, 32)
- ii. New data and knowledge were collated in a number of regions across the world through: (1) continued monitoring, community outreach and research in Argentina, Australia, Brazil, Greece, France, Kenya, Malaysia, Mozambique, Portugal, South Africa, and the US; (2) SPS SG members published a paper describing a new species of pipefish in Australia, the Red Widebodied Pipefish, *Stigmatopora harastii*; (3) SPS SG members published a paper describing a new species of pygmy seahorse, the Sodwana Pygmy Seahorse, *Hippocampus nalu*, in South Africa. (KSR #12)

Plan

Planning

- i. A priority action statement for the Endangered Knysna Seahorse was completed in 2018 but was revised with additional information in 2020. Local government and stakeholders were invited to engage and contribute to the revised priority action statement.

 (KSR #15)
- II. A priority action statement for the Critically Endangered Estuarine Pipefish was completed in 2018 but was revised with additional information in 2020 including new data indicating main threats. Local governments and/or stakeholders were invited to engage and contribute to the revised priority action statement. SPS SG member and our regional focal point for Africa completed Green List assessments in South Africa. (KSR #15)
- **iii.** Although a preliminary list of priority Data Deficient species was drafted, we are hoping to expand and finalise this list in 2021 with input from Specialist Group members to determine the number of priority Data Deficient species where we have new knowledge or data to warrant conservation reassessments. (KSR #15)

Policy

i. The implementation of relevant rules and laws that affect syngnathids was documented for Argentina, Brazil and South Africa. A large review funded by the IUCN Internal SSC Grant



Zoom photo of members attending our online SPS SG meeting in May 2020 Photo: Lily Stanton

documented national conservation assessments and legislation for the over 130 countries where syngnathids are found. This review will be completed and added to our SPS SG website as a living document in 2021. (KSR #26)

Network

Capacity building

i. New members were appointed as regional or thematic focal points: (1) Dr Nuno Monteiro as the thematic focal point for climate change; (2) Graham Short as the thematic focal point for taxonomy and evolutions; (3) Dr Louw Claassens as regional focal point for Africa; (4) Dr Miguel Correia as the regional focal point for Europe; (5) Dr David Harasti as the regional focal point for Oceania; (6) Dr Adam Lim as the regional focal point for Southeast Asia; (7) Dr Tacyana Oliviera as the regional focal point for South America; and (8) Dr Xiong Zhang as the regional focal point for South Asia in the IUCN SSC Seahorse, Pipefish and Seadragon Specialist Group. (KSR #17)

Membership

i. We have eight new members from Australia, Canada, Kenya, Mexico, Peru, and the US with specialities ranging from Aquaculture, Taxonomy and Evolution, Trade, eDNA, Seadragons and Ghost pipefishes.

Synergy

- i. One new member was appointed from the Birch Aquarium. Consultations took place with Association of Zoos & Aquariums (AZA) members on IUCN World Conservation Congress (WCC) motions. (KSR #25, 29)
- ii. We have collaborations with over 35 multiplier organisations, including the AZA and the home institutions of all our IUCN SPS SG members. Connections were also made through promoting and endorsing multiplier organisations' campaigns and messages on social media (e.g., Twitter). (KSR #29)
- III. Connections made with IUCN units include: (1) discussions with the Chair of the IUCN Conservation Translocation Specialist Group for advice on developing guidelines for the release of captive-bred syngnathids; (2) communications with the Freshwater Fish Specialist Group to determine researchers who may be working on freshwater pipefish species; (3) promoting the IUCN SSC Marine Conservation Committee, IUCN SSC Cetacean Specialist Group and IUCN SSC Shark Specialist Group on their submitted IUCN WCC 2020 motions (all now accepted as Resolutions). Motions (now Resolutions) were actively supported through social media and include: Resolution WCC-2020-Res-023: Reducing impacts of incidental capture on threatened marine species; Resolution WCC-2020-Res-025: Ecosystem

conservation, restoration and remediation in the ocean; Resolution WCC-2020-Res-091: Global Conservation of rhino rays (Rhinidae, Glaucostegidae, Rhinobatidae); Resolution WCC-2020-Res-094: Safeguarding the Endangered narrow-ridged finless porpoise (Neophocaena asiaeorientalis) in the Yellow Sea; Resolution WCC-2020-Res-095: Conservation of seahorses, pipefishes and seadragons (family Syngnathidae); Resolution WCC-2020-Res-107: Reducing the impact of fisheries on marine biodiversity. (KSR #29)

Technical advice

i. SPS SG assisted and connected people/ organisations to address urgent requests and concerns for seahorse conservation. Plans are in place to develop guidelines on how to deploy our urgent action response in 2021. We connect SPS SG members with members of our citizen science programme iSeahorse (Ambassadors and Trends Monitors) as well as general public requests to address pressing conservation concerns and provide them with tools and resources to increase their capacity and knowledge and capacity to respond. (KSR #18)

Communicate

Communication

- i. We developed and increased outreach capacity for syngnathid conservation issues by: (1) creating briefing documents and videos on 'bottom trawling' and 'why seahorses?' through Project Seahorse initiatives; (2) raising the profile for IUCN Motion 111, now Resolution WCC-2020-Res-095: Conservation of seahorses, pipefishes and seadragons (family Syngnathidae), and all marine-related IUCN WCC motions. (KSR #28)
- ii. The now accepted Resolution WCC-2020-Res-095: Conservation of seahorses, pipefishes and seadragons (family Syngnathidae) will serve as a vital tool providing a synopsis of issues for donors, policy makers and the public to both raise awareness and catalyse action. (KSR #14)
- iii. Our Specialist Group remains active on social media through Twitter, Instagram and Facebook, where we share our many successes and achievements including four blogs covering research on the Critically Endangered Estuarine Pipefish in South Africa, documenting our SPS SG meeting in May 2020, and bringing attention to IUCN WCC Resolution 95 on seahorses and how seahorses are an index of global fishing pressure. A further three blogs were created to highlight amazing species observed through our iSeahorse community science platform. Significant communication and outreach through regular posts on social media serve

to promote the great conservation, research and outreach activities made by our SPS SG members. These posts showcase the work they are doing around the world to protect these magical fishes. (KSR #28)

Scientific meetings

- i. We met with Chair of the IUCN SSC Conservation Translocation Specialist Group to discuss updating our guidelines and protocols for release of captive-bred syngnathids. (KSR #28)
- ii. Our Specialist Group held a three-day meeting each lasting four hours in May 2020 and a separate 4-hour meeting was held in November 2020. (KSR #28)

Acknowledgements

The SPS SG benefits from support to Project Seahorse, acting as the core of the SPS SG. Project Seahorse is hugely grateful to our longtime major partner in marine conservation, Guylian Belgian Chocolates, and to our faithful supporters at the Langar Foundation. We would also like to thank the IUCN SSC for providing an external grant to support a portion of our work documenting national conservation assessments and legislation for syngnathids globally. Sincere thanks to the home institutions of all our valued SPS SG members. Project Seahorse also thanks our host institutions, the University of British Columbia in Canada and Zoological Society of London in the UK, who provide support for the Chair and some SPS SG and Project Seahorse activities.

Summary of activities 2020

Species Conservation Cycle ratio: 4/5

Main KSRs addressed: 1, 12, 14, 15, 17, 18, 25, 26, 28, 29, 32

Resolutions: WCC-2016-Res-016, WCC-2016-Res-021

KSR: Key Species Result