



Ecosystem
Impact

Impact Report 2023



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**TOGETHER WE HEAL
OUR PLANET**



Helped protect **four highly threatened** sea turtle species



Saving **critically endangered** songbird species



Saved **2,317** sea turtle nests from poaching across our projects



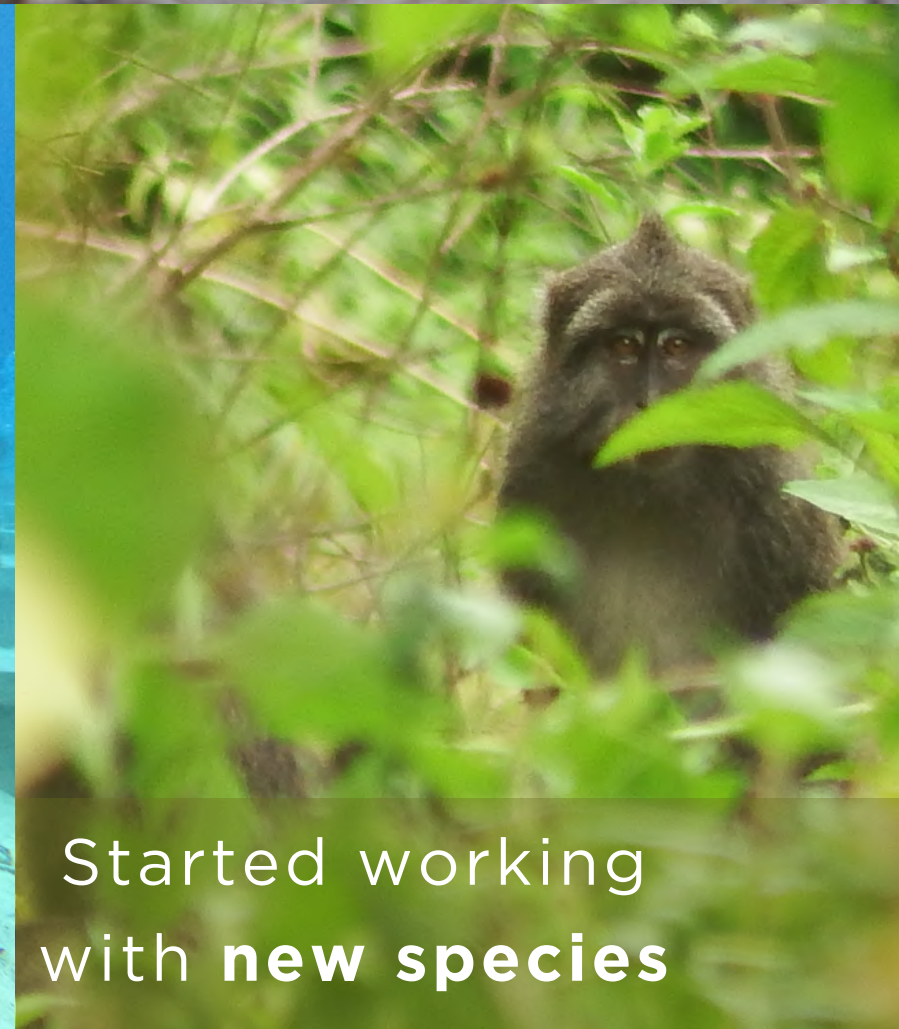
Implemented **three sustainable fisheries** temporary closure areas



6 schools included in our environment education



Planted **36** coral restoration structures



Started working with **new species**



Grew our team to **61** members



Implemented **2 new ranger teams**

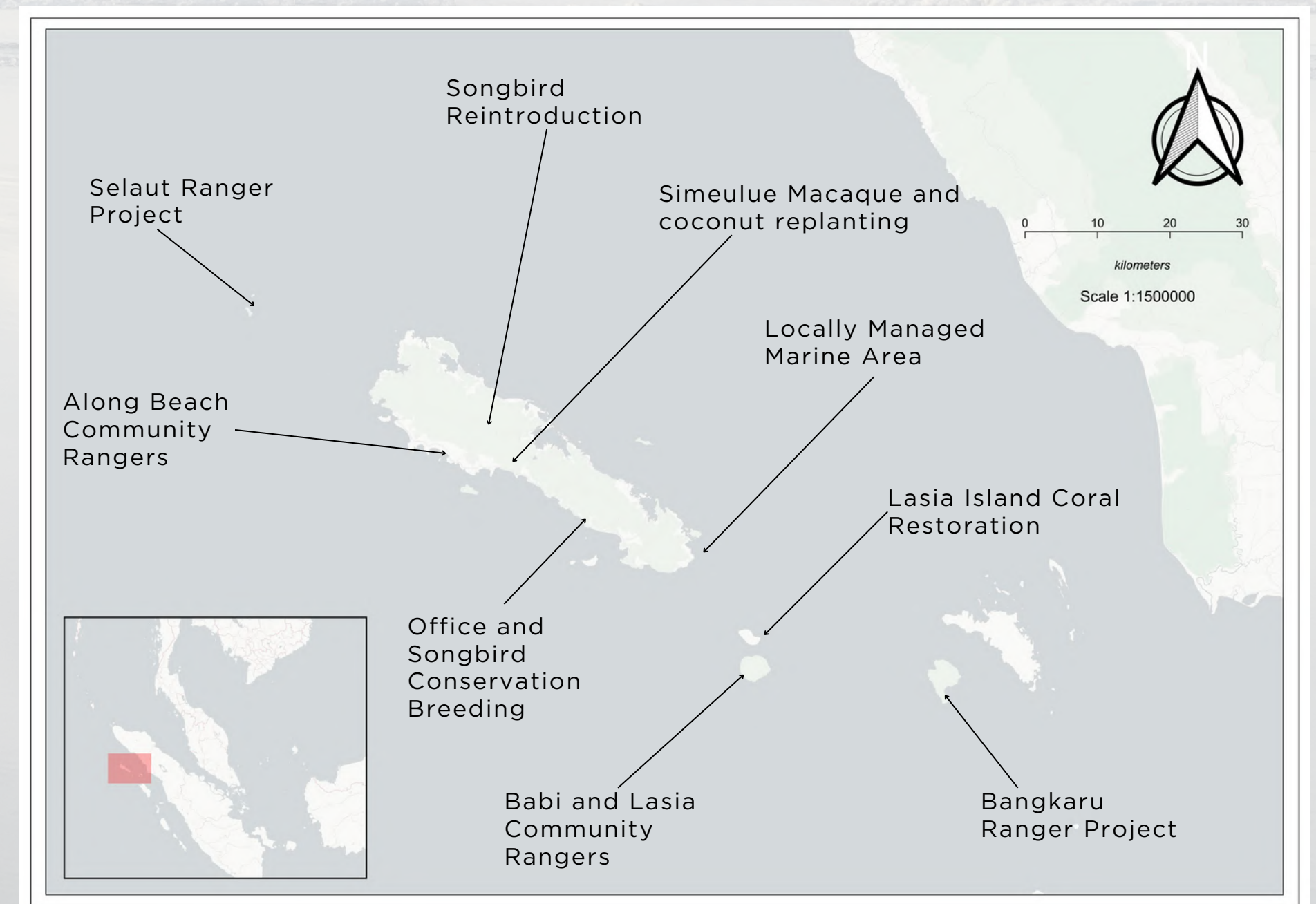


Bred a total of **14** highly threatened songbirds

| ABOUT US

Part of the West Sumatran Islands chain off the coast of Sumatra, Simeulue and Bangkaru Islands lay just 350 kilometers north of the equator. The region's nature consists of highly biodiverse tropical rainforest and coral reefs. These islands are home to some of the world's most endangered bird, reptile and mammal taxa, all of which are seriously threatened by poaching, wildlife conflict and habitat destruction. Our mission is to save these taxa from the brink of extinction, contribute to more resilient ecosystems, and develop opportunities for the local community to benefit through their involvement.

