

PROJECT REPORT

INDONESIA 2023 -
HABITAT RESTORATION
FOR RHINO, ELEPHANT,
& TIGER



ONETREEPLANTED



THANK YOU FOR YOUR SUPPORT

Dear friend,

Thanks to your support, a total of 167,000 trees were planted to restore 100 hectares of land in Indonesia.

Planting trees in areas that have been degraded or deforested helps the environment by accelerating and assuring the re-establishment of healthy forests. Through reforestation, the canopy is restored, ecosystems are made whole, and biodiversity can thrive.

None of this would be possible without you. On behalf of everyone at One Tree Planted, thank you!

What follows is a report outlining the project you supported in Indonesia. I hope you enjoy reading it and truly feel the impact you have made.



Harry P. Lynch

PRESIDENT & CEO
ONE TREE PLANTED



OVERVIEW

The objective of the Indonesia 2023 - Habitat Restoration for Rhino, Elephant, & Tiger project was to reforest nearly 250 acres of Way Kambas National Park for the purpose of restoring key wildlife habitat and building resilience to fire disturbances. Planting 14 native tree species and implementing adequate firebreaks – including an emphasis on community involvement in fire suppression and outbreak control – will work to build resilience against environmental disturbances such as fires, while enhancing the ecological functioning and biodiversity supported by this iconic National Park.

 **TREES PLANTED**
167,000


 **TREE SPECIES PLANTED**
14

 **FAMILIES BENEFITED**
35

 **HECTARES REFORESTED**
100

 **WOMEN INVOLVED**
7

 **ACRES REFORESTED**
247

 **JOBS SUPPORTED**
50

 **WILDLIFE SPECIES BENEFITED**
50

 **VOLUNTEERS INVOLVED**
5

 **HECTARES RIPARIAN RESTORATION**
200



TREE SPECIES PLANTED

Large-scale planting initiatives require careful consideration of forest fire prevention to ensure optimal success within Way Kambas National Park. Given the historical prevalence of forest fires as a primary cause of degradation in this area, any restoration activity must prioritize habitat protection. The three-layered approach adopted for this restoration project in WKNP encompasses reforestation to enhance tree density, proactive measures against forest fires to safeguard vegetation, and stringent law enforcement to curb illegal activities contributing to fire outbreaks.

In selecting tree species for the restoration area, various factors were meticulously weighed, including the species' characteristics and ecological functions. Preference was given to native species with attributes such as fire resistance, rapid growth, and provision of food for herbivores, aligning with the park's conservation goals. Additionally, considerations extended to riparian species suitable for small stream ecosystems within the restoration zone, ensuring a comprehensive approach to habitat revitalization and biodiversity enhancement.

SPECIES PLANTED THROUGH THIS PROJECT

- Jambon (*Syzigium grande*)
- Puspa (*Schima wallichii*)
- Ketapang (*Terminalia catappa*)
- Salam (*Syzygium polyanthum*)
- Pulai (*Alstonia scholaris*)
- Bintaro (*Cerbera manghas*)
- Laban (*Vitex pinnata*)
- Kecapi (*Sandoricum koetjape*)
- Nyamplung (*Calophyllum inophyllum*)
- Bungur (*Lagerstroemis speciosa*)
- Deluwak (*Microcos paniculata*)
- Sungkai (*Peronema canescens*)
- Joho (*Terminalia bellirica*)
- Kemang (*Mangifera kemanga*)



SPECIES SPOTLIGHT

Jambon, scientifically known as *Syzygium grande*, is an evergreen tree species native to Indonesia, particularly found in the lush tropical forests of Sumatra and Java. Jambon – the species planted in most abundance for this project – is characterized by its tall stature, reaching heights of up to 30 meters, and its dense, dark green foliage, which provides ample shade in its natural habitat. Jambon trees have smooth, grayish bark and produce small, white flowers that bloom in clusters, emitting a pleasant fragrance, especially in the evenings, attracting pollinators such as bees and butterflies.

In Indonesia, the Jambon tree holds significant cultural and ecological importance. Traditionally, various parts of the tree, including the leaves, bark, and fruits, have been utilized for their medicinal properties. Extracts from the leaves are believed to possess antibacterial and anti-inflammatory properties, and are used in traditional herbal remedies to treat ailments such as coughs, colds, and digestive issues. Additionally, the fruits of the Jambon tree are edible, with a sweet and slightly sour flavor, and are enjoyed fresh or in culinary preparations such as jams, jellies, and desserts.

