

# ASP Conservation Action Network (CAN)

## Conservation Threats to the Survival of Wild Orangutans



(Left to Right) Male Bornean, Sumatran, and Tapanuli orangutans. Credit: Eric Kilby Aiwok, Tim Laman; photo from <https://www.orangutan.com/orangutans/orangutan-facts/>

### *Fellow Primatologists:*

In light of the extinction crisis facing the world's primates, the *American Society of Primatology* has formed the **ASP Conservation Action Network (ASP-CAN)**. This action letter was authored by Anne Russon (arusson@glendon.yorku.ca), Sylvia Atsalis (sylvia@sylviaconsults.com), Francine Dolins (fdolins@umich.edu), Marc Ancrenaz (marc.ancrenaz@gmail.com), and Serge Wich (sergewich@gmail.com).

### **CURRENT STATUS**

A century ago, orangutans were considered a single species and wild orangutans were estimated to number more than 230,000. Today, they represent three species - Bornean, Sumatran, Tapanuli (recognized as a species in 2017) – with Borneans comprising three subspecies. The IUCN Red List of Threatened Species classifies all three orangutan species as *Critically Endangered*, at extremely high risk of extinction in the wild (IUCN Red List of Threatened Species: [iucnredlist.org/search?query=Orangutan&searchType=species](https://www.iucnredlist.org/search?query=Orangutan&searchType=species)). Recent population estimates are: Bornean ~104,700 (Ancrenaz et al., 2018), Sumatran ~13,900 (Wich et al., 2016), and Tapanuli at most 800 (Nowak et al., 2017).

Orangutans are *Critically Endangered* mainly because of (a) loss, degradation, and fragmentation of native forest habitat, and (b) hunting. Forests have been damaged and destroyed by logging - illegal and legal, oil-palm and other agricultural and timber plantations, forest fires, mining of coal, oil, gold, and gems, and local small-scale shifting cultivation, exacerbated by increased human influx. Environmental damage is largely due to commercial agriculture, but also includes small-scale local activities. In many parts of

their range, orangutans are still killed for their meat. Major hunting threats come from commercial agricultural, plantation and mining staff, from local people who consume orangutans as bushmeat and/or who are disgruntled with wild orangutans' crop raiding or trespassing, and from the illegal wildlife trade; i.e. capturing wild infants for sale, by killing their mothers. Sadly, even when orangutans are rescued, many are disabled (emaciated, maimed, wounded, or burned), orphaned, infected with human diseases (e.g., tuberculosis, hepatitis), and human habituated; some are so seriously disabled that they cannot be reintroduced to free forest life.

### **MAJOR THREATS TO SURVIVAL**

Thousands of orangutans are killed annually for two major reasons: conflict with humans and for their meat. Killing and hunting orangutans is a major cause of their population decline, especially in Indonesian Borneo (i.e., Kalimantan) and some parts of Sabah and Sarawak (Santika et al., 2017; Voigt et al., 2018, Davis et al., 2013; Meijaard et al., 2011a; 2011b), as well as parts of Sumatra (particularly for Batang Toru (Wich et al., 2011). Hunting orangutans is for eating, not just forest clearance. It is not just conflict that motivates killing of orangutans.

Estimates of the total number of orangutans killed across the entire Bornean species range indicate that a minimum of 40,000 orangutans were killed in Kalimantan within survey respondents' lifetime. These surveys showed that more orangutans had been killed for meat consumption rather than for any other reasons (e.g., conflicts, pet trade) (Davis et al., 2013).

Oil palm agriculture receives much attention for its effects on orangutans: data from Kalimantan indicate that individual humans associated with industrial and smaller scale oil palm plantations account for ~20-25% of orangutan killings (Davis et al., 2013). However, ~60% of killings occur in protected and non-protected forests (Abram et al., 2015; Voigt et al., 2018).

### **Forest clearing, fires, other encroachment**

Forest clearing and fires pose different threats to orangutans. Typically, forest clearings occur as a result of large agricultural development but also when smallholders clear land for agriculture. Fires often start by small holders' clearing land or burning for hunting and other reasons.

Orangutan habitat also has been decimated by fires enabled by large scale deforestation and severe droughts. "The great fires of Borneo", the forest fires enabled by El Niño droughts that swept Borneo in 1982-83 and 1997-98, were among the worst recorded world-wide fires. Severe droughts recurred in 2015, 2018, and 2019, facilitating burning huge areas of orangutan-inhabited forest. In central Kalimantan, over 500,000 hectares (1,240,000 acres) of tropical peat-lands were burnt in 2018, and over 850,000 hectares (2,120,000 acres) in 2019 (<https://www.reuters.com/article/us-southeast-asia-haze/area-burned-in-2019-forest-fires-in-indonesia-exceeds-2018-official-idUSKBN1X00VU>) (Meijaard et al, 2005; Morgan et al., 2018).

