

International
Specialised
Skills
Institute Inc

Indonesian Conservation Management Practices & the Australian Zoo Industry



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ISS Institute / The Pratt Foundation Fellowship

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Executive Summary

For the zoo industry to effectively contribute to meaningful conservation outcomes in South East Asia, a sound understanding is required of the general principles of conservation and how these can be applied in the South East Asian region, as well as the specific challenges facing conservation in this region and successful strategies for addressing those. Zoos in western developed countries, such as Australia, have come a long way from the time when they contributed to the removal of species from the wild for public display and entertainment. Zoos now play an important role in conservation and this is seen as a key goal of the zoo industry in many parts of the world. Today, Australia actively addresses wildlife conservation through a range of processes, including:

- Protecting habitat through designation and management of national parks and reserves.
- Endangered Species Recovery Programs, e.g. Helmeted Honeyeater and Brush-tailed Rock Wallaby.
- Environmental planning legislation.

Conservation programs across South East Asia are numerous and diverse. They have a diversity of objectives, from single species conservation to large-scale ecosystem restoration. A wide variety of strategies and approaches are employed across these programs, including research, education, political and community awareness, enforcement, wildlife rehabilitation and habitat restoration. By examining a cross section of diverse programs, McKelson sought to evaluate the relative effectiveness of different strategies, and how the zoo industry may best contribute its resources and expertise to maximum benefit/gain. Following this, McKelson could return to Australia with the knowledge, skills and ideas to enable her to advise the zoo industry on how to make clearer choices in supporting and developing conservation programs.

The aim of the current Fellowship is to study and gain first-hand information on Indonesian conservation programs and the methods and practices involved for long-term successful outcomes. It is essential that knowledge of practical skills and techniques used in project design and management be acquired and then applied in Australian zoos to assist them to improve their capacity to support conservation programs. Indonesia provides a rich source of information having experienced significant success in ensuring positive outcomes on a broad range of projects and initiatives. The following site visits were identified as being most significant in terms of both providing inspiration and the information necessary to ensure that the study objectives were met:

- Erik Meeijard, Senior Forest Ecologist, The Nature Conservancy.
- Lone Droscher Nielson, Project Manager, Nyaru Menteng Orangutan Rehabilitation and Rescue Centre. Central Kalimantan, Palankaraya, Indonesia.
- Sumatran Elephant Project, Wildlife Conservation Society Indonesia.
- Sumatran Elephant Conservation Program, Flora and Fauna International, Sumatra, Indonesia.

Specific areas of study and development were as follows:

- Develop an understanding of the general principles applied in conservation management.
- Investigate the practices used in the development and management of conservation projects.
- Investigate how these models are applied in South East Asia.
- Based on the general understanding of conservation planning, identify strengths and weaknesses of various approaches in South East Asia, and the skills needed in achieving success.

Executive Summary

- Develop practical skills needed in conservation planning in South East Asia.
- Provide zoos in Australia with information on how they can maximize their capacity to facilitate conservation programs in South East Asia and Australia.

In order to optimise the outcomes of this fellowship McKelson identified the importance of ensuring that the knowledge obtained on the study tour would be shared with others. Following an overview of the international experience, a series of recommendations have been made at the conclusion of the report regarding a range of initiatives and activities that the Fellow identifies as central to furthering the fellowship opportunity. Recommendations are also made for government bodies, professional associations, education and training providers, industry, business and the community.

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Abbreviations and Acronyms

ARAZPA	Australasian Regional Association of Zoological Parks and Aquaria
ASZK	Australasian Society of Zookeeping
BOS	Borneo Orangutan Survival
CRU	Conservation Response Unit
FCC	Field Conservation Committee
FFI	Flora and Fauna International
GLNP	Gunung Leuser National Park
HAC	Human Animal Conflict
HEC	Human Elephant Conflict
ISSI	International Specialised Skills Institute
IUCN	International Union for the Conservation of Nature & Natural Resources
LPT	Lembaga Pariwisata Tangkahan
NGO	Non-Government Organisation
POAG	Palm Oil Action Group
RNHP	Regional Natural Heritage Program
SECP	Sumatran Elephant Conservation Program
SWOT	Strengths, Weaknesses, Opportunities, Threats
TNC	The Nature Conservancy
USFWS	US Fish & Wildlife Service
VILTA	Victorian Indonesia Teachers Conference
WAZA	World Association of Zoos and Aquariums
WCS	Wildlife Conservation Society
WCSI	Wildlife Conservation Society Indonesia
WKNP	Way Kambas National Park
ZV	Zoos Victoria

Acknowledgments

Jessica McKelson would like to thank the following individuals and organisations who gave generously of their time and their expertise to assist, advise and guide her throughout the Fellowship program.

Awarding Body - International Specialised Skills Institute (ISS Institute)

We know that Australia's economic future is reliant upon high level skills and knowledge, underpinned by design and innovation.

The International Specialised Skills Institute Inc (ISS Institute) is an independent, national organisation, which has a record of nearly twenty years of working with Australian industry and commerce to gain best-in-the-world skills and experience in traditional and leading-edge technology, design, innovation and management. The Institute has worked extensively with Government and non-Government organisations, firms, industry bodies, professional associations and education and training institutions.

The Patron in Chief is Sir James Gobbo AC, CVO. The ISS Institute Board of Management is Chaired by Noel Waite AO. The Board comprises Franco Fiorentini, John Iacovangelo, Lady Primrose Potter AC and David Wittner.

Through its CEO, Carolynne Bourne AM, the ISS Institute identifies and researches skill deficiencies and then meets the deficiency needs through its *Overseas Skill Acquisition Plan (Fellowship Program)*, its education and training activities, professional development events and consultancy services.

Under the Overseas Skill Acquisition Plan (Fellowship Program) Australians travel overseas or international experts travel to Australia. Participants then pass on what they have learnt through reports, education and training activities such as workshops, conferences, lectures, forums, seminars and events, therein ensuring that for each Fellowship undertaken many benefit.

As an outcome of its work, ISS Institute has gained a deep understanding of the nature and scope of a number of issues. Four clearly defined economic forces have emerged out of our nearly twenty years of research. The drivers have arisen out of research that has been induced rather than deduced and innovative, practical solutions created - it is about thinking and working differently.

A Global Perspective. 'Skills Deficiencies' + 'Skills Shortages'

Skill deficiencies address future needs. Skill shortages replicate the past and are focused on immediate needs.

Skill deficiency is where a demand for labour has not been recognised and where accredited courses are not available through Australian higher education institutions. This demand is met where skills and knowledge are acquired on-the-job, gleaned from published material, or from working and/or study overseas. This is the focus of the work of ISS Institute.

There may be individuals or firms that have these capabilities. However, individuals in the main do not share their capabilities, but rather keep the IP to themselves; and over time they retire and pass way. Firms likewise come and go. If Australia is to create, build and sustain Industries, knowledge/skills/understandings must be accessible trans-generationally through nationally accredited courses and not be reliant on individuals.

Our international competitors have these capabilities as well as the education and training infrastructure to underpin them.

Addressing skill shortages, however, is merely delivering more of what we already know and can do to meet current market demands. Australia needs to address the **dual** challenge – skill deficiencies and skill shortages.

Acknowledgments

Identifying and closing skills deficiencies is vital to long-term economic prospects in order to sustain sectors that are at risk of disappearing, not being developed or leaving our shores to be taken up by our competitors. The only prudent option is to achieve a high skill, high value-added economy in order to build a significant future in the local and international marketplace.

The Trades

The ISS Institute views the trades as the backbone of our economy. Yet, they are often unseen and, in the main, have no direct voice as to issues which are in their domain of expertise. The trades are equal, but different to professions.

The ISS Institute has the way forward through its 'Master Artisan Framework for Excellence. A New Model for Skilling the Trades', December 2004. The Federal Government, DEEWR commissioned ISS Institute to write an Australian Master Artisan School, Feasibility Plan.

In 2006, ISS Institute Inc. set up a new ISS advisory body, the **Trades Advisory Council**. Members are Ivan Deveson AO; Martin Ferguson AM, MP, Federal Labor Member for Batman; Geoff Masters, CEO, Australian Council of Educational Research; Simon McKeon, Executive Chairman, Macquarie Bank, Melbourne Office; Richard Pratt, Chairman, Visy Industries and Julius Roe, National President Australian Manufacturing Workers' Union.

Think and Work in an Holistic Approach along the Supply Chain - Collaboration and Communication

Our experience has shown that most perceive that lack of skills is the principal factor related to quality and productivity. We believe that attitudes are often the constraint to turning ideas into product and a successful business; the ability to think laterally, to work and communicate across disciplines and industry sectors, to be able to take risks and think outside the familiar, to share – to turn competitors into partners.

Australia needs to change to thinking and working holistically along the entire Supply Chain; to collaborate and communicate across industries and occupations - designers with master artisans, trades men and women, Government agencies, manufacturers, engineers, farmers, retailers, suppliers to name a few in the Chain.

'Design' has to be seen as more than 'Art' discipline – it is a fundamental economic and business tool for the 21st Century

Design is crucial to the economic future of our nation. Australia needs to understand and learn the value of design, the benefits of good design and for it to become part of everyday language, decision making and choice.

Design is as important to the child exploring the possibilities of the world, as it is to the architect developing new concepts, and as it is to the electrician placing power points or the furniture designer working with a cabinet-maker and manufacturer. As such, design is vested in every member of our community and touches every aspect of our lives.

Our holistic approach takes us to working across occupations and industry sectors and building bridges along the way. The result has been highly effective in the creation of new business, the development of existing business and the return of lost skills and knowledge to our workforce, thus creating jobs - whereby individuals gain; industry and business gain; the Australian community gains economically, educationally and culturally.

Acknowledgments

Fellowship Sponsor

I would like to thank The Pratt Foundation for providing funding support in initiating and working with ISS Institute to bring this Fellowship to fruition.

Fellowship Supporters

Australia

Zoos Victoria:

- Wildlife Conservation and Science Director, Dr. Graeme Gillespie
- Wildlife Conservation and Science International Project Co-ordinator, Chris Banks
- Melbourne Zoo Human Resources Director, Lovonne Hunter
- Melbourne Zoo Curator, Peter Courtney

Overseas

Sumatra:

- Wildlife Conservation Society (WCS)
- Dr Nick Brickle, Program Manager, WCS Indonesia
- Donny Gunaryadi, Administration Manager Forestry, Way Kambas National Park
- WCS Sumatran Elephant Project Team
- Flora and Fauna International (FFI)
- Wahdi Azmi, Program Manager, FFI Medan
- Edi Sunardi, Field Manager Medan
- Conservation Response Unit (CRU) Tangkahan staff

Kalimantan:

- The Nature Conservancy (TNC)
- Dr Erik Meijard, Senior Forest Ecologist, Regional Program Manager, East Kalimantan
- Borneo Orangutan Survival (BOS)
- Lone Droscher Neilsen, Project Manager, Nyaru Menteng Orangutan Rehabilitation and Rescue Centre

Peak Organisations and Key Representatives

Government – Federal, State and Local

- Department of Sustainability and Environment – State Government, Victoria
- Department of the Environment and Water Resources – Federal Government, Canberra

Business, Commerce and Firms

- Zoos Victoria
- Australasian zoos & staff having ‘conservation responsibility’ within the zoos
- Environmental conservation NGO’s
- Trade firms that utilise sustainable ‘green’ practices

Acknowledgments

Professional Associations

- World Association of Zoos and Aquariums (WAZA), Zurich, Switzerland
- Australasian Regional Association of Zoological Parks & Aquaria, Inc. (ARAZPA), Sydney
- Australasian Society of Zookeeping (ASZK), Healesville
- International Union for the Conservation of Nature & Natural Resources (IUCN), Gland, Switzerland

Education and Training Institutes

- Box Hill TAFE Institute – Biotechnical and Animal Sciences Department
- TAFE Institutes, Australia – Natural Resource Management Course
- Australian Universities – Ecology Courses

About the Fellow



From an early age, McKelson has enjoyed being around animals. She quickly came to understand that the protection of biodiversity was important for our future and that all species needed to live in balance with the natural world.

Hand feeding wild Kookaburras in her grandparents' backyard, reading about birds and mammals and drawing species from around the world developed McKelson's ambition to work with animals and their environments. Unusually for a 5 year old, she looked towards naturalists Jane Goodall and Dian Fossey as icons and dreamed of following in their footsteps and devoting her life to the preservation of species.

At the age of 12, McKelson approached the owners of Ballarat Wildlife Park, seeking volunteer work. Because of her age, they suggested she return when she was 15. This answer was simply not good enough and McKelson visited the Park every weekend, harassing the owners to give her a chance. Fortunately, they did and this volunteer work led to working with native species for five years. This gave her great hands-on experience in animal husbandry and the requirements needed to keep animals in captivity.

Whilst working at the Ballarat Wildlife Park many opportunities arose in the conservation field. McKelson volunteered with several projects with the Department of Sustainability and Environment, including the Eastern Barred Bandicoot Project and the Brush-tailed Phascogale Project. She also had the opportunity to become a foster carer to help injured ringtail possums and birds to be rehabilitated and then released back into the wild.

Gaining this vital experience gave McKelson the opportunity to pursue her career. She went on to study in a one-year Natural Resource Management program with the aim of gaining a position in species field projects. Consequently, McKelson was offered a 3 month contract with Victoria's Werribee Open Range Zoo, working with exotic species such as bison, rhino, giraffe and antelope.

After her contract had finished, McKelson gained employment at Melbourne Zoo, where she has been for the past five years. Since the commencement of her employment, she has worked with a number of species such as elephants, seals, Australian native species and primates. Each precinct had something to offer and has given her the chance to work on endangered species breeding programs and the opportunity to send vital conservation messages to the Zoo's visitors.

Highlights of McKelson's career to date, at Melbourne Zoo, include:

- Breeding the Southern Hairy-nosed Wombat.
- Introduction of De Brazza's Monkeys to the gorilla group.
- Animal husbandry training of Gorillas, Orangutans, Siamangs, Black and White Colobus Monkeys, Lion-tailed Macaques and White-cheeked Gibbons.
- Breeding the endangered New Holland Mouse.
- Initiation of a Koala handling program for visitors to gain close encounters with one of Australia's icon species.
- Participating in the development of Orangutan Sanctuary.

McKelson has now been working with Orangutans for the past four years, specialising in their care and management. She has published many articles on orangutan care in zoo-related journals and has spoken at a variety of conferences for zookeepers on 'Orangutan Husbandry Management' at Melbourne Zoo.

McKelson took the opportunity to travel to Indonesia recently to observe orangutan rehabilitation centres in Borneo and Sumatra, and the work they are doing in the field to

About the Fellow

protect this highly endangered ape species. McKelson has also volunteered her spare time to the Borneo Orangutan Survival (BOS) Program in the capacity of Fundraising and Merchandise Coordinator for Australia. In addition, McKelson volunteers for the Palm Oil Action Group (POAG).