With its dense foliage and fruit-bearing capabilities, Jambon trees play a crucial role in supporting the habitat and survival of key wildlife species such as the Sumatran rhinoceros (IUCN Red List Critically Endangered), Sumatran tiger (IUCN Endangered), and Sumatran elephant (IUCN Critically Endangered) in Indonesia. These iconic species heavily rely on Jambon for various reasons:

- **Sumatran Rhinoceros:** The Jambon tree provides essential food resources for the Sumatran rhinoceros, which is primarily a browser, feeding on leaves, twigs, and fruits. The tree's edible fruits serve as a valuable food source for rhinos, contributing to their dietary needs in the dense tropical forests of Indonesia where they reside.
- **Sumatran Tiger:** The dense canopy of the Jambon tree offers critical shelter and hiding places for the elusive Sumatran tiger. These big cats use the thick vegetation cover provided by the tree for resting, stalking prey, and rearing their young, enhancing their chances of survival in their natural habitat.
- **Sumatran Elephant:** The Jambon tree serves as an important food resource for Sumatran elephants, which are primarily herbivores, consuming a wide variety of vegetation. The tree's leaves, bark, and fruits are valuable components of the elephant's diet, providing essential nutrients and sustenance for these large mammals.



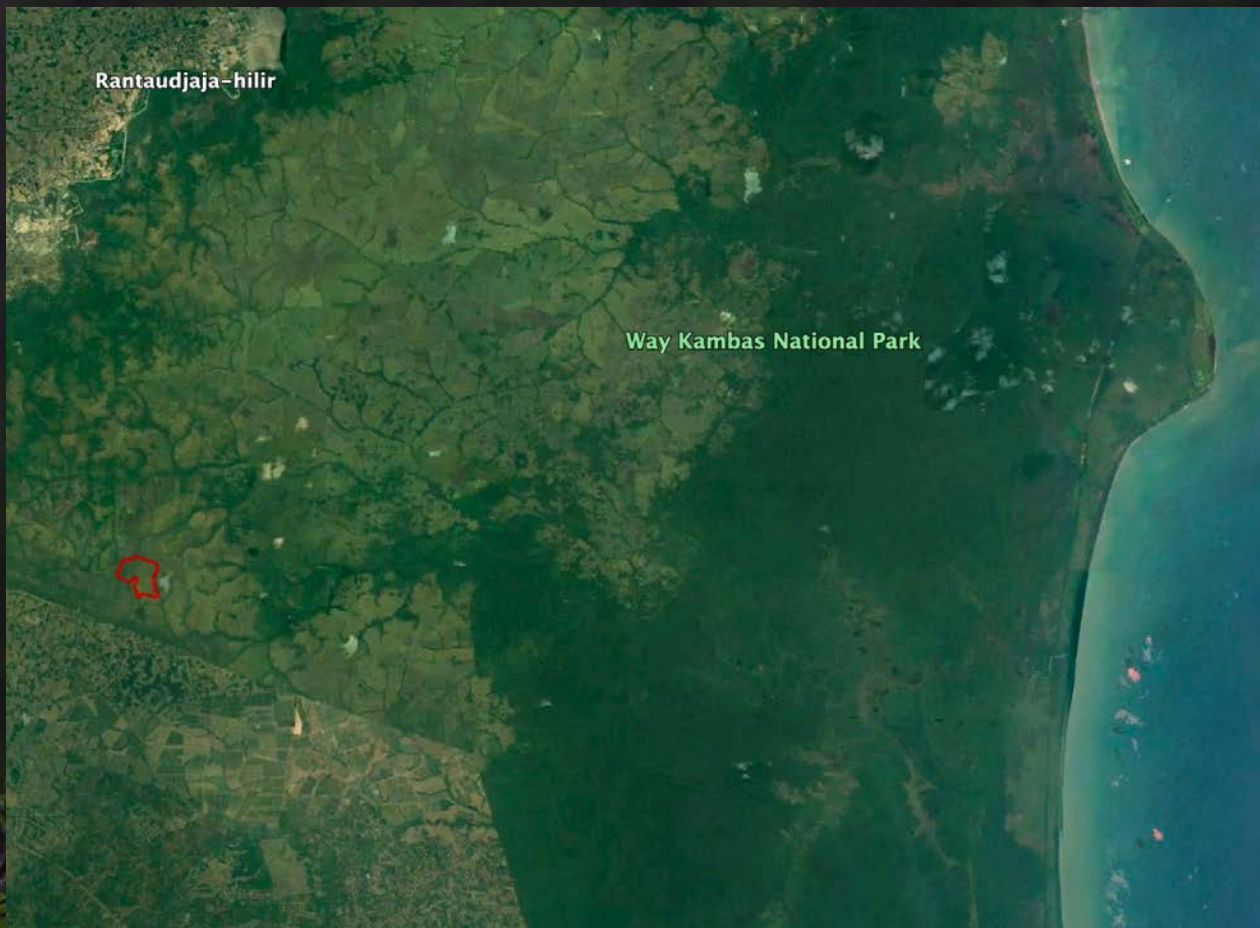


“
THE DAMAGED HABITATS IN WAY KAMBAS NATIONAL PARK HAVE BEEN A PROBLEM FOR THE GROWING WILDLIFE POPULATION, AS WELL AS THE INCREASING THREAT OF FOREST FIRES. WE HAVE CONSISTENTLY STRIVED TO IMPROVE THIS CONDITION SINCE 2010 BY CONTINUING REFORESTATION AND PROTECTION PROJECTS. IN THIS ONE TREE PLANTED-SUPPORTED PROJECT, WE STROVE TO PLANT 100 HECTARES AND PROTECT MORE THAN 300 HECTARES OF CRITICAL HABITAT AREAS WITH INTENSIVE COMMUNITY INVOLVEMENT. OUR HOPE IS THAT FUTURE FUNDING FROM ONE TREE PLANTED WILL HAVE A SIGNIFICANT IMPACT ON THE QUALITY OF FOREST ECOSYSTEMS IN WAY KAMBAS NATIONAL PARK, THEREBY WORKING TO RESTORE WILDLIFE DIVERSITY AND POPULATIONS, ESPECIALLY KEY WILDLIFE POPULATIONS, AND RESTORING AND INCREASING PLANT DIVERSITY IN NATURAL FOREST ECOSYSTEMS.



YOUR IMPACT ON THE MAP

The Indonesia 2023 - Habitat Restoration for Rhino, Elephant, & Tiger project supported the planting of 167,000 native tree species across 100 hectares / 247 acres of Way Kambas National Park in the Lampung province of southern Sumatra, Indonesia. By reforesting these sites with fire-resistant species, this project strives to set the foundation for what will soon become ecologically diverse, sustainable wildlife habitat capable of resilience to fires, and provision of ecological benefits for wildlife and the community alike.



A CLOSER LOOK AT THE IMPACT

Reforestation to Restore Wildlife Habitat in Way Kambas National Park
