

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: Blacktip reef shark Scientific Species Name: *Carcharhinus melanopterus*

Prepared by

Name(s): Elasmobranch TAG Year: 2023

1. Contact information

Contact details of proposed EEP Coordinator

Name: Timo Haußecker Institution: SEA LIFE Oberhausen with support from Chessington Email: <u>Timo.Haussecker@sealife.de</u>

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)

Monotypic species

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 contemplates the possibility to maintain a long-term *ex situ* population to preserve options for the future. There are threats mostly related to intensive coastal fisheries, incidental catches, decrease in the water quality and habitat degradation (coral reefs). Additionally, although this species is found in a wide range, its distribution is rather patchy. Because it's status as a vulnerable species it is not very clear if this justifies enough an insurance role, nevertheless it is widely kept in aquaria. Therefore the benefit is considered medium-high. In terms of feasibility, the data in ZIMS needs to be updated so that the population appears as it is in the studbook. The main risk is the potential space competition with other species.

Indirect conservation roles:

- Conservation Education: This role will be used to convey messages on the general threats to sharks (especially finning) and coral reefs. Reef sharks are important flagship species for healthy ecosystems. This role can contribute to increasing public awareness of the status of sharks and to highlight the need to conserve them in the wild and to protect their natural habitat. While it can be difficult to convey a sustainability message, this can be done if framed in the right way. For the Black tip reef sharks it is important to consider that despite being a well-adapted species to *ex situ*, it is crucial to pay attention to their enclosure as not all tanks are suited for them and they can get restless. Furthermore, this can also impact the visitors' perspective.

Elasmobranch TAG - 2021 RCP Carcharhinus melanopterus (Black tip reef shark)

- *Ex situ* research: This role focuses on reproduction research, and more specific to find out answers to multiple paternity in litters. This can contribute to the future *in situ* assessments. To achieve this, it is important to take samples and to keep the population with reproductive efforts recorded in the studbook, find research institutions that can collaborate with the research, and get enough funding for the research. This type of research has been done successfully in the past and there is a lot of interest to participate in this research. Nevertheless, it is important to consider some unpredictable factors such as difficulty to get enough funds, sampling feasibility and the risk in handling the sharks.

Non-conservation roles:

- Model species: Taking advantage of the experience with the species, the knowledge on husbandry could be applied to more endangered and less common species found in aquaria. It still needs to be decided for which species this could apply. Nevertheless, this is not as important role as the other roles identified for this species.

Decision statement: EEP

The TAG wants to manage the Black tip reef shark population in EAZA within the new style EEP framework. To overcome the actual challenges of the EAZA population and fulfil the selected roles, it will be necessary to maintain a demographically and genetically stable population and update the records in ZIMS. Furthermore, this flagship species will aim to contribute to engage the public with a conservation education story focused on finning and coral reefs (as habitat). It will be also essential to work together with research institutions to fulfill the research role. In conclusion, the TAG recommended to manage *Carcharhinus melanopterus* as an EEP given the active management level required.

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.)

SEA LIFE Oberhausen is no EAZA Member, but will be supported by Chessington Zoo.

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:

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

At the moment there are no non-EAZA partner not holding animals involved in the EEP. We thought about involving universities or research centres, like the Wagening University & Research, which are still working on research studies at *Carcharhinus melanopterus*.

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.

A species committee will be elected.



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

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).

There are several possibilities to link existing EAZA groups and committees. *Carcharhinus melanopterus* is one of the species most kept in public aquaria. There are considerations on investigations into family relationships and descent and origin, the implementation of optimal husbandry, training, nutrition, etc. So then there will be links to EPMAG, Animal Training Working Group, Animal Welfare Working Group, the conservation committee, and so on. But there is no Long-term management plan yet but will be implemented.

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 LTMP yet. But I am in contact with Wagening University & Research about Blacktip Reef Shark research at the Maledives. And there are considerations about paternity research at the aquarium kept BT sharks.



• What is the anticipated duration of the programme?

Still unknown

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

Carcharhinus melanopterus is "just" near threatened, so no restoration yet necessary

• 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, not yet

• 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)

At the first step we will work with existing groups and populations in public aquariums. Further steps will be discussed during the LTMP sessions.

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

For now, we could work with existing populations and captive born pups. There still are several breading and rearing programs in different public aquariums, like SEA LIFE Oberhausen.



• Is this EEP intended to include ex situ breeding?

There is still ex situ breeding implemented in public aquariums for *C. melanopterus.*

• 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 for this taxon to achieve the roles of the programme and provide conditions for good welfare. The *C. melanopterus* Studbook was updated in May 2023.

Best practice guidelines doesn't yet exist but will be created as soon as possible with support of Max Janse.

• 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)

This is an ongoing process. In some regions breeding recommendations are still implemented, while in other region not. So, the worldwide stock will be controlled permanently, and breeding and transfer will be coordinated in cooperation with all studbook keepers worldwide.

• 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)?

For healthy populations we must think about to add new individuals to existing populations from other still existing ex situ populations from other regions of the world. Eventually we also must think about adding individuals from the wild in far future.

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

Group based



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

First, we must look at pedigree analysis, but presumably we also must do molecular genetic analysis.

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

Not yet

• 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?

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.

No

• 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

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



5. References (if any)

Janse, M., Baylina, N., Wille, M., Aparici Plaza, D., van der Meer, R., Hausen, N. (eds.) 2021. EAZA Elasmobranch Taxon Advisory Group Regional Collection Plan – First Edition. EAZA Executive Office: Amsterdam.