The Orangutan Project – National Education Program
General Classroom Information Pack

Introduction
This information pack provides background information on The Orangutan Project, history, facts and most importantly, what we do with the money that is raised to help orangutan. The General Classroom Information Pack provides a valuable source of information on habitat destruction, palm oil plantations and their devastating effects on the land, orangutan rehabilitation and fact on orangutans themselves.

For more information please visit our Education Website on www.orangutan.org.au/schools

Target Audience

<table>
<thead>
<tr>
<th>School</th>
<th>Class</th>
<th>Ages</th>
<th>Topics</th>
<th>Material Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School (Secondary)</td>
<td>10</td>
<td>15</td>
<td>Information on The Orangutan Project and the facts around why we are so passionate about saving the orangutans.</td>
<td><a href="http://www.orangutan.org.au/schools">www.orangutan.org.au/schools</a>: General Classroom Information Pack</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary School</td>
<td>6</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reception / Early Childhood</td>
<td>K</td>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Welcome

To TOP’s Information Education Pack. We hope this will give you information that you can incorporate into your classroom. You will also find some suggested activities which may be freely adapted to suit the needs, interest and ability levels of your students.

Thank you for taking the time to look at this pack.
The Orangutan Project is a very special organisation - it’s one of the most successful orangutan protection and education organisations in world.

At this current period in time, the environment is becoming an ever increasing concern for all Australians, especially the youth. We believe that the youth of Australia can make the big difference in the coming years. By assisting The Orangutan Project they can help save not only the orangutan, but many other endangered animals such as tigers, elephants, and sun bears. All of these animals share the same habitat. As the environment of these animals is saved, the lives of the local people – and their

It’s a single project that helps so many. It is hoped that once you become aware of the plight of the orangutans, you might be inspired to become part of the solution.

Kindest regards. The Orangutan Project Team
About our information pack

• The activities in this pack have been created mainly for Junior and Middle Primary children. However, many of them have been designed in a flexible manner so that they can be altered to suit the interest and ability level of each child. NB where a numeral is quoted in the title of an activity, this does not designate a year level. Instead, it simply indicates a degree of difficulty, i.e. 1 represents the simplest task created in that set of activities.

• It is hoped that some of the activities will inspire the children to create their own activities.

• Added to these, children could easily utilise some of their new found knowledge about orangutans to create poetry, songs, stories and art work.

• If you or your students have some original and innovative ideas, please send them to The Orangutan Project
  P.O. Box 1414,
  SOUTH PERTH WA 6951

  Email: education@orangutan.org.au
  so that we can post them on the web-site for everyone to share and enjoy.

Helpful Resources:

• TOP web-site: www.orangutan.org.au
• Indonesian dictionary
• Newspaper and magazine articles about orangutans.
• Atlas – maps showing Australia, Indonesia, Borneo and Kalimantan.

Some General Ideas
If you a creating an ‘Orangutan Corner’ or display area, think about enhancing it by ‘Greening’ your classroom. There are many hardy indoor plants which would be suitable. Ficus plants in particular would help to create a rainforest. If potted plants are not an option, if someone is pruning trees or bushes, these can be placed in a vase or some kind of container. (You’ll soon become aware of a new fragrance in the air).
Contents

• How we started
• Why protect endangered species?
• The Facts
• What can we do?
• What does TOP do with the money raised?
• What is Palm Oil?
• Where are Orangutans
• Orangutan Facts
• What keeps a baby orangutan happy for hours?
• Baby orangutans love to play

• Did you know?
• Useful resources
• Great reading
• Orangutan – products to avoid
• Why we cant give up
How we started

Ever wondered how TOP got started?
President Leif Cocks tell us how...
"I was working with the big cats at Perth Zoo when Charlie Broomfield, who had been the orangutan keeper for the last 20 years, retired. Soon after, I was asked to go and work on the Primate Section to take his place. I started working with the orangutans and then it was discovered that not only did I like orangutans, but also that they liked me, so I was able to enter the enclosure with them and do things that others keepers could not. I continued to be their keeper for 12 years. Although I don't look after them directly now they are still in my area of care. Now TOP Projects Coordinator Kylie Bullo is in charge of caring for them on a daily basis, however I still see them regularly when Kylie and I have orangutan contact sessions.

The old Australian chapter of Orangutan Foundation International (OFI) was closing down, when President of OFI, Birute Galdikas asked if I would take over the chapter. After consideration I said I would not want to however I agreed to start an orangutan organisation in Australia that would help her good work as well others.

The underlying philosophy of the TOP being; no criticism of fellow orangutan organisations, building partnerships between organisations and funds to be distributed according to scientifically determined conservation priorities. I gathered a small group of friends that had the skills that I lacked and we started."

The Orangutan Project started in 1999 and now has over 5,000 Supporters and Orphan Adopters!
Why protect endangered Species?

Whilst important in their own right they also -

Conserve the earth's bio-diversity.

Are critical for maintaining the fundamental balance of ecosystems.

Are charismatic icons, providing a unique opportunity in promoting & communicating critically important conservation and environmental issues.
Wild populations of orangutans are found only in the tropical forests on the islands of Borneo and Sumatra. All populations are under severe threat from habitat loss, illegal logging, fires and poaching.
The Facts

Orangutan populations have declined by more than 80 per cent in the past century.

Long-term survival depends on well-managed, protected areas and on wider forest landscapes connected by corridors.
The Facts

There are currently 300 football fields per hour of rainforest being cleared in Indonesia.

That equates to 15,000 sq km per year being cleared.

In 5 years an area the size of Tasmania will have been cleared at current rates.

There are over 2,000 rescued Orangutans in Care Centres across Indonesia.
What can we do?

1. Raise people’s awareness of the plight of the orangutans in Borneo & Sumatra
2. Educate people about the issues with Palm Oil
3. Send a letter to your local member of parliament
4. Join The Orangutan Project as a Supporter
5. Adopt an Infant Orangutan

Did you Know?
The Orangutan Project is a non-partisan organisation that supports all orangutan conservation organizations. Being non-partisan we can distribute our funds due to conservation needs only. Also we use our ability to support all organisations as a way of bringing orangutan conservation organisations together.
What is Palm Oil?

A form of edible vegetable oil obtained from the fruit of the African oil palm tree (Elaeis guineensis).

African Oil palms originated in West Africa, but can flourish wherever heat and rainfall are abundant. The majority of all palm oil is grown and produced in Borneo and Sumatra; it is an introduced agricultural crop (not gathered from the rain forests).

Second-most widely produced edible oil, behind soybean oil.

Used in many food, cosmetic and bath products.

Palm fruit

Forests are cleared by burning, which increases carbon emission
About Palm Oil

Palm Oil is a major contributor to global warming

• Often wet, swampy rainforests are drained to be cleared for palm oil plantations. As they dry, their peat filled soils release large amounts of methane, a greenhouse gas that has a global warming impact 23 times that of CO2.
• The cleared land is highly susceptible to long burning fires that emit large quantities of carbon. Illegally lit peatland fires in Borneo have for years been one of the largest global sources of greenhouse gas emissions. Fires are used to clear the land because it is cheaper than bulldozing.
• It has recently been calculated that 15% of all global carbon dioxide emissions from fossil fuels come from this rainforest destruction. Unfortunately, the international community has no cohesive strategy to address this issue although it is now becoming widely recognised and discussed.

Environmental Impacts:

• Indonesia is set to enter the Guinness Book of World Records for the fastest pace of deforestation in the world between 2000 and 2005. An area of forest equal to 300 soccer fields is being destroyed every