

**On behalf of YK-RASI team we wish you all a happy & healthy new year 2022!**

The year 2021 marked a significant progress towards the conservation of the habitat of the Mahakam River dolphins but was also full of challenges to deal with mortality. We thank you for your support will make the difference in their survival and will help us to protect their habitat!!

Budiono, Executive Director



*In memoriam: Musmus*

Annual Newsletter

# RASI 2021 Highlights

## Pingers prove effective in keeping dolphins away from gillnets!

Evaluation on the effectiveness of acoustic underwater deterrents (so-called pingers) was done by studying interactions with pingers and dolphins as well as conducting interviews with over 58 fishermen that had pingers on their nets. The results: after one year no dolphin ate fish from or damaged the nets! Visual interaction studies done in January 2021 also showed that dolphins avoided an area of 10m from nets with an active pinger. In total, 78 pingers have been distributed at present and 75 more pingers will be handed over at the start of 2022.

## Protecting dolphin habitat

### By creating aquatic conservation & essential ecosystem areas

Besides the c. 43,000 ha large Aquatic Conservation Area that was established by the Regent of Kutai Kartanegara District in 2020 and now under legal review for a ministerial decree, another huge step ahead involved the provincial Governor's decree for the "Indicative Essential Ecosystem Area (EEA) of Pesut Mahakam and peat swamp habitat in East Kalimantan Province !!

The total area encompasses 221,299 ha, including the existing PA of Pesut Mahakam habitat. Outside the PA, 127,535.73 ha of the indicative EEA lies in Kutai Kartanegara District and 50,646.05 ha lies in Kutai Barat District. This provincial declaration is the umbrella we needed to make (parts of) this indicative EEA become existing

and to be managed in collaboration with all the villages and stakeholders within the area through a multiple stakeholder forum that is in process of establishment. Another good news is that in 2021 we already obtained the signed agreements of 32 villages that agree to be part of the EEA in Kutai Kartanegara and allocated **160.476,58** ha including **54.480,75** ha of peat swamp forest



Biodiversity surveys in the Essential Dolphin Habitat Ecosystem identified 55 protected species of which 45 Threatened on the IUCN Redlist



## Monitoring of illegal fishing

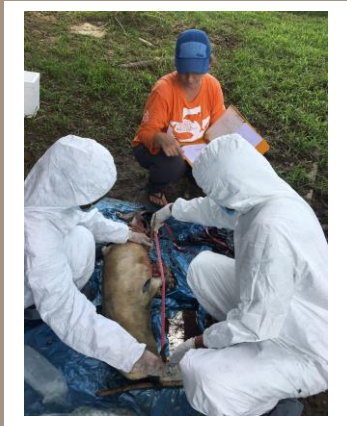
Thanks to the monthly reporting of 5 teams of field rangers' who monitor illegal fishing activities and record dolphin occurrence and calves 3 times a week since 2020, a 50% decrease of illegal fishing was noted by at least 3 teams. These verified monitoring reports are helping law enforcement to find exact locations and best timing for their operations.



Rangers helping to monitor dolphin positions, new calves and replace dangerously placed nets. Picture by ranger Rahman/ Muara Kaman

# Population surveys and mortality research

## Challenging



**Research** on the causes of pesut mortality is continuing as our team and the local conservation authority BKSDA immediately responds to perform necropsy of each dead dolphin

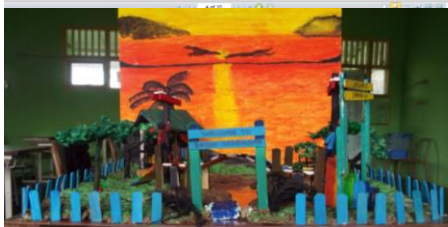
This year in particular has been challenging due to the fact that there were eight dead dolphins reported in 2021 of which 3 calves and 5 adults. Besides the 3 dead ones, 4 more newborns were born, which in terms of newborns at least was more than the average calving rate of 6 dolphins. We determined that three adults were old with teeth worn out and were already identified as adults at the start of the photo-id research in 2000. Four dolphins died as a result of gillnet entanglement or after eaten parts of gillnets

One mother and presumably calf were found just 3 days apart and histopathological analysis as well as toxicological analyses indicated that the dolphins died as a result of toxic potassium.



Potassium may have been used to fish shrimp as we found shrimp remains in the adult's stomach. Further investigation will be conducted by our patrol teams who will pay extra alertness.

**Population surveys** that are conducted every 3 months as well as monitoring of water quality indicated that for 2021 water quality mostly ranged within the norm with a few exceptions of less directly harmful parameters at some locations. Photo-identification analyses of individual dorsal fins are in progress and we hope to provide new population estimates in the beginning of the New Year..!!



## Campaigns

# Environmental education during lockdown

Two years of schools lockdowns have been hard for schoolchildren and students all over the world and not any less for the schools in the Mahakam River districts. After a successful training for high-school teachers in an environmental education course developed by YK-RASI in 2019 and hand over of practical materials and course books for 42 schools, the practical courses could not be continued during the COVID-19 pandemic.

To give students some positive event that would revive their creativity while reflecting on environmental issues and a positive future, RASI organized an online Diorama and Comic Competition where 11 schools and a total of 87 participants from 24 groups participated with great enthusiasm. The theme focused on protecting the ecotourism potential in each respective village. We hope that students learned through this

event the value of their natural environment Ecotourism is a potential source of income that rural communities can rely on if they develop and maintain the potential in a sustainable way. In addition, students can also understand and cultivate a love for nature, and not do things that damage the natural environment. They may start doing small things, such as not littering, using items that are not disposable.

## Stay Tuned >>>

For regular updates follow us on on :

Instagram: [yayasan\\_rasi](#) #ykrasi

Youtube: Yayasan Konservasi RASI

FB Page/ Group: Rare Aquatic Species of Indonesia