Through collaborative partnerships across the globe and within the landscape, we address these interlinked goals of conservation and local community livelihoods. We employ more traditional conservation approaches such as community ranger projects, conservation breeding and reintroduction. Along side these efforts we increase agriculture productivity, replant coconut trees and invest in added-value processing. The interconnected goals are to support biodiversity, increase farmer incomes, create meaningful jobs, and avoid planned (i.e., industrial palm oil) and unplanned (i.e., farmer driven) deforestation and poaching.





OUR APPROACH: HOLISTIC AND LANDSCAPE WIDE

We are working to shift the trajectory of an entire landscape away from an extraction orientated development path to one that is regenerative.

We do this through long term, holistic activities that address core needs of humans and nature: creating jobs, increasing productivity of primary resources while ensuring sustainability, emergency conservation of endangered species, and long term partnerships and knowledge sharing with communities and government.

INTEGRATING REGENERATIVE AGRICULTURE AND CONSERVATION

Sumatra has one of the world's highest deforestation rates. Simeulue has mostly avoided deforestation pressures due to a long running civil conflict in Aceh and the remoteness of the island; in 2020 it had total forest cover of 83.6% of which 56.2% was primary forest. However, between 2000 and 2020 overall forest cover in Simeulue reduced by 8.4%, highlighting that Simeulue's forests are under threat. Our mission is to save Simeulue's remaining forest.

Palm oil expansion presents the largest macro threat to Simeulue forests and many of the species that live within it. A key issue with coconut farmers is that existing coconut trees are ageing, and productivity is dropping. Coconut farmers who typically own 1-3 ha of land in coconut production do not have access to quality seedlings or the funding needed to revitalise their plantations. Large scale palm oil companies on the other hand are actively providing these inputs to encourage expansion.

An integrated approach to regenerative agriculture, farmer livelihoods and conservation is essential for overcoming the climate crisis, ecosystem degradation, and addressing basic human needs. We address these interlinked goals by rehabilitating farms and replanting coconut trees alongside added-value processing and access to premium markets, alongside specific conservation measures.

In 2023 we have established our first songbird reintroduction project on a 25ha island just off the coast of Simeulue, where there are designated conservation zones with community rangers focused on patrols, feeding stations, and monitoring alongside, and in harmony with coconut plantations. We have also built on this work with additional coconut replanting and intercropping in another 5ha site on mainland Simeulue. Our ambition is to use these sites for proof of concept in order to develop a replicable model for expansion across Simeulue.

2024 goal:

- Raise finance to replant 8,000 ha of senile coconut plantations, alongside
- Conservation of Simeulue's remaining forest areas and endangered biodiversity.

OUR DATA FOCUS

We have implemented **SMART Patrol**, an application designed specifically for conservation field work and ranger projects. SMART has allowed us to greatly improve the efficiency and effectiveness of our data collection.

Koltiva is an agritech start-up enabling inclusive, climate-smart, and traceable global supply chains. In 2023 we partnered with Koltiva to develop full traceability for our regenerative agriculture work and coconut product supply chain. This enables all products to be traced from farm to end user.



Traceable from farm and farmer to you
Scan me with your phone camera

SONGBIRD CONSERVATION

Birds are the most common pet in Indonesia. Many of these birds are taken directly from the wild and enter into the illegal pet trade. This has led to dramatic declines in Indonesian bird populations, which is now recognised as a global conservation crisis.

Simeulue and its satellites are home to a number of highly threatened endemic bird taxa. Their endangerment most often stems from their desirability as pets, and in some cases sustenance.

| SONGBIRDS CONSERVATION

CONSERVATION BREEDING

Simeulue's most highly threatened songbirds are Simeulue Barusan shama and the Simeulue hill myna. Both are classified as subspecies but some argue should gain species status. Both Simeulue Barusan shama and Simeulue hill myna are widely considered extinct in the wild, but do remain in cages on Simeulue.

As for throughout much of Indonesia, Simeulue has an active bird poaching and keeping culture, with the more rare and desirable species fetching high prices. Due to the dire situation of both these subspecies, we run a conservation breeding

project focused on building safety populations and the foundations for reintroductions.

In 2023 we have continued to successfully breed Simeulue Barusan shama, having bred 14 chicks. We have also obtained our first Simeulue hill myna. With the subspecies now increasingly hard to find, even in captivity, this is a huge step towards saving them from extinction.



REINTRODUCTIONS

In 2023 we have carried out our first songbird reintroductions. With the constant threat of poaching, we have developed a community ranger project to protect our released birds. There are two ranger teams made up of four local community members which rotate on 7-day shifts, providing constant surveillance. In addition, we have recruited two women rangers who join our female Project Coordinator when in the field. Gender roles within Aceh province, Indonesia's most conservative province and the only region in Indonesia to be governed by Syariah law, are highly defined. Through engaging women in the project, our goal has been to start to break down these barriers and create opportunities for women to become involved in conservation.





BABI AND LASIA ISLANDS

At around 25 km from Simeulue and 130 km from mainland Sumatra, these amazing islands are remote and isolated. Research suggests they have not been connected to Simeulue or Sumatra for the last 2.5 million years creating a unique flora and fauna, including the endangered endemic subspecies of long-tailed macaque and six endemic bird subspecies including the highly threatened Nias hill myna and Lasia Barusan shama.

In 2023 we implemented a community ranger project which is working to protect these islands and their unique biodiversity.



LONG-TAILED MACAQUE

Both Simeulue and Lasia are home to endemic subspecies of long-tailed macaque. Highly distinct from the mainland Sumatran subspecies, they are darker in colour, have different facial markings and research suggests may show different behaviours. Both the Simeulue and Lasia subspecies are now IUCN recognised as Critically Endangered.

In 2023 together with āluān, have started an exciting partnership with The Long-Tailed Macaque Project who work with people and macaques across disciplines and countries to further coexistence and share knowledge on the species. Together with āluān we are working with Simeulue smallholders and communities to find ways to save these two subspecies from extinction.



