



Appendix 3: Template for proposing a new EEP

EEP Proposal for

Common Species Name: Short-snouted seahorse

Scientific Species Name: *Hippocampus hippocampus*

Prepared by

Name: EAZA Marine Teleost TAG

Year: 2023

1. Contact information

Contact details of proposed EEP Coordinator

Name: Jarco Havermans

Institution: Ecomare (institutional support from EAZA-Member Rotterdam Zoo)

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2. Taxonomy information

Taxonomy of the species

Monotypic species

3. Identified roles

Identified role(s) description

INDIRECT CONSERVATION ROLES:

- **Conservation education:**

As a flagship species for habitat conservation, seahorses play an important role in maintaining healthy ecosystems. As a European species, there is a need for a demographically healthy population, and overexploitation for souvenirs can negatively impact their populations. However, the feasibility of this education role could potentially be impacted if more transfers of seahorses are needed due to their CITES listed status. Careful consideration of the messaging and target audience would be important to ensure that this education role is effective in reducing the demand for seahorses as souvenirs while also promoting their conservation.

The habitat and prevalence of short-snouted seahorses is shifting further north due to climate change (specifically rising sea water temperatures). On the north end of their



habitat this leads to problems and seahorses regularly wash ashore here in winter (f.e. in the Netherlands).

- **Research (*in situ*)/Monitoring:** Given the likely recommendation by the IUCN Red List assessment for *in situ* research and monitoring of seahorses, an institutional-based approach could be taken to conduct this work. This could involve coordination between aquaria with seahorse populations and other relevant organisations to carry out research on seahorse populations in their natural habitats. However, there are feasibility challenges that need to be considered, such as the availability of resources and licenses in protected areas. With local habitat restoration efforts in place, *in situ* research and monitoring of seahorses could contribute to ensuring a demographically healthy population and furthering their flagship species status for habitat conservation.

4. Programme participants and governance

Non-EAZA holding institutional scope

- EAZA population/community is the dominating driver of the EEP and any non-EAZA Members will occasionally join and are not integral to the structure of the EEP.*
- In addition to EAZA, there are other structural/equal drivers of the EEP (e.g., World Pheasant Association, ...). Please describe.*
- A larger initiative exists and the EAZA population is a small part of this (e.g., GSMP, ...). Please describe.*

Additional information:

EAZA population/community is the dominating driver of the EEP but non-EAZA Members will join and are integral to the structure of the EEP.

Essential Non-EAZA partners not holding animals *(List the organisations, define their role, and how they will work with the EEP).*

The coordinator of this EEP is not an EAZA member himself, but has institutional support from an EAZA member (Rotterdam). His employer Ecomare thus is an essential Non-EAZA partner not holding short-snouted seahorses at the moment.

Musea, research institutes and Universities will definitely play a role in this EEP, but which partners is not clear yet.

Members of the EEP core group (Species Committee + non-voting members)



- *By default, EEPs have a Species Committee (a democratically elected representation of the holders) as part of their EEP core group (information on the Species Committee and its associated default decision making process can be found in the Population Management Manual). If that will not be the case for this EEP, explain why and define the composition, structure and decision-making process for the EEP core group.*
- *List the EEP core group members (names and institutions) (if already known): Species Committee members, Advisors, others.*

Species committee will be elected upon approval of the EEP

Collaboration with EAZA Working Groups and Committees *(Explain any current and/or future proposed links to existing EAZA groups and committees, such as the Animal Training Working Group, Biobanking Working Group, EAZA Reproductive Management Group (RMG), EAZA Population Management Advisory Group (EPMAG), EAZA Education Committee, EAZA Nutrition Working Group, EAZA Research Committee, Reintroduction and Translocations Group, Transport Working Group, EAZA Veterinary Committee, EAZA Conservation Committee, Animal Welfare Working Group, Palm oil Working Group).*

Collaboration will be sought with:

EAZA Reproductive Management group (RMG): reproduction is key to maintain a healthy aquarium population

EAZA Population Management Advisory Group (EPMAG): it is unclear still how large the aquarium population of short-snouted seahorses is at the moment, but as these animals are normally not kept in very large groups the population management will be vital to maintain a healthy aquarium population.

EAZA Education Committee: as one of the conservation roles for this EEP is education about this flagship species the Education Committee is a logical partner.

EAZA Research Committee: as one of the conservation roles is research and monitoring, and because this species is listed as 'Data Deficient' on the IUCN Red List research will be vital for this EEP.

EAZA Conservation Committee: as a key species in habitat restoration, the conservation committee is a logical partner for this EEP.

5. Programme characteristics

The detailed programme characteristics, goals, objectives and management strategies to fulfil the roles and goals of the EEP will be developed at a later stage as part of a Long-Term Management Plan (LTMP). The questions below are intended to help paint a rough view of what is currently intended/expected for the general EEP programme characteristics.

