Orangutan Haven

Concept Overview and Progress Update

September 2017
Medan, North Sumatra, Indonesia
Problem Statement
There are a number of orangutans at the Sumatran Orangutan Conservation Programme (SOCP) Batu Mbelin Orangutan Quarantine Station in North Sumatra, who are permanently incapacitated by conditions including hepatitis, paralysis and blindness, which for the most part are the direct result of human impacts on their lives. These orangutans can never be released, either for their own safety or to prevent the spread of disease amongst wild primate populations. They therefore face the prospect of spending the rest of their lives in individual cages (potentially as long as 50 years or more), unless a more acceptable solution can be found. Despite every effort to provide the best of care and behavioural enrichment, the inherent limitations of a caged existence means that the quality of life of each of these individual's is always going to be compromised and suboptimal.

The Solution
Mission & Vision
Our mission is to provide each these orangutans with a more positive and meaningful future and in doing so communicate the plight of their Critically Endangered wild Sumatran orangutan cousins and the realities of the situations they face to a wide audience. In giving these orangutans a life with all the support they need, but in the freedom and openness of a far more spacious and naturalistic setting, this offers the unique opportunity act as ambassadors for wild populations and become an education resource. All this can be achieved as part of the concept being outlined here.

The solution involves the construction of a number of man-made moated islands. These would be equipped with abundant climbing structures and covered in natural vegetation, as opposed to the cold metal bars of the orangutan's present accommodation. These islands would give the orangutans the perception of being in a much more pleasant and naturalistic environment, with running water, fresh grass to lie on, and timber and ropes to climb on. All this, whilst at the same time being contained in a manageable setting in which all of their daily needs can still be catered for.

These 'model' islands will not only provide a sanctuary and improve the welfare of un-releasable animals, but also fulfil a vital role as a unique educational resource. It is envisioned that the new facility would be located in an area within easy reach of Indonesia’s 4th largest city of Medan (metropolitan area of 4 million people), where many of those that decide what happens to Sumatra's forests, or influence such decisions, reside. It is therefore planned to allow managed access to the site for the public, such that both today's decision makers, and those of tomorrow, will be able to far better understand why orangutans end up in human hands, what the consequences of this are for orangutans and humans alike, and what is involved in conserving the species
and its habitat in the present day. This innovative 'model' project will offer a long-term viable solution for a few unfortunate orangutans that cannot be returned to the wild, and serve as an example that could be easily replicated in other regions, where there are orangutans or other species in similar situations.

Not only will the individual orangutans themselves be far better off than they are now, but as a result of a better-informed public at large, due to the new centre, it is hoped that those in the wild will be better off in the future too as a result of the project. Through unique experiences, visitors, both local and international, will gain a better understanding of orangutans, their individuality, intelligence and complexity. They will gain a much better appreciation of the threats facing orangutans in the wild and the ways in which human populations can co-exist with them.

**Primary Objectives**

1. Provide greatly improved living conditions for disabled or otherwise unreleasable orangutans in need of lifelong support;
2. Foster greater support for orangutan and wildlife conservation, through managing environmental education and awareness activities at the Haven.

**Progress through September 2017**

**Staffing**

In the first quarter of 2017 we brought on a consultant, a skilled young architect from Austria named Mr. Gilbert Murrer, to work under the lead coordinator for Haven Development, Founding SOCP staff member Mr. Suherry Aprianto.

We have also hired a local construction company, ‘Ozin Karya’, which has many years of experience in the region, to assist in building the site and procuring the necessary staff and equipment. This saves the SOCP both time and energy in having to manage these issues ourselves, and instead maintain our focus on designing the best possible site for the orangutans and our conservation mission.

*Figure 1 A number of SOCP staff, civilian service volunteers, and visitors from the US Government, including the US Ambassador to Indonesia and the US Consul, Medan*
Masterplan

The Orangutan Haven Masterplan document continues to be developed, with inputs also being provided by a number experienced volunteers from Switzerland (home of the PanEco Foundation head office), who are conducting their national civil service requirements through assisting our work in Sumatra.