by Meghan Danny, Global Projects Support Specialist

The importance of reforestation and conservation of wildlife habitat in Way Kambas National Park (WKNP) cannot be overstated, as this protected area is not only a biodiversity hotspot but also plays a crucial role in ecosystem services and wildlife conservation efforts. Reforestation initiatives within WKNP are essential for restoring degraded habitats, promoting biodiversity, and mitigating the impacts of deforestation and habitat loss. By planting native tree species and restoring natural vegetation, reforestation projects like these help to recreate vital habitats for a diverse range of plant and animal species, contributing to the overall health and resilience of the park's ecosystems.

Conservation of wildlife habitat in WKNP is paramount for safeguarding the park's rich biodiversity, which includes globally threatened species such as the Sumatran elephant, Sumatran tiger, and Sumatran rhinoceros. These iconic yet globally threatened species rely on the park's diverse habitats, including tropical forests, grasslands, and wetlands, for food, shelter, and breeding grounds. Protecting and restoring their habitats through conservation measures such as habitat restoration, anti-poaching efforts, and community engagement is essential for ensuring the long-term survival of these species and maintaining the park's overall ecological balance.

Furthermore, WKNP serves as a crucial corridor for wildlife movement, connecting fragmented habitats and facilitating genetic exchange among populations. By conserving wildlife habitat and promoting habitat connectivity, the park helps to prevent genetic isolation and maintain healthy populations of key species, thereby enhancing the park's ecological resilience to threats such as climate change and human encroachment. Additionally, preserving intact ecosystems within WKNP contributes to carbon sequestration, climate regulation, and the provision of clean water, underscoring the interconnectedness between biodiversity conservation, ecosystem health, and human well-being.

Thanks to donors like you, One Tree Planted has helped our planting partners achieve monumental change in restoring Way Kambas National Park through reforestation, riparian restoration, forest fire prevention, and community engagement. This project's impact will be critical to preserving Way Kambas National Park's unique biodiversity and ecological integrity now and in the future.



DOCUMENTING YOUR IMPACT

Through authentic and informative storytelling, we help donors relate to the people who plant their trees and to the impact they're making for the planet. We share photos, videos, and updates from our global projects across our social media, website, and other media to create a personal connection to the incredible work happening on the ground.