Rainforests, once the home for many species, have been destroyed for production forests such as Palm Oil and rubber plantations. McKelson's trip to Indonesia in February 2006 was extremely challenging, due to witnessing the suffering of orphaned and homeless primates displaced by these activities. This experience has focused her on the conservation of the endangered apes of Indonesia and their habitats.

The experiences of McKelson's last trip to Indonesia gave her the motivation to take immediate action and present the information to a wider community audience. McKelson has spoken on many occasions about orangutan conservation, such as school events, the Victorian Indonesia Teachers Conference (VILTA), fundraising events and universities. She has also had the opportunity to meet and spend quality time with one of her childhood idols, Jane Goodall, on her recent tour to Australia, 2006. Jane's passion for conservation and protection of the world's natural habitats has encouraged McKelson to continue to strive and further pursue her career in the conservation field.

McKelson has the passion and the dedication to become further involved in conservation management, especially in the Australian context. On gaining these skills she will be able to better represent Zoos Victoria (ZV) in conservation programs within the state of Victoria, Australia and in the field.

The Fellowship Program

The purpose of the Fellowship was to develop a strong understanding of the principles used to develop and implement conservation programs, and develop skills and techniques in conservation project design and management, with a view to assisting the Australian zoo industry to make more informed decisions and choices in supporting conservation programs.

Aim of the Fellowship

The aim of the Fellowship is to study and gain first-hand information on conservation programs and the methods and practices involved for long-term successful outcomes; acquire practical skills and techniques used in project design and management; and then apply the knowledge and skills in Australian zoos to assist them to improve their capacity to support conservation programs.

Specific areas of study and development:

- Gain an understanding of the general principles applied in conservation management.
- Investigate the practices used in the development and management of conservation projects.
- Investigate how these models are applied in South East Asia.
- Based on the general understanding of conservation planning, identify strengths and weaknesses of various approaches in South East Asia, and the skills needed in achieving success.
- Develop practical skills needed in conservation planning in South East Asia.
- Provide zoos in Australia with information on how they can maximize their capacity to facilitate conservation programs in South East Asia and Australia.

Skills and Knowledge Gaps

Skills and knowledge gaps that McKelson will address during the Fellowship:

- Skills to enable effective evaluation of conservation programs, ie: assessing the techniques used in field activities and program management.
- Understanding the basic principles applied in wildlife conservation.
- Skills in project planning, design and management.
- Identifying issues that affect conservation planning.

Conservation programs across the region are numerous and diverse. They have a diversity of objectives, from single species conservation to large-scale ecosystem restoration. A wide variety of strategies and approaches are employed across these programs, including research, education, political and community awareness, enforcement, wildlife rehabilitation and habitat restoration. By examining a cross section of diverse programs, McKelson intends to evaluate the relative effectiveness of different strategies, and how the zoo industry may best contribute its resources and expertise to maximum benefit/gain. McKelson will then be able to return to Australia with the knowledge, skills and ideas to enable her to advise the zoo industry on how to make clearer choices in supporting and developing conservation programs.

McKelson's visit to projects within South East Asia will enable her to develop high standard practices and skills that can be applied to the framework of conservation programs within Australia and other projects that zoos support across the world.

The Fellowship Program

To obtain the relevant information, the following activities will be undertaken during the course of the Fellowship:

- Obtain information on the general principles and requirements for successfully managing conservation programs, along with design, implementation methods and long-term management strategies.
- Explore project models and principles that have been developed and implemented, and evaluate their results.
- Investigate a variety of habitat conservation methods.

These objectives will be achieved by:

- Meeting with project coordinators and field managers.
- Visiting a broad range of projects in South East Asia.
- Gaining practical skills working with projects.

The Australian Context

Australia currently addresses wildlife conservation through a range of processes, including:

- Protecting habitat through designation and management of national parks and reserves.
- Endangered Species Recovery Programs, eg: Helmeted Honeyeater and Brush-tailed Rock Wallaby.
- Environmental planning legislation.

Zoos in western developed countries, such as Australia, have come a long way from the time when they contributed to the removal of species from the wild for public display and entertainment. Zoos now play an important role in conservation and this is seen as a key goal of the zoo industry in many parts of the world.

Achim Steiner, previous Director General of the IUCN, The World Conservation Union, is quoted in the World Association of Zoos and Aquariums (WAZA) Conservation Strategy:

"The critical role of zoos and aquariums within conservation is more important than ever. Zoos and aquariums are in a unique position: that of providing conservation in a genuinely integrated way. For the young people of the world's cities, zoos and aquariums are often the first contact with nature and so you are the incubator of the conservationists of tomorrow. The research you conduct is vital to our understanding of the components of biodiversity and their interactions."

"The public awareness campaigns and communication programmes you oversee are critical in making the general public understand both the utilitarian and the aesthetic importance of nature. Your efforts to build capacity, and transfer technology to colleagues in other parts of the world, will ensure the longer term contribution of zoos and aquariums to biodiversity conservation, while also fostering a spirit of collaboration and cooperation much needed in our troubled world. Finally, the financial support that you gather for conservation in the field will demonstrate the commitment of urban populations to maintaining the wild areas of the Earth."

Many zoos now support conservation programs for species that they hold in their collections via captive animal management, through direct financial assistance or technical field support.

However, confusion persists within the zoo industry over how to best contribute meaningfully to conservation. Few zoos in this region have developed strategies for directing their conservation efforts and actions.

Zoos Victoria's (ZV) Conservation Strategy is currently the only such document in this region to guide a zoo's involvement in conservation. The overall goal of the Strategy is to maximise ZV's capacity and opportunities to deliver meaningful and tangible conservation outcomes. It will do this by:

- *Contributing directly to achieving tangible biodiversity conservation outcomes through direct involvement in, and support for field conservation programs, both within Australia and internationally.*
- *Assisting communities to take informed action to conserve the natural world – either indirectly or directly, both within Australia and internationally.*
- *Taking our informed action to conserve the natural world – On-site habitat management and conservation; environmentally sustainable management; and retail and catering activities.*

The Australian Context

- *Ex situ collection management* – captive breeding for reintroduction; public education and/or exhibit opportunities; fundraising activities; research to gain basic knowledge of animal biology and develop husbandry, management and breeding skills and expertise; and, demographic and genetic backup for wild populations.

The World Association of Zoos and Aquariums (WAZA) has encouraged Australasian zoological institutions to focus on Australasia and South East Asia as their priority conservation areas. The ZV Conservation Strategy reflects this and identifies a range of goals and objectives that will deliver conservation outcomes under the four broad themes cited above. An important aim of both the ZV and WAZA strategies is to achieve 'integrated conservation', whereby all the zoo's activities are working together to 'achieve the greatest sustainable conservation benefit for threatened species, their habitats and their human neighbours' (WAZA 2005).

Many zoos attempt to support conservation programs for species that they hold in their collections. As a consequence, Australian zoos are committing increasing levels of energy and resources to conservation programs within South East Asia. However, it is broadly unclear how effective this support is due to limited capacity and expertise to evaluate the merits and performance of the programs. Even the larger zoos within Australia, such as ZV and Taronga Zoo in Sydney, have few staff with sufficient expertise, experience or time to oversee such activities.

For the zoo industry to effectively contribute to meaningful conservation outcomes in South East Asia, a sound understanding is required of the general principles of conservation and how these can be applied in the South East Asian region, as well as the specific challenges facing conservation in this region and successful strategies for addressing those.

In a wildlife conservation context, there are important differences between South East Asia and 'western countries', ie. The former faces greater population pressures, lower standards of living, and weaker government capacity and regulation. These contribute to significant and complex conservation challenges.

Conservation programs in South East Asia are widely supported by western organisations, funds and individuals. Increasingly, the principles and practices of conservation program management developed in western countries are being adapted to more effectively reflect the needs and realities of working in South East Asia. A key goal of this Fellowship is to assess these changes and their relevance for Australian zoos. However, it is unclear how effective application of the general principles and practices of conservation management developed in western countries is in delivering successful conservation outcomes.

A SWOT analysis provides a useful avenue for exploring conservation practices within the context of the Australian zoo industry. Exploring strengths, weaknesses, opportunities and threats provides an effective means of 'mapping' the current situation and identifying opportunities for future developments.

SWOT Analysis

Strengths

- The visions and values of Australian zoos identify the need to contribute to conservation in some capacity.
- Human Resources systems and procedures are in place.
- Most staff employed within the industry have a general interest in actively participating in field conservation.

The Australian Context

- The use of captive animals creates a personable impact for visitors, who can also initiate action of their own to contribute to conservation.
- Educational conservation is a priority of most zoos within Australia, and creates programs developed to change community attitudes.
- Professional zoo organisations (ARAZPA, ASZK and WAZA) have developed policies and procedures, and criteria to ensure these are adhered to within the zoo industry. The criteria also ensure that conservation is a priority focus.

Weaknesses

- Lack of strategic plans when identifying conservation management within the industry. Zoos Victoria has the only strategic conservation plan among Australian zoos.
- Lack of funding support from most government bodies to identify and integrate conservation opportunities for staff, including participation in the management of the conservation outcomes in the field.
- Lack of communication within the industry to discuss issues, activities and direction in relation to supporting conservation programs.
- Lack of reports on what is working and not working in zoo-supported conservation activities.
- Lack of dedicated training systems for zookeepers to become conservation professionals. This includes lack of education opportunities, scholarships and incentives for staff to develop career paths towards conservation management.
- Cost to replace staff that participate in field conservation.
- Lack of media opportunities to highlight the involvement of Australian zoos in achieving conservation outcomes.
- Lack of paid positions to encourage professionals within the field to become committee members for ARAZPA, ASZK and other conservation bodies, which promote changes in conservation direction for the zoo industry.

Opportunities

- Greater conservation outcomes can be achieved.
- Zoos can work together in the same direction.
- Communication could be increased on all levels in the industry. This promotes consistent information for zoo visitors, which can lead to changes in their behaviours and actions towards conservation.
- Skilled zoo employees can provide increased support in the field.
- Zoo employees can learn from experiences and skills gained in the field.
- Educational opportunities can be strengthened.
- Zoos can become true conservation centres.
- Zoos have the opportunity to become leaders in 'green technology'.
- Develop 'online' learning activities.
- To investigate the delivery of learning activities within South East Asia under a ISS Fellowship

The Australian Context

Threats

- Funding support not consistent.
- Disagreement within the industry on why it should support conservation, or how conservation is defined.
- A sector of the zoo industry taking the view that conservation is not relevant to its purpose and operations.
- Criticism from the animal rights movement about zoos generally, which may undermine the capacity of zoos to support conservation.
- Community views that zoos do not have a role in wildlife conservation.

International Context

The overseas program was designed to explore and identify skills and knowledge gaps, and obtain the information necessary for the Fellow to return to Australia equipped with the knowledge, ideas and skills to evaluate, advise, manage and have practical input into the overall management of long-term conservation planning and development within zoos and other zoo-related organisations in Australia.

The Program

Date	Location	Activities	Status	Person	Title	Enterprise	Objectives
15/01/07	Balikpapan -East Kalimantan	Meeting	Confirmed	Erik Meeijard	Senior Forest Ecologist	The Nature Conservancy	<ul style="list-style-type: none"> • Gain information in new monitoring techniques for evaluating programs • Program Coordination
16/01/07 - 20/01/07	Samboja Lestari	Tour and Overview	Confirmed	Paramita Ananda	Manager Wanariest	Borneo Orangutan Survival (BOS)	<ul style="list-style-type: none"> • Gain information to pilot program, activity update and management overview update. What was required for the program
20/01/07 - 05/02/07	Palankaraya, Central Kalimantan	Meeting Program Overview Field experience	Confirmed	Lone Droscher Nielsen	Program Manager	Nyaru Menteng (BOS) Program	<ul style="list-style-type: none"> • Program management operations • Skills in rehabilitation • Requirements needed to operate and achieve objectives • Evaluation as a conservation tool
06/02/07	Bogor	Meeting	Confirmed	Dr Nick Brickle	Program Manager for WCS Indonesia	Wildlife Conservation Society, Indonesia Conservancy	<ul style="list-style-type: none"> • Daily operations/management • Program Management • Program Design • Indicators of success • Field operations • Strategy planning • Priorities • Objectives for future planning.

International Context

Date	Location	Activities	Status	Person	Title	Enterprise	Objectives
7/02/07 - 17/02/07	Banda Lampung, Way Kambas National Park	Meeting Field experience	Confirmed	Donny Gunaryadi	Admin Manager for Forestry WKNP	Wildlife Conservation Society (WCS)	<ul style="list-style-type: none"> • Assessing program development • Program management • Evaluating techniques • Strategy Development
19/02/07 - 31/04/07	Medan / Tangkahan	Meetings Field Activities Management overview and experience	Confirmed	Wahdi Azmi	Program Manager	Flora and Fauna International (FFI) Sumatran Elephant Conservation Program (SECP) Medan	<ul style="list-style-type: none"> • Goals and objectives • Program management • Priorities • Field operations • Partnerships • Strategy development • Issues and problem solving strategies • Communication methods

Destination and Objective

Program Content

Several models of field conservation were selected and visited during the course of the Fellowship. Many organisations and people within the conservation industry gave McKelson the opportunity to develop the necessary skills to assist her in conservation management and program evaluation, in order to enhance the capacity of Australian zoos to choose and evaluate conservation programs (*in situ or ex situ*). She was able to effectively evaluate each program using a number of different communication techniques, conduct several interviews with stakeholders in the programs, and spend time working within the project field.

Organisations and people that McKelson was not aware of were also available for her to visit and conduct interviews, which provided additional information on small project management within South East Asia. Every project member gave freely of their time, offering a diversity of opinions and much valuable information.

The following site visits and meetings proved to be the most significant in providing information and inspiration:

- Erik Meeijard, Senior Forest Ecologist, The Nature Conservancy.

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- Lone Droscher Nielson, Project Manager, Nyaru Menteng Orangutan Rehabilitation and Rescue Centre, Central Kalimantan, Palankaraya, Indonesia.
- Sumatran Elephant Project, Wildlife Conservation Society Indonesia.
- Sumatran Elephant Conservation Program, Flora and Fauna International, Sumatra, Indonesia.



1. East Kalimantan, Indonesia

Erik Meeijard, Senior Forest Ecologist, The Nature Conservancy (TNC). East Kalimantan Project – Meeting / Interview.

The Nature Conservancy (TNC) strategy in East Kalimantan is to work in areas having high ecological significance, but which are not protected and are threatened with destruction.¹ One such site is the Kelay River watershed in the Berau District, which is home to many threatened species.

One focus of the Conservancy's efforts in East Kalimantan has been on sustaining forest habitats. Scientists believe that the Kelay River watershed is home to over 10% of the world's remaining wild orangutan population. Successful protection of orangutan habitat will also be a measure of success in the area's conservation at a larger scale.²

The meeting with Meeijard was organised after McKelson was advised by FFI about a new technique in evaluating programs. The meeting enabled discussion of Meeijard's role and the technique he implemented in managing forest protection. Importantly also, the process of evaluating a different approach to conservation management.

