

CONSERVATION OUTCOMES Delivered by WOX at Various Project Sites

WOX has made some important contributions to wildlife conservation in each project site. We classify our Great Orangutan Project (GOP) project sites according to the conditions of the wildlife we work with: Captivity, Rehabilitation, Wild.

SETTING I: ORANG-UTANS IN CAPTIVITY

Ape Centre, Zoo Negara, Selangor Malaysia

Ape Centre, Zoo Taiping & Night Safari, Perak, Malaysia

1. While it may seem that very little of direct benefit to conservation can happen in a zoo, we have found that our engagement in both zoos has resulted in:
 - 1.1. Greater understanding of enrichment as we design, trial and monitor impact of different enrichment devices.
 - 1.2. Our increased participation in the use of captive animals as a valuable means to educate and raise awareness about the condition of the species in the wild. This has impacted zoo keepers, zoo personnel and the general public and has played a role in preparing our volunteers for their work in the rehabilitation centres and in the wild
2. Activities carried out in the Ape Centres
 - 2.1. Volunteers participate in daily husbandry.
 - 2.2. Cleaning cages, raking and cleaning enclosures/ exhibit areas.
 - 2.3. Collect browse to provide nutritional enrichment
 - 2.4. Help keepers prepare food
3. Activities carried out in the zoo
 - 3.1. Volunteers design and implement enrichment that can stimulate captive animals and help simulate natural conditions and behaviours. These range from toys, feeders, challenges around exhibit area, hammocks, rope ways for brachiating between trees etc
 - 3.2. Volunteers have been asked to plant wild gingers, herbs and plants that make up the diet of orang-utans in the wild all across the zoo. Work has begun on this in a modest way

3.3. Zoo has requested volunteers to help prepare a digital photo library and database of all the trees in the zoo that can provide additional browse or fruits to the orang-utan's diet. Work has begun on this in Zoo Taiping and will be completed in 1 year to document annual flowering and fruiting cycles.

4. Evidence

4.1. Logs that detail volunteer activities in each month

4.2. A database of over 50 enrichment ideas that have been trialled in both zoos. This database (both soft and hard copies) has been made available to both zoos.

4.3. Endorsements from both Zoo Directors about the value addition provided by WOX volunteers and facilitators

4.4. A tangible, visible difference in the maintenance and protocols being followed in the Ape Centres in comparison to other areas in the zoo and when compared to the Ape Centres prior to WOX involvement.

5. Impact

5.1. Zoo Taiping hopes to invite our facilitator to present the work on enrichment at the next SEAZA conference and both zoos have invited WOX to conduct keeper training sessions.

5.2. Facilitators and volunteers work very closely with the keepers in the Ape Centre, the Curator and the zoo veterinarians. Each interaction is an opportunity for us to learn and also for us to share our ideas, our learning with the zoo. This informal dialogue over the years has led to WOX being acknowledged as a partner and consulted in most matters related to orang-utan welfare and conservation breeding in the zoo.

5.3. Requests from both zoos to help and work in other sections- sun bears, elephants and reptiles – to help improve them in the same way that we did with the Ape Centres

SETTING II: ORANG-UTANS IN REHABILITATION CENTRES

Matang Wildlife Centre, Sarawak, Malaysia
Semenggoh Wildlife Centre, Sarawak, Malaysia
Samboja Lestari, Kalimantan, Indonesia

In Sarawak all parks and nature reserves are under the jurisdiction of the State Government. We partner and assist the Sarawak Forestry Corporation (SFC) in the running of Matang Wildlife Centre.

Our principal roles in these Centres naturally focus on working with the animals for rehabilitation towards release. This process includes regular husbandry, enrichment, design and maintenance of large enclosures, construction of ranger stations that play a vital role in the jungle training of the orang-utans prior to release.

In addition, we help provide employment for locals, help in creating awareness in local communities through education and other projects and provide information dissemination through our blogs and websites. We also play a role in increasing ethical and meaningful tourism to the area by bringing in our volunteers and as a result of what people read on our websites.