- *If there is a recent/active Long-term Management Plan for this species, list the demographic, genetic and other goals determined (if they still apply post RCP workshop).*

There is no recent/active Long-term Management Plan for this species, one of the goals of this EEP will become the setting up of this LTMP.

- *What is the anticipated duration of the programme?*

The anticipated duration of the programme is not clear yet. To be defined by the LTMP.

- *What is the anticipated likelihood and time scale of the use of the EEP population for restoration in the wild (reintroduction, reinforcement, etc.)?*

As the species in this EEP is 'data deficient' in the IUCN Red List, more research needs to be done on the wild population to be able to estimate if population restoration in the wild is needed via this EEP. Note that there is a potential (local) rescue role for specimens wash ashore in Winter in the North Sea.

- *Are some or all the individuals within this EEP intended to be held in specialist ex situ centres in the species' native range? Specify.*

Most of the centres holding this species are situated in the species' native range, one of the goals of this EEP will firstly be to distinguish the status of the current aquarium population of short-snouted seahorses.

- *Is it expected to be necessary that the whole population, or a certain proportion thereof, will need to be held off exhibit in order to fulfil the roles of the programme?*

No, is it not expected to be necessary that the whole population, or a certain proportion thereof, will need to be held off exhibit in order to fulfil the roles of the programme.



- *Does a part or the whole of the EEP population need to be held in bio-secure facilities? And/or are there known diseases that have an above average effect on fulfilling the roles of the EEP?*

No

- *What is the expected estimated number of individuals and institutions required to fulfil the selected roles? (this question will be answered in detail during the LTMP session for the taxon, but if some indication of scale is clear already, this should be stated here)*

The expected estimated number of individuals and institutions to fulfil the selected roles is unclear at the moment. To be clarified through the LTMP process.

- *Is this EEP intended to include rearing of wild eggs/young (i.e. head-starting)?*

This EEP is not intended to include rearing of wild eggs/young.

- *Is this EEP intended to include ex situ breeding?*

This EEP will include ex situ breeding.

- *Is there likely sufficient expertise for this, or a model, taxon to achieve the roles of the programme and provide conditions for good welfare? Please indicate if Best Practice Guidelines already exist and if yes, include publication date.*

There is sufficient expertise but no BPG have been published yet.

- *Will (non-)breeding and transfer recommendations be issued? If yes, with what frequency? (naturally problems will need to be solved throughout the year, but with what frequency will recommendations be issued for the whole population at once)*

(Non-)breeding and transfer recommendations will most probably be issued, frequency is unclear yet.

- *Do you anticipate that the EEP population will be (largely) closed or will there be regular planned additions of individuals? In case of the latter, will this be for genetic and/or demographic reasons and what will be the source (other ex situ sources and/or from the wild)?*



I anticipate that the EEP population will have regular planned additions of individuals. This will be for both genetic and demographic reasons. It has a strong preference to be sourced from other ex situ sources (and not from the wild).

- *Do you expect genetic and demographic management in this EEP to be individual and/or group-based?*

I expect genetic and demographic management in this EEP will be individually based.

- *Do you expect genetic management in this EEP to be based on pedigree analysis, group history analysis, and/or molecular genetics?*

Genetic management in this EEP will most probably be based on pedigree analysis, but might also incorporate molecular genetics and group history analysis.

- *Do you anticipate, or proactively plan for, biobanking and/or assisted reproduction to be key components of this programme?*

No

- *Do you anticipate certain national or international legislation to form a particular hindrance (more than average) to achieving the roles of your EEP (e.g., CITES, BALAI, governmental ownership, etc.). If so, explain how.*

No

- *Are there any other issues/plans related to in situ conservation support that you feel should be mentioned and are not evident from the role description of the EEP?*

Note that there is a potential seasonal (local) rescue role for specimens wash ashore in Winter in the North Sea.

- *Is there a research component/aspect to the EEP that is expected to have important consequences for the design of the EEP programme (e.g. housing and husbandry of a significant proportion of the population, etc.)? If yes, explain.*

The research components/aspect of the EEP will most probably have consequences for the design of the EEP programme. Depending on what the research component will be (e.g.: getting higher reproductive output or higher animal welfare) housing and husbandry will be affected.



- *Do you anticipate there to be any sizeable political, social, or public conflicts of interest related to the EEP programme and how do you plan to deal with them?*

As short-snouted seahorses are a flagship species for habitat restoration, but with no real economical relevance conflict are not expected. Public interest however will definitely be a key part of the EEP and will aid to the educational part.

6. References (if any)

Varga, A., Aparici Plaza, D., Fienieg, E., Hausen, N. (eds.) 2023. Regional Collection Plan for the EAZA Marine Teleost Taxon Advisory Group – Edition One. EAZA Executive Office: Amsterdam.