PHOTOS FROM YOUR PROJECT





IT IS OUR GOAL THAT IN THE LONG-TERM, ONE TREE PLANTED'S SUPPORT WILL ALLOW FOR INCREASED CAPACITY AND PARTICIPATION OF LOCAL COMMUNITIES IN FOREST MANAGEMENT (ECOSYSTEM RESTORATION) AND - IN GENERAL - INCREASING COMMUNITY AWARENESS AND CONCERN FOR FORESTS, THEIR FUNCTIONS, AND OPTIMAL FOREST MANAGEMENT MEASURES. THANK YOU TO ALL DONORS WHO HAVE SHARED OUR PASSION TO PROVIDE A GREENER AND HEALTHIER HABITAT IN WAY KAMBAS NATIONAL PARK.



ECOLOGICAL BENEFITS

Our reforestation efforts prioritize the planting of fire-resistant, pioneer, and fast-growing species such as *Schima*, *Vitex*, *Syzygium*, *Alstonia*, and *Terminalia*, enhancing the resilience of the restored ecosystem. To enrich plant diversity, over 10 native species were carefully selected, with primary species including Mentru (*Schima wallichii*), Jambon (*Syzygium grande*), and Laban (*Vitex pinnata*). Through our on-ground partner's strategic planting and nurturing techniques, we mitigate the dominance of shrubs and grasses, fostering optimal conditions for tree growth and seed dispersal. This approach not only benefits plant species, it facilitates improved habitat conditions for mammals and other terrestrial animals, contributing to the restoration of local biodiversity.

In addition to planting 100 hectares, our partner's long-term strategy involves intensive protection of another 200 hectares surrounding the planting area, with the goal of eventually restoring a total of 300 hectares of degraded habitat. Through ongoing efforts in areas such as Bambang, Bungur, Sandat, Harjosari, and surrounding regions, these sites are anticipated to see sustained improvements in ecosystem health and resilience. This comprehensive approach not only addresses immediate reforestation needs, but also lays the foundation for enduring ecological restoration, promoting habitat connectivity and enhancing the overall ecological integrity of the landscape.

Lastly, as part of a commitment to holistic ecosystem restoration, riparian areas, including small streams and freshwater swamps, were targeted for restoration. Traditional damming techniques, such as digging sections of streams, were implemented to restore hydrological processes and enhance riparian habitat quality. Over 200 hectares of riparian zones were impacted by this restoration effort, ensuring the conservation of vital aquatic habitats and supporting the recovery of associated flora and fauna.



WILDLIFE BENEFITS

This reforestation project holds immense promise for the region's diverse wildlife, including the globally threatened Sumatran elephant, Sumatran tiger, Sumatran rhinoceros, Malayan tapir, Sun bear, Jungle boar and Great Argus. As the restored habitat matures, it will serve as a vital resource for these animals, offering a rich variety of food sources such as insects and fruits, supporting the dietary needs of avian species and herbivores like deer, napu, and wild boar.

Moreover, the reforested areas will provide essential feeding grounds and shelter, fostering biodiversity and facilitating natural behaviors crucial for the survival of these species. By restoring water catchment areas and revitalizing ecosystems, the project further enhances habitat quality, ensuring the long-term viability of wildlife populations and contributing to the overall health of the park.



COMMUNITY BENEFITS

This reforestation project secured numerous benefits for the local community, driven primarily by collaboration of the Way Kambas National Park and the village communities surrounding the national park. In doing so, these efforts created new jobs for the surrounding village community – especially smallholder farmers and ranchers – as field workers in helping with planting, land preparation, conducting nurseries, and plant care. Likewise, farmers and ranchers will gain through increased food security as a result of the restored ecosystem.

By engaging the community in learning about the importance of reforestation and conservation of Way Kambas National Park, as well as multiple stages of the planting program, this work fostered a sense of ownership and stewardship among community members. What's more, some reforestation sites have evolved into educational tourism destinations, managed collaboratively with local communities, and further spreading conservation awareness and sustainable livelihoods.





20K+
PEOPLE
IMPACTED



U.N. SUSTAINABLE DEVELOPMENT GOALS

THIS PROJECT CONTRIBUTED TO THE FOLLOWING SUSTAINABLE DEVELOPMENT GOALS:



WHAT ARE SDGS?

Sustainable development entails seeking out solutions that not only boost the economic outcomes of developing and poorer nations, but also work to limit (or eliminate) our impact on the planet. Trees are one such solution.

From creating jobs and reducing hunger to improving gender equality, cleaning air and water, absorbing carbon, protecting life on land and water, and more, planting trees can address all 17 sustainable development goals.





"Planting trees here will protect, restore, and conserve Indonesia's forest and related resources. As the trees grow, they will improve soil and water conservation, store carbon, moderate local climate by providing shade, regulate extreme temperatures, increase wildlife habitat and improve the land's capacity to adapt to climate change."

Meghan Danny
Global Projects Support
Specialist



KM Reyes
Project Manager
Asia Pacific