Several large populations of orangutans inhabit peatland forests. Peatlands are important ecosystems and they are especially vulnerable to fires. Peatlands typically form in high rainfall areas and act as sponges retaining high volumes of water, so agricultural and logging practices that drain them effectively transform the area into kindling during the dry season. Dried peat is highly flammable so peat fires burn both above and below ground level, making peatland fires extremely difficult to extinguish, and threaten the lives of resident orangutan populations as well as people.

### **Commercial land conversion**

Conservationists became aware of the environmental impacts of deforestation late in the 20th century. Threats initially stemmed from commercial logging and resource extraction, but more recently from the “conversion” of forested lands to commercial agriculture - notably oil palm plantations. Worldwide demand for vegetable oil makes forest conversion to oil palm plantations one of the major threats to orangutans’ survival. Indeed, around the world, orangutans have become symbols of the environmental impact of unsustainable large-scale monocultures.

Large numbers of wild orangutans are victims of human-wildlife conflict. In Kalimantan they are treated as “pests”—injured, captured, translocated, killed—in newly planted areas of oil palm plantations. Moreover, the recent shift from directly operating large oil palm plantations to subcontracting the growing of oil palms to smallholders - typically local farmers - renders sustainable practices more difficult and sometimes impossible to enforce. One example comes from Kutai National Park where smallholders have illegally extended their oil palm farms into the park, damaging native habitat that resident orangutans use, increasing the likelihood that orangutans will feed on ‘their’ oil palm shoots, and raising their risks of being injured or killed by humans. However, there is also positive news.

More and more companies are improving their production practices to produce what is called “sustainable palm oil”. They adhere to certification guidelines that ensure fairer work conditions and wages and better respect for the environment. The Roundtable on Sustainable Palm Oil (RSPO), established in 2004, is promoting identification, protection and management of “High Conservation Value” elements of the landscape. This includes forests but also species like orangutans. A RSPO certified company pledges to protect forest, to not drive any deforestation, and to protect any resident orangutans within the oil palm concessions (Morgan et al., 2018; Ruyschaert & Salles, 2014). However, many problems still exist and this certification scheme must be improved to achieve better outcomes for orangutans and its habitat.

### **Illegal wildlife trade**

Orangutans have long been targets of the illegal exotic wildlife trade. Many are captured from the wild as infants by killing their mothers then sold to buyers around the world. Some are kept privately as pets or curiosities, others used as performers in commercial entertainment. Despite efforts to end the trade, photos and videos posted online within the last couple of years still show orangutans - many wild born - performing in commercial shows ([www.catersnews.com/stories/animals/orangutans-pictured-in-cruel-boxing-bouts/](http://www.catersnews.com/stories/animals/orangutans-pictured-in-cruel-boxing-bouts/);

[www.news.mongabay.com/2017/04/great-apes-in-asian-circus-style-shows-on-rise-so-is-trafficking/](http://www.news.mongabay.com/2017/04/great-apes-in-asian-circus-style-shows-on-rise-so-is-trafficking/) ; [www.worldanimalprotection.ca](http://www.worldanimalprotection.ca)).

## **ORANGUTAN CONSERVATION ACTIONS IN NATIVE HABITAT**

### **Protecting Native Orangutan Habitat**

Orangutans are highly resilient and can adapt to drastic changes in their environment: they survive in acacia plantations (Meijaard et al., 2010), sustainably logged forests (Ancrenaz et al., 2010), and oil palm dominated landscapes (Ancrenaz et al., 2015). However, controlling against further degradation of remaining native orangutan habitat is as important as enriching damaged areas, and sometimes more so. This must include engaging with land-users to improve habitat conditions (corridors, reforestation) and to promote peaceful co-existence between people and wildlife.

#### **a) Community Education**

Several long-term wild orangutan research and conservation projects have developed effective conservation programs (e.g., [internationalanimalrescue.org/orangutan-centre](http://internationalanimalrescue.org/orangutan-centre); [savegoranqutans.org/conservation](http://savegoranqutans.org/conservation); [orangutan.org.au/project-summaries/borneo-nature-foundation](http://orangutan.org.au/project-summaries/borneo-nature-foundation)).

These programs include lecture-based and experiential events on the value and importance of protecting wild orangutans and their native habitats, as well as participating in conservation work (e.g., reforestation).

#### **b) Patrols**

Some projects operate patrols to promote enforcement of conservation and wildlife regulations. Patrols can enforce regulations only if the habitat they monitor is located in areas they 'own'. Unfortunately, these projects cannot engage in enforcement patrols in national parks.