ENVIRONMENTAL EDUCATION

Environmental education and knowledge sharing is key to the long-term success of conservation projects. We have a particular focus on the next generation in communities closest to our project sites, as well as concentrating efforts with community rangers in each geographic area to enhance their leadership going forward.

In 2023 we have ramped up our environmental education activities developing a conservation themed syllabus, and gained support from local government and communities to implement this directly within schools.



PROTECTING SEA TURTLES

Despite being protected by law, Indonesia's sea turtle species are subject to threats such as rampant poaching of turtle eggs as a local delicacy, for their turtle meat and shells for jewellery. The situation is so drastic that when not protected, almost 100% of turtle nests get poached.

We run three community ranger projects which protect turtle nesting beaches from poaching, whilst directly involving local communities.



// PHOTO: PAUL HILTON

| SEA TURTLES CONSERVATION

BANGKARU RANGER PROJECT



In 2023 we have continued to run and develop the Bangkaru Ranger Project. Bangkaru is Western Indonesia's largest green sea turtle nesting site. It is also an important nesting site for the little understood Northeast Indian Ocean leatherback turtle subpopulation; currently IUCN classified as Data Deficient, but which we believe should be Critically Endangered.

With the implementation of SMART Patrol, a set of specifically designed software and analysis tools built to help conservationists manage and protect wildlife and wild places, 2023 has seen us focus on improving the data collection methodology of the project.

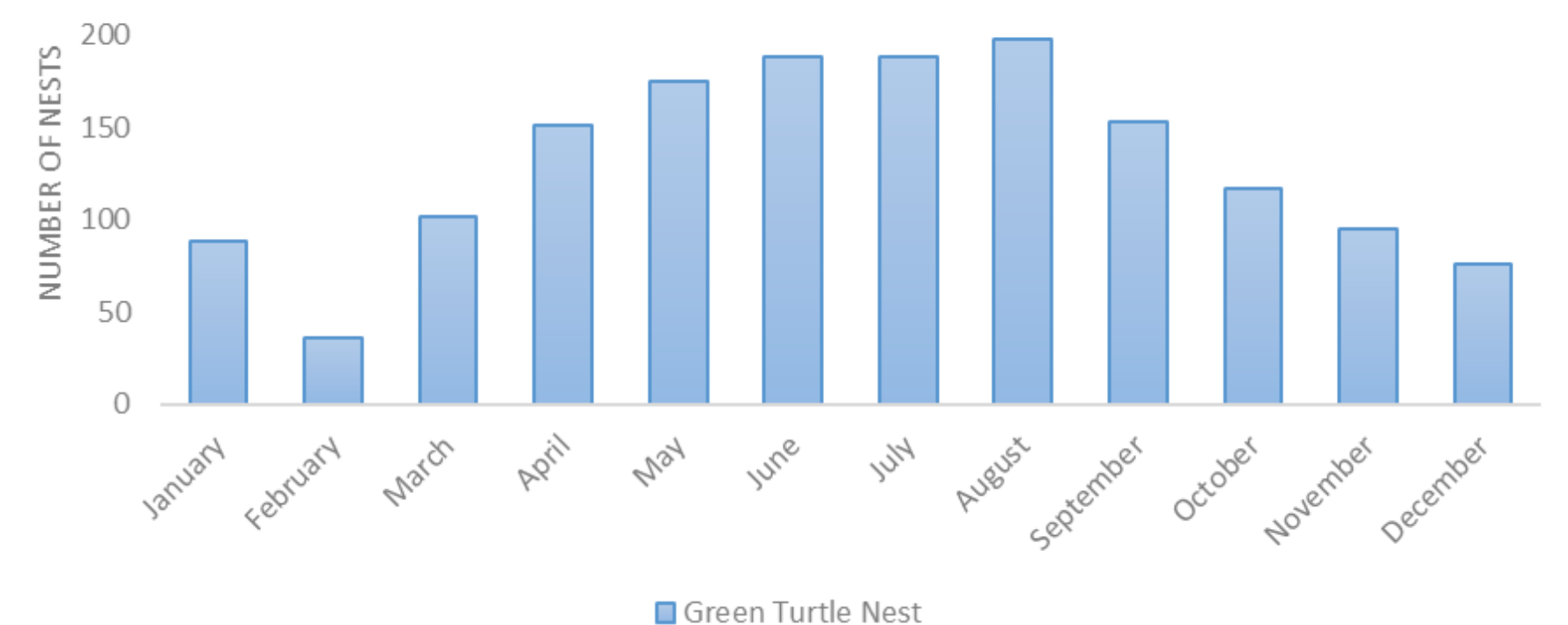
Turtle nesting data was collected during twice daily patrols. During each patrol, the rangers collected data using a GPS and SMART data collection device to log sea turtle encounters as false crawls, turtles nesting, and hatching activity.

During 2023 one poaching event was recorded in April, with seven nests being poached. After the poaching event, we increased ranger surveillance of Bangkaru's nesting beaches and carried out numerous meetings with the village closest to Bangkaru, alongside other key actors such as the government and police. There has been no poaching activity since.

// PHOTO: ALEX WESTOVER

Across each of our project sites, we are dedicated to providing local community members opportunities to be involved in our projects. Through the employment of community rangers, each project provides sustainable income opportunities and training in turtle conservation. Many of our rangers are ex-poachers, but through project engagement and training, they have undergone a transformative process from poacher to conservation guardian.

In 2023 we have continued to work with local communities by running the Ranger community involvement project, which provides an immersive experience and salary for local community members who work on a revolving roster alongside our permanent ranger team. This builds positive conservation ethic, trust in the project and additional livelihood opportunities. The Local Ranger scheme is one of the elements of the project that we are most proud of as it has led to positive changes in the way local communities act towards turtle species and conservation issues.

