



EUROPEAN UNION OF AQUARIUM CURATORS

REPORTING FORM

FOR *IN SITU* CONSERVATION PROJECTS FUNDED in 2021

1 TITLE OF PROJECT

Conservation breeding
facility for threatened
Indonesian blackwater fish
at PCBA , East Java

2 NAME OF APPLICANT

Fabian Schmidt

INSTITUTION

Zoo Basel

ADDRESS

Binningerstr. 40, CH-4054
Basel

TEL:

++41—61 295 35 35

FAX:

E-MAIL:

fabian.schmidt@zoobasel.ch

DATE OF REPORT:

01.03.2023

PLEASE SEND YOUR REPORT TO ISABEL KOCH, SECRETARY-GENERAL OF EUAC

(ISABEL.KOCH@WILHELMA.DE)

AND COPY TO

João Falcato : jfalcato@oceanario.pt; Brian Zimmerman: bzimmerman@bzsociety.org.uk

3 LOCATION OF PROJECT (REGION & COUNTRY)

Taman Safari, Prigen, East Java, Indonesia.

4 PROJECT START AND END DATES:

September 2021 - ongoing

5 PROJECT CO-ORDINATOR, ADDRESS AND INSTITUTIONAL AFFILIATION

(IF DIFFERENT FROM APPLICANT)

Jochen Menner

Taman Safari 2 Prigen

RT.12/RW.06, Gn. Princi, Jatiarjo, Prigen, Pasuruan, East Java 67157.

Zoo Basel has previously supported PCBA regarding different bird projects, this collaboration will now expand into conservation breeding of threatened blackwater fish.

6 PROJECT TYPE

(TICK ANY COMPONENTS THAT APPLY)

- BIOLOGICAL/ECOLOGICAL RESEARCH
- VETERINARY/CONSERVATION MEDICINE
- ANIMAL WELFARE
- CAPTIVE BREEDING
- RE-INTRODUCTION/RE-STOCKING/TRANSLOCATION
- HUMAN-WILDLIFE CONFLICT

- EDUCATION/PUBLIC AWARENESS
 - TRAINING/WORKSHOPS
 - COMMUNITY-BASED/SOCIAL POLICY
 - ECOTOURISM/SUSTAINABLE DEVELOPMENT
 - SUSTAINABLE USE
 - WARDENING/LAW ENFORCEMENT
 - PROTECTED AREAS MANAGEMENT
 - OTHER: _____
-

7 FOCAL SPECIES (COMMON AND SCIENTIFIC NAME)

Focus is on species of the genera *Betta* (Fighting Fish) and *Parosphromenus* (Licorice Gurami) e.g.

Betta hendra, *B.burdigala*, *B.miniopinna*,

Parosphromenus ornatICAUDA, *P.deissneri*, *P.anjunganensis*.

8 IUCN RED LIST STATUS (OR OTHER THREAT LISTING) OF FOCAL SPECIES

The focal species mentioned above and many others are assessed as Critically endangered or Endangered by IUCN Redlist. See Appendix 1.

CITES YES NO X

APPENDIX

9 PROJECT BACKGROUND

The Prigen Conservation Breeding Ark (PCBA) is an off-exhibit conservation breeding center for selected highly threatened Indonesian species and subspecies at the site of Taman Safari II Jatim. PCBA operates under the umbrella of Yayasan Konservasi Alam Dan Satwa Indonesia (KASI), the conservation wing of Taman Safari Inc. The PCBA has seen outstanding growth and has already achieved successful breeding of various threatened Asian songbird species and Javan warty pigs, Javan Palm Civets and various Blackwater Fish over the last three years. The species of the genera *Betta* and *Parosphromenus* are at imminent risk of extinction and many will only be saved by targeted conservation breeding. For this purpose a state of the art blackwater facility has been built at PCBA allowing for the long-term *ex-situ* management of Indonesia's most threatened Blackwater Fish.

With relatively limited investment it is possible to have a major impact on the conservation of several of Indonesia's most threatened freshwater species. Being located in Indonesia, this project is not only able to operate highly cost-effectively but also has access to species that are hard or impossible to source outside of the country.

10 OVERALL PROJECT PURPOSE (

Indonesia's peat forests are diminished at an alarming rate and with the forest many highly specialized fish species are disappearing.

To prevent the looming extinction of entire species groups, conservation breeding is a vital tool. Only by creating sufficient capacity will it be possible to establish viable *ex-situ* populations of as many threatened species as possible.

PCBA, as Indonesia's leading conservation breeding centre, has set up a specialized facility for the conservation breeding of small black water fish species and is therefore a key partner in the region for the conservation of those taxa.

