







Save the Orangutan & THE BIODIVERSITY CRISIS

The tropical rainforests are areas of very high biodiversity. More than half of the world's terrestrial species live here. Borneo is a distinctive hotspot with a very rich biodiversity, and many of the animals and plants can only be found in the rainforest of Borneo. One of the most iconic animals is one of our closest relatives - the orangutan, which today only lives in Sumatra and Borneo.

The wildlife is, however, threatened. We are currently experiencing a global biodiversity crisis, often called the sixth mass extinction. A 2019 UN report states that up to one million animal and plant species are on the verge of extinction. Out of all animal and plant species listed in the IUCN red list, 27% are threatened with extinction. All three orangutan species are included here. The Sumatran orangutan has been critically endangered since 2000, the Bornean orangutan since 2016 and the newest orangutan species, the Tapanuli orangutan, that lives in Sumatra, was assessed as a critically endangered when discovered in 2017.

The animals lose their habitat

Habitat destruction is one of the primary causes to the decreasing number of species. Deforestation is especially a major challenge as many of the world's animals live in the forest. When the forest is cleared, the animals lose their homes, important food sources and become even more exposed to hunting as they are forced away from their natural surroundings.

Some of the biggest threats for the orangutan are deforestation and forest fires. However, hunting and the illegal wildlife trade also contribute to the critical state of the orangutan populations. Up to 80% of the orangutans' habitat in Indonesia and Malaysia has disappeared in the last four decades and more than 1,000 orangutans are annually subjected to the illegal wildlife trade. Additionally, there is the threat of infectious diseases. The orangutans are vulnerable to the same viruses and bacteria that cause respiratory illness and disease in humans. SARS-CoV-2, the new corona virus that causes the COVID-19 disease in humans, can by the same token pose a threat to the critically endangered orangutans.

The biodiversity crisis is also linked to the climate crisis. Extreme climate changes are yet another factor threatening biodiversity. When the climate changes, the species must adapt to new conditions. This is not always possible when climate change occurs at the speed we see today. At the same time, human activity, such as deforestation and fires, is both the reason for loss of biodiversity but also a contributing factor to climate change. Therefore, common solutions for both crises would be beneficial. By preserving and restoring important ecosystems such as the rainforest, an increased absorption of carbon as well as a reduction of carbon emissions can be achieved, while providing space for animals and plants in need.

Save the Orangutan protects important habitat

As there is such a rich biodiversity in the tropical rainforests, clearing of forests has a major impact on biodiversity worldwide. We risk losing unique species if rainforest degradation continues at its current pace.

Save the Orangutan believes that the rainforest in Borneo and its biodiversity needs to be protected. The forest not only contributes to food, medicine, timber, wood, and other raw materials. Plants, animals, and microorganisms in the forest also contribute to, among other things, pollination, reduction of soil erosion, regulation of the climate and clean drinking water. When we protect the orangutan and its habitat, we simultaneously protect the entire ecosystem, its functions, and species. For example, the orangutan contributes to spreading seeds in the rainforest and by building nests, the orangutan ensures that sunlight can trickle in through the canopy and enable plants to grow.

It is impossible to know how many species an ecosystem can lose before it leads to a collapse. A 2019 UN report implies that it is still possible to change the dangerous development by protecting and restoring nature. This is what Save the Orangutan does through numerous projects in Borneo. In cooperation with local partners, we protect and restore the rainforest. We work in close collaboration with local communities to use the rainforest in a sustainable way. The goal is to preserve the habitat for thousands of species in one of the world's richest biodiversity hotspots. In addition, Save the Orangutan works with local partners to establish new sustainable populations of rehabilitated orangutans that have previously been victims of the extensive hunt and illegal wildlife trade. In cooperation with the Indonesian authorities, the rehabilitated orangutans are released in protected forest areas. Almost 500 rehabilitated orangutans have already been returned to the wild since 2012.







Save the Orangutan & THE CLIMATE CRISIS

Preserving the rainforest is an important factor in protecting the animals and people of the forest. The rainforest – especially the tropical peatland forest – also plays a central role in the fight against climate change. In order to reduce the global climate impact, it is necessary to stop the deforestation and to replant degraded forest areas.

The world's forest has a unique ability to absorb CO2 from the atmosphere and to store carbon in tree trunks, leaves, and roots. For this reason, forests play a key role when it comes to reducing climate change. The extensive deforestation of tropical rainforests destroys important areas that regulate the climate. Major forest fires in the tropics cause large amounts of CO2 to be released into the atmosphere. As much as 20% of human CO2 emissions are estimated to derive from deforestation worldwide, making it the second largest form of CO2 emissions after fossil fuel. Furthermore, deforestation also affects the water cycle and accelerates soil erosion.

The importance of the Indonesian forests for the climate

Although forests are important for the climate, the peatlands have a particularly important role. Peatlands are an extremely efficient carbon reservoir as the peat consists of large amounts of partially decomposed residues of dead plants. Although the peatlands cover only 3% of the earth's land surface they store 20-25% of all soil carbon. As much as 36% of the world's tropical peatland forests are located in Indonesia and the peatlands in Borneo are one of the largest carbon reservoirs in the world. The average depth of the peatland is 5.5 meters, which is one of the reasons why pristine peatlands in Indonesia store an average of 12 times more carbon than other tropical rainforests in Asia.

Peatlands store large amounts of carbon in the soil, while other forest areas store most of the carbon in the trees above the ground. When it comes to peatland forests it is, therefore, not only the trees, but the peat itself that is important. The trees are important for stabilizing the peat and avoiding drought and CO2 emissions. One of the biggest reasons for greenhouse gas emissions in Indonesia is the draining of peatland forests and the burning of forests and peatlands in order to utilize the areas for plantations or mining.