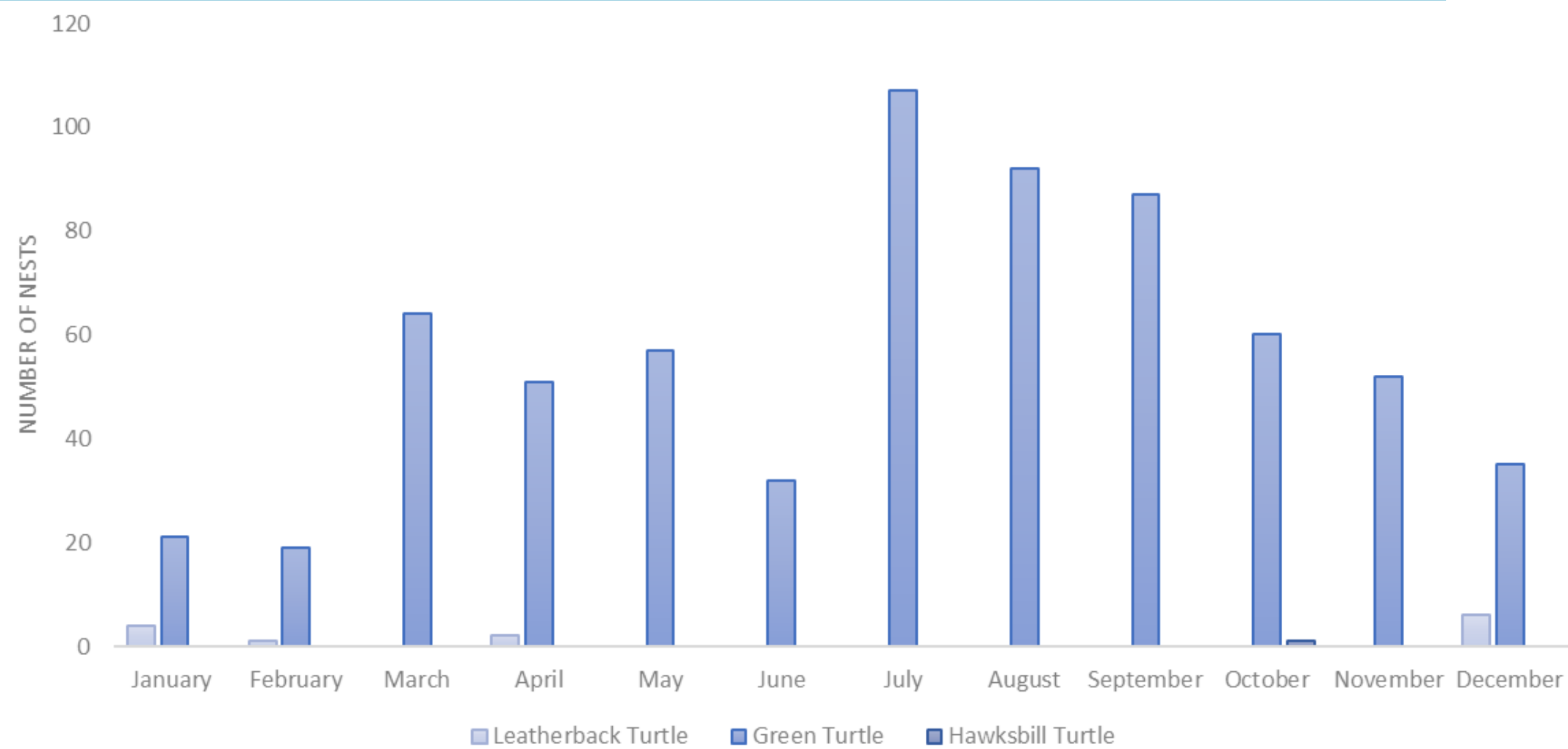


| SEA TURTLES CONSERVATION

SELAUT ISLAND RANGER PROJECT

With partners Turtle Foundation and Yayasan Penyu Indonesia, we have continued to grow and develop the project in 2023. We now employ a total of nine rangers all of which are members of local communities. Each ranger has been trained in scientific monitoring techniques and for advanced data collection purposes, we are tagging all encountered leatherback turtles with metal tags and PIT tags.

Our main project objective, is to patrol the nesting beaches of Salaut Island each night and morning in order to prevent poaching activity, and to collect data on nesting turtles and nest numbers.



// PHOTO: PAUL HILTON



Prior to the project starting, background research showed that close to 100% of nests were poached by the coconut farmers and fishers that frequently visit the island. Including 2023 data, a total of 44 leatherback turtle nests have been protected from poachers since the project's implementation. Thanks to the constant presence of our rangers, there have been no recorded cases of poaching since the project commenced, showing the huge importance and success of this project.

| SEA TURTLES CONSERVATION

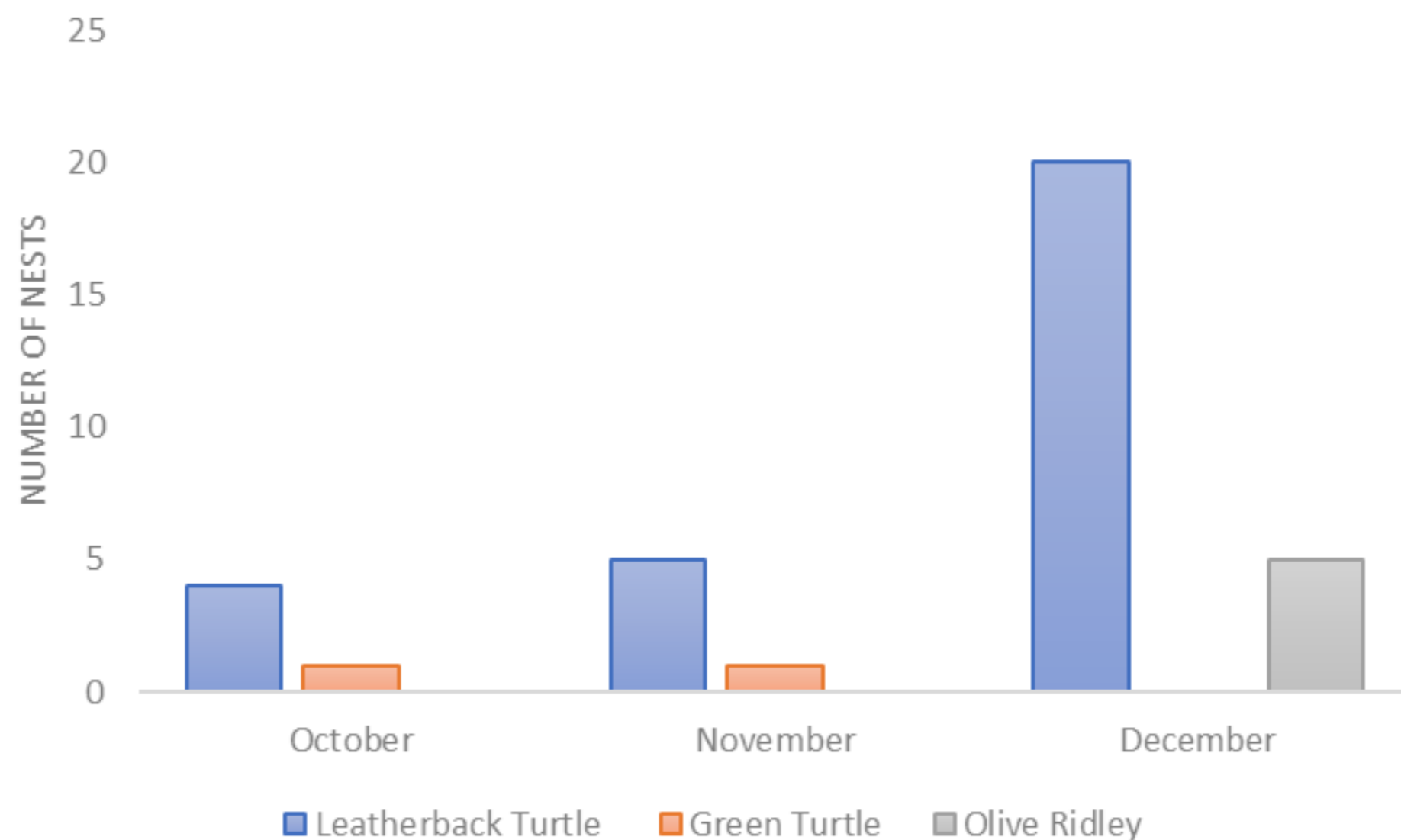
ALONG BEACH COMMUNITY RANGERS

In addition to Bangkaru and Selaut which are both outer islands around 50 and 70km from Simeulue respectively, several beaches on mainland Simeulue are nesting areas for sea turtles. Along, in the northwest of Simeulue, was discovered during our research on leatherback turtle nesting beaches in 2019. Further research in 2022, revealed that Along is the most frequented leatherback nesting site of mainland Simeulue and indeed of all the areas where we are currently protecting turtle nests.