10 WAS THE OVERALL PROJECT PURPOSE FULFILLED?

Yes, so far 20 species of threatened Blackwater fish species have successfully reproduced at PCBA. This will be the start of the formation of long-term viable *ex-situ* populations

11 WHAT OBJECTIVES WERE MET?

This project will set up a large conservation breeding facility for threatened Indonesian blackwater fish species. **Met**

This project will be based on the experiences gained from the existing, smaller blackwater facility. **Met**

This project will cooperate with the local hobbyist community to source founder individuals with known origin. **Met and onhoing**

This project will breed threatened species of the genera *Betta* and *Parosphromenus* in captivity.

This project aims to establish viable *ex-situ* populations of the most threatened species. **On progress**

This project will collaborate with international partners to ensure the survival of its focal species. **In preparation**

WHAT OBJECTIVES WERE NOT MET?

none

12 WHAT PROJECT ACTIVITIES WERE UNDERTAKEN?

PCBA has set up a breeding facility, this facility consists of 20 epoxy-coated concrete ponds (150x100x60cm), 20 bigger aquaria (50x50x30cm) and 120 smaller aquaria (50x25x30cm). Each tank is equipped with an individual water and air intake and an overflow, this ensures that individual tanks can receive individual treatment (water change, medication...). At the same time it is possible to connect several tanks and hence, create larger, more stable systems.

Water changes are carried out using rain or RO water to ensure low conductivity as required by the focal species.

To lower the pH of the water to a suitable level for blackwater fish, Katappa leaves (*Terminalia catappa*) are being used. This tree is common around PCBA and its leaves have excellent properties for water treatment.

The fish are being housed in species-only tanks ensuring ideal care and optimal breeding results.

To source founding individuals, PCBA is closely cooperating with the Indonesian Hobbyist community. PCBA staff is in close contact with people working with the focal species in the wild and is therefore able to source fish directly from the habitat without long supply chains but with known origin.

Based on given experience and constant knowledge exchange with partners, PCBA is able to breed many highly threatened species. By providing enough capacity, larger numbers of each species can be kept and bred and hence, viable "safety-net-populations" will be created. The concrete ponds enable PCBA to house groups of high priority species under near natural conditions and therefore allow a certain degree of natural selection to take place, this will in return contribute to the long term health and viability of the *ex-situ* populations. PCBA will make fish, bred at Prigen, available to partnering institutions in Europa.

13 WHAT OUTCOMES WERE ACHIEVED DURING THE COURSE OF THE PROJECT?

160 specialized breeding tanks for some of Indonesia's most threatened Blackwater fish have been set up.

All necessary equipment is in place and the facility is running smoothly.

34 taxa of Blackwater fish are kept at PCBA.

20 of these taxa have reproduced successfully.

Many species are starting to develop lasting ex-situ populations.

A growing network with Indonesian hobbyists and professionals has been formed in order to gain knowledge and ultimately better protection for Indonesia's blackwater fish.

ARE ANY ONGOING?

All breeding efforts are ongoing.

Networking within Indonesia and internationally is ongoing.

DID ANY EXPECTED OUTCOMES FAIL?

no

14 DID LOCAL PEOPLE/COMMUNITIES PARTICIPATE IN THE PROJECT? IF SO, HOW MANY AND WILL CONTINUED CONTACT BE MADE?

yes. Dozens of local hobbyists, scientists, conservationists and fishermen are forming a growing network of enthusiasts supporting PCBA's ex-situ efforts and future in-situ conservation measures.

15 DID THE GOVERNMENT OF THE HOST COUNTRY RECEIVE INFORMATION ON THE PROJECT'S RESULTS?

yes.

16 HOW DID THE RELATIONSHIP WITH OTHER NGOS WORK? WERE THERE ANY ISSUES?

Currently there is no formal relationship with any other NGO

17 TOTAL PROJECT BUDGET AND EXPENDITURE (IN EUROS)

8.300 Euro

18 AMOUNT OF MATCHING FUNDS

SPENT:

3.300 Euro

19 AMOUNT SPENT FROM EUAC FUNDS:

5.000 Euro

20 EXPENDITURE BREAKDOWN (IN EUROS)

TRAVEL	
SALARIES	
ACCOMMODATION	
EQUIPMENT	5.000
COMMUNICATION	
MISCELLANEOUS	
TOTAL	5.000 Euro

21 PUBLICATIONS PRODUCED AS A RESULT OF THE PROJECT

PCBA Winter Update 2021
PCBA Spring Update 2022
PCBA Summer Update 2022
PCBA Autumn Update 2022

Various social media posts.