Before 1999, forest loss was only being evaluated by randomly generated science, rather than from a strategic approach. In 2000, it was becoming apparent that forest loss had increased due to economic demands. This led to research commencing in 2005 to determine how much forest was being lost at two sites, as well as an assessment of 'how to improve management of forest protection issues that affect all conservation needs'. The two sites covered 11,000 ha and 38,000ha.³

The Conservancy's general aim is to work on the actual threats of forest loss and more with the private sector than the National Government. This approach is based on the belief that the National Government only sees two solutions, ie. establishment of animal rehabilitation centres and creating more national parks. However, the national parks are poorly monitored and have no law enforcement. Encroaching agricultural plantations in park borders and large-scale illegal logging are the primary threats to East Kalimantan's remaining forests. Hence, it was recognised that local management was needed for the forest-monitoring program.

A review of the on-ground issues highlighted that available funds could be used more efficiently. After TNC looked at their forest management and reviewed the issues on ground, they invested money into more efficient needs. For example, TNC removed the Non-timber Forest program as it was well financed and not achieving the main goal of forest protection. The impacts were still increasing in the forests despite their community development programs. The money is now directed to forest monitoring and assessments of how to protect larger areas. Under the new monitoring scheme, four general site researchers are employed and managed by Meeijard.⁴

¹ Meeting with Erik Meeijard on 15/01/07, Senior Forest Ecologist, The Nature Conservancy

² <http://www.nature.org/wherewework/asiapacific/indonesia/work/art6216.html>

³ Meeting with Erik Meeijard on 15/01/07, Senior Forest Ecologist, The Nature Conservancy

⁴ Meeting with Erik Meeijard on 15/01/07, Senior Forest Ecologist, The Nature Conservancy

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TNC also works closely with the Forestry Department to issue logging permits in two large-scale forest regions covering 300,000 ha and 100,000 ha.¹ As TNC's main aim is to help protect large scale forested regions, they need to work closely with the Agriculture and Forestry Departments. Working with the Agriculture Department enables TNC to assist and influence local governments where to best place agricultural plantations, without upsetting any other environmental NGO's field work and impacting prime forest habitat.²

As the program is still new, it needs to be assessed in the long-term. By looking at the research and using science on the ground, TNC has been able to assess their strengths and weaknesses and place money into operations that most directly affect their programs and maximise conservation outcomes.

Key findings/outcomes from the interview with Meeijard, 15/01/07:

- To achieve greater results, TNC developed a strategic plan with clear objectives. This allows more time to be allocated to implementing actions in the field and less time on revisiting decision-making.
- The short-term (12 month) priority of the program was to continue with the forest monitoring, regular reviews of the programs and work plans (including changes), and managing financial expenditure.
- Assessing costs and financial benefits of the changed approach is a longer-term priority.
- Critical areas to be addressed for program success were:
 - Socio-economic issues must be considered.
 - Participants need to be aware of and sensitive to the political environment.
 - The previous major focus on relying solely on science has been scaled back to allow more time on assessing the direction of the project and attention on the described other factors.
 - Good communication and advocacy are crucial.
- All non-timber forest programs that were originally established and supported by the Conservancy were terminated. This was concluded after research into the effectiveness of the programs on the ground showed that the forest was still being destroyed at the same rate as was occurring before the non-timber forest programs were established.
- TNC will continue the health and education initiatives that it established in village communities, but recognises that these are costly and are not core business for the Conservancy. Hence, they will be closely monitored.
- Working with the local government and agricultural industry to lobby the national government to strengthen laws and on-ground practices was a strong focus of the changed approach.
- More rigorously generated data on forest loss was used to measure the success of the program.
- The approach in working with some local communities was to consider wildlife in the context of its financial impacts, rather than as endangered species. This strategy focused on the benefits for the community, rather than looking at it as a conservation need, which helped some local communities protect the species for their future. It became an important part of their daily living needs and by sustainable harvesting of some species for food resources; they were able to preserve the species long-term.

¹ Meeting with Erik Meeijard on 15/01/07, Senior Forest Ecologist, The Nature Conservancy

² Meeting with Erik Meeijard on 15/01/07, Senior Forest Ecologist, The Nature Conservancy

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2. Central Kalimantan, Indonesia

Nyaru Menteng Orangutan Rescue and Rehabilitation Centre, Palankaraya, Central Kalimantan. 17 day visit.

Nyaru Menteng is the largest orangutan rescue and rehabilitation centre in the world, operating under a Memorandum of Agreement with the local government to use 62.5ha of lowland peat swamp for orangutan rehabilitation.¹ It houses over 600 orangutans, all in different stages of rehabilitation, and is the only active orangutan centre that rescues orangutans from palm oil plantations.² The centre is considered to be among the most prestigious and best-operated primate rehabilitation centres in the world. It is not open to visitors and does not employ Western people in any capacity.

The centre is managed by Nielson for the Borneo Orangutan Survival (BOS). Nielson opened McKelson's eyes into conservation management through using rehabilitation as a conservation tool, and gave her the opportunity to gain experience in the overall management at the centre during the Fellowship program. McKelson gained knowledge on the daily management practices, which included:

- Communications to critical staff about the plans for the day and week.
- Communications with media personnel.
- Communications with security posted at the entrance to the centre, monitoring all people and their access.
- Payments to food suppliers for the orangutans.
- General staff enquiries.
- Report writing for the organisation's monthly updates.
- Staff rostering.
- Animal health instructions, including a communication overview from veterinary personnel on a daily basis. This included actions to how the animals were being assessed, what treatments were given and other issues surrounding orangutan health management.
- General rescue operations. This included answering the phone to surrounding communities that held or had information on an orangutan that needed to be rescued.
- Fundraising proposal writing, including general communications to the potential sponsors.

Working alongside Neilson, McKelson was given the opportunity to gain experience with the local people in a variety of programs, including the local children's education programs, BOS Kids and BOS Friends. McKelson was able to assist in teaching a group of 22 children on bird watching and binocular use.

McKelson also participated in the rehabilitation of infant orangutans. She would enter the forest at the different stages of rehabilitation and work with the younger female employees who look after the infant orangutans. She also worked with the male technicians who care for the adolescent and adult orangutans.

McKelson spent time in the field, helping the veterinarians and Neilson to rescue illegally held orangutans and animals that would end up in Human Orangutan Conflict in agricultural crops. She also had the opportunity to work with Neilson on funding proposal submissions, strategic development, Public Relations work and staff management techniques.

¹ http://www.orangutans.com.au/nyaru_menteng.htm

² Meeting with Ms. Lone Droscher Nielsen, 2/02/07, Project Manager, Nyaru Menteng Orangutan Rescue and Rehabilitation Centre.

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McKelson and BOS Friends group



McKelson participating with the rehabilitation of orangutans.

This very rewarding time gave McKelson the opportunity to evaluate rehabilitation as a conservation tool, and to conduct a series of interviews with the locally employed staff. She was also able to gain valuable insight into how a tightly managed and successful rehabilitation centre was operated and its contributions to the overall conservation of the orangutan species.

Skills/ Knowledge Gained

- **Orangutan rehabilitation** – McKelson had the ability to learn more about the needs of orangutans whilst they are being trained to be returned to the wild.

A large amount of time is spent with infant orangutans. This will conclude as soon as the animal has the independence and confidence to move to its next stage of development. The female employees will spend ten hours of the day with the orangutans in the forest, where they are taught the skills to climb, food to eat, nest building and socialisation with other animals. As soon as the infant reaches its next stage in development, it is sent to male technicians, who take them to a larger forest and provide the opportunity to spend the night in the forest. Once the orangutans show stages of not responding to humans, they are then taken to a pre-release island where they live semi-wild until a release site is secure. Depending on each individual orangutan, different stages apply to different animals.

McKelson also gained skills in nursing sick animals that were rescued from illegal operations. This included giving medications to young animals via a drip, special feeding requirements and constant 24-hour attention. She also had the opportunity to learn about general handling and management, and preferred food plants, such as ficus (fig tree species) and durian.

- **General management of a rehabilitation program** – McKelson learnt that the best way to operate such a large centre was to have specialised groups of staff working in different regions, but also having the ability to move throughout the program. Groups included restricting only females to nurse infant orangutans, male technicians to look after adolescent orangutans, male technicians to look after the pre-release island orangutans, veterinary staff to cross service all orangutans, cleaners to service orangutan cages, rescue teams to collect animals and communications team to communicate all daily matters to the groups.

McKelson also learnt that unforeseen matters may arise, and to work within the management of the program you had to have the capacity to be innovative, take risks

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when necessary and also be confident in how you deliver directions. This helps staff take direction more clearly and encourages the project to always think quickly and concisely.

Program Management Skills Identified

- Organisational skills – This was the most valuable skill identified in the overall daily management of the centre. The ability to multi-task, delegate work duties, manage animal activity and daily planning is essential for smooth operations.
- Strategic development, evaluation and assessment.
- Business Management.
- Preparation and submission of fundraising proposals and general report writing.
- Communication – This was essential to all staff that worked at the project. Daily communication from the communications team ensured staff working on ground were prepared for any activities that were out of their daily routine, eg: animal movements and animal rescues.
- Media and public relations, and interpersonal relations.
- Liaison skills and stakeholder management.
- Animal management and husbandry skills.
- Conflict management.

Key Findings/Outcomes

- Nyaru Menteng employs over 140 local staff and its annual operating cost is approximately US \$2,000,000.¹ The rehabilitation project requires participation at all levels, from village communities to the forestry department and local government.
- The ‘no’ visitor approach ensures that disease transmission is minimal and that the animals do not become ‘habituated’ to people. This greatly assists rehabilitation of the animals to become wild.
- Scientific knowledge is less important than organisational and communication skills, which are essential for overall management success.
- Lack of government support for the project is evident. However, there is no strategy from Nyaru Menteng that encourages support and direction from the local government.
- Human Animal Conflict (HAC) is the number one issue that affects the centre and orangutans.² Building strong relations with the palm oil companies to report HAC and problematic animals is essential for successful animal rescues. A strategy to address this needs to be developed and implemented as a high priority.
- Habitat protection is required for timely release of the animals at the centre. This is time consuming to organise and requires support from other environmental organisations, local and national government bodies, Forestry Department and local communities. Nyaru Menteng has recently released 120 animals into a forested region with support at all levels, but several years were needed to complete the habitat assessments and requirements for release. This process needs to be efficient and land management allocation needs full attention.
- Developing and maintaining relationships has proven to be very important. Nyaru Menteng works closely with large companies like BHP Indonesia. This has been an

¹ Meeting with Ms. Lone Droscher Nielsen, 2/02/07, Project Manager, Nyaru Menteng Orangutan Rescue and Rehabilitation Centre.

² Meeting with Mr. Hardi Bakatori, 20/01/07, Vice Manager, Nyaru Menteng Orangutan Rescue and Rehabilitation Centre.

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important tool for the overall support of the orangutan program, in particular with the release of orangutans using their helicopter.

In 2005 BHP Indonesia sponsored 70% of the costs via the use of a helicopter when 100 orangutans needed to be relocated to a 10,000 hectare region.¹ Since this initial relationship was developed, Nielsen communicates with them often. In particular with an upcoming relocation of orangutans to another protected region. Due to the dense habitat, the only way for orangutans to be released is by helicopter drops, which are extremely costly and unaffordable.

- The communications officer at Nyaru Menteng currently manages HAC education. It is the responsibility of the communications officer to attend all orangutan rescues and confiscations, so they can highlight the issues associated with keeping orangutans. Cultural differences are taken into consideration when approaching education, eg: some cultures eat orangutans. Therefore, more emphasis is placed on disease transmissions rather than the biology and habitat requirements of the orangutans. They provide the family keeping the orangutan with an information kit, which uses a lot of images to highlight the dangers involved. The technique works best if the photos and information are graphic and unambiguous.

3. South Sumatra, Lampung Province, Indonesia

Wildlife Conservation Society (WCS) Sumatran Elephant Project, Way Kambas National Park, Sumatra – 12 day visit.

The Wildlife Conservation Society (WCS) was founded and supported by New York Zoological Society in 1895 and now has more than 400 programs worldwide (WCS, 2007).

The WCS Indonesia Sumatran Elephant Program was developed in 2002. It is the first conservation organisation to use the DNA Dung Analysis Survey within Indonesia, to effectively gain information on elephant populations in a survey across Lampung Province.² From the gathered data they have been able to apply strategies to combat Human Elephant Conflict (HEC), and devised innovative ways to protect Way Kambas National Park (WKNP) and its wildlife, including elephants. This national park is the second most important site for Sumatran Elephant Conservation and contains one of the largest remaining swamp forests in Sumatra (WCS, 2007).

McKelson conducted a series of interviews and meetings around WKNP to gain information from a range of stakeholders working within the program site. Visiting the project in the field, McKelson was able to see the partnerships that WCS has established with the local community, the unique strategies they have applied to conservation management of WKNP, working relationships with the government, and what skills were needed to operate a world recognized program. A rostered program was designed when McKelson arrived to cover all the necessary information and skills that applied to her Fellowship needs, via meetings and field expeditions in the surrounding farming villages, as well as educational programs in other regional communities.

The meetings began with WCS Indonesia Program Manager, Dr. Brickle, who gave McKelson an insight into program management and his overall job responsibilities. Gunaryadi, Program Supervisor for the Sumatran Elephant Program (SEP), introduced her to SEP staff working in the field, and officials from the Forestry Department and local government.

¹ <http://www.savetheorangutan.co.uk/?m=200604>

² Meeting with Mr. Donny Gunaryadi, 17/02/07. Administration Manager Forestry, Way Kambas National Park, Wildlife Conservation Society.

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A series of exercises and techniques were used to obtain opinions from the farming communities that were affected by the strategies WCS apply. These included accompanying the WCS community organiser, Sukatmoko. Over a three-day period, McKelson took a voice recorder to record all conversational dialogue with the local farmers. Sukatmoko, was able to translate the answers to her questions into English. Approaching the farmers provided an environment for a relaxed open discussion, rather than a formal meeting. This allowed the farmers to speak more freely, rather than being nervous and not presenting their opinions fully, which may have been the case in a more formal interview.



McKelson and Gunaryadi interviewing Forestry Department officials



Community farming meeting

As a result of these general discussions, the farming community invited McKelson to several meetings. These were member-operated groups by the local village communities, which were managed by the men. They provided McKelson with the opportunity to evaluate how the group discussed issues, solutions and group communications, to resolve HEC as well as responding to Sukatmoto's opinions and guidance.

The meetings also provided her with the opportunity to connect with the local community on a more personal basis, where she had the opportunity to spend time in the field throughout the evening, and feel connected to the program, rather than a foreigner entering from abroad. It gave McKelson the chance to see how the local community would respond to WCS' work on the issues of HEC, and the overall protection of elephants and national park.

McKelson also spent one day with a local school community to understand their attitude towards WCS. This information was gained by giving the school children paper, pens and a series of topics to illustrate their thoughts and opinions. They worked in groups of 10 and produced posters on HEC and WCS involvement.