#### **c) Reforestation**

Even protected wild orangutan forests are often degraded by illegal logging, droughts, and forest fires. Conservation projects such as the Orangutan Centre (<https://orangutancentre.org/restoring-forest/>) include websites for these reforestation projects that undertake to re-build and replant forests and create forest enrichment to enhance forests for future generations of species; these also help to establish forest corridors to enable safety for orangutan travel.

#### **d) Translocation.**

Translocation involves moving wild and other free-ranging orangutans from places where they are at risk of conflict with humans (e.g., local gardens, oil palm or other agricultural plantations) to 'safe' areas of suitable native forest. Whether translocation contributes to orangutan conservation is, however, questionable. Given continuing loss of native forest, all remaining wild orangutan habitat is almost certainly populated at or beyond its carrying capacity so translocations are more likely to endanger than support the resident orangutan population.

**e) Tourism**

Tourism has been promoted as contributing to nature conservation by enhancing knowledge and appreciation of the species and natural areas visited. In practice, primate tourism is very difficult to manage to benefit conservation. Tourists more often increase the threat to the primates visited by encouraging close encounters and exposing the primates to diseases<sup>11</sup>.

**Rescue, Rehabilitation, Sanctuaries**

Since the 1950s in Sarawak and Sabah (Malaysian Borneo) and the early 1970s in Indonesian Borneo and Sumatra, efforts have been made to rescue orangutans from illegal captivity and/or dangerous situations and return them to the forest. Sadly, the number of wild orangutans injured during human encounters and illegally held captive continues to increase. At least 10 orangutan rescue and rehabilitation projects now operate in Asia, most run by international NGOs. They provide rescue equipment and staff, orangutan housing, 'forest schools' to rehabilitate ex-captives to forest life (i.e., gain forest and orangutan knowledge and skills), release sites for rehabilitants in protected native forests, monitoring and support post-release, and medical clinics with professional veterinarians supported by the Orangutan Veterinary Advisory Group (OVAG). Responding to COVID 19, OVAG promptly released a plan of action ([ovag.org/news/non-human-primate-covid-19-information-hub](http://ovag.org/news/non-human-primate-covid-19-information-hub)).

While rescue centers mostly aim at rehabilitation and release of ex-captive orangutans, some also provide sanctuary care for rescued orangutans who prove ineligible for release (e.g., blind, crippled, tuberculosis positive, or otherwise health compromised). Orangutans rescued from the illegal international wildlife trade or the entertainment industry then repatriated to Indonesia or Malaysia are likely to need permanent care - especially those rescued as adolescents or adults. They face major difficulties acquiring the knowledge and skills needed to survive in native forest and the social relations needed to survive in an orangutan community. Importantly, if they have been exposed to human diseases, they could infect the forest's resident orangutans. Asia has relatively few orangutan sanctuaries, but there are some in non-native countries (e.g., [www.centerforgreatapes.org/treatment-apes/](http://www.centerforgreatapes.org/treatment-apes/)).

**TAKE ACTION: WHAT WE CAN DO TO HELP PROTECT ORANGUTANS**

In general, maintaining wild orangutans in forest patches is essential for metapopulation dynamics and long-term survival. A new approach to orangutan habitat and management of fragmented populations is needed. Forests, both large and small, can be protected, managed, and connected to maintain wild orangutans where they currently live and support metapopulations. New thinking is needed to facilitate the peaceful coexistence of humans and orangutans rather than removing orangutans and losing forests.

A ten-year study tracking population trends concluded that Bornean orangutans' survival is feasible given their flexibility in habitat use. This study emphasized, however, the

importance of protecting and connecting forest fragments, improving law enforcement, and developing strategies to manage human-orangutan conflict without removing orangutans from multi-use landscapes<sup>12</sup>. The authors warn against considering rescue, rehabilitation and reintroduction or reinforcement of existing wild populations as the primary ways to ensure population viability, and warn that translocating threatened wild orangutans into other populations is not an appropriate conservation strategy.

Individuals can support orangutan conservation by contributing financially to NGOs (examples in the list below), and by spreading their message through social media, teaching, lectures, and public presentations.