Given the importance of Along as a nesting site for leatherbacks, we started a community ranger project in January 2023

to protect turtles nests along Along beach in partnership with Turtle Foundation, Yayasan Penyu Indonesia and local communities.

During the trial period from January to March 2023, we recorded and saved 38 leatherback turtle nests. The project then started collecting data with regular community ranger patrols for the 2023-24 season with a further 28 nests being saved. These numbers are significant given how low the leatherback nesting numbers are across the region. We have also recorded green and olive ridley turtles nesting on Along meaning the beach is home to three species.



| REGION WIDE COOPERATION

EAST INDIAN OCEAN LEATHERBACK ALLIANCE

Very little is known about the leatherback Northeast Indian Ocean subpopulation. Data from our projects and evaluation of the existing limited literature, suggests that the number of nesting female leatherback turtles in the eastern Indian Ocean might actually be no more than 1,000 individuals. The IUCN Red List status for the subpopulation is also Data Deficient showing just how little understood the Northeast Indian Ocean leatherbacks really are.

In 2023 we along with our partners Turtle Foundation and Yayasan Penyu Indonesia have come together to create the East Indian Ocean Leatherback Alliance (EIOLA). With so little known about Northeast Indian Ocean subpopulation, and with leatherback turtles having lower nest site fidelity and larger travel range than other turtle species, it is crucial that we work together across the region.

Leatherback nesting activities are well documented on the Andaman and Nicobar Islands, but it has only recently been found out that the Western Sumatra Islands are also home to several beaches that are regularly visited by small numbers of leatherback turtles for nesting. While the nesting turtles are not facing many threats on the Indian Islands, because consumption of turtle eggs and meat is not a tradition in these areas. The situation on the Indonesian islands is far more drastic.

Around 10% of Indonesia's population live below the national poverty line, with this

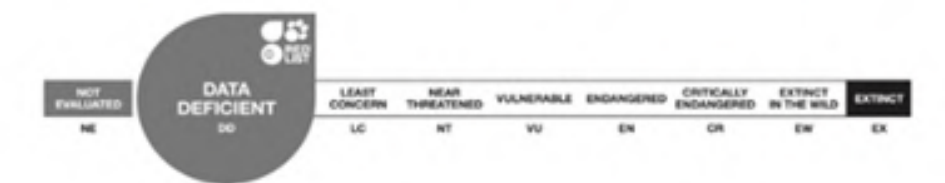
being considerably higher within small island coastal communities, such as those we work with on Simeulue, Pulau Banyak and Nias. Turtle eggs are seen as a free and easily accessible source of food and additional income.



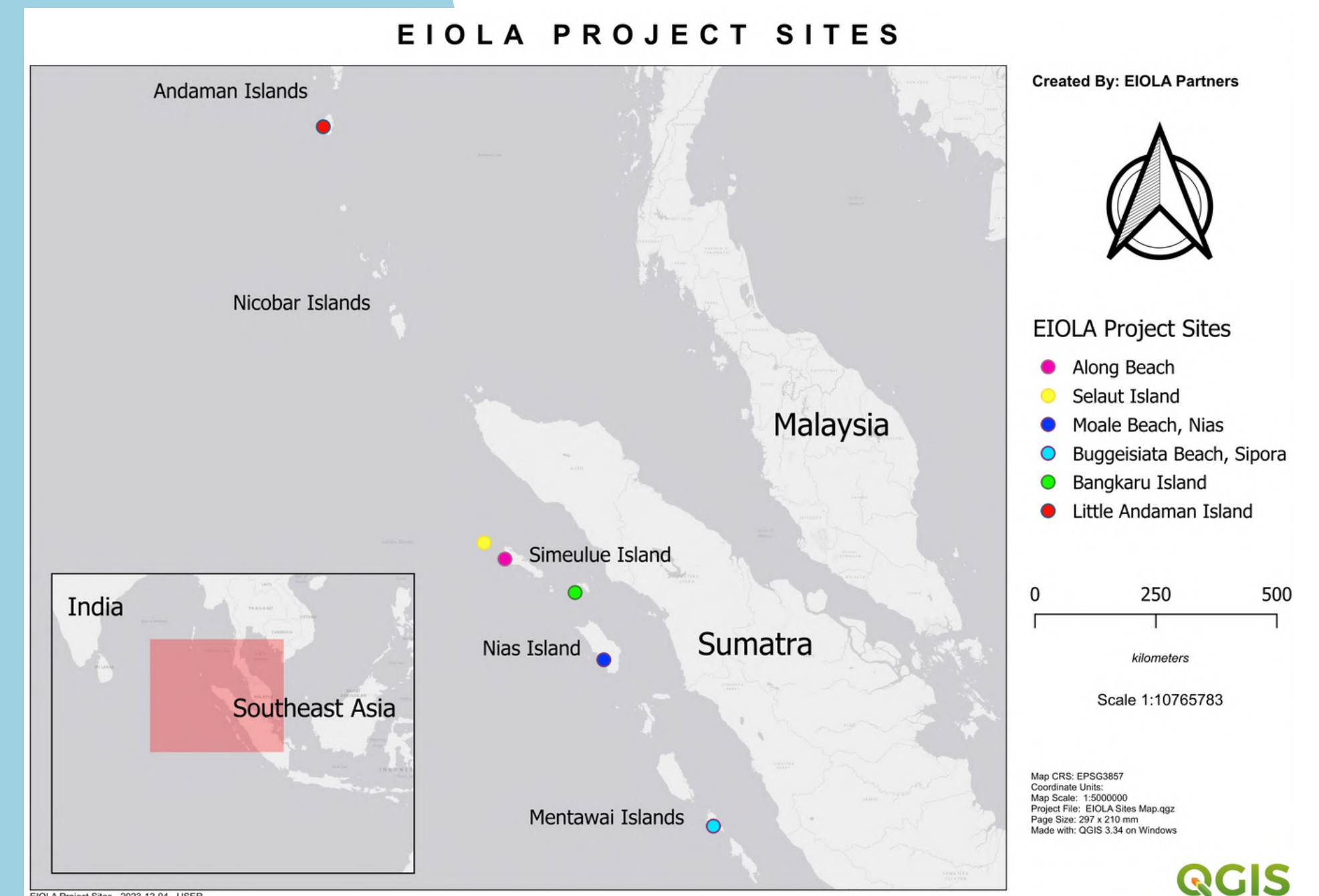
The IUCN Red List of Threatened Species™
ISSN 2307-8235 (online)
IUCN 2008: 146967873A46967877

Dermochelys coriacea (Northeast Indian Ocean subpopulation), Leatherback

Assessment by: Tiwari, M., Wallace, B.P. & Girondot, M.