Forest conservation as a part of the climate solution

At Save the Orangutan we are very concerned about the consequences of the climate crisis. In Borneo, deforestation has already led to increased temperatures and less rain - in addition, extreme weather phenomena and forest fires have become increasingly common. These changes not only largely impact people all over the world - also animals, such as the orangutan, are also threatened by the rapid climate changes and the loss of habitat.

The important role of the forest – not to mention the rainforest in the fight against climate change cannot be overlooked. Save the Orangutan sees a combination of conservation and restoration of the forest as a strong natural climate solution, also protecting animals and people living in these areas. However, this should not be considered an alternative to reducing the carbon emissions of the industrial sector, but rather an invaluable effort in the fight against climate change.

Save the Orangutan's climate action

Save the Orangutan works together with local partners and other environmental organizations to change the attitude of the Indonesian government regarding the importance of the rainforest. Since the UN Climate Summit in Bali in 2007, Indonesia has become increasingly aware of its CO2 emissions. In 2015, major forest fires ravageded the country. The fires led to Indonesia becoming the world's third largest carbon emitter. In 2019, forest fires ravaged again in Indonesia. Two million hectares burned down in 2015 and 1.6 million hectares burned down in 2019. If climate targets are to be achieved, efforts to preserve and restore Borneo's rainforest should be strengthened and fire prevention should be intensified.

Save the Orangutan works together with our partners on specific projects aimed at protecting and replanting the rainforest and increasing its resilience. Among other things this includes:

- Patrolling in protected forest areas to minimize illegal logging
- Replanting degraded forest areas with local and naturally occurring tree species
- Blocking man-made drainage canals in order to increase water levels and reduce drought and degradation of the peatlands.
- Preventing and fighting forest fires in collaboration with local communities living in and around the rainforest.





Save the Orangutan PANDEMICS

The COVID-19 pandemic sends a clear signal regarding the vital importance of nature conservation. Experts and organizations around the world argue that the spread of zoonoses - diseases transmitted from animals to humans – have increased due to human activity such as wildlife trade, destruction of animal habitats, and human-induced climate change.

Therefore, it is crucial to stop deforestation and begin to utilize the biodiversity in a sustainable and healthy way. This will reduce the risk of new pandemics that leads to loss of life and economic downturns.

Increase of zoonoses

Well-known diseases originating from animals are SARS, HIV, Zika and Ebola - and now also COVID-19. The risk of diseasecausing microorganisms transmitting from animals to humans has always existed. However, an notable increase of the number of zoonoses has been recorded due to people's extensive impact on ecosystems and close contact with wild and domesticated animals.

A study published in Nature (2008) shows that 60% of more recent infectious diseases originated from animals and almost 72% of that come from wild animals. Meanwhile, the United Nations Environment Program (UNEP) estimates that 75% of all new infectious diseases derive from wild animals.

What is the reason for the increase?

The risk of new diseases and the spread of infection increases when we change the relationship between wildlife and humans - for example when new land is cultivated or when the rainforest is cleared. Deforestation leads, among other things, to animals being forced away from their natural habitat and closer to humans and domesticated animals in the hunt for food and a new habitat. When we change and destroy ecosystems, viruses also more easily adapt to new hosts. This mainly affects those living close to the forest. However, with the spread of infection, wet markets as well as wild animals adapting to densely populated cities and other areas created by humans, it can affect us all - with globalization it can even lead to pandemics.

Simultaneously, climate change can have a - primarily negative - effect on our health. The spread of infection changes as the climate changes. Rising temperatures can, up to a certain degree, cause many microorganisms to multiply faster. Similarly, climate change causes an increased amount of extreme weather phenomena such as drought and floods, which also contribute to the spread of diseases.

How do we avoid pandemics?

This does not mean that we should see nature and animals as our enemies. On the contrary, it is human activity, such as increased deforestation and human-induced climate change, that causes the number of zoonoses to increase. The risk of disease, and in the worst case, pandemics, is yet another clear sign that we should take care of our remaining nature. For the sake of biodiversity, for nature itself and for the climate - as well as for our own health. As long as we leave nature untouched, it takes care of itself. Therefore, the best way to avoid pandemics in the future is to protect our nature and its biodiversity.

Research indicates that a rich biodiversity can even protect us from diseases. The more animals a disease passes through, the more likely it is that the spread will be stopped as some animals cannot become infected.

To limit the spread of diseases, people need to take more responsibility and respect nature. It is absolutely crucial that we learn from and bring with us what the corona pandemic has taught us, even after the crisis is over.

2020 was supposed to be a year focused on climate and biodiversity. However, this agenda is now threatened, which causes major concern since the efforts to reduce climate change and avoid the mass extinction of animals and plants are directly linked to reducing the risk of future pandemics.

Save the Orangutan's efforts to avoid future pandemics

Save the Orangutan works in close collaboration with local partners to preserve Borneo's rainforest and protect the forest's biodiversity.

In connection to the corona crisis, we have increased the spread of information among local communities about the risk of zoonoses and the importance of a sustainable and healthy use of the rainforest. We also support efforts to protect the local communities living in or around the rainforest, from infectious diseases.



Denmark

Amagertorv 13, 3.sal 1160 København K

info@redorangutangen.dk www.redorangutangen.dk **Sweden** Arenavägen 41 121 77 Johanneshov

info@savetheorangutan.se www.savetheorangutan.se **UK and Wales** Flat 241, Orchard Grove London, SE20 8BQ

info@savetheorangutan.org www.savetheorangutaan.org.uk