Appendix 3: Template for proposing a new EEP

TAGs can use this Template for proposing a new EEP to the EEP Committee. As per default these applications follow from the RCP publication process and the Species Assessment Sheet should be sent along with this template. In exceptional cases new EEPs may also be proposed in between RCP editions. A separate Species Assessment Sheet should be completed if an EEP is being applied for in between RCP editions. Note that not all sections below may be relevant to each programme. Also note that 'species' represents any taxonomic unit the TAG has chosen as the unit of management in an EEP.

EEP Proposal for

Common Species Name: long-snouted seahorse
Scientific Species Name: *Hippocampus guttulatus*

Prepared by

Name(s): EAZA Marine Teleost TAG
Year: 2024

1. Contact information

Contact details of proposed EEP Coordinator

Name: Chris Brown
Institution: Chessington World of Adventures Theme Park and Zoo
Email: Chris.Brown@SEALIFE.co.uk

2. Taxonomy information

Taxonomy of the species *(indicate which taxa are included in this programme and why, and give an indication of the degree of confidence in the taxonomic identification of the individuals in the EEP population)*

Syngnathiformes > Syngnathidae (seahorses, seadragons and pipe fish) > Hippocampus

All Black Sea specimens examined thus far have been genetically identified as *Hippocampus guttulatus*, with no evidence of a separate species. This supersedes

previous suggestions that a new and different species or subspecies inhabits the Black Sea.

3. Identified roles

Identified role(s) description *(copy from the Species Assessment Sheet in RCP)*
Indirect conservation roles:

- Conservation Education: This role will be used to convey messages on the general threats to seahorses in the wild. This role can contribute to increasing awareness and political attention to protect them and their natural habitat.

- *Ex situ*/*in situ* research: This role focuses on genetics, abundance and behaviour research. This can be used as a model on how to take samples from similar species. To achieve this, it is important to find research institutions that can collaborate with the research and get enough funding for the research.

Programme decision statement: EEP

To fulfil the identified roles a demographically and genetically healthy population is required. Additionally, this species will aim to continue with educational work involving local NGO's and government organisations, research and raise awareness to the general public. Therefore, active management is required. In conclusion, the TAG recommends managing *Hippocampus guttulatus* as an EEP.

4. Programme participants and governance

EAZA institutional scope *(As a default, participation in EEPs is obligatory for EAZA Members. If you wish for an exemption, identify which institution(s) holding this species is/are not part of the EEP and explain the underlying reasons.)*

Non-EAZA holding institutional scope *Select one or more of the options below.*

- *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.*

All forms/templates are available to download on the EAZA Member Area.

- *A larger initiative exists and the EAZA population is a small part of this (e.g., GSMP, …). Please describe.*

Additional information:

Besides the EAZA, aquaria affiliated to the EUAC are important partners for this programme.

Known current *H. Guttulatus* holders in ZIMS:

Species: Hippocampus guttulatus / Mediterranean seahorse

All 7 Institutions, 1 Regions	0	0	0	30	13	21	40	74
Institution	Male	Female	Other	Birth (last 12 months)	Group M.	Group F.	Group O.	Total
Region: Europe 7 Institutions, Male: 13, Female: 21, Other: 40								
AQUAVGAMA / Aquario Vasco da G…	0	0	0	0	3	4	0	7
BREST AQ / Oceanopolis-Aquarium …	0	0	0	0	0	0	2	2
GENOVA AQ / Acquario di Genova	0	0	0	30	9	11	36	56
LISBOA AQ / Oceanario de Lisboa	0	0	0	0	0	2	0	2
OCEAN VAL / Oceanografic Valencia	0	0	0	0	0	4	0	4
STUTTGART / Wilhelma Zoo	0	0	0	0	0	0	2	2
ZOOMARINE / ZOOMARINE - Mun…	0	0	0	0	1	0	0	1

EUAC/Other Aquaria that have not entered their data in ZIMS: Aquarium Piran, Anglesey Sea Zoo, Oceanarium Bournemouth, Haus des Meeres Vienna, Aquarium Pula, Planet Ocean Montpellier, Bioparc Acuario de Gijon, Musee Oceanographique Monaco.

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

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.*

  Species Committee is to be elected.

- *List the EEP core group members (names and institutions) (if already known): Species Committee members, Advisors, others.*

To be determined. **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*

All forms/templates are available to download on the EAZA Member Area.

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).

Biobanking Working Group, EAZA Reproductive Management Group (RMG), EAZA Population Management Advisory Group (EPMAG), EAZA Education Committee

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).*
-

No LTMP yet, but as a first step there has been "The *Hippocampus guttulatus* aquarium survey 2023" hosted by SEALIFE Weymouth, conducted in Europe.

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

  The estimate duration of the programme is 10 years.
- *What is the anticipated likelihood and time scale of the use of the EEP population for restoration in the wild (reintroduction, reinforcement, etc.)?*
- To be determined
- *Are some or all the individuals within this EEP intended to be held in specialist ex situ centres in the species' native range? Specify.*

  All spiny seahorses are held in the aquariums within the native range. Genetic analysis or studbook management can determine the origin populations of individuals and their offspring to maintain regional genetic diversity.

  All centres are specialised to keep individuals. The best practices of holding spiny seahorses will be developed and shared between aquariums.

- *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? If yes, please explain. (this question does not refer to the temporary housing of individuals off exhibit for space reasons)*

No

- *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)*

During the LTMP this question will be answered in more detail, but for now, The *Hippocampus guttulatus* aquarium survey identified 97 individuals (33 male, 34 females and 30 juveniles) in 10 aquariums in Europe so far. More intensive research should be done to identify other aquariums.

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

No

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

Yes

- *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.*

Yes, there is sufficient expertise and we will create a best practice guide and report on ex-situ research findings.

- *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)*

Yes. The *Hippocampus guttulatus* aquarium survey 2023 has identified possible individuals for transfer. Within the proposed EEP, extended communication and transfer of individuals will be increased.

- *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)?*

To maintain a healthy and genetically viable population of spiny seahorses, representative of the locations from which they derive, individuals will probably need to be sourced from either the wild or transferred correctly in accordance with the genetic diversity between aquariums. This is something that will be looked into in more detail during the LTMP

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

The genetic and demographic management will be individual-based.

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

The genetic management will be based on viable methods depending on the aquarium. All three methods of management, including pedigree analysis, group history analysis and molecular genetic analysis could be used depending on the limitations of the aquarium resources.

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

We anticipate to biobank samples and work with research institutions such as universities to assist in future genetic analysis.

- *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.*

Currently 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?*

For the UK this species is protected in the UK under the Marine Management Organisation and therefore specific licences are required to locate and research seahorse individuals and populations in the wild.

- *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.*

To be determined.

- *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?*

No

- *Any important additional programme characteristics that you would like to mention?*

No

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