Specific achievements in each Rehabilitation Centre:

A. Matang Wildlife Centre, Kuching, Sarawak, Borneo Malaysia

This is our flagship program, our pilot in orang-utan rehabilitation that has helped consolidate our understanding, leading to the development of protocols and the methodology that is the basis of our model for rehabilitation in orang-utans. It is staffed by a very committed team that is led by Leo Biddle and includes locals from neighbouring kampungs (hamlets).

Since the time WOX began managing the Centre in partnership with SFC we have had about 14 orang-utans in our care. The personal histories of many of them made the gradual progression to health and stability a real challenge for the team. In addition to the orang-utans we have made a big contribution and impact with the captive sun bears, the rescued macaques and other animals.

1. Rehabilitation of orang-utans into the wild and semi-wild

We aim to give orang-utans the skills they need to successfully integrate into the wild. To date this has meant the creation of a jungle school. An education station has been set up in which orang-utans learn skills vital to integrating into the semi-wild, such as climbing, searching for food and reacting to threats. By teaching orang-utans the skills necessary to adapting to a challenging environment, they can be released into the semi-wild.

We have so far released Mamu (5 year old female) Chiam (16 year old) and her baby (7 months)

The long arduous process of preparing the orang-utan for release is what a rehabilitation process is all about.

Mamu, the daughter of Chiam and Aman, was born at the centre in 2004. Since November 2008, Mamu had been spending one week a month at the Piers Mott ranger station, built by volunteers in Kubah National Park, about a 2 km trek from the centre. Keepers have been able to stay in relative comfort in this building, while the orang-utan explored the surrounding jungle both day and night. She fed at the neighbouring feeding platform built by volunteers in October 2008. This year, Mamu had been showing increasing reluctance to return to the centre at the end of her periods of training. After a particular week at the ranger station in April, she decided that she would be happier to remain in the jungle. This site had been prepared for exactly this purpose, so it seemed as good a time as any to leave her out.

Chiam had long been a favourite of volunteers and keepers alike at Matang. She is a highly intelligent orang-utan, and has fascinated many onlooker with her swift and accurate construction of tools out of mere scraps of rope and left over food items.

Part of the centre's captive breeding program; Chiam gave birth to George's son in February 2009. Her infant developed quickly, and Chiam's stress-free approach to motherhood quickly fostered an ambitious and independent son. In May 2009, the decision was made to release Chiam. Her infant had developed extremely well and it was more than clear that Chiam is a competent mother. At the beginning of June, Chiam was released into Kubah.

These releases and the subsequent sightings of Chiam and her baby have been the highlight of not just this year but all the past years of preparation. Chiam

and her son have been in very good health and it is now hoped that Chiam will act as mentor, buddy or matriarch and help with the other babies and young orang-utans in the centre. Captive orang-utans have always suffered from the lack of training that a mother gives for the first 6 – 7 years. We hope Chiam will bridge the gap and provide a 'foundation course in survival skills' to the other young orang-utans.

3 orang-utans may seem like a small number but it is very difficult to quantify the implications of this as a contribution to conservation for such an endangered species with a low birth rate. It gives hope that orang-utans languishing in cages all around the world, rescued from the pet trade or from destroyed habitat will have a chance to return to the canopy. This has been our biggest success so far.

2. Orang-utan Breeding

Achieving results from orang-utan breeding can be problematic given the naturally low frequency of orang-utan births. However, we have had a number of breeding successes to date. In February 2008, our two resident females gave birth to a baby each within hours of one another.

WOX has developed a protocol that ensures that mother and baby are kept undisturbed with minimal human contact so as to allow natural instincts to kick in and develop. Nutrition is kept as close to the natural diet as possible and this has yielded very good results.

In addition to natural births taking place at the Centre we have had 3-4 very young babies handed over to our care. The focus here has been to ensure survival followed by enhancing health and moving them towards independence. Contrary to current prevailing opinion about orang-utan baby nurture, WOX has advocated a 'hands-off', 'no cuddling', 'no diaper' policy that has implications for the human care givers. Local people have been employed to help during the day and the rest of the time the dedication of the team has ensured a round-the-clock care for the babies.

Birute Galdikas, the world famous primatologist, conservationist and ethologist, visited our Centre in June this year. She was vocal in her appreciation of the management of the Centre, the baby care being given and stated this in a press conference too.