McKelson with local school children.

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WCS also gave McKelson the opportunity to participate in their expansion programs to other village groups, which included several training exercises and meetings, empowering the locals to take direct action.

Key Findings/Outcomes

- One major strategy that has proven to be successful is not to give all the community that live around WKNP unconditional support.¹ Responsibility has to be given to, and taken on by the local communities via not being involved in large and costly sustainability programs that require ongoing external support.
- Human Elephant Conflict (HEC) is an issue that affects the management of WKNP and elephant survival. WCS has empowered the local farmers to actively take responsibility by setting up a self-coordinated guarding program. The strategy for WCS is to educate the farmers that are greatly affected by HEC - in protecting crops and mitigating against crop damage by providing group development, regional development, training and assistance in building watch towers and equipment needed for elephant mitigation, as well as communication systems and general knowledge of elephants.² WCS has since begun to withdraw this support, as the local community's capacity to self-manage their own habitats grows.
- WCS is helping the local farming 'hotspot' groups, which are at greatest, risk from wild elephant crop damage. WCS has developed and supported self-managed farming groups to communicate effectively to manage HEC and works hard as a community connector. WCS provides the local community with a voice to the local government about their needs. Since this strategy has been implemented, no elephants have been killed illegally from 2002-2007³, crop damage has decreased significantly⁴, and no people have been killed or injured⁵.
- The same methods and principles of education about HEC mitigation strategies are also passed on to the Forestry Department and the local government, so they are actively a part of the solution and are major stakeholders in the decision making process.
- Different cultures influence the different values about wildlife and habitat protection. Unless there is a food value and it affects economics, people are not that pro-active in changing behaviours in ways that make a difference to conservation. WCS has established a strategy to help protect the local communities' crops from elephants that exit the National Park in search of food, and educated the local people on the value of species and habitat protection. The government has recognised the value of WCS' work and the community's needs, and implemented alternative income sources, like fish farming and goat farming.⁶ However, WCS has not placed any funds into these alternative livelihood programs, as they have encouraged the local government to take action on their own accord and empowered them to connect with the community.

¹ Meeting with Mr. Donny Gunaryadi, 17/02/07. Administration Manager Forestry, Way Kambas National Park, Wildlife Conservation Society.

² Meeting with Mr. Donny Gunaryadi, 17/02/07. Administration Manager Forestry, Way Kambas National Park, Wildlife Conservation Society.

³ Meeting with Mr. Donny Gunaryadi, 17/02/07. Administration Manager Forestry, Way Kambas National Park, Wildlife Conservation Society.

⁴ Meeting with Mr. Sukatmoko , 11/02/07, Community Organiser, Way Kambas National Park, Wildlife Conservation Society.

⁵ Meeting with Mr. Sukatmoko , 11/02/07, Community Organiser, Way Kambas National Park, Wildlife Conservation Society.

⁶ Meeting with Mr. Tachirudin Hasan, 9/02/07, Head of Administration and second in charge, Forestry Department.

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McKelson assessing crop damage from elephants

- Education is not looked upon as a major strategy from WCS in conservation management, however it is part of the process¹. Significant amounts of money are placed into education and sustainable livelihoods. Education in schools and for the younger generation is important, as they will be the ones who will pro-actively make a difference in the future. However, unless research shows that education and alternative livelihoods will have a significant impact, then these approaches are unlikely to provide immediate benefits to conservation of natural ecosystems. They must be part of the long-term goal and a long-term strategy.
- The current research that WCS implements on crop damage by elephants is estimated at US. \$12,000 per year². However, major funds are placed into educational programs and there is no evidence that education is making an immediate difference to habitat and elephant conservation³.
- Rigorous research into what does and does not work is essential and needs to be published widely. Organisations can use this information to avoid past mistakes, make better decisions in ecosystem management and implement effective strategies for future protection.
- WCS uses research to implement key strategies into areas most affected by HEC, as well as patterns of elephant migration and costs to damage of farms. This information provides greater insight into how to deal with HEC hotspots and enables attention to be concentrated on these areas.
- Zoos can contribute to habitat/ecosystem management instead of channelling large amounts of money into species-focused programs, and then contribute to managing the habitat accordingly with the on-ground NGO's.
- Continuous review and change is necessary for successful program management, including research as a tool to determine if the program is effective in delivering key outcomes. Different programs are designed for different regions and not all strategies can be used in every habitat. Therefore, regular review and adaptive management is needed to improve programs and set new goals.
- The key elements of the overall strategy that have been most successful in the SEC program are gaining community support and giving personal confidence to the local community.⁴ Most of the local community believes WCS should remain, as they provide further support and knowledge, particularly if the local villagers have not found solutions to some of their problems. However, by supporting their efforts and encouraging them to take action, local communities develop the independence to self-manage their natural resources, educate and empower each other to take action, and develop new initiatives within their own community.
- Stakeholder relations are extremely important to the project, as international donors provide the bulk of the funds that support the program. These include the US Fish & Wildlife Service (USFWS), private donors, Kline Foundation, World Bank and the Regional Natural Heritage Program (RNHP)⁵. Providing regular reports and building

¹ Meeting with Dr Nick Brickle, 6/02/07, Program Manager, Wildlife Conservation Society Indonesia.

² Meeting with Mr. Donny Gunaryadi, 17/02/07. Administration Manager Forestry, Way Kambas National Park, Wildlife Conservation Society.

³ Meeting with Mr. Donny Gunaryadi, 17/02/07. Administration Manager Forestry, Way Kambas National Park, Wildlife Conservation Society.

⁴ Meeting with Mr. Donny Gunaryadi, 17/02/07. Administration Manager Forestry, Way Kambas National Park, Wildlife Conservation Society.

⁵ Meeting with Dr Nick Brickle, 6/02/07, Program Manager, Wildlife Conservation Society Indonesia.

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sound relations with the donors has given WCS the flexibility to explore new research tools and methods of conservation management, as well as changes in their systems and strategic direction. Implementing an agreed strategic direction depends very heavily on available funds, so regular reviews are an important part of the process in managing fieldwork and communicating with program stakeholders¹.

Program success requires a range of important skills:

- **Team management** – The ability to lead a team to address criteria in the organisation's strategic plan.
- **Communication** – Communication is vital at all levels of a project. This ranges from key stakeholders in the program to community level participation, media and written information.
- **Technical** – A broad range of skills that can be applied throughout the project, such as the use of a GPS in the field, the skills to enter data into a computer program and quantify the data to gain a statistical outcome.
- **English skills** – The ability to speak English is vital for a program that involves foreign support or input. This is very important to communicate to key international donors that contribute to the project. Speaking English enhances how the program is perceived internationally and is a key communication tool.
- **Conceptual ecology** – measurements for success – The skills to be able to constructively look at a program and evaluate the overall performance, with a general understanding of ecology ad use of research to help with decision making.
- **Politics** – The ability to communicate at all levels of government. This benefits the organisation by having an opportunity to be more involved in the policy changes related to environmental protection and management, contributes to government direction and also helps support networking forums.
- **Economics and budget management** – To have an understanding of how to balance economics with environmental sustainability. The ability to liaise with key stakeholders in economic development will give the program more opportunity to develop positive partnerships that will achieve a tangible outcome in conservation management.
- **Program management** – Skills that will benefit the project through ensuring all the program's components are addressed and managed, with a focus on achieving the desired outcomes.
- Providing skills to staff that work within the program is a very important part of managing the program. For instance, staff training in proposal writing, log frames and how to meet objectives. This training is conducted within the program and most WCS employees who contribute to the program management have a degree that they have gained from various universities around the world. They draw on these skills to help with the general report writing.
- Management essentials for the WCS programs in Indonesia are based on providing realistic proposals to donors and having the capacity to deliver.² Being honest to the funding bodies about what is achievable in the program gives a clearer direction for field operations, delivering higher success rates in conservation program management. Past proposals and operations in WCS Indonesia have had unrealistic

¹ Meeting with Dr Nick Brickle, 6/02/07, Program Manager, Wildlife Conservation Society Indonesia.

² Meeting with Dr Nick Brickle, 6/02/07, Program Manager, Wildlife Conservation Society Indonesia.

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expectations, and lacked follow-up and accountability from the program supervisors.¹ Over-committing through the proposal writing process has then set a trend of not reporting failure to achieve stated program objectives due to a perception that this will have negative consequences for further funding².

- Each program that WCS manages in Indonesia has its own work plan, budget and supervisor. This should provide the necessary responsibility and accountability to ensure that agreed outcomes are achieved in the field. A process of monthly reporting and annual meetings allows for effective program evaluation and any necessary operational adjustments³.

4. North Sumatra - Tangkahan, Medan and Aceh Province

Flora and Fauna International (FFI), Medan, Sumatran Elephant Conservation Program. Conservation Response Unit (CRU), Tangkahan

McKelson spent eight weeks at the project site in Tangkahan in Northern Sumatra Province. This is adjacent to the Gunung Leuser National Park (GLNP), which is one of three national parks within the 2.5 million hectare UNESCO 'Tropical Rainforest Heritage of Sumatra' World Heritage Site.

The primary source of income for the Tangkahan community used to be illegal logging in the GLNP. They have ceased this activity and are developing a more sustainable long-term alternative based around ecotourism. The key element of this initiative has been the use of trained captive elephants and their mahouts from Aceh, which constitute the primary operational units of the FFI Conservation Response Units (CRU) to address Human-Elephant Conflict (HEC) (Azmi, 2007).

Flora and Fauna International work with their Sumatran Elephant Conservation Program (SECP) in a joint initiative with GLNP and the local tourism organisation, Lembaga Pariwisata Tangkahan (LPT), to operate the Tangkahan CRU. This Unit is based at Tangkahan and comprises seven elephants and their mahouts. The team uses a range of conservation strategies to assist the community in achieving their ecotourism goals.

McKelson participated in many activities at this program and was able to use her prior experiences from the other programs on her Fellowship to effectively evaluate it and apply new skills. Working with Program Manager, Azmi, McKelson was given the opportunity to work at the same level and participated in strategic planning and program management. McKelson also had the opportunity to visit Banda Aceh and other key regions to meet other members of the FFI team in Indonesia, and gain their perspectives and opinions on conservation management.

Activities

Development of CRU staff concept plan and ongoing staff training plan

McKelson had the opportunity to work with the CRU team after she evaluated the programs basic needs. This included redeveloping the ecotourism elephant trek:

- The trek route was revised to increase its effectiveness in raising conservation awareness and enhancing the tourist experience.
- The trekking times were set rather than being unpredictable.

¹ Meeting with Dr Nick Brickle, 6/02/07, Program Manager, Wildlife Conservation Society Indonesia.

² Meeting with Dr Nick Brickle, 6/02/07, Program Manager, Wildlife Conservation Society Indonesia.

³ Meeting with Dr Nick Brickle, 6/02/07, Program Manager, Wildlife Conservation Society Indonesia.

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- CRU staff were taught Basic English to improve their communication with visitors..
- The CRU centre was redeveloped, including change of images displayed, posters developed for tourist information and a guest book initiated.

Evaluation of ecotourism elephant trek, prior to its use by visiting tourists

McKelson was invited to participate in a new ecotourism trek between Tangkahan and Bukit-Lawang. This involved four days of camping and trekking with elephants through the National Park. The aim was to look at the trek from a tourism perspective, evaluate it and produce recommendations for FFI and the ecotourism operator at Tangkahan. A part of this trek also included the patrolling route, where the CRU staff monitored the forest and entered data via a GPS system. No illegal activities were recorded. (Please see attached evaluation sheet)



New display poster for the CRU



McKelson lecturing about English Speaking Skills to support the Tangkahan-Bukit Lawang trek.



McKelson on the Tangkahan-Bukit Lawang trek.

Proposal and grant writing

Working with Azmi on a range of project proposals for future funding, McKelson was able to learn about the writing formats and funding opportunities that can be pursued. The funding application McKelson was able to work with included a template proposal to secure land for new sleeping quarters for the CRU staff in Tangkahan. (Please see attached template)

Participation in the co-ordination and integration of volunteers from various cultural communities to work and implement the rubbish bin program

A volunteer program was initiated when McKelson was approached by Azmi to help implement a trial low impact rubbish bin program to assist the ecotourism plans. A concept of the program was developed by Azmi, and McKelson prepared a volunteer sheet on 'how' and 'what' to do to try and initiate the project.



Volunteers working on rubbish bin project with local community



International Context



US Consulate and team in Tangkahan for World Day

Ten positions were advertised by FFI and applicants were interviewed by the FFI staff, followed by one-day course for the chosen volunteers. This included a brief description of responsibilities, and the project's goals, methods and location. The program was to run for six weeks and was supported by the US Consulate. McKelson was in the field the day the implemented program commenced, but the overall result was a success and a repeat is now being considered by FFI.

Participation in the co-ordination of media and the US Consulate in Medan for the environmental 'World Day' opening.

McKelson had the opportunity to initiate contact with the US Consulate in Medan, to help launch the volunteer 'rubbish bin program', as a support and further encouragement for the volunteers. This was well received by the Consulate and Azmi co-ordinated the event with McKelson. This included the Consulate and staff being catered for whilst in Tangkahan, accommodation organised, volunteer debrief, ceremonial 'World Day' debrief with CRU staff and volunteers after the rubbish bin program, and gaining media interest. (Please see attached program itinerary)

Strategic Planning

McKelson was able to take part in formal meetings between the CRU staff and Azmi to plan the program's direction in the short-term, within the framework of the Five Year Strategic Plan. This included responding to new HEC incidents and new patrol programs that were in the process of being developed.

The key findings for strategic planning were:

- Communication was critical for all staff to ensure the direction was consistent. Staff also had the opportunity to feel that they were important and had a role to play in some capacity. The meetings initiated brainstorming amongst the group and organisational responsibilities were delegated from this.
- The benefits and issues were also communicated as part of the process. Staff were able to problem solve as a group, which made Azmi's decisions easier to implement. However, they were also encouraged to take risks when they were in the field making decisions on patrol routes and HEC issues.
- Reporting all findings to all levels of the program, including key supporters like Zoos Victoria, were a part of the planning, so they also had the opportunity to contribute and receive information on the activities and long term directional planning.

Key Findings/Outcomes

- Cultural differences can impact the FFI program's capacity to implement conservation strategies. Therefore, cultural factors are an important consideration when recruiting new staff. Community participation within the program site is the highest priority - working with the community and supporting their efforts, coupled with gaining respect and providing education, is crucial to achieving conservation outcomes.
- Using the elephants for patrolling of the forest and conflict mitigation from illegal activities, such as logging and land encroachment, is a passive form of conflict management which has proven to be a success. No illegal logging activities have occurred in the Tangkahan area in the past three years since this program has been in full operation.

