

IUCN SSC Seahorse, Pipefish and Seadragon Specialist Group

2018 Report



Amanda Vincent

Chair

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Location/Affiliation

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Number of members

28

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 (seahorses, pipefishes, seadragons and their relatives) fishes 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

Assess

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) priority action statement for *Hippocampus capensis* (Endangered – South Africa); (2) priority action statement for *Hippocampus whitei* (Endangered – Australia); (3) priority action statement for *Syngnathus watermeyer* (Critically Endangered – South Africa); (4) priority action statement for *Microphis pleurostictus* (Endangered – Philippines); (5) priority action statements for Vulnerable species; (6) monitoring and evaluation 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.



Hippocampus capensis
Photo: Dave Harasti

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 programme officer and meetings.

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

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 meeting with Specialist Groups for other marine taxa; (2) hold annual meetings of the SPS SG.

Activities and results 2018

Assess

Red List

i. A list of priority species in urgent need of re-assessment has been created. (KSR #1, 32)

ii. Re-assessments of two priority Data Deficient species, *Hippocampus hippocampus* and *H. guttulatus*, has begun in collaboration with the IUCN Marine Red List Officer at Oceanário de Lisboa in Portugal. (KSR #1, 32)

Plan

Planning

i. Priority action statements have been created and work has begun on priority research to address some of the threats and determine possible solutions: (1) we investigated the home-range, population size and growth rate of *H. capensis* within artificial reno mattress habitats; (2) mapped the Knysna estuary sub-tidal habitat to determine the amount of suitable habitat available; (3) initiated monthly monitoring of *H. capensis* populations within the Keurbooms estuary; (4) successfully used eDNA to determine the extent and current range of *H. capensis* within the Knysna, Keurbooms and Swartvlei estuaries; (5) work has also begun to investigate the population genomics of *H. capensis*. (KSR #15)

ii. Priority action statements have been created and work has begun on priority research to address some of the threats and determine possible solutions. To assist with recovery of declining populations of the Endangered seahorse *Hippocampus whitei*, a study was implemented to assess the viability of using purposely designed artificial habitats (known as seahorse hotels) to help recolonise areas where the species previously occurred. The results from this study are encouraging and a manuscript is currently being prepared. (KSR #15)

iii. Priority action statements have been created and work has begun on priority research to address some of the threats and determine possible solutions. Monitoring has begun for *Syngnathus watermeyer*, including the use of eDNA to determine the presence within the Bushman's and Kariega estuaries. (KSR #15)

iv. Consulted potential expert in the region to lead on priority research; dependent upon funding. (KSR #15)

Policy

- i.** Priority regions have been selected: (1) South-east Asian marine; (2) South African estuarine; (3) India and Southeast Asian freshwater; and (4) Brazil and Argentina marine. (KSR #26)
- ii.** Developed document detailing rules and laws related to habitat alteration and loss in South Africa and Brazil and Argentina. Initiated discussions with government and agencies in South Africa about implementing rules and laws that are already in place. (KSR #26)
- iii.** Secured a summer undergraduate research student through the University of British Columbia to complete matrix on perverse incentives that affect syngnathids in Southeast Asian marine environments. (KSR #26)
- iv.** Secured a summer undergraduate research student through the University of British Columbia to complete scoping document on perverse incentives for Southeast Asian marine environments. (KSR #26)

Network

Capacity building

- i.** Almost one-third of the IUCN SPS SG's members are early career scientists who are within 10 years of completing their PhDs. (KSR #17)

Membership

- i.** Since the new quadrennium, we have grown our SPS SG membership by recruiting 10 members, increasing discipline and regional representation including many from developing countries.

Proposal development and funding

- i.** A draft grant template has been created to use once funding opportunities arise. (KSR #19)

Synergy

- i.** The IUCN SPS SG is working together with the IUCN Marine Red List Officer at Oceanário de Lisboa in Portugal to complete re-assessments of the two European seahorse species. We have also begun talks with Birch Aquarium at Scripps Institution of Oceanography on the possibility of collaborating on husbandry projects. (KSR #29)
- ii.** The IUCN SPS SG partnered with Oceanário de Lisboa and the Oceano Azul Foundation with support from Guylian Chocolates Belgium to host the first European syngnathid meeting at the Oceanário de Lisboa in Portugal in October 2018. (KSR #29)
- iii.** Amanda's role as Chair of the IUCN SSC Marine Conservation Committee works to support, connect and promote marine species conservation in large part through tightening links to other IUCN units. (KSR #29)

Technical advice

- i.** Developed a country-specific briefing document for Malaysia as a model template to expand to other priority countries. These briefing documents will aid researchers in countries in need of urgent action and will become a useful resource summarizing issues, threats, species, laws and lead advocates for each priority country. (KSR #18)

Communicate

Communication

- i.** Embarked on a plan to enhance our social media presence on Facebook, Instagram and Twitter, involving SPS SG members. (KSR #28)
- ii.** A draft taking action toolkit has been developed. (KSR #28)
- iii.** Created conservation outreach toolkits for: (1) Sweetings Pond, Eleuthera Island, Bahamas; (2) the Endangered Knysna seahorse, *Hippocampus capensis*, in South Africa; (3) Ria Formosa in Portugal; and (4) CITES for seahorses. (KSR #28)
- iv.** SPS SG members have contributed five blogs documenting their work with syngnathids and have initiated a plan to increase our social media presence on Facebook, Instagram and Twitter, involving SPS SG members. (KSR #28)

Scientific meetings

- i.** Facilitated two joint meetings on funding opportunities and conservation planning with IUCN Marine Specialist Group Chairs through Amanda's Vincent's role as the Chair of the IUCN Marine Conservation Committee. (KSR #28)
- ii.** Held a well-attended virtual SPS SG meeting on 23 January 2019. Plans are already underway for the next in-person meeting on 22 May 2020 in Guangzhou China. (KSR #28)



Hippocampus japapigu
Photo: Richard Smith – OceanRealmlimages.com



Home to the Endangered Knysna seahorse, *Hippocampus capensis*, Amanda Vincent visits Specialist Group members David Harasti and Louw Claassens - the lead researcher on the world's most Endangered seahorses in Knysna, South Africa
Photo: Amanda Vincent

Acknowledgements

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Summary of activities 2018

Species Conservation Cycle ratio: 4/5

Assess	2	■■
Plan	8	■■■■■■■■
Network	7	■■■■■■■
Communicate	6	■■■■■■

Main KSRs addressed: 1, 15, 17, 18, 19, 26, 28, 29, 32

Resolutions 2016 WCC: 016, 021

KSR: Key Species Result