# 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:** Banggai cardinalfish
**Scientific Species Name:** *Pterapogon kauderni*

### Prepared by

Name(s): EAZA Marine Teleost TAG
Year: 2023

## 1. Contact information

### Contact details of proposed EEP Coordinator

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## 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)*

The genus *Pterapogon* contains only one other species, *P. mirifica* from northwestern Australia. However, ongoing studies on the reproductive biology, behaviour, anatomy and preliminary data on molecular studies on *P. mirifica* indicate that it is distantly related to the Banggai cardinalfish and may in fact merit separate generic status. Therefore the Banggai cardinalfish may be unique at the generic level

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

## 3. Identified roles

### Identified role(s) description *(copy from the Species Assessment Sheet in RCP)*

DIRECT CONSERVATION ROLES:
- **Insurance:** This role considers the possibility of maintaining an *ex situ* population of this species in the long-term to preserve options for the future. Therefore, the *ex situ* population has the potential to be used as an insurance population. Nevertheless, this role requires genetic research as a first step in order to find out how many founders are in the *ex situ* population. Additionally, demographic and genetic management of the population is also a requisite to fulfil this role. Further details on *in situ* conservation efforts can be found on the website https://www.gbif.org/. Research on genetic variability is also necessary to achieve this objective. The benefit of this role depends on the IUCN status assessment.

INDIRECT CONSERVATION ROLES:
- **Lobby:** The main focus of this role is advocating for the protection of *Pterapogon kauderni* by promoting its inclusion in the CITES II list. The species is currently proposed for this status, but it has not yet been approved. Lobbying efforts can involve reaching out to government officials, policymakers, and other stakeholders to raise awareness of the need for protection of this species. This can include providing information on the threats to the species and the importance of its conservation. Ultimately, the success of lobbying efforts will depend on the engagement and support of key stakeholders. This lobbying role can play a critical role in ensuring the long-term survival of this species.

NON-CONSERVATION ROLES:
- **Exhibit:** The aim of this role is showcasing this iconic species to visitors in a way that highlights its unique features and interesting behaviour. As the species is easy to breed, keep, and transport between institutions due to its small size, it is an excellent choice for public display. One of the most fascinating aspects of this species is the way it keeps its young in its mouth, which provides an excellent opportunity for an educational message. Visitors can learn about the breeding behaviour of *Pterapogon kauderni* and how they protect their offspring by using sea-urchins.

### Programme decision statement: EEP

The Marine teleost TAG has decided to propose *Pterapogon kauderni* as EEP due to its importance in reducing pressure on wild populations. The species is currently proposed for CITES II status and its IUCN status needs reassessment. It is crucial to promote *ex situ* breeding efforts as the true impact of capturing these fish from the wild is not known. Despite the fact that *ex situ* breeding has been successful, most aquarium specimens are still captured in the wild, with current harvest rates exceeding 700,000 to 900,000 fish per year. Encouraging participation and providing education on the benefits of *ex situ* breeding programmes will be essential to ensuring the long-term survival of this species.

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

## 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.*

- X *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:

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

*Pterapogon kauderni* is a very common Public Aquarium and Aquarium hobbyist species. It is also now commonly bred by various fish suppliers. In order to extract the maximum benefit from this EEP we intend to approach non-EAZA facilities and suppliers for co-operation.

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

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**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.*

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Default, 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 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 we plan to conduct a survey of EAZA (to double check the numbers in ZIMS for husbandry, origin) and when/where relevant other facilities in Europe to establish current kept populations and origins of *Pterapogon kauderni*

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

Long term.

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

No applicable at this stage.

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

No

- *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)*

In principle no. Depends on the facility, but my previous experience is that they breed on display and then the young are displayed as well to showcase and tell the story. Rearing the young could also be back of house I suppose but the babies and longspine urchins make such a good exhibit and informative display.

- *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 need for bio-secure facilities.

- *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, more intensive research/surveys are planned to identify other aquariums.

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

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


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 Guidelines 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. Within the proposed EEP, extended communication and transfer of individuals will be increased. But, I will get in touch with the PMC to determine the best management strategy.

Future surveys , to double check numbers/group sizes, to get clarity on the origin, institutional wishes, will identify possible individuals/groups for transfer.

- *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)?*

The long and short term goal is to not acquire fish from the wild for display, there is enough captive bred availability already. the aim of the EEP is to protect the ex-situ genetics of this species within the EU region and should the need arise to maintain/enhance this we might consider to incorporate some new founders but only if needed and legally available.

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

I will get in touch with the PMC to determine the best management strategy.

- *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. All Banggai cardinalfish are held in aquariums where genetic analysis or studbook management can determine the origin of populations of individuals and their offspring to maintain regional (Europe) genetic diversity.

- *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?*

No

- *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?*

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

No

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

No

## 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*.