International Context

- Education is a major strategy in reducing illegal activities and ensuring full forest protection of the 17,000ha for which the Tangkahan community has responsibility. Workshops, awareness activities in schools and local communities, information packages and education through the ecotourism program have all influenced protection and helped with management of the National Park.¹
- Ecotourism development has supported the local community in an alternative livelihoods program, via the employment of local staff and allocation of resources within the Tangkahan community.² It brings visitors closer to the elephants, providing an educational opportunity to explore the forest and see wildlife.
- This program is a potential model for other regions to implement the same concept of environmental protection, offering tourists an opportunity to visit remote regions of Sumatra. However, it is not a long-term solution and is only possible in some regions of Sumatra. Hence, alternative livelihood programs need to be developed with government support, to empower people to protect and conserve natural resources.
- Working in partnership with the key stakeholders gives not only funding support, but also transfers technical and management skills for the overall management of the FFI program. This is an important part of the program, as such capacity building is likely to result in increased contributions from key supporters. Stakeholder partnerships with the staff on the ground are also important, enabling appreciation and respect for their work, and opportunities for direct relationships with the staff and funding bodies. This strengthens partnerships over time, enhancing conservation outcomes.
- Working with other NGO's has contributed to increased outcomes for the community and enhanced protection of the National Park³. For instance, Indecon, an ecotourism NGO, has worked with the local community delivering key strategies to assist ecotourism management and development of alternative sources of income for the local community. Subsequent influence from FFI has been able to support this work and influences the direction of conservation strategic planning, using the local community in key programs to deliver conservation outcomes. Hence, ecotourism has been a valuable tool in combating illegal activities.
- Key relationships with the government have been important for the program. The decision by the Forestry Department and local government to give the Tangkahan community management responsibility of the 17,000ha is the first time such an initiative has occurred in Indonesia. Reporting processes from FFI to the government are being implemented, so support on all levels is being recognized and maintained when managing the forest.
- Human Elephant Conflict (HEC) is still a major concern for North Sumatra and Aceh Provinces. Using the elephants from the Tangkahan program and other captive elephants from elephant camps within Aceh Province to assist in wildlife protection and conflict mitigation is a key strategy to mitigate HEC. The trained Tangkahan staff helping in other regions has provided further conservation protection and education, and resulted in acknowledgement from government on their job profile and ability.

¹ Quoted from Mr. Wahdi Azmi, Program manager FFI Medan.

² Meeting with Mr. Juan Katika Sitepu, 13/03/07, Community Tour Operator, Tangkahan.

³ Meeting with Mr. Raja 27/02/07, Indecon Representative for Tangkahan.

International Context



5. East Kalimantan

Borneo Orangutan Survival (BOS) Samboja Lestari Program – Site visit: 3 days.

In 2001, BOS developed a reforestation program in Samboja, East Kalimantan. Starting with degradable land and alang-alang grass, they have turned this project into a pilot program for future reforestation, involving large-scale community participation and employment.¹

The habitat consists of approximately 1800ha and the aim was to turn it into a forest program that would be able to provide habitat for flora and fauna and a sheltered program for rehabilitated wildlife, like sun bears and orangutans. It is the largest private reforestation program within Kalimantan and houses rescued orangutans and sun bears from the illegal operations in cages and in island settings. Whilst at this project, McKelson was guided around the site and was given first hand information on its management.

Key Findings/Outcomes

- 200 local staff are now employed on the program, providing important employment for the local community.
- The program highlights to the government that alternative jobs can be created to initiate forest restoration programs that will provide longer-term benefits than mining and logging the forest.
- The overall cost of the program is US. \$2,000,000 per year, all of which is provided by external donors.² Due to the large operational costs to manage this pilot program, funds are limited. BOS has 11 sister organisations throughout the world that operate as fundraising bodies and provide annual financial support to the project. An ecotourism program has also been initiated recently to generate extra financial support. This allows tourists to take part in paid work experience programs, comprising working on orangutan and sunbear environmental enrichment programs, forest planting exercises and redevelopment of orangutan islands.
- A wide variety of skills are used to manage the program, including:

Agro-forestry – By harvesting and planting a range of suitable trees native to the land, BOS has people who manage the productivity of land, with skill sets in soil quality, tree variables, tree nursery operations and land maintenance. All these skills combined have created a nature reserve where the original forest is regenerating. Having a range of abilities in agro-forestry has been essential for BOS to achieve the tree planting and growing results.

Animal management – The ability to work with captive animals and meet all their necessary needs. This includes cleaning of cages, dietary requirements, animal movements and health care.

People management – The ability to manage multi-function teams on all levels of the department. This is highlighted in the animal manager's position, who has to cross manage and supervise the sun bear and orangutan teams, construction of new facilities for animals, animal rescue teams, and deal with queries.

Fundraising – Writing funding proposals, communication to BOS sister organisations on funding needs, and instigating on-site fundraising opportunities. The m2 (Square Metre) project has been the most successful fundraising scheme. People around

¹ http://www.orangutans.com.au/samboja_lestari.htm

² Quoted by Paramita Ananda, Project manager of Wanariset.

International Context

the world can purchase a m2 and the on-ground employees plant trees within the purchased site. The person who purchases the m2 has the opportunity to follow the progression of the tree's growth online.

- The program provides opportunities for research in reforestation and land development.
- The program uses small teams focusing on specialist areas, eg: plant nursery, replanting and maintenance, commercial forestry, animal management, soil quality and pest management.
- This model can be used to reforest areas that have been affected by the mining industry, and other companies that utilize the land and natural resources.

Fellowship Outcomes

The aims of the Fellowship were to:

1. Gain a strong understanding of the principles and practices involved in the development and implementation of conservation programs, with particular reference to south-east Asia.

McKelson visited a range of conservation models within Indonesia that assisted her to increase her practical experience of how conservation programs are managed and the approaches and techniques they require. For example:

Nyaru Menteng – Although rehabilitation was a tool for a single species, this approach did not have strong support from all levels of community and government to ensure long-term goals were met. For instance, the release of the orangutans was unpredictable and securing release sites was often difficult, as there were usually competing claims on the land for agricultural development.

Rehabilitation centres also have financial burdens. They are expensive to maintain and operate annually, which is exacerbated as more orangutans are taken in. They also have no immediate effect on conserving orangutans in the wild.

However, the facility did operate as a world-class rehabilitation centre and was able to achieve this by:

- Training the animals to be as 'wild' as possible. Teaching the orangutans what foods to eat/not to eat, how to climb, build nests and become independent, etc.
- Strong public relations. Many media representatives were able to enter Nyaru Menteng to film the centre and its operations. This produced great media attention around the world and much financial support.
- Communication to all employees was vital to ensure work was achieved on a daily basis and staff morale was supported.

2. Evaluate the effectiveness of approaches to managing conservation programs in south-east Asia.

Use of a wide variety of approaches provided McKelson with the opportunity to obtain the maximum amount of information possible on each project. Variations in culture, religion and socio-economic issues required that different techniques were needed for successful interactions with the various communities visited during the Fellowship.

International Context

Evaluation Techniques included:

- a) The use of formal interview sheets for environmental NGO staff. The same sheet was used for each NGO to ensure consistency of questions and allowed for program comparisons. The same interview sheet also was used when interviewing the Forestry department, environment and industry local government representatives and sub-district leaders.
- b) At times when interviewing project coordinators, a tape recorder was used to ensure all aspects of the interview were captured.
- c) When approaching community members, the use of non-formal interview techniques would not be appropriate, as they were perceived to be invasive by the local community and restricted 'honest' and 'descriptive' information.

3. Develop the skills needed for achieving desired outcomes in conservation programs.

Conservation programs visited within the course of the Fellowship gave McKelson the opportunity to develop wider knowledge and experience. As each program is different and requires different skill sets, the main skills that McKelson developed from this Fellowship were:

- Evaluation of a program using a variety off methods, as discussed above.
- The ability to communicate and liaise with different levels of community members, stakeholders and staff members within the program.
- The ability to apply some of the knowledge gained to implement the CRU development plan within the FFI program, and gain a successful outcome.
- The ability to identify issues related to working within a region.
- The ability to recognize how a zoo can contribute to a program.

4. Using the knowledge and skills gained during the Fellowship to assist the Australian zoo industry to make more informed decisions about supporting conservation programs.

The Fellowship report outlines base criteria that the Australasian zoo industry can use to make more informed choices when supporting conservation programs. However, support from a variety of levels is also needed to become world leaders in the zoo industry (please refer to Recommendations). The following points outline McKelson's main recommendations, based on her experience from the Fellowship.

McKelson will continue to support and contribute to Zoos Victoria's conservation goals, and will also advise and help other zoo industry organisations, so greater goals and outcomes are achieved in conservation planning and management.

- Building relationships with each project is vital for more direct zoo involvement in field programs. Most Australian zoos only provide funds to support programs, but the opportunity exists for much broader involvement, e.g. staff participation, providing skills and helping with strategic direction and goal-setting. This should continue until the zoo's support is no longer needed and the field partner or community can manage the program itself.
- Zoo support for field conservation should be developed and implemented within a strategic framework. This can be at the level of individual zoos or regionally, and would be more effective in delivering zoo support, including advice on field activities and outcomes. A strategic plan will provide the Australian zoo industry with a more focused approach and potentially larger commitment to the field programs, with clear goals and expected outcomes.

International Context

- Single species conservation, whilst important in some instances, must be seen in the context of broader biodiversity conservation goals. Large-scale habitat protection is needed in order to effectively protect and manage flora and fauna species. Sound research can then be applied effectively to support delivery of agreed strategic directions and the most appropriate conservation management techniques. The Australian zoo industry needs to adopt a variety of measures to evaluate implemented conservation strategies to fully assess if they are working or not, and publish the results so that other organisations do not reinvent the wheel or make the same mistakes.
- The Australian zoo industry needs to work with NGO's to achieve policy changes in environmental management where these are needed. Involving key government, forestry, and community representatives will ensure that a communication process is undertaken whereby the zoo industry can help with reviewing policy changes and recommendations.

Skills and knowledge gaps addressed during the Fellowship:

Skills to enable effective evaluation of conservation programs, i.e. assessing the techniques used in field activities and program management

The skills were achieved via conducting various evaluation methods and spending nominated time at each program to also visually evaluate the overall management of the fieldwork applied to the program. This allowed McKelson to identify the main components that are essential in assessing field activities.

1. *Does the project have a good relationship with the local community, government officials and forestry department?*

This is essential to gain results and support from various levels, in particular if the program has the aim of ensuring long-term sustainability from the local communities, as well as self-managed systems.

2. *How effective is their communication and is it communicated effectively?*

Communication is vital to all staff members that are working in an environmental NGO. The use of a strategic plan will help ensure that accountability and responsibilities are considered and that all aspects of their positions and work programs are communicated throughout.

3. *Does the project have a broad range of experience?*

Today's environmental management uses a broad range of experience to deliver conservation programs. For instance, staff need to understand the politics, socio-economics and any long-term development plans of the area in which they are working; project management skills, including financial management; knowledge of the area's ecology; liaison and networking capacity to support interaction cultures and communities on all levels; and research skills that are necessary for field conservation.

4. *Field-based decisions are using sound research to apply strategic direction.*

5. *How long is the program going to operate in a region?*

The environmental NGO's need to have an understanding of when to finish in a particular region, so their expertise can be applied in another region where it is needed. Hence, an exit strategy is required.

International Context

6. The zoo can also contribute more than financial support to contribute to the project's strategic direction, ie. Exchange skills and knowledge amongst staff, create awareness among zoo visitors and generate ongoing support directly via financial support or direct field involvement.

Understanding the basic principles applied in wildlife conservation

Spending a considerable amount of each time at the projects nominated to visit, enabled McKelson to understand the basic principles applied in wildlife conservation.

Skills in project planning, design and management

McKelson was able to contribute to the FFI project planning and design, and overall management off the CRU team. From her experience gained from the other programs visited, she was able to utilise her knowledge and practical experience, to assist in project funding proposals, which assisted the long-term operations of the program. She was able to contribute to the FFI ecotourism strategy plan, to ensure it had clear and realistic expectations and set key objectives to achieve desired outcomes. This included the development of a tourist travel agent booklet on the activities that visitors could participate in, which increased promotional opportunities to the region. Also assessing a 4-day elephant trek to another tourist destination.

The Fellowship has given McKelson the basic skills needed in project planning, design and management of a program. However, further skills and experience will continue to develop with greater involvement in a program.

Identifying issues that affect conservation planning

Major issues that were identified as affecting conservation planning are:

- **Community involvement** – this is needed to a level where the community understands what work is applied in the field. Unless there is some involvement and commitment from the community to provide solutions to sustainable management, funding and resources cannot be used as effectively. Hence, evaluation at all levels is vital to ensure that the best methods are applied.

The connection with the local community proved to be the most successful strategy for all programs visited during the Fellowship. It provided McKelson with valuable information on how an environmental NGO should work with the local community.

- **Economical development threatening natural resources** – historically, large areas of land have been allocated to increase economic development. Unfortunately, this encroaches on natural resources, impacting flora and fauna, natural habitats and community reliance on those natural resources.
- **Miss-management of financial resources** – this can dramatically impact how the program is managed, strategic direction is affected and long-term effectiveness on ground is low.
- **Culture and religion** – these factors can create sensitivity around how a program is managed within a region, and affect community attitudes towards the environmental project and support from government levels.

Knowledge Transfer

What?

Zoo Industry Conferences

- ASZK annual conferences
- WAZA 2008 Conference
- International Zookeeping Conference
- ARAZPA annual conferences
- 20th International Congress of Zoology
- A workshop should be developed for a zoo audience to highlight the factors that zoos should be encouraged to consider when contributing to a conservation program. This will include representation of ARAZPA and ASZK committees, as well as general members and zoo managers. Key representatives in government that fund and support the zoo industry should also be invited.

Environment NGO delegates should be invited from overseas and also be invited to participate in the workshop and highlight how zoos can increase their contribution.

Community Presentation Conferences (Business and industry)

- 'Green' conservation seminar on how to contribute more to in situ conservation, factors to consider in supporting a program and what skills can be applied and learnt from supporting a program.
- Presentation at a climate change conference/seminar. Topic includes how the community and industry can support zoo industries, to become leaders in conservation programs, conservation education, and how industry and work with zoos to help the latter increase their use of 'green' technologies.

Media Opportunities

- Development of a conservation documentary on programs that zoos within Australia support, highlighting the operations of the programs, relevant issues, and impacts that zoos make to general conservation management. This can include how the general audience can support zoos and what is needed for overall conservation program success.
- General marketing and promotions – World Environment Day, Endangered Species Day, World Animal Day, Orangutan Awareness Week, Clean Up Australia Day, etc..

Who?

- ISS and Zoos Victoria to develop and host a 'green conservation' seminar with business and industry.
- Zoo Industry Conferences – McKelson with support from Zoos Victoria and ISS.
- Business & Industry presentations – McKelson with Zoos Victoria and ISS support.
- ISS to host a workshop for the zoo industry and other key representatives. Within Australia and overseas. Zoos Victoria and McKelson to support the function.
- Media opportunities – ISS and Zoos Victoria to investigate how media opportunities can further promote the Fellowship and the conservation activities that the zoo is involved with – link this in with how people can increase their support. This could be via Fellowships in this industry.

