



Global Re-introduction Perspectives: 2010

Additional case-studies from around the globe
Edited by Pritpal S. Soorae



IUCN/SSC Re-introduction Specialist Group (RSG)





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Re-introduction of the Sumatran orangutan in Sumatra, Indonesia.

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Introduction

Today the orangutan occurs only on the two islands of Sumatra and Borneo, with ~90% of the population in Indonesia and around 10% in the Malaysian states of Sabah and Sarawak (Yuwono *et al.*, 2007). The Sumatran orangutan (*Pongo abelli*) and the Bornean orangutan (*Pongo pygmaeus* sp.) are considered two distinct species, both of which are protected under Indonesian law and listed on App. I of CITES. The Sumatran orangutan is considered Critically Endangered by the IUCN (IUCN, 2009) with an estimated population of ~6,600 (Wich *et al.*, 2008). Only six of the remaining 10 forest blocks occupied by wild Sumatran orangutans are considered to contain viable populations (Wich *et al.*, 2008; see also Singleton *et al.*, 2004). The IUCN/SSC Primate Specialist Group named the Sumatran orangutan as one of the 25 primates most endangered in 2006-2008

(Mittermeier *et al.*, 2007). There is only one existing re-introduction project for the Sumatran orangutan that is the Sumatran Orangutan Conservation Program (SOCP). The SOCP is a collaborative program involving the Indonesian Government's Department of Forest Protection and Nature Conservation (PHKA), the PanEco Foundation, Frankfurt Zoological Society and the Indonesian Yayasan Ekosistem Lestari (Foundation for a Sustainable Ecosystem). SOCP currently operates facilities in two main locations for the rehabilitation and re-introduction work: a medical quarantine centre for orangutans near Medan in North Sumatra, and two release sites at the edge of the Bukit Tigapuluh National Park in Jambi Province, Sumatra.

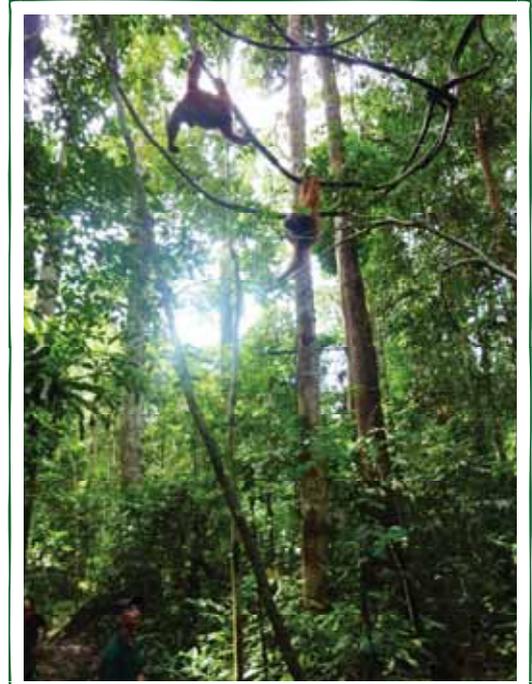


Infant orangutan at the first stage of rehabilitation

Goals

- Goal 1: To create a new sustainable population of re-introduced Sumatran orangutans in an area considered to be a part of their natural range until at least the 1830's.

- Goal 2: To increase the geographic range of Sumatran orangutans by establishing a genetically unrelated founding population in order to maximize genetic diversity among the wild-living population and to reduce or offset the risks from external threats (habitat loss, poaching, disease pandemic, natural catastrophe) to the remaining wild populations in the north of the island.
- Goal 3: To provide ex-pet orangutans with enhanced welfare and a viable chance of survival and reproduction in their natural habitat.
- Goal 4: To provide a safe place for Sumatran orangutans that for whatever reason cannot be released to the wild.



Two orangutans after release

Success Indicators

- Indicator 1: An acceptable proportion of orangutans surviving for at least two dry- seasons (considered to be around 70% of individuals released based on data available to date) in the forest without food supplementation.
- Indicator 2: Reproduction (both conceptions and births) occurring in the wild with infants being adequately mother reared.
- Indicator 3: Dispersal of individuals away from the re-introduction sites.

Project Summary

SOCP provides the only legal facilities to rehabilitate and re-introduce confiscated orangutans in Sumatra. Public education programs are also undertaken to highlight the socio-economic impact of the trade in orangutans and the loss of its forest habitat. Habitat loss, mostly for timber or plantations, continues to be the biggest threat to the orangutan. Forest blocks become increasingly fragmented and human-orangutan conflicts increase in number, often leading to the killing of the animals and the capture of any surviving infants. Inadequate law enforcement and corruption continue to be the source of the deficiency in wildlife and environmental protection. The reintroduction goal of SOCP was to establish a program for ex-pet orangutans in Sumatra that improves the welfare of confiscated individuals and establishes a new 'wild' population of orangutans in Sumatra. A purpose-built medical quarantine center was completed in 2002 to care for 'ex-pet' orangutans. The centre is in Batu Mbelin in the village of Sembahe, North Sumatra and the location was chosen for its clean water supply, ease of access to Aceh (then off-limits due to civil conflict), with access to good medical facilities (medications, laboratory tests, etc.) and an airport in Medan, yet sufficiently remote to avoid uninvited visitors; due to its quarantine function the

centre is not open to the public. SOCP has good relations with the local communities near the centre employing local staff and purchasing most of the orangutan's daily fruit and vegetable supplies from local farmers.

