

**Address to the World Zoo and Aquarium Conference  
St Louis, Missouri, USA  
October 2009**

**BUILDING CAPACITY FOR CONSERVATION IN BUKIT TIGAPULUH, SUMATRA**

Susan Hunt, Chief Executive Officer, Perth Zoo

The purpose of this paper is to detail the capacity building and work of NGOs, zoos and partners being undertaken in Bukit Tigapuluh, Sumatra, Indonesia.

Perth Zoo has been working at Bukit Tigapuluh for over three years. Our work started with our participation in the release program for Sumatran orangutan into Bukit Tigapuluh. This program is an Indonesian Government joint program with the Frankfurt Zoological Society (FZS). The aim of the program is to re-introduce Sumatran orangutan into an area which the species has been extinct for over 150 years. Since our initial involvement, through partnering and working with others, Perth Zoo and several other Australasian zoos are active in Bukit Tigapuluh habitat protection programs in support to wildlife surveys, community education programs, local employment, research activities and the construction of facilities to support conservation. Increasingly, too, zoos, NGOs and other partners are involved politically, with lobbying and actively negotiating to protect the Bukit Tigapuluh ecosystem.

The work occurring at Bukit Tigapuluh is a clear example of zoos as active conservation partners with NGOs and with governments. I understand that many of you undertake this sort of work internationally, but it is the first time that zoo-NGO collaboration has occurred to such an extent in the Australasian region. For the first time we have 5 major zoos, Perth Zoo, Australia Zoo, Auckland Zoo, Dreamworld and Adelaide Zoo actively supporting conservation programs in Bukit Tigapuluh in Sumatra. This is through a variety of mechanisms - through fundraising; zoo interpretation, public awareness; active staff participation; and now advocacy to conserve this area for the future. There are also indications of future involvement of other major Australian zoos – as the benefit and outcomes of an integrated approach to in-situ conservation are realised.

Perth Zoo has been active for some years in Australian native species conservation and some of you may have heard me and predecessor CEOs of Perth Zoo speak of this. In our breed for release programs for Western Australian species we have had good success, with now over 2000 Western Australian native animals released from Perth Zoo programs into the wild. This

activity is continuing to grow with additional work commencing this year with woylies, yellow bellied frog and Western Ground Parrot.

However as Perth Zoo CEO I have been aware that this conservation effort has not been integrated into our programs with exotic animals. While I had several staff active in conservation in SE Asia and Africa in their own time, Perth Zoo's contribution was predominantly an education one, rather than harnessing our staff expertise as an active contributor to in-situ conservation programs for non Australian species.

The Australian context offers many opportunities for greater involvement in Sumatran wildlife conservation. There is intense interest and commitment in Australia to South East Asian species, from our zoo visitors, who enjoy the Sumatran Tiger, the Sumatran Orangutan<sup>1</sup>, Gibbon species and Asian elephant. Additionally internally within the Zoo community there is a strong commitment to manage our ex-situ combined species' populations sustainably with an increasing imperative to more actively link our ex-situ exhibited animals with in-situ conservation.

As a starting point in describing the habitat protection and conservation efforts at Bukit Tigapuluh I acknowledge the ground breaking work of the FZS in its ongoing work on the ground in Sumatra. Another major contributor is the NGO the Australian Orangutan Project (AOP) in its fundraising and advocacy work. (I would point out that AOP is a WAZA supported program – so zoos can be involved in support for Bukit Tigapuluh by funding support to AOP.)

The third major party to be acknowledged is the Republic of Indonesia's Ministry of Forestry and Biodiversity Protection. All work is done in partnership with the Ministry and its participation and endorsement are central to the conservation work in Bukit Tigapuluh.

Sumatra is a major island in Indonesia and Indonesia is one of Australia's closest neighbour states, with around 240 million people. It is the World's 3<sup>rd</sup> largest democracy. Its neighbours to the north are Malaysia and Singapore, to the west Papua New Guinea and to the south, Australia.

---

<sup>1</sup> I would emphasize that the priority managed orangutan species in the Australasian region and in the re-introduction program to which I refer in this paper is Sumatran orangutan, not Bornean. Even in zoo circles there is confusion between the context and conservation approach between Sumatran and Bornean orangutan. There are approximately 6,600 Sumatran orangutan left in the wild and the current rate of loss is approximately 1,000 per year. Unfortunately 80% of the remaining Sumatran orangutan habitat is covered by timber concessions in the troubled province of Aceh.

The situation is extremely different from that in Borneo with many animals held in sanctuaries and little suitable habitat for reintroduction. In Sumatra the expert advice is that there is greater capacity for animals for the re-introduction program. Since 1970, 27 Sumatran orangutans have been born at Perth Zoo - and the colony currently comprises ten females and four males as one of the largest captive breeding group in the World.