Knowledge Transfer

Why?

- 'Green Conservation' seminar – Zoos Victoria and ISS to develop and strengthen further networks in sustainable technology industries, develop initiatives to become leaders in green technology, and also increase contributions to conservation programs.
- Zoo Industry Conferences – To motivate and share knowledge, experiences learnt on this Fellowship, and communicate recommendations for all zoo enthusiasts who are involved in conservation programs. Develop further networks and highlight directions that zoos can take to make a greater contribution to their organisation's conservation plans. Promote International Fellowships via ISS.
- Workshop – To network with other organisations, develop further contacts, highlight further skill deficiencies, promote international links, and encourage further discussions and actions between parties.
- Media opportunities – To promote positive links with the general communities that have zoo organisations and also highlight how they can help and what work is being accomplished. Media also places further attention on how ARAZPA can achieve greater results, but needs greater attention. (Please see Recommendations)

When?

Zoo related conferences:

- ASZK Conference – 23rd-25th May 2008, Sydney Academy of Sports, Narrabeen
- WAZA 2008 Conference – October 19th-23rd 2008, Adelaide Zoo
- International Zookeeping Conference – Seattle, 2009
- ARAZPA Conference – Taronga Zoo, March 9th-13th, 2008
- International Congress of Zoology – August 26th-29th, 2008, Paris
- ISS Workshop – TBC

Media Opportunities

- World Environment Day - June 15th 2008
- World Animal Day - October 4th 2008
- Clean Up Australia Day – 2nd March 2008
- Orangutan Awareness Week – 6th-12th November each year
- Endangered Species Day – May 18th 2008

Where?

- Zoos Victoria and ISS to host a 'green conservation' seminar in the Trail of the Elephants precinct at Melbourne Zoo.
- Media opportunities to take place at Melbourne Zoo or otherwise recommended.
- ISS to host the workshop at a designated facility.

Recommendations

Government – Federal

As the impact of climate change has surfaced in recent times, governments are under increasing pressure from the international community to address issues of sustainable environmental practices and conservation of natural resources, whilst aiming to minimise/reduce climate change in the future.

- The Australian Federal government can take a stronger lead in ensuring policies are developed to promote and encourage increased contributions from State Governments for their respective zoos.
- Federal Government should maintain and strengthen its dialogue with other countries to enable the latter to more actively prioritise and implement conservation and sustainable management of natural resources. This should include liaison with funding agencies to help sustain such on-ground work.
- Support the ongoing development and implementation of the ARAZPA Accreditation Program that will establish agreed minimum standards for all facets of zoo operations in Australia, including animal welfare and coordinated breeding programs.
- The Federal government needs to support on-site skill development programs that ensure zoo staff maintain and broaden their experience and expertise, in order to become world leaders in their specialised fields.
- Support the ARAZPA Field Conservation Committee (FCC) in its aims of establishing a more strategic approach to zoo-based involvement in wildlife conservation, including evaluation mechanisms to ensure maximum achievement of conservation outcomes.
- Support ARAZPA by funding a full-time employment opportunity to support delivery of its priority objectives.
- Use zoo professionals to advise on animal welfare policies and practices for personal captive animal use and in research. For instance, animals used in medical research, requirements for private purchase, and policies to ensure the husbandry requirements are met in private collections.

Government – State & Territory

- Australian state and territory governments should develop stronger links with their respective zoos and promote their zoos as centres of excellence in conservation management. This should include using the zoos as forums/venues to discuss and promote wildlife conservation and sustainable management of natural resources.
- State and territory governments should work with ARAZPA and its member zoos to develop programs that provide opportunities for zoo staff to become leaders in their fields.
- State and Territory governments should work with their respective zoos and the ARAZPA FCC to establish partnerships that provide resourced opportunities for zoo staff to participate in agreed field conservation programs.
- Promote and develop a communication system to ensure key environmental NGO's can partner with zoo bodies to deliver conservation outcomes.

Recommendations

Government – Local

- Help develop and participate in networking forums for all groups that have a stake in conservation and sustainable management of natural resources. This should include zoos, industry and community groups.
- Work with local zoos and other stakeholders to develop, promote and implement local conservation programs.

Industry

Zoo industry

- Zoos need to adjust and implement their visions and objectives in line with the World Zoo & Aquarium Conservation Strategy.
- Zoos should develop conservation strategies that establish clear goals and objectives. These should be complemented by criteria for choosing and evaluating conservation programs that they support.
- The conservation strategies that zoos develop should reflect national and regional conservation priorities and issues, as identified by relevant conservation agencies and groups.
- Zoos should institute staff development programs that identify skill deficiencies and increase skills in conservation management. This should be linked to direct involvement of staff in the zoos' conservation programs.
- Increase the focus on environmental education and staff encounters programs in order to provide zoo visitors with clear actions that enable them to contribute to increase environmental sustainability in their daily lives.
- Develop innovative programs that will ensure all animals in the zoos are used as conservation ambassadors. This should include the identification and implementation of key messages and visitor interactive programs, and be linked to professional development goals for keepers.
- Create strong sponsorship and donor groups in zoos that have key targeted programs and communication processes that ensure sponsors are receiving appropriate conservation information.
- The development and maintenance of sponsor/donor relations should include zookeepers where appropriate, in order to maximise the sponsor/donor experience. Staff needed to deliver this goal should be identified and addressed through appropriate training.
- Zoos should establish closer relationships and partnerships with other organisations in order to achieve greater conservation outcomes. This particularly applies, but is not restricted to, relevant conservation/environment and humanitarian NGO's.
- Zoos should use all possible opportunities to promote conservation programs and their achievements.

Environmental NGO's

- Develop partnerships with zoos that result in increased conservation outcomes. These should include all relevant aspects, including sharing of information and materials, cross promotion and staff exchange opportunities.

Recommendations

Humanitarian NGO's

Currently, some Australian zoos support sustainable alternative livelihood initiatives as part of broader conservation programs, in order to minimise or alleviate the potential impact of local communities on natural resources or environments within the conservation program. This is an increasing activity of other zoos around the world, but there is potential for much greater conservation and community outcomes to be achieved through partnerships with humanitarian NGO's. Hence, humanitarian NGO's should:

- Develop a more environmentally aware approach that recognises the links between biodiversity conservation and sustainable community support and development.
- Develop partnerships with environmental NGO's, and zoos where applicable, to ensure that both conservation and community goals are identified and achieved.
- Ensure that their infrastructure is as environmentally sustainable as possible, through collaboration with the respective environment NGO's.
- Work with zoos where applicable to explore training opportunities for both zoo and humanitarian NGO personnel.

Professional Associations

ARAZPA – Australasian Regional Association of Zoological, Parks and Aquariums, Inc

ASZK – Australasian Society of Zoo Keeping

WAZA - World Association of Zoos and Aquariums

The various zoo associations should:

- Ensure that their criteria for membership are both reasonable and professionally sound, but at the same time reflective of the WAZA conservations goals and recommendations. This should include regular reviews of expectations, conservation strategies and goals in order to evaluate contributions to conservation programs.
- Allocate resources for developing government submissions and funding applications.
- Work together to provide consistent information on issues and achievements.
- Collaborate and share information.
- Promote keeper exchange programs to ensure that staff are continuously developing and sharing experiences.
- Promote larger communication forums to discuss and, where applicable, update conservation methods and programs within zoos.

Education and Training

Environmental Science / Management Courses

- Use the zoo as a living classroom, to educate, inspire and motivate students to think, learn and create.
- State and Territory curriculum developers to work with zoos educators to create new and motivating curricula and programs that support conservation and sustainable development. These should reflect Australia's biodiversity conservation priorities. In the first instance, this should be approached with the ARAZPA Education Specialist Advisory Group.
- Educators should use zoos to develop and deliver appropriate research programs in partnerships with the respective zoos.
- Educators should collaborate with zoos to provide field conservation opportunities for their students in the zoo's conservation programs.

Recommendations

Community

- Support the zoo and act as a voice to the government.
- Develop local programs that can assist the zoo's conservation priority programs. Use the programs to educate others, gain support from sponsors, and utilise the skills possessed by community members.
- Enhance the community programs by supporting zoo initiatives and hosting functions at the zoo.

Other

- Research initiatives and grants should be offered to zoo employees for further educational opportunities.

International Specialised Skills Institute

- Support in delivering a workshop on the ways in which zoos can lead in conservation management.
- Support international representatives from key conservation organisations to attend and present at an organised zoo forum in Australia.
- Create a network of key representatives that can use the information learnt on this Fellowship to promote action within zoo organisations.
- Zoos in each state to fund a three-year Fellowship Award to bring international experts to the region and also send key Australians overseas.

Further Skill Gaps

- Conservation Strategy Planning
- Conservation Policy Development.

References

Books

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Strategy Plans

World Association of Zoos and Aquariums (2005) *Building a Future for Wildlife: The World Zoo and Aquarium Conservation Strategy*, WAZA Executive Office, Bern, Switzerland.

Websites

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http://www.orangutans.com.au/nyaru_menteng.htm

Nyaru Menteng E- journal, Borneo Orangutan Survival UK. *42 Wild Orangutans Given a Second Chance'*
<http://www.savetheorangutan.co.uk/?m=200604>

Samboja Lestari, Borneo Orangutan Survival
http://www.orangutans.com.au/samboja_lestari.htm

Attachments

ELEPHANT TREK: TANGKAHAN – BUKIT LAWANG EVALUATION.

DAY 1 – DAY 4:

Suggested Rest Itinerary:

Stop needed AM (for 15 minutes).
 Lunch (1/2 hr – 1hour)
 Arrival at location – Set up camp
 Afternoon Snack to be given to tourists – (Stop for 15minutes)
 Dinner preparation.

(If arriving late PM, need to stop 1 x for a break and a snack – 15minutes)

1. EQUIPMENT NEEDED FOR PURCHASE:

- Cooking utensils
- Pot/ wok / fry pan
- Transportable cup, plate and spoon in travel packs – x 15 (mahouts and visitors)
- Torches x 2 – Heavy duty
- Kerosene lamp x 2
- Heavy duty (if possible waterproof) carry bags for equipment x 6
- New elephant seats to be designed and new mattresses and strapping.
- New mahout uniform for the trek.
- New plastic sheeting for mahout sleeping. X4
- Camera for recording of trips, biodiversity etc.

2. FOR THE VISITOR – to be included in price:

- Mattresses x 4
- Sleeping bag x 2
- Tent – waterproof x 2

3. TO BE ADVISED FOR THE VISITOR:

No visitor with any / previous illness, injury or pregnancy

- 1 X Bag only p/p – waterproof recommended. Backpack highly recommended
- Raincoat
- Sandals and boots
- Towel and personal belongings
- Mosquito repellent / sunscreen / sunglasses / hat
- Camera!
- Water bottle

Attachments

4. INCLUDED ON TREK:

Day 1:

- Morning Snack,
- Lunch
- Afternoon snack
- Dinner

Day 2:

- Breakfast
- Morning snack
- Lunch
- Afternoon Snack
- Dinner

Day 3:

- Breakfast
- Morning snack
- Lunch
- Afternoon Snack
- Dinner

Day 4:

- Breakfast
- Morning Snack
- Lunch
- Afternoon Snack

5. OTHER MATTERS:

Staff from CRU Tangahan only and Forest ranger from Tangahan (x1 – 2 max) to be the staff who manage the tourists and assist them n the trip. Staff from Bukit lawang not required until the tourists are at Bukit Lawang. All responsibility is then on staff at Bukit Lawang for the tourists.

CRU staff and Forest rangers can speak Basic English and communicate efficiently with the tourists. It is also a part of the experience that the tourists want to have when they take place for the trek. Only if a tourist requires a staff member on suggestion from Bukit Lawang, then they must cover costs for the additional person for the trek.

Food supplied for visitors should be easy to make ad also require less time to prepare. Very similar and as close to the staff that eat in the forest. Fruit is recommended for the snacks, as well as some snacks eg. Biscuits.

Attachments

6. PRICE RECOMMENDATIONS:

Tourists should pay a nominated price that includes the following:

- National Park entrance fees
- Food / water coverage
- Reasonable and advanced wage for the mahouts and Forest Rangers in Tangkahan
- Equipment hire age and facility maintenance – so funds are available to upgrade facilities when worn and torn
- Time and experience

Attachments

Project Proposal

ACCOMODATION & HOUSING FACILITY PROJECT DEVELOPMENT.

FLORA & FAUNA INTERNATIONAL (FFI)

CONSERVATION RESPONSE UNIT (CRU), TANGKAHAN.



**Improving the living conditions of the mahouts of
Tangkahan**

April 2007

Attachments

Summary

The rural community in Tangkahan, Northern Sumatra, has ceased their primary source of income from illegal logging activities within the Gunung Leuser National Park, and has developed an ecotourism based program as an alternative long-term self sustaining source of income. Part of this initiative has been the introduction of trained captive elephants and their mahouts from Aceh, as major role players of the ecotourism development with the FFI Conservation Response Unit (CRU). Over 250 visitors come to visit this program each year and support the operation of the ecotourism development.

To ensure continuity of this important program, it is essential that the mahouts are given support and incentive to remain in Tangkahan. In this respect, the Spartan communal living quarters that they currently live in, are inadequate and provide no privacy or room for family contact and is not conducive for the long term residency of the mahouts within the Tangkahan community.

The following proposal therefore approaches XXXXXXXXXXXX for a partnership to become a major donor and sponsor to improve the basic living conditions within the FFI CRU project and become a major stakeholder in the development of a new housing and accommodation facility for the mahouts to stay onsite at the project.

Funding request: xxxUS\$

Timeframe: 4-month development programme.

Attachments

Background to the Programme

The community that resides around Tangkahan, Northern Province Sumatra, works with the government under a Memorandum of Understanding (MOU) to self-administer and manage 17,000 hectares of the Gunung Leuser National Park. This was done with the intention of empowering the local community, autonomic control of ceasing illegal logging activities and developing an ecotourism based programme as an alternative source of income. The programme has now developed into a popular tourism location for national and international visitors and has over 250 tourists visiting annually. The illegal logging activities have now ceased for the past 4 years and the local community manages the forest via regular patrolling, community based education, skill development and forestry skills.

Flora and Fauna International (FFI) work with their Sumatran Elephant Conservation Programme (SECP) in a joint programme with Gunung Leuser National Park, and the local tourism organisation Lembaga Pariwisata Tangkahan (LPT), and maintain and operate a Conservation Response Unit (CRU) in Tangkahan. The CRU in Tangkahan provides community support to achieve the ecotourism programme goals, and employs the use of seven captive elephants and their mahouts, which are based at the field site.

The CRU integrates diverse conservation strategies using trained captive elephants from Aceh province. Consisting of a small team of eleven staff, the following programs are operated and achieved:

- Conservation education to tourists that visit the centre and participate in elephant interaction programs. I.e. Elephant rides, trekking and elephant washes.
- Conservation education to surrounding villages, forest rangers and implementing skill based programmes to ensure that forest conservation is managed and controlled.
- Elephant based patrolling of the forest region. The patrolling ensures that illegal activities such as logging, poaching, destruction and urban encroachment are not occurring in the region.