// PHOTO: PAUL HILTON



MARINE ECOSYSTEMS

LOCALLY MANAGED MARINE AREA

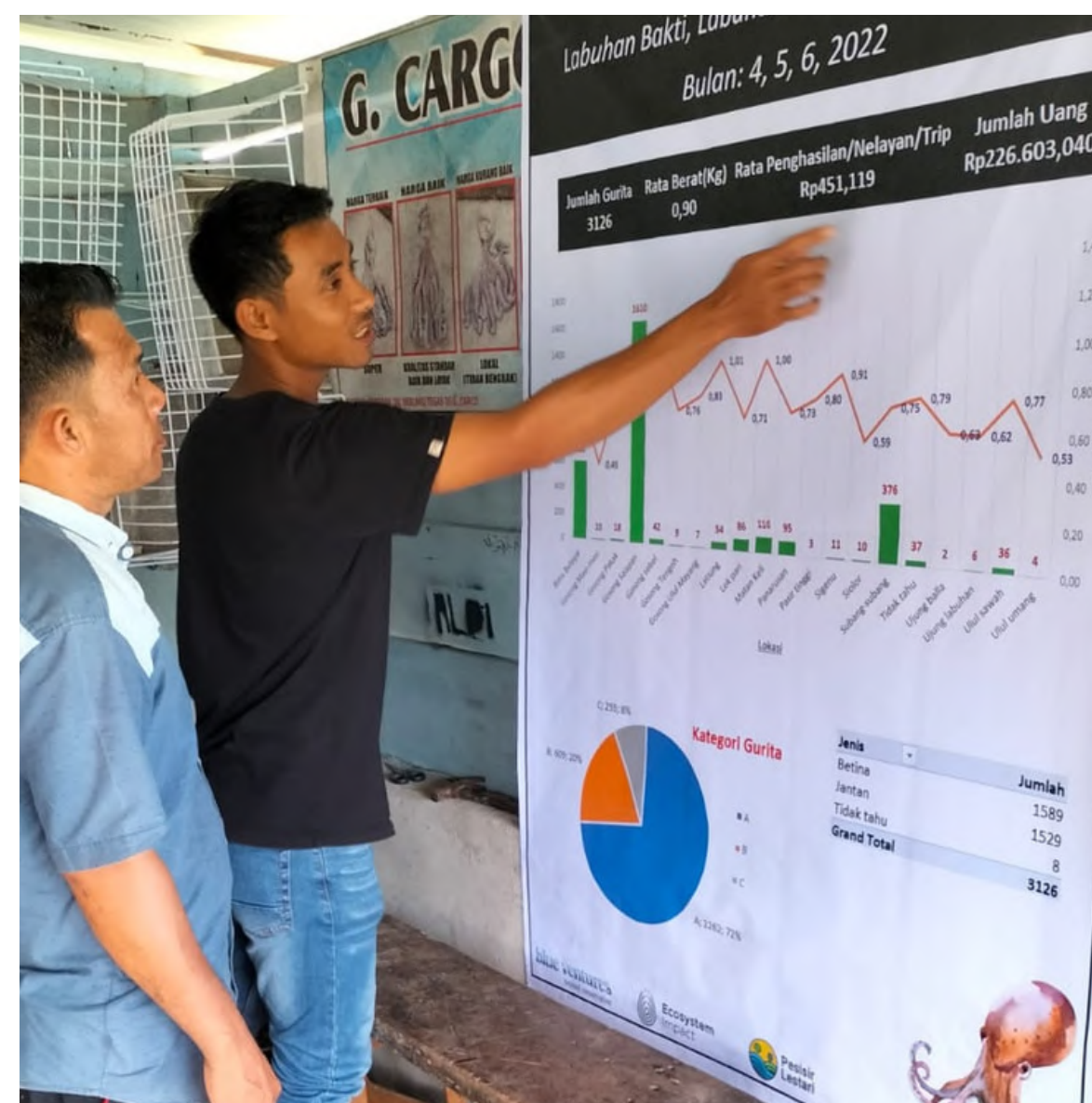
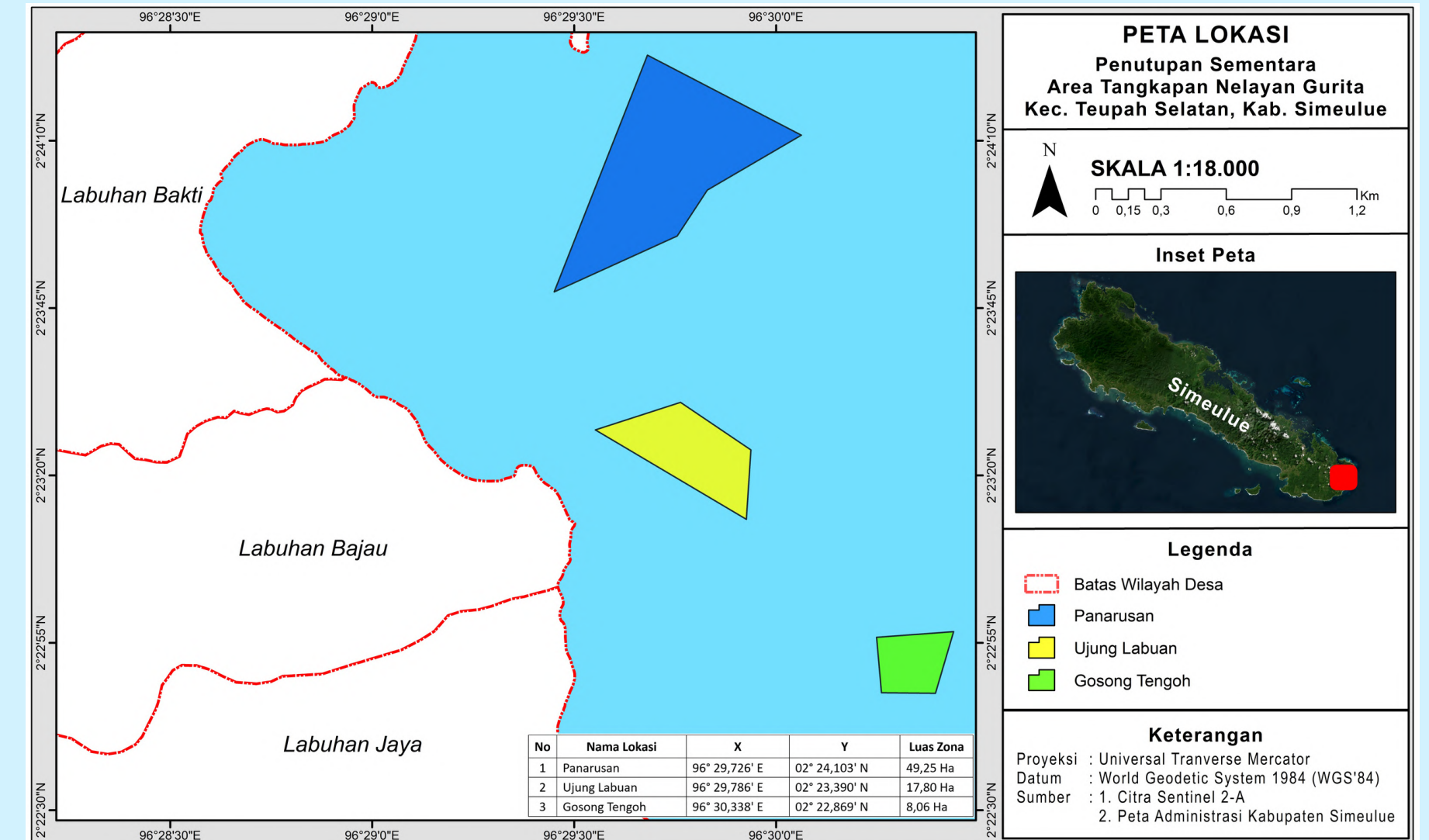
In 2023 we have implemented three temporary marine closure areas as part of our developing Locally Managed Marine Area. This project is run in partnership with Blue Ventures, who are world leaders in developing community led marine conservation initiatives. The project uses octopus as an indicator species, due to their quick life cycles and highly exploited fishery.