Indonesia's capital Jakarta is closer to Perth and to Perth Zoo, than the Australian cities of Sydney, Melbourne or Canberra. In many ways Western Australians look to Asia as a basis for our economic development and it is also a natural place to partner on wildlife conservation.

The Bukit Tigapuluh National Park and its surrounds have rich biodiversity. The Park is almost 150 000 hectares – with a boundary length of over 330 kms. It is a wilderness area, the terrain is rough and locations are remote. Two indigenous groups still live in the forest living sustainably off its produce. More than 1500 types of flora are found within the Park. There are approximately 59 types of mammals in the Park. 193 species of birds (or one-third of the species of birds in Sumatra); a 1993 study recorded 97 species of fish from 52 genera and 25 families in the waters around Bukit Tigapuluh. There are also nine species of primates recorded in the immediate area. There are 5 mammals species that are threatened by extinction and have protected status; the habitat is home to a variety of endangered wildlife species endemic to Sumatra which serve as umbrella or flagship species protected by Indonesian law, CITES and IUCN. This includes Sumatran tiger (thought to be around 40 animals) and the Sumatran elephant (perhaps up to 120) and now as a result of the re-introduction program commenced around 7 years ago Sumatran orangutan, the world's most threatened Great Ape has been added to the mix (Resource Base Inventory, Bukit Tigapuluh National Park and Frankfurt Zoological Society, 2009; 57-74).

Wildlife is also rich in the area around the National Park of Bukit Tigapuluh. These areas do not yet have protected status. Indeed as we understand more about the area through wildlife surveys and research as a result of increased conservation work we are finding that the so-called Park buffer zone has a greater known number of several key species (particularly Sumatran elephant and the Sumatran tiger) than the protected National Park. As a consequence the battle to save the surrounding areas of the Park has urgently arisen: to maintain wildlife habitat; enable the movement of species such as elephant and tiger; and to minimise human animal conflict.

It has been the efforts of the FZS Director Indonesian Programs, Dr Peter Pratje that has raised the profile of the importance of the conservation of Bukit Tigapuluh. In addition to the re-introduction program, he is on the ground managing approximately 70 staff in the region in wildlife protection patrols, community education and research. This now includes the programs funded by Australian partner zoos.

108 orangutans have now been 'soft released' into the Bukit Tigapuluh ecosystem. To date there have been three births from released orangutan and these animals are living wild with their mothers at Bukit Tigapuluh. Given that orangutans have the longest inter-birth interval of any species at around 8 years before natural dispersal; this is a long term program. The project's intent is to create a viable back-up wild population to the only remaining in-situ wild populations in Aceh Province in North Sumatra. All animals bar one, the orangutan from Perth Zoo

‘Temara’, are ex-pet or orphaned orangutans previously held illegally and confiscated by the Indonesian Government. All animals confiscated are placed in the SOCP program for repatriation and care and for re-introduction into Bukit Tigapuluh.

One of the keys to the success of the re-introduction program has been the armed and trained wildlife protection units which patrol Bukit Tigapuluh. Their mandate is wildlife crime prevention, monitoring forest fire, collecting intelligence and acting on illegal logging, palm oil farming, animal poaching and also undertaking wildlife surveys. This is where the collaboration of zoos has come in. Along with and initiated through the AOP, Humane Society International, Australia Zoo, Dreamworld, Perth Zoo and Auckland Zoo have now funded 8 wildlife protection units in Bukit Tigapuluh. The men are all recruited from the local area. A training centre for the wildlife protection units is soon to be constructed funded by Australia Zoo, further consolidating the program’s role as a major local employer and in protecting wildlife and habitat.

While most of the staff who work with the orangutans preparing them to be released are local Sumatrans, Perth and Auckland zoos are also increasingly active. This has been in those tasks that come easily to modern zoos: animal enrichment, husbandry and animal nutrition. The intensive captive management approach is necessary in most instances due to the traumatic events leading to the animals’ captivity, such as physical abuse, the death of their mothers or long-term captivity as a family pet, as a circus animal, or a company mascot. Expert keeping zoo staff make a big difference in enrichment, training and husbandry. Zoo staff who visit Bukit Tigapuluh up to three times per year help to and assist with training local staff to build the animals’ physical health and strength in addition to developing social skills; forest skills, which these primates need to learn and would have learnt from their mothers in a natural environment. It builds the animals’ mental and physical health – skills necessary for survival in the wild.

In January this year Perth Zoo formalized its involvement and investment at Bukit Tigapuluh with the construction of a sanctuary funded by the Zoo. It was opened on the outskirts of the National Park in January 2009. Integrated with the FZS funded program Perth Zoo’s sanctuary provides the additional levels of husbandry support necessary for particularly damaged orangutan with the aim of their introduction or their offspring’s’ introduction into the wild.

Additionally, Perth Zoo has funded wildlife surveys for Sumatran elephants and a specialist study on the mitigation of elephant human contact has also commenced.