3. Health care for animals

WOX does not have a resident veterinary doctor but we have established a close working relationship with many good veterinarians and Leo Biddle has been handling basic care for orang-utans and other primates in an exemplary fashion. In situations where orang-utans have contracted illnesses or disease, we treat and monitor them by bringing in the best doctors.

Aman, a dominant orang-utan in our care had been blind for several years, with cataracts. In May 2007, we recruited an eye surgeon from South Africa to perform a cataract-removing operation. The operation was a success and Aman can now see without any trouble. Since then, Aman has been successful in learning rehabilitation skills. Most recently he learned how to negotiate an intricate rope structure in his enclosure. The development stages can be seen on our blog at http://orang-utanproject.com/sarawak_orang-utan_volunteer

4. Establishing networks and working with communities

Creating links between WOX and different environmental groups is one of our aims in this region. WOX is using its respected position as a responsible tourism provider to unify a number of interest groups with differing stances on conservation. In the last five years, GOP has built partnerships with Borneo Orang-utan Survival Foundation (BOS), Sarawak Forestry Corporation (SFC), Tourism Malaysia, Sarawak Tourism Board and government departments in the individual countries. The aim has been to use our success as a business to aid and gain knowledge from other conservation organizations. We believe that only by unifying manpower and knowledge, will we find the most effective conservation solutions.

B. Samboja Lestari, Kalimantan, Borneo Indonesia

Mid 2009 saw the start of work in another rehabilitation centre in Indonesian Borneo. This centre, Samboja Lestari, is being run by Borneo Orang-utan Survival Foundation (BOS), Indonesian Borneo.

WOX has signed a MOU and is official partner in the refurbishment/rebuilding of this orang-utan centre. We have been asked to replicate our successful model of bringing in volunteer contribution and participation to aid in running part of the rehabilitation process, participate in animal welfare and husbandry. The centre houses more than 210 orang-utans and more than 50 sun bears. We hope to help in rehabilitating these animals for release into forest reserves identified by BOS.

The first team of volunteers has already been hard at work for more than 2 months, led by Guillaume Feldman, ardent conservationist and Director of WOX.

The volunteers going to Samboja will help in **construction** of large, tall, feeding platforms, complex ropeways for the orang-utans to brachiate and move freely on artificial islands that will house 10 to 12 orang-utans each. They will also help in making daily **enrichment** for the sun bears and the orang-utans based on our experience and database trialled at both the zoos and at Matang Wildlife Centre.

WOX volunteers will participate in the larger BOS goal of **reforestation** and habitat health by high density rapid tree planting and maintenance in the areas earmarked for the rehabilitation process.

The very act of being selected as a partner with the most prestigious and well known Borneo Orang-utan Survival Foundation speaks volumes about the quality of our **volunteering programmes** and the manner in which it is embedded in our overall action plans for conservation.

See link showing evidence of partnership with one of BOS' outfits.

<http://www.orang-utans.com.au/Orang-utans-Survival-Information/Volunteer-Help-for-BOS-Projects.aspx>

C. Semenggoh Nature Reserve, Kuching, Sarawak, Borneo Malaysia

Semenggoh Nature Reserve was established in 1975 for the rehabilitation of confiscated and surrendered wild animals. It is located about 20 km south of Kuching. This was a temporary home for various endangered wildlife of Sarawak, especially orang-utans that were rescued from captivity and hornbills.

WOX helps in the running of Semenggoh Nature Reserve by providing them with the means to employ staff. GOP pays for 2 of the keepers in the Semenggoh reserve. They help in information dissemination for both volunteers and tourists, work at feeding platforms for the orang-utans and keep a close watch on the orang-utans in the semi-wild conditions of Semenggoh, including proving health care for the ailing or the ones that need de-worming.

SETTING III: ORANG-UTANS IN THE WILD

**Corridor of Life, Lower Kinabatangan, Sabah, Malaysia
Batang Ai, Sarawak, Malaysia**

A. Lower Kinabatangan, Sabah, Borneo Malaysia

WOX has been steadily increasing its commitment and investment in Sabah mainly because we believe that our work in Sabah showcases our holistic approach to seeking environmental solutions that benefit animals, the habitat and the people. In Sabah too, our flagship species is the orang-utan but we also work along with other partners in the prestigious Corridor of Life Project that is run by the World Wide Fund for Nature (WWF), Malaysia and the Sabah Government agencies. This project supports numerous endemic species and the larger biodiversity found in the region including pygmy elephants.