Simeulue is a small remote island where people continue to live traditional lives highly dependent on natural resources for their sustenance and livelihoods. The main sources of food and income on Simeulue are from

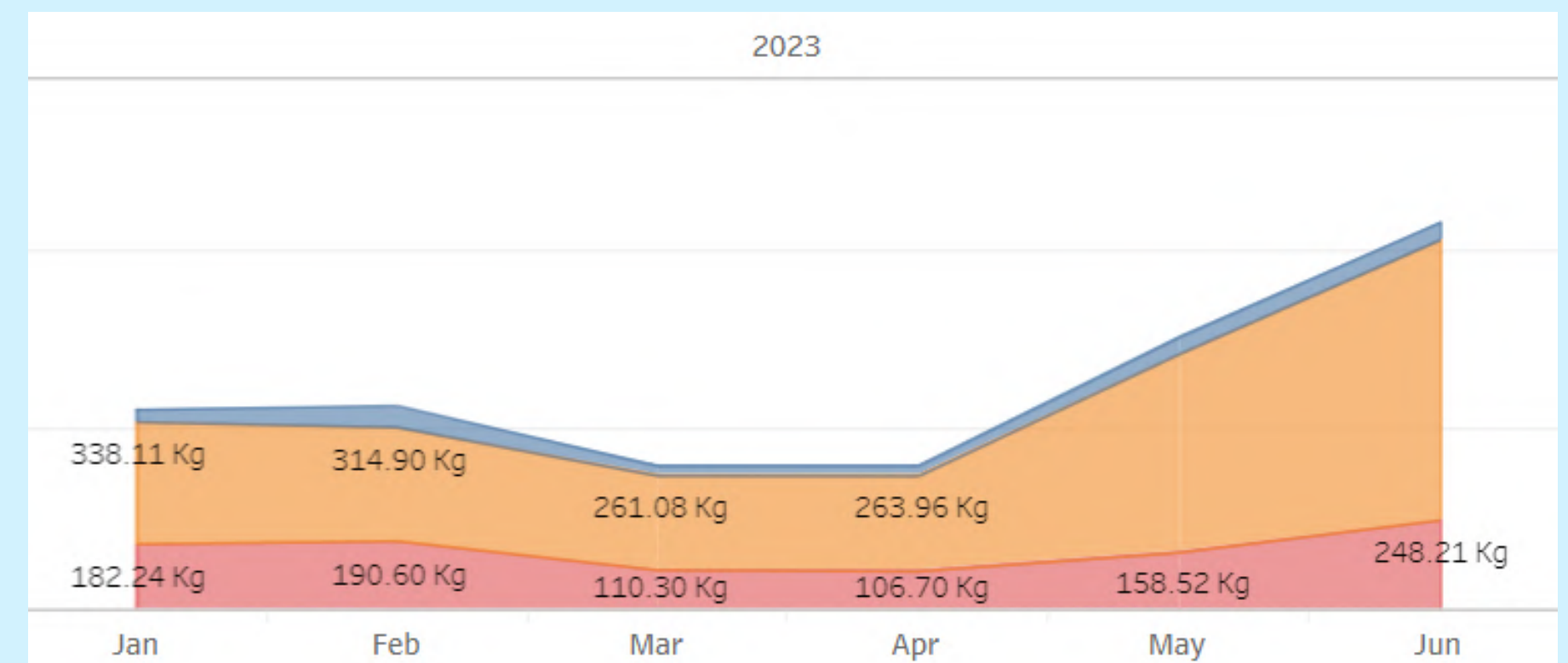
fishing and smallholder farming. Developing sustainable fishery practices is therefore imperative for the longevity of Simeulue's fish stocks and this critical source of livelihood and food security.

Many of Simeulue's fishing communities are deeply aware of the downward trend in fish stocks. This existing knowledge, coupled with data collected through the project, has helped gain wide community support for the project, and strong interest for further improvements in marine resource management.

The project works on collecting data to showcase how sustainable fisheries management not only benefits marine biodiversity, but also communities through increasing catch sizes. Our approach focuses on community and government engagement leading to these actors taking the decision to successfully implement three temporary closure areas during 2023. Each temporary closure lasted three months, with data being collected on catch size and quantity before and after.



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| MARINE ECOSYSTEMS

CORAL RESTORATION



In 2023 we carried out our first large scale coral restoration activity. A total of 36 coral restoration structures, each holding eight coral fragments, were placed within close proximity to a damaged reef, at between 10 and 15 meters.

In order to gain further support for the project, local police, navy, and government members were invited to participate.