Attachments

- Supports the local community via staff employment.
- Monitors wildlife and participates in Human Elephant Conflict issues.

The mahouts, who have come from Aceh, have been trained with mahouts from Thailand over the past few decades. The mahouts living in Tangkahan have for the past three years shared an office in the training/information centre as their living quarters. One small room is shared by six people in a bunk-bed style accommodation. It is essential that alternative living quarters are developed so that the project can continue to develop and support local communities and conservation of the National Park.

Elephant training is a long-term process whereby the mahout develops an individual relationship with the elephant, and to continue to provide support and incentive to their hard work we need to provide adequate housing facilities. Various national and international donors and sponsors currently fund the FFI CRU Tangkahan programme; however, the living conditions are not covered in the funding sources.

Nature of the proposal

This is a request for funding for the construction of four basic houses (double units) on land (which is currently being agreed upon with the land owners) adjacent to the education centre for the long-term accommodation of the mahouts of Tangkahan. Ownership of purchased land will initially be in the name of FFI, but when the programme is self-sustaining will revert to the community. Seven of the single units will be used by the mahouts and the eighth will be used a guest accommodation for supervisory visits from the FFI headquarters and the veterinarian.

Funding for items that cannot be locally sourced is requested. Some of the construction timber will come from logs that are washed down river (windfall and naturally fallen trees). The wall-cladding and roofing material is also locally available.

The CRU team will themselves conduct the majority of the construction of the units, using building professionals only where required.

Attachments

Building plans

The floor plan of the double unit is shown in Figure 1. The basic construction consists of a one-bed roomed unit with an outside ablution facility.

Floor: Concrete slab (10cm thick, $8 \times 40\text{m}^2 = 320\text{m}^2$ required, which approximates to 32m^3 of concrete)

Area: 40m^2 (including toilet area) each.

Walls: Brick and mortar to 100cm, then “tepas” to the roof.

Frame: Timber.

Roof: Traditional palm fronds.

Ablutions: Asian squat WC, with shared water tank.

Septic tank: One for each double unit.

Dimensions: 6m x 6m per unit.

3m x 3m per bedroom (no interior brick walls).

Inside basins: desired, but optional and can be added later.

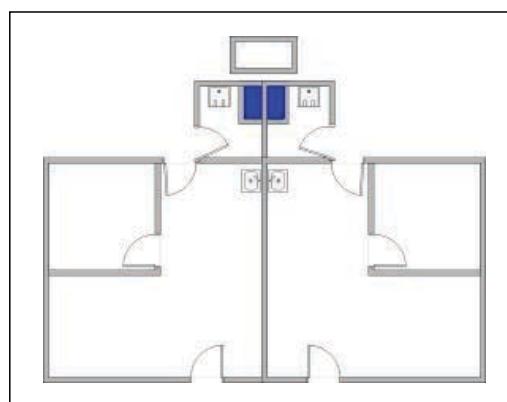


Figure 1. Floor plan of the double unit.

Attachments

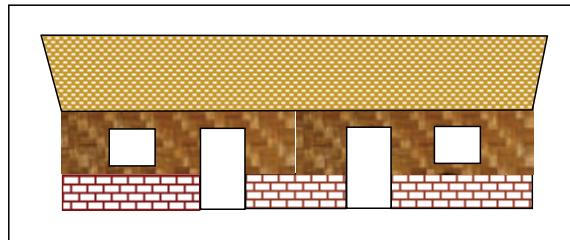


Figure 2: Front view of double unit.

Finances requested

Table 1 below shows the list of items for which funding is requested in this proposal.

Table 1: List of items.

Item	Quantity/Price	Cost/Funds requested
Land	40m x 50m (2000m ²)	\$ 3 000.00
Asian squat toilets	8 @ \$ 12 each	\$ 96.00
Cement	7 bags (50kg/m ³) @ \$ 6 per bag. (224 bags)	\$ 1 344.00
Timber	@ \$ 520 per house	\$ 4,160.00
Bricks	8 400 @ \$0.1/brick (~55 bricks/m ² of wall)	\$ 840.00
Nails	53 kg per house @ \$2/kg	\$ 848.00
Labour	\$ 350 per unit	\$ 2,800.00
Transport	\$ 800 in total	\$ 800.00
Total		\$ 13,888.00

Timeframe

The proposed timeframe for the construction of the units, as estimated from the date of receipt of funding is shown in Table 2 below.

Table 2: Timeframe for activities.

Timeframe from receipt of funding				
	Month 1	Month 2	Month 3	Month 4
Purchase and transport of materials to site.				
Collection of local materials.				
Construction activities.				
Progress reporting.	X	X	X	X

Attachments

Responsibility

The overall responsibility of the project lies with Wahdi Azmi, whose contact details follow. He will be responsible for the overseeing of the execution of the project as well as the regular reporting to the donors.

Wahdi Azmi,
Sumatran Elephant Conservation Programme Manager.
Fauna & Flora International
Jl. Garuda No. 61A, Sei Sikambing
Medan 20122, Indonesia

Tel: +62 61 845 2203
Fax: +62 61 8474934
E-mail: gajah-wahdi@medan.indo.net.id

Additional reading (attached)

The following reports detail the working of the programmes and activities that are supported by the mahouts of the CRU's. These details are attached for completeness.

CRU Final Report 2006.
FFI Annual Report 2006
SECP Strategy Document 2006

Attachments

Logical framework for project

Broad Objective: Improved Living Conditions for the Tangkahan Mahouts			
	Indicators of Success:	Source of Verification:	Assumptions:
Project Purpose: The construction of accommodation units (three double and one single).	Construction of buildings completed on time.	Inspection on site.	Funding available.
Specific Objective 1: Land for building purchased.	Possession of ownership of land	Cadastral report.	Willing seller.
Specific Objective 2: Acquisition of materials.	All required building materials (locally sourced and purchased) on site.	Quantity survey on site.	Availability of funds and materials to be purchased.
Specific Objective 3: Construction activities.	Construction conducted according to plan.	Continuous site inspection.	
Specific Objective 4: Completion of reports.	Timely submission of progress reports.	Reports.	Regular inspections.
Specific objective 1: Land for building purchased.			
Activities	Resources	Staff	Assumptions
Identifying the land to be purchased.		1	Willing seller.
Legally registering purchased land with officials	Funding.	1	Cadastral approval
Specific objective 2: Acquisition of materials.			
Activities	Resources	Staff	Assumptions
Purchasing materials from suppliers.	Funding.		Availability.
Transporting materials to site.	Vehicles, funding.		Availability.
Collecting locally sourced materials to site.	Local.		
Specific objective 3: Construction activities.			
Activities	Resources	Staff	Assumptions
Cleaning ground of vegetation.			Objectives 1 & 2 fulfilled.
Marking out and casting of floor slabs.			Availability of labour.
Building of brick walls.			
Framing and taping cladding of walls.			
Erecting roofing frames and applying roof material.			
Digging and connecting of septic tanks.			
Specific objective 4: Completion of reports.			
Activities	Resources	Staff	Assumptions
Monitoring the correct use of funds.			
Evaluating the progress.			
Compiling regular progress and final reports.			

Attachments

Organisation structure

Interaction between the stakeholders is shown in Figure 3.

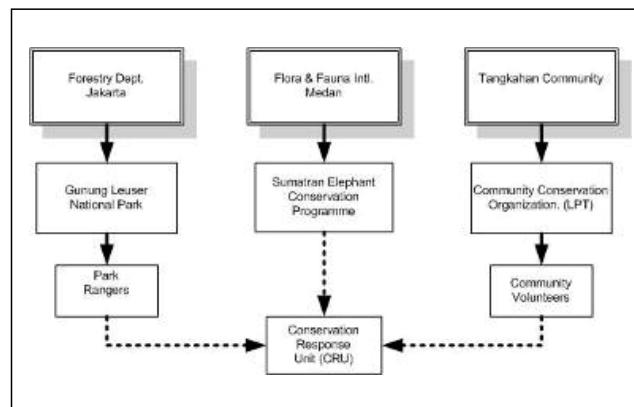
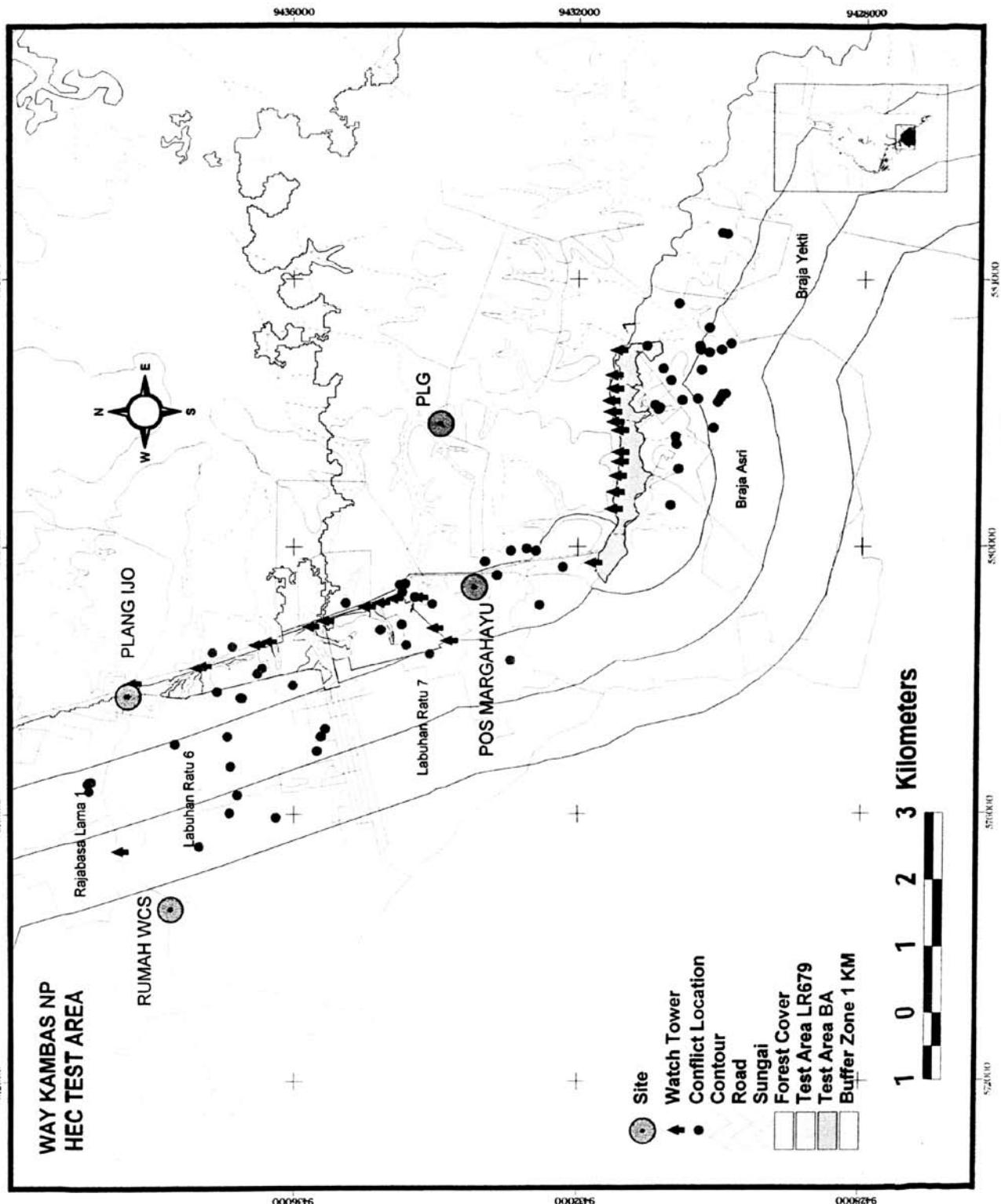


Figure 3: Interaction between the major stakeholders of the programme.

Attachments



Attachments

MEETING SHEET FOR LAMPUNG

1. WHAT ARE YOUR KEY RESPONSIBILITIES?

2. WHAT ARE THE LONG TERM OUTCOMES AND GOALS?

3. WHAT ARE THE PRIORITIES OF YOUR PROGRAM?

- OVER 12 MONTHS?
- OVER 3 YEARS?
- BEYOND?

4. HOW MANY STAFF OPERATE IN YOUR PROGRAM AND WHAT EXPERIENCE IS CRITICAL FOR WORKING IN THE PROGRAM?

5. HOW HAVE THE COMMUNITY BEEN INVOLVED IN THIS PROJECT?

6. WHAT STRATEGIES ARE PUT IN PLACE TO OPERATE AND MANAGE THE PROGRAM?

7. WHAT STRATEGIES HAVE BEEN SUCCESSFUL?

8. WHAT STRATEGIES HAVE BEEN PUT IN PLACE AND HAVE NOT WORKED?

Attachments

9. HOW DO YOU MEASURE SUCCESS FOR YOUR PROGRAM/S?

(Indicators: biological, social; how measured, over what time frame?)

10. WHAT PROGRAMS HAVE BEEN SET UP TO COMBAT HUMAN ANIMAL CONFLICT?

11. What type of activities are occurring to assist communities to conserve their biodiversity and minimize their impact on wildlife and their environment?

12. DO YOU DELIVER ANY EDUCATION PROGRAMS / ACTIVITIES?

- Who manages the education program?
- What are the key messages?
- How is the education program assessed?
- What activities are people doing to show they are taking action / changing their lifestyles based on this education?
- What has not worked with the education program?

13. What are the projects key stakeholders and what are their roles?

- Government
- Other NGO – local, international
- Community
- Funding Agencies

14. WHO IS THE FUNDING BODY/S?

Attachments

15. HOW OFTEN IS THE PROJECT REVIEWED / MEETINGS TAKEN PLACE?

- Who is involved?
- Where are the meetings taken place?
- Who makes final decisions?

16. WHAT ARE SOME OF THE MAIN ISSUES YOU NEED TO RESOLVE?

How are they currently managed?

Who manages the issues?

Have there been any resolved?

How were they resolved?

17. WHAT IS THE REPORTING PROCESS ON THE PROGRAM?

Who is responsible for the reporting process?

How is information communicated effectively?

Who is the information reported too?

18. WHAT SKILLS ARE ESSENTIAL FOR PROJECT MANAGEMENT?

How are they achieved?

19. WHAT ELSE SHOULD I BE ASKING THAT I HAVEN'T ASKED?

Attachments

VILLAGE QUESTIONNAIRE

Have you heard of: Y N

What is it that they are trying to do? Conservation Education Improve Livelihoods

Details:

Other:

How are they going about it?

Details:

Other:

Do you think they are likely to succeed? Y N

Why/ Why not?

What are the three key issues in your community?

1.

DETAILS:

2.

DETAILS:

3.