Volunteer participation and contribution in this project site has extremely successful in the areas of reforestation along the banks of the river, an innovative program on education and also wildlife monitoring along the river.

The quality of the work, the consistency and the rigour with which it is done has catapulted WOX to the league of important international agencies and has resulted in very strategic and important collaborations – both with Governmental and NGOs operating in the region. Thus, WOX has been instrumental in bringing together a coalition of diverse agencies working toward a common goal of conservation. This establishment of networks, of learning and growing communities brought together by passion and idealism and values is a hallmark of WOX operations in all sites.

The highlights of our work in Sabah are outlined below:

1. Wildlife sighting and census

- 1.1. WOX has been collecting and maintaining a database of wildlife sightings on a monthly basis along the Lower Kinabatangan area around Sukau. Since July 2008, with numerous boat transects per month, a sizeable database has been built with GPS locations for each sighting.
- 1.2. WOX will be handing this data over to the Sabah Wildlife Department on a regular basis for their analysis. The department has also requested WOX to continue the data collection and expand it into other areas along the

Kinabatangan River within the Corridor of Life. An MOU will be signed between WOX and Sabah Wildlife Department for wildlife monitoring along the Kinabatangan.

- 1.3. WOX will provide wildlife density data to the University Malaysia Sabah to supplement their research on wildlife in the Kinabatangan. UMS will cooperate with WOX by sharing research conclusions and will also include WOX volunteers on suitable wildlife research activities.

2. Reforestation and habitat regeneration

- 2.1. Habitat Restoration is a key activity in our Sabah programmes and WOX's success in the high survival rate and fast planting methods has gained recognition from partners and other organisations such as World Wide Fund for Nature, Malaysia (WWF). This success can be seen on 2 plots where planting has been completed and maintenance is being carried out.
- 2.2. A 3rd plot on the high priority area has been assigned by WWF to WOX as "caretaker" of this land. WOX will be fully responsible for the planting on this land. Close monitoring will be done and tree growth data will be forwarded onto WWF for records.
- 2.3. Having successfully introduced the concept of volunteering programmes to Sabah Forestry Department (SFD), WOX has been invited to conduct an inspection tour of 3 conservation areas earmarked for rehabilitation: Klias, Deramakot and Ulu Segama-Malua. All three areas have recorded high wildlife density, require community programmes and are in urgent need of reforestation work. Sabah Forestry Department has asked WOX to share its methodology for reforestation in these areas using our highly successful model of volunteerism.

3. Working with the community

- 3.1. WOX programmes have been running successfully in the village of Sukau through education programmes and upgrading work in the local village school. The programmes have seen the improvement of English among students and a better understanding of their role within this high conservation area. Recently, village elders, through the Village Council, have requested that we extend our programmes to adults and the larger community. Plans are being made to start the adult education programme as well as the larger community-based habitat restoration and conservation programme in 2010.

3.2. Future program in Batu Puteh Village: By working with MESCOT & KOPEL on their successfully established community based home stay programme, WOX is extending its wildlife population density surveys and tree planting support into this village. MESCOT had conducted a community baseline survey in the Batu Puteh catchment area and used this information to come up with home stays and tree planting as alternative income generating activities for the community. WOX will begin working hand-in-hand with MESCOT to conduct a second community baseline survey to help inform and direct the further development of alternative income strategies for the community.

B. Batang Ai National Park, Sarawak, Borneo Malaysia

Batang Ai is located in an existing forest on the edge of a national park, with many orang-utans inside and outside the area. Volunteers participate in wildlife monitoring in this region. This helps building up a database and also acts as a deterrent to poachers. We mark the trails using GPS and use GPS while doing nest spotting as indirect evidence of orang-utan densities.

As volunteers are willing to pay money to be part of a monitoring team the local people see that environmental protection can also generate income for them. Thus, GOP is helping local people to preserve wildlife and habitats. Before GOP, some of the tribes had been responsible for bringing in people, both Malaysians and foreigners, for hunting. Ever since WOX started its volunteer projects in the area, there have been lower numbers of people hunting in the forest surrounding Batang Ai.