LOOKING FORWARD TO 2024

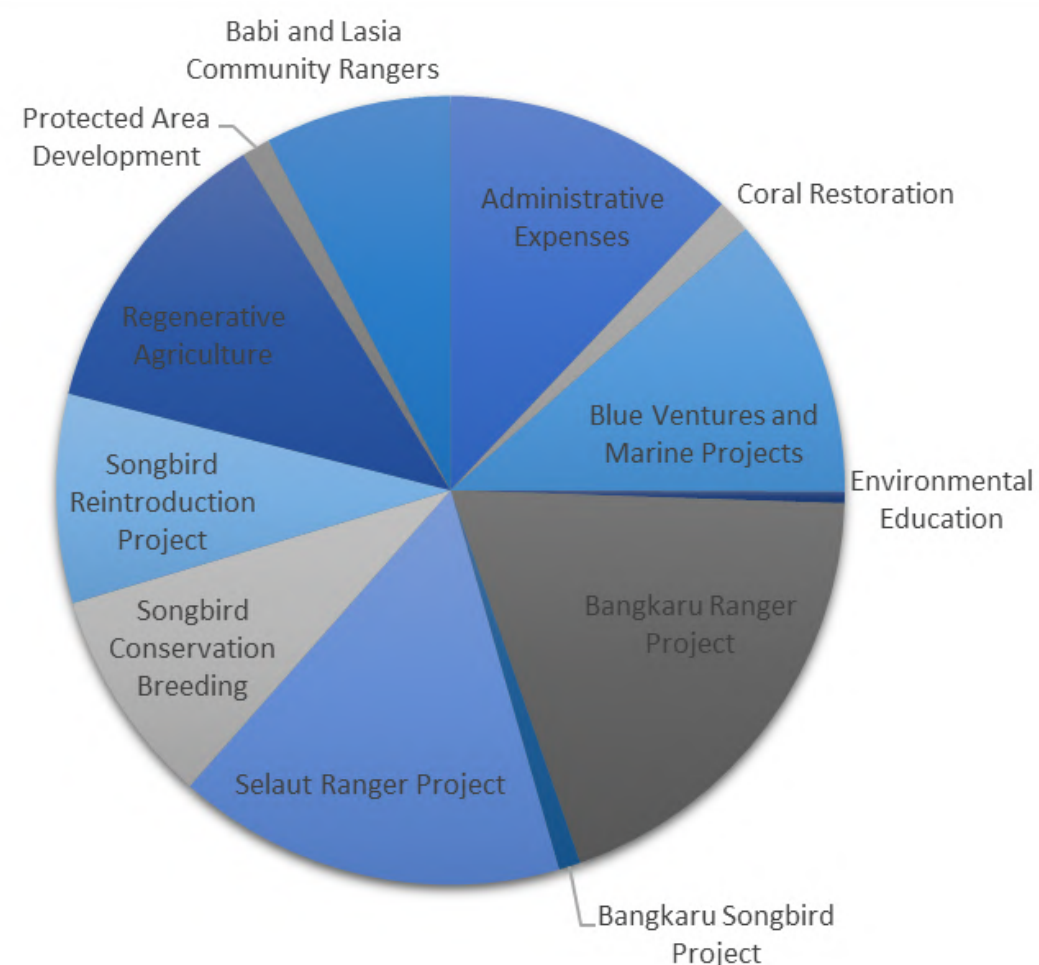
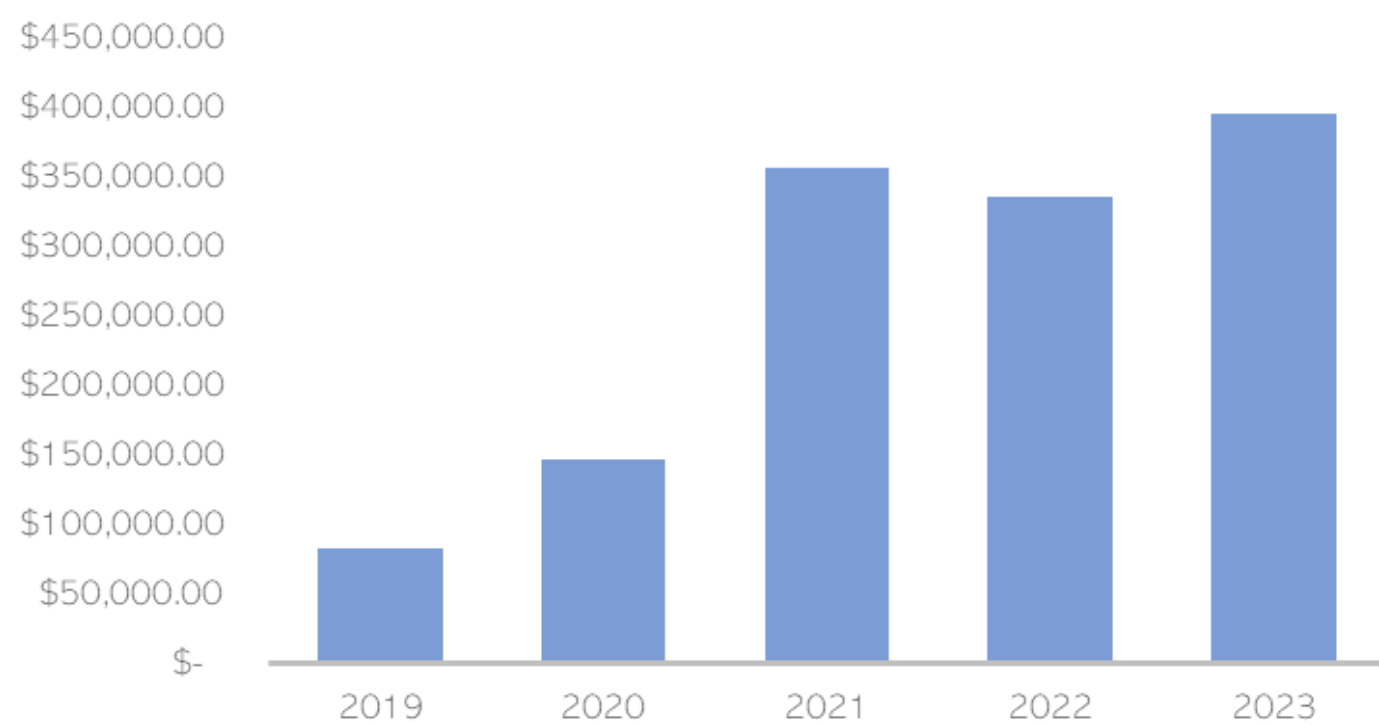
In 2024, we will bring EcosystemImpact and āluān closer together, with EcosystemImpact becoming āluān foundation. āluān means purpose and direction in Simeulue language. Our vision is that by further collaborating we will widen our scope and increase our positive conservation impact by providing genuine sustainable livelihood opportunities. We will achieve this through developing community led regenerative agriculture and landscape level land use planning models, which will include areas of high conservation value for the protection of highly threatened species (including songbird reintroductions), alongside areas for community agricultural productivity.

By growing our marine work, and increasing our Locally Managed Marine Area activities across a larger area, we will continue to improve Simeulue's fisheries management. Our long-term goal is to link our Locally Managed Marine Area with our terrestrial conservation work on Babi and Lasia to develop a larger designated conservation Protected Area.

The exciting growth of EIOLA means that together with our partners, we will continue to increase and develop region wide protection for sea turtles.

// PHOTO: PAUL HILTON

Five Year Total Proceeds





Ecosystem Impact

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