1. **Borneo Nature Foundation** adopted the Borneo Initiatives Youth Camp in 2018. The program invites 13 to 17-year old youths from across Asia to share ideas about global issues. Youth learn about diverse human rights and environmental challenges, and the importance of protecting orangutans and their natural habitat. Their **OuTrop programme** (Orangutan Tropical Peatland Project) has conducted some of the longest running, continuous conservation research on orangutans. The program began in 1999 and includes multiple initiatives contributing to peatland and swamp forest habitat restoration. BNF has also developed sophisticated fire preparedness strategies. (To check out and/or donate to this important organization, see [www.borneonaturefoundation.org](http://www.borneonaturefoundation.org)).
2. **Borneo Orangutan Survival (BOS) Foundation** collaborates with the Indonesian Ministry of Forestry and international organizations to target orangutan rescue, rehabilitation, reintroduction, and long-term conservation. BOSF currently cares for ~650 orangutans, and offers 'adoptions' to support orphaned orangutans (see [support.orangutan.or.id/adoptions](http://support.orangutan.or.id/adoptions)).
3. **Sepilok Orangutan Rehabilitation Centre** provides medical treatment and rehabilitation to young orangutans rescued during logging and forest clearance, or from poachers who slaughter the mothers. Rehabilitation is a long and expensive process, taking up to seven years. Infants, e.g., are paired with older orangutans to help them develop skills they would normally gain from their mothers. (To help, donate at: [orangutan-appeal.org.uk/donate](http://orangutan-appeal.org.uk/donate)).
4. **The Orangutan Conservancy (OC)** is dedicated to protecting orangutans in their natural habitat through research, capacity building, education and public awareness programs, and supporting numerous on-the-ground efforts. (For wristbands and reusable bags, see: [orangutan.com/how-to-help/](http://orangutan.com/how-to-help/)).
5. **The Orangutan Land Trust** supports wild, rescued and rehabilitated orangutans. It is backed by a Scientific Advisory Board and engages in on-the-ground activities to protect orangutans as well as community, educational and policy work. It seeks to secure release sites for wild and rehabilitated orangutans. All sites must be supplied with infrastructure and given protection. Importantly, the Trust engages with industries

that pose a risk to orangutan habitat, such as the palm oil industry. (see [forests4orangutans.org/donations/](https://forests4orangutans.org/donations/)).

6. **The Pongo Alliance** connects some of the biggest palm oil industry players with NGOs and experts focused on protecting orangutan habitat in oil palm landscapes. Private land owners and businesses are encouraged to play a role in preventing the extinction of rare wildlife species, not simply by giving money to “rescue” programs but by allowing their lands to contribute space, habitat, and foods for these rare species. (see [www.pongoalliance.org/](http://www.pongoalliance.org/)).
7. **HUTAN**, through the community-based “Kinabatangan orangutan Conservation Programme” empowers local communities to manage and protect orangutans in the Kinabatangan (Sabah, Malaysian Borneo). Since 1998, we follow wild habituated orangutans who are living in fragmented forests and agricultural landscapes dominated by oil palm plantations. HUTAN’s long-range intended impact is to sustain meta-populations of large-ranging species across entire landscapes encompassing fully protected forests and production areas. This includes a better understanding of wildlife needs in fragmented and highly transformed landscapes; ecosystems’ restoration and reforestation; habitat and wildlife protection; increase peaceful co-existence between people and animals; and, improved policies and land-use planning (see website: [hutan.org.my/](http://hutan.org.my/)).

**Other actions that individuals can take are equally important:**

- Stop spreading selfies with orangutans (rehabilitants especially) or pictures of people close to wild orangutans because they send inappropriate messages to the general audience and ultimately help to fuel the illegal pet trade.
- Instead of boycotting palm oil, support RSPO certified palm oil products. Supporting certification and sustainable agriculture will send a strong message to the industry to improve its management and production practices.
- Put pressure on American retailers and on legislators to import ONLY RSPO certified palm oil. Boycott all non-certified palm oil.
- Support community-based conservation projects and projects focused on habitat protection and management.
- Work against bushmeat hunting, and avoid purchasing non-certified tropical timber by checking labels and the origins of any wood products (especially flooring and furniture).

**SOME GOOD NEWS**

There is some good news in the effort to protect orangutans:

- a) Rescue centers in Kalimantan protected 994 orangutans between 2007 and 2017.
- b) In Sabah, seven wildlife offenders were arrested this year (see the story here: [theborneopost.com/2020/01/15/seven-wildlife-offenders-arrested-in-sabah-in-first-5-days-of-january/](https://theborneopost.com/2020/01/15/seven-wildlife-offenders-arrested-in-sabah-in-first-5-days-of-january/)).
- c) Pepsico has updated its palm oil sustainability policy to require all its suppliers to commit to ending deforestation, conversion of peatlands, and worker exploitation (see

the story here: [news.mongabay.com/2020/03/pepsico-palm-oil-sustainable-indonesia-indofood-deforestation-sumatra/](https://news.mongabay.com/2020/03/pepsico-palm-oil-sustainable-indonesia-indofood-deforestation-sumatra/).

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