New ID, medical, and behavioral record files are created for each orangutan upon arrival at the centre and after an initial adjustment period more extensive health checks are undertaken by two full-time Indonesian veterinarians. Routine health screening includes testing for TB and other respiratory problems (chest x-ray, PPD tests, and from 2009 also culture of sputum samples). Blood samples are taken and tested for hepatitis A, B and C, herpes simplex virus, and routine haematology. Faecal samples are taken to check for intestinal parasites and pathogens (*Strongyloides* tends to be the most prevalent). All checks and tests conform to accepted veterinary guidelines for orangutans (from workshops in Balikpapan (2001) and Palangkaraya (2002) and a recent orangutan veterinary training course in Wanariset Samboja in 2009. All of the orangutans at the centre have had close contact with humans and zoonoses are fairly common. Each orangutan is given a microchip inserted near the left scapula, a tattoo of their unique house number is made on the inside right thigh, fingerprints are taken, and photographs are taken of face and dentition, all for identification purposes. After all health checks are complete the individual can then be transferred to much larger socialization cages. For most, this is the first direct contact they have had with other orangutans since they were first captured and their mother killed.

The release station near Bukit Tigapuluh National Park was selected after numerous extensive field surveys carried out all over the island between 1996 and 2000. Firstly, the National Park itself (140,000 ha) is a protected area, and its surrounding buffer zones form a continuous lowland forest tract of some 350,000 ha, all of which is below 700 m a.s.l. and therefore potential orangutan habitat (orangutans are few or absent in Sumatra at altitudes of 1,000 m a.s.l. or more). Orangutans were also absent from these forests since the 1800's (at that time a legal requirement for potential orangutan re-introduction sites under Minister of Forestry Decree No. 280, 1995). Moreover, fruit tree densities and fruit availability were found to be comparable to, if not better than at the well known orangutan research site at Ketambe, in Aceh province, where orangutans are known to thrive at densities of around 5 individuals/km². Given this, even extremely conservative predictions (for Sumatran orangutans) of the density of the re-introduced orangutan population, e.g. 1 individual/km², would still allow for a potential population of some 1,400 individuals in the National Park alone, and as many as 3,500 individuals or more in the entire area. The first orangutans were transferred to the Jambi facility in 2002, and the first releases took place in January 2003. Today over 100-individuals have been released back into the forest and at least three individuals have conceived and given birth in the wild, and have proven excellent mothers.

Due to the natural socioecology of orangutans, the rehabilitant orangutans are often released individually or in pairs during the fruiting season in order to give them the best chances of re-adapting to living permanently in the forest. Each orangutan is followed from night-nest to night-nest and data is collected on the

individual's range-use, diet, activity, and social interactions. Phenology plots are also established in the forest and monitored monthly to assess what food and how much is available to the orangutans both within and between years. A wildlife protection unit patrols permanently around the forest collecting presence/absence data and monitoring for illegal logging activities or other threats to the orangutans.



Conducting medical checks on orangutan

Major difficulties faced

- Long-term continuous monitoring of the progress of every individual released is not possible. However, many individuals can be followed and observed and much data on others is still obtained from random encounters as people are working in and patrolling the forests constantly.
- Encroachment and conversion of habitat to plantations remains a considerable threat and difficult to control, especially in the buffer zone but also even at times within the National Park itself. Some key tracts of the buffer zone, for example, are currently targeted by the Pulp and Paper companies and for conversion to monoculture Acacia plantations.
- A general lack of will amongst the Conservation Department to follow up orangutan confiscations with actual prosecutions. An instruction by the Director General of Forest Protection and Nature Conservation (No. 762/2001) actually encourages its staff to accept voluntary handover of illegal pet orangutans and not to prosecute offenders.

Major lessons learned

- As one of the newest orangutan re-introduction programs in Indonesia it has benefited from the experiences and lessons learned by the others, designing its facilities and procedures accordingly.
- The project was established and designed by people already having many years experience working with orangutans and in tropical forests, under a variety of settings. This has helped avoid common pitfalls and in garnering donor and other support.
- Vets, scientists, and field staff continue to monitor all aspects of the program to ensure that SOCP continues to adapt and change with the latest scientific information.
- SOCP continues to expand by combining reintroduction with habitat conservation, education units, ranger patrols, and research on wild orangutans. SOCP actively recognizes that the success of the re-introduction program is not solely reliant on the rehabilitation of individual orangutans, but a

complicated effort requiring science, education, and working with local human populations.

- The Indonesian government is a necessary and an integral part to help confiscate, release, and protect the orangutans. We continually encourage and facilitate them to play an increasingly active and constructive role at all stages of the process.

Success of project

Highly Successful	Successful	Partially Successful	Failure
	√		

Reason(s) for success/failure:

- SOCP is the only program to date to create a new population of re-introduced Sumatran orangutans the wild.
- This population is in a part of their historic range area where previously no orangutans existed for up to 150 years.
- The geographic range of the Sumatran orangutan has been increased.
- There is now a safety net population of wild living Sumatran orangutans, if ever a catastrophe should befall the more northern wild populations.
- Using the data so far available, SOCP appears to have one of the highest survival rates of any primate re-introduction program.

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