The Zoo has also funded construction of infrastructure including Wildlife Protection Posts on the outskirts of the National Park to maintain a clear physical presence. Funds are also being provided to enable pursuit of prosecutions for illegal clearing, poaching or illegal burning of the forest. Wildlife Education Units have also been established with funding through the European Union and Perth Zoo.

Perth Zoo's orangutan Temara was introduced into Bukit Tigapuluh as a part of the orangutan reintroduction program in November 2006. She was born at Perth Zoo and is a granddaughter of a wild caught orangutan which given to the Zoo as a gift many years previously. Temara now lives successfully in the wild and is monitored daily and her movements, food intake and behaviour are been closely documented to inform possible future releases. Further papers and publications on this release are available elsewhere.

So what has Temara's release – the first ever Zoo-born Sumatran orangutan release meant for capacity building for conservation at Bukit Tigapuluh?

Certainly there was media interest and interestingly there was a strong diplomatic flavor to the media coverage. As a Western Australian Government zoo and a statutory authority Temara's release was a Government to Government event. In addition to the intense and detailed work necessary to return her to the wild, she has clearly been an ambassador and public symbol of the need to protect Bukit Tigapuluh. There have also been diplomatic benefits. The Australian Ambassador to Indonesia confirmed with me that in his many years as Ambassador to Indonesia Temara's repatriation was the most positive media he had ever seen about Australia in Indonesia. In terms of the broader role of zoos, the Director General of the Indonesian Government Ministry of Forestry said that he was impressed that a Western Zoo was giving back to his country, rather than making representation to take animals, which was the most common request received from Western zoos.

Temara and the work associated with her were important signals that zoos were moving beyond their borders into the broader business of wildlife conservation and protecting ecosystems.

As many may be aware it has not been all smooth sailing in terms of the protection of Bukit Tigapuluh. Large areas surrounding the National Park have been subject to logging concessions and as a result subject to illegal burning and clearing of land for palm oil plantings.

Wildlife is not aware of the boundaries of logging concessions or National Parks and large numbers of threatened wildlife live in the unprotected logging concession areas. Through the work of wildlife surveys and the work of partners we can see that particularly the Dalek Esa Concession adjoining the protected areas has the most intense concentration of recorded wildlife. During 2009 this area has been the subject of intense lobbying and publicity to protect these areas, as the Singapore based pulp and paper company, Asia Pulp and Paper (APP) and its subsidiary and associated companies look to access the concession areas for clear fell logging.

Led by the politically active local NGO, the Australian Orangutan Project, Australia and New Zealand zoos and other NGOs joined forces to defend Bukit Tigapuluh. This was followed up by international NGOs in a global push to protect the area.

As a Government zoo and given diplomatic sensitivities in working internationally Perth Zoo was not able to 'go public' against activities occurring in Indonesia. This may be seen as an impediment; however there are also great benefits of working within the Government framework. In 2007 Perth Zoo, as an agent of the Government of Western Australia, reached and signed off a formal agreement with the Indonesian Government on joint initiatives for conservation in Sumatra and Java. This year a higher level agreement is under development which is more prescriptive about the levels of activities and protected areas for conservation and this is only possible because of the extra status and importance given to Government to Government agreements.

Additionally as a Chief Executive of an Australian Government statutory body this year I was able to meet with the Governor of Jambi Province (the responsible Sumatran regional government) who has now pledged to protect Bukit Tigapuluh and its landscape. As a result of issues raised at the meeting the Governor has now also approved that Bukit Tigapuluh wildlife protection units will assume management responsibilities for significant roads around the protected areas. This is a promising further step to ensure increased protection and less encroachment of illegal land clearing and farming at Bukit Tigapuluh. In July 2009 a Government to Government agreement between Perth Zoo on behalf of the Government of Western Australia with the local government, Jabung Barat Buparti was also signed off. This agreement protects the area in which the Zoo Sanctuary is located and agrees to further collaboration on conservation and community programs in the area. This will include inclusion of REDD schemes and carbon credit programs, as well exploring eco-tourism opportunities for the Bukit Tigapuluh ecosystem. The intent of these agreements is to build confidence about alternative land-use which is consistent with the conservation of the ecosystem and which also support the economic and future development aspirations of the community.

As a Government zoo, we may not be able to publicly advocate using the media to protect wildlife and ecosystems; however using the influence and strength of government processes there have been significant opportunities to build partnerships and relationships to protect Bukit Tigapuluh.

While this more political Government to Government diplomatic path may not be as yet a common role for zoos and zoo Directors, in order for zoos to be active agents for conservation of wildlife and ecosystems it is a path worth travelling.

Bukit Tigapuluh has been an opportunity for the combined capacity of NGOs and zoos - Government and private - to make an impact and build conservation action in the wild. With this combined activity and integration of skills, expertise, resources and commitment we jointly hope that the ecosystem of Bukit Tigapuluh may be conserved for the future.

Susan Hunt  
Chief Executive Officer  
Perth Zoo

October 2009