DETAILS:

Attachments

Have you or your family been involved with this project? Y N

Y: How?

N: Why not?

Do you know of others in the community that are involved in this project? Y N

DETAILS:

What impact do you think this project has had on your community?

DETAILS:

Has there been any conflict between you and your community and the project? Y N

DETAILS:

RESOLUTION? Y N

DETAILS:

What would your measure of success be? Expectations?

DETAILS:

Do you think the project is achieving this?

Who do you think the key people and/or organisations that should be involved in this project?

DETAILS:

Attachments

Overseas Itinerary

Date	Location	Activities	Person	Title	Enterprise
JAN					
15	Melbourne - Balikpapan Borneo.	Depart Melbourne / Arrive Balikpapan.			
15	Balikpapan	Meeting	Erik Meeijard	Senior Forest Ecologist	The Nature Conservancy
16	Balikpapan, Borneo	Field Work	Ishak Yassim	Regional program Manager, East Kalimantan	Borneo Orangutan Survival (BOS) Samboja Lestari Project
17	Balikpapan, Borneo	Samboja Lestari tour and overview	Ishak Yassim		Borneo Orangutan Survival (BOS) Samboja Lestari Project
18	Balikpapan, Borneo	Samboja Lestari Facility and orangutan care management	Ishak Yassim		Borneo Orangutan Survival (BOS) Samboja Lestari Project
19	Balikpapan, Borneo	Samboja Lestari on ground activity and management	Ishak Yassim		Borneo Orangutan Survival (BOS) Samboja Lestari Project
20	Balikpapan - Palangkaraya	Fly from Balikpapan to Palangkaraya, Borneo Stay at N/M	Lone Droscher	Program Manager	BOS Nyaru Menteng Rehabilitation and Rescue centre
21	Palangkaraya	Program Management overview	Lone Droscher		BOS Nyaru Menteng Rehabilitation and Rescue centre
22	Palangkaraya	Program Management overview	Lone Droscher		BOS Nyaru Menteng Rehabilitation and Rescue centre
23	Palangkaraya	Socialisation orangutan Management overview	Lone Droscher		BOS Nyaru Menteng Rehabilitation and Rescue centre
24	Palangkaraya	Program Management overview	Lone Droscher		BOS Nyaru Menteng Rehabilitation and Rescue centre
25	Palangkaraya	Paper work day. Proposal writing skills	Lone Droscher		BOS Nyaru Menteng Rehabilitation and Rescue centre
26	Palangkaraya	Pre-release Island management	Lone Droscher		BOS Nyaru Menteng Rehabilitation and Rescue centre
27	Palangkaraya	Rescue Orangutan	Lone Droscher		BOS Nyaru Menteng Rehabilitation and Rescue centre
28	Palangkaraya	Forest orangutan management	Lone Droscher		BOS Nyaru Menteng Rehabilitation and Rescue centre
29	Palangkaraya	Forest orangutan management	Lone Droscher		BOS Nyaru Menteng Rehabilitation and Rescue centre
30	Palangkaraya	Meeting: Assistant manager, Communications/Education Officer	Hardi, Tuta	Assistant Manager, Communications Officer	BOS Nyaru Menteng Rehabilitation and Rescue centre
31	Palangkaraya	Meeting, Forest management / half way house	Sean Whyte	Director	Nature Alert
FEB					
1-Feb	Palangkaraya	Orangutan Rescue	Lone Droscher		BOS Nyaru Menteng Rehabilitation and Rescue centre
2-Feb	Palangkaraya	Stay at Lone house / Meeting	Lone Droscher		BOS Nyaru Menteng Rehabilitation and Rescue centre
3-Feb	Palangkaraya	Stay at Lone house. Orangutan Management and care	Lone Droscher		BOS Nyaru Menteng Rehabilitation and Rescue centre

Attachments

4-Feb	Palangkaraya	Orangutan Rescue	Lone Droscher		BOS Nyaru Menteng Rehabilitation and Rescue centre
5-Feb	Palangkaraya - Bogor	Fly from Palankaraya (Borneo) to Bogor (Java)			
6-Feb	Bogor	Meeting with Nick Brickle	Dr Nick Brickle	Program Manager for WCS Indonesia	Wildlife Conservation Society, Indonesia
7-Feb	Bogor - Lampung	Fly from Bogor to Banda Lampung. Night Patrol at Braja Asri			
8-Feb	Lampung Province	WCS Office - Permit for village surveys and interviews in parks. Meeting with farmers from Purbolinggo, visit to ETC	Ade Kusuma	Community Organiser Connector	Wildlife Conservation Society, Sumatran Elephant Project
9-Feb	Lampung Province	Meeting with Mr Hasan	Donny Gunaryadi	Administration Manager for Forestry WKNP	Wildlife Conservation Society, Sumatran Elephant Project
10-Feb	Lampung Province	School activities and visit. Visit to watch towers and ETC	Moh Taufik Soleman		Wildlife Conservation Society, Sumatran Elephant Project
11-Feb	Lampung Province	Meeting with: Farmers from Labuhan Ratu 6,7,9 Meeting with Mr Sukatmoko & Moh Taufik. Night patrol at LR. Internal Staff meeting	Mr Sukatmoko & Moh Taufik	Community Coordinator & Assistant Program Manager	Wildlife Conservation Society, Sumatran Elephant Project
12-Feb	Lampung Province	Meeting with M.Saleh, Braja Selebah Meeting with Mr. Mucholis, Way Jepara	Sugiyo		Head of Sub District - Council
13-Feb	Lampung Province	Attended a meeting at Purbolinggo	Ade Kusuma		Wildlife Conservation Society, Sumatran Elephant Project
14-Feb	Lampung Province	Meeting: Mr Sahid - Head of Bapedalda (district gov in Lampung Timur) Meeting: Ms Andjarwaei (2nd in charge Forestry Dep, East Lampung	Sugiyo		Head of Monitoring impact for the environment (Industry specialist) & Second in charge Forestry Dep in East Lampung district
15-Feb	Lampung Province	Invited and attended a monthly meeting at Labuhan Ratu 6,7,9 between all farmers. Night patrol, participated in elephant mitigation.	Mr Sukatmoko & Ade Kusuma		Wildlife Conservation Society, Sumatran Elephant Project
16-Feb	Lampung Province	Stay in Banda Lampung for the night. Visit Forestry Division and Bukit Barisan WCS office. Stay at WCS office.	Donny Gunaryadi		Wildlife Conservation Society, Sumatran Elephant Project

Attachments

17-Feb	Lampung Province	Fly from Banda Lampung to Medan. Meeting with Donny at Jakarta Airport Fly from Jakarta - Medan	Donny Gunaryadi		Wildlife Conservation Society, Sumatran Elephant Project
18-Feb	Medan	Free day			
19-Feb	Medan	Medan FFI Office - planning	Wahdi Azmi	Program Manager	Flora and Fauna International (FF) Sumatran Elephant Conservation Program (SECP)
20-Feb	Medan	Medan FFI Office	Wahdi Azmi		Flora and Fauna International (FF) Sumatran Elephant Conservation Program (SECP)
21-Feb	Medan - Tangkahan	Medan - Tangkahan	Edi	By car	Flora and Fauna International (FF) Sumatran Elephant Conservation Program (SECP)
22-Feb	Tangkahan	Walk in forest - Orientation of area.	Edi		Flora and Fauna International (FF) Sumatran Elephant Conservation Program (SECP)
23-Feb	Tangkahan	Overnight in Taeos House	Edi		Flora and Fauna International (FF) Sumatran Elephant Conservation Program (SECP)
24-Feb	Tangkahan	Attended a meeting with community atScotchie on HEC and conservation management	Edi		Flora and Fauna International (FF) Sumatran Elephant Conservation Program (SECP)
25-Feb	Tangkahan	Community school visit	Edi		Flora and Fauna International (FF) Sumatran Elephant Conservation Program (SECP)
26-Feb	Tangkahan	Free day	Edi		Flora and Fauna International (FF) Sumatran Elephant Conservation Program (SECP)
27-Feb	Tangkahan	Meeting with Indecon	Raja		Indecon Indonesia.
28-Feb	Tangkahan	Tangkahan	Edi		
MAR					
1-Mar	Tangkahan	Tangkahan	Edi		Flora and Fauna International (FF) Sumatran Elephant Conservation Program (SECP)
2-Mar	Tangkahan	Tangkahan	Edi		Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
3-Mar	Tangkahan - Medan	Tangkahan- Medan	Edi	Drive to Medan	Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
4-Mar	Medan	Medan - Free day			Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
5-Mar	Medan - Kuala Lumpur, Malaysia	VISA RENEWAL. Stay at Pan Pac KL Airport			
6-Mar	Kuala Lumpur - Medan	Fly from Kuala Lumpur to Medan			

Attachments

7-Mar	Medan	Medan - project management with Whadi on CRU ecotourism development	Wahdi Azmi		Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
8-Mar	Medan	Medan - project management with Whadi on CRU ecotourism development.	Wahdi Azmi		Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
9-Mar	Medan - Tangkahan	Medan - project management with Whadi on CRU ecotourism development. Return to Tangkahan pm.	Edi		Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
10-Mar	Tangkahan	CRU Ecotourism at Tangkahan. Redevelop CRU centre	Edi		Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
11-Mar	Tangkahan	CRU Ecotourism at Tangkahan. Redevelop CRU centre	Edi		Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
12-Mar	Tangkahan	CRU Ecotourism at Tangkahan. Redevelop CRU centre	Edi	All mahout give verbal presentation in English	Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
13-Mar	Tangkahan	Meeting with CTO. Elephant management workshop and presentation	Chris Topper	Aceh Veteranarian. Both Chris and Wahdi arrive in Tangkahan.	Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
14-Mar	Tangkahan	School Awareness evaluation and activity day. Meeting on volunteer management. Meeting with CTO and Forest Rangers on new development of CRU ecotourism	Wahdi Azmi	Involves 25 kids from surrounding villages	
15-Mar	Tangkahan	CRU Ecotourism at Tangkahan. Redevelop CRU centre	Edi		
16-Mar	Tangkahan	Work with Ecotourism on new redevelopment. CRU ecotourism management	Iyakar	Invited to help design new management strategies for visitors	
17-Mar	Tangkahan	Patrolling with fied staff	Parman	Full day partolling and clearing elephant treks	
18-Mar	Tangkahan	Ecotourism and community development project and meeting	Iyakar	Invited to participate in community development of design and management of new ecotourism.	Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP

Attachments

19-Mar	Tangkahan	Field work	Edi		Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
20-Mar	Tangkahan-Bukit Lawang	New elephant trek - evaluation	Parman - CRU staff	Ride elephants from Tangkahan to bukit Lawang so evaluation of new ecotourism trek.	Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
21-Mar	Gunung Leuser National Park	New elephant trek - evaluation	Parman	3 nights / 4 days trekking with CTO and eco staff from T	Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
22-Mar	Gunung Leuser National Park	New elephant trek - evaluation	Parman		Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
23-Mar	Gunung Leuser National Park	New elephant trek - evaluation	Parman	Arrival of elephant trek in BL	Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
24-Mar	Bukit Lawang	Bukit lawang	Edi		Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
25-Mar	Bukit Lawang - Medan	Return to Medan	Edi	Drive from Bukit Lawang to Medan	Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
26-Mar	Medan - Banda Aceh	Drive from Medan to Banda Aceh	Edi		Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
27-Mar	Banda Aceh	Meeting with Scott Stanley	Scott Stanley	Cancelled due to a late notice mgt in Jakarta	Flora and Fauna International (FFI), Aceh program
28-Mar	Banda Aceh	Visit Surrey Elephant Training Camp.	Edi		Elephant Training Centre Surrey.
29-Mar	Banda Aceh - Medan	Return to Medan from Banda Aceh	Edi		Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
30-Mar	Banda Aceh - Medan	Field work	Edi	Drive from Tangkahan to Medan	Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
31-Mar	Medan	Meeting with Wahdi. Return to Tangkahan from Medan	Wahdi Azmi	Meeting on concept planning, longterm management of programs and how to implement strategy into Tangkahan	Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP

Attachments

APR					
1-Apr	Tangkahan	Trek to cave	Rud	Complete CRU project management experience. Trekking to cave with Rud, Perri, Cliwon, Tejo and Johnny	Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
2-Apr	Tangkahan	Proposal and concept plan experiece and writing. Evaluation of trek - Bukit lawang completed	Wahdi Azmi		Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
3-Apr	Tangkahan	Proposal and concept plan experiece and writing. Evaluation of trek - Bukit lawang completed	Wahdi Azmi		Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
4-Apr	Tangkahan - Medan	Return to Medan	Edi		
5-Apr	Medan - Singapore	Fly from Medan to Singapore (VISA RENEWAL) Stay at the Le Meridien Changi Village Hotel.			
6-Apr	Singapore - Medan	Fly from Singapore to Medan			
7-Apr	Medan	Return to Tangkahan. US Consulate proposal written and submitted. Proposal writing experience and strategy planning. Volunteer planning	Edi		Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
8-Apr	Tangkahan	Camping and patrol	Edi		Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
9-Apr	Tangkahan	Camping and patrol	Edi		Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
10-Apr	Tangkahan	Film crew management at Tangkahan. Meeting with Iep. Return back from patrolling	Iep		Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
11-Apr	Tangkahan	Party for going?. Return from camping	Edi		Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
12-Apr	Tangkahan - Medan	Meeting on ecotourism and strategy planning for the next 3 years	Wahdi and Iyakar		Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
13-Apr	Medan	Leave for Medan	Wahdi		Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP

Attachments

14-Apr	Medan - Kuala Lumpur, Malaysia	Stop over in KL. Stay at Pan Pac KL Airport			
15-Apr	Kuala Lumpur - Phnom-Penh, Cambodia	Fly to Phenom Phen, Cambodia. Stay at Raffles Le Royal	Hotel transfer included		
16-Apr	Phnom Phen	Khmer Day - Public Holiday Stay at Raffles Le Royal			
17-Apr	Phnom Phen	Free day			
18-Apr	Phnom Phen	Free day			
19-Apr	Phnom Phen	Free day			
20-Apr	Phnom Phen - Medan Indonesia	Fly from Phnom Phen - Medan			Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
21-Apr	Medan - Tangkahan	Drive from Medan to Tangkahan. US Consulate	Wahdi Azmi		Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
22-Apr	Tangkahan	US Consulate	Wahdi Azmi		Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
23-Apr	Tangkahan	Field work	Wahdi Azmi		Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
24-Apr	Tangkahan	Field work	Wahdi Azmi		Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
25-Apr	Tangkahan - Medan	Field work	Wahdi Azmi		Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
26-Apr	Medan	Ecotourism and community development project	Wahdi Azmi		Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
27-Apr	Medan	Ecotourism and community development project	Wahdi Azmi		Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
28-Apr	Medan	Ecotourism and community development project	Wahdi Azmi		Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
29-Apr	Medan	Free day			Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
30-Apr	Medan	Free day			Flora and Fauna International (FFI), Conservation Response unit (CRU) Tangkahan, SECP
1-May	Medan - Melbourne	Depart Medan back to Melbourne			