Figure 2 Orangutan Haven Masterplan document as of August 2017

Figure 3 Aerial view of the Orangutan Island sector of the Haven (pre-construction)
**Micro hydropower**

Micro hydropower plant construction began in April 2017, with the facility now nearing completion (80%), and our awaiting delivery of the turbine from Java to finish. It is expected to be completed by the end of 3rd quarter 2017.

![Figure 4](image.png)

*Figure 4 This building (L) will house the turbine for microhydro electricity generation. After passing the turbine the water will flow out through this raceway and back into the river (R)*

**Access road**

Drainage canals built alongside key locations of the arterial access road through the Haven, as well as planted vetiver (*Vetiveria zizanioides*), a densely tufted grass with stout roots, alongside those areas with hilly terrain on its sides. Further, we have developed plans for soil retention and drainage system and electrical conduits, and have set a layer of gravel on top of the road. The arterial road is now said to be at 75% total completion.

![Figure 5](image.png)

*Figure 5 Road construction model/example (L) and an example of roadside hilly terrain that has been planted with vetiver (R)*

**Bamboo procurement and storage**

We recently expanded the on-site storage facility size for treated bamboo, with there being an increased need of the material for use in construction of the new bamboo bridge. Until now we have sourced most of our bamboo from Sibolangit, Tiga Juhar, and Marike – all nearby locations in North Sumatra, and have worked with local people to ensure that only mature stalks are harvested,
and cutting is done during a full moon phase (which aids in lowering insect borers from degrading the organic structure of the shoots).

Figure 6 All the bamboo needs to be soaked for several weeks in a borax solution (L), an organic salt that acts as a pesticide. After soaking the bamboo must then be thoroughly dried, this makes it both stronger and lighter in weight (R)

Figure 7 Aerial view of the bridge construction site, bamboo factory and storage area, with the river down the centre
**Organic farming**

The Haven’s large area offers enormous potential to promote sustainable, organic farming practices. Rubber, citrus, cacao, durian, corn, pineapple, and many other crops are present throughout the site. The Haven already provides 60% of our nearby quarantine centre’s orangutan food needs – with the remainder for the moment being used at the Ecolodge Bukit Lawang ‘Kapal Bambu’ Restaurant (http://ecolodges.id/en/restaurant) - until such time that the Haven has its own restaurant facilities constructed.

**Bamboo Bridge**

Groundbreaking work on the bamboo bridge began in June. This iconic bridge will cross the river from the Haven’s entrance near the car park towards its interior. We are very thankful to have had the aid of sustainable bamboo construction expert, Mr. Joerg Stamm, who also helped build the renowned Green School in Bali, Indonesia (https://www.greenschool.org). Through the 2\(^\text{nd}\) quarter of 2017 work has been done on the foundation (60%) completed and trusses (40%), with full completion expected by the end of quarter 3.
**Orangutan Islands**
We have finalized the orangutan island design and layout, with the planned total now being 9 islands separated from each other by water moats. Each of the island’s confines have been marked, allowing for the excavator to start digging out the land and building up each island – which began in July 2017.

*Figure 10 Orangutan Island design (L) alongside mid-August aerial photo of the island region (R), with closeup aerial photo of the first islands (below)*
We now have 2 excavators working to form the islands, and through the end of August there are already 8 in place. As depicted above, the moats surrounding each island will be maintained at a depth of 1.5m, which according to SOCP Director and former zookeeper Dr. Ian Singleton, will safely prevent the resident orangutans from crossing the channel.

We also plan to construct 4 orangutan ‘housing’ units at the island complex, as an optional shelter and treatment facility for any necessary medical care.
Visitors
In July, we also hosted a visit to the Haven and our nearby quarantine centre, from US Ambassador to Indonesia, Joseph R. Donovan Jr., along with the US Consul in Medan, Juha Salin, taking a tour of our facilities. We are very proud to have garnered such high-level interest from government officials, and the opportunity to discuss and educate on conservation issues and threats and opportunities for Indonesia’s people and wildlife.

Outlook
At the current rate of development (in total the islands are now considered 30% complete), we expect to be able to move in the Haven’s first permanent resident orangutans from the SOCP Quarantine Centre to the Island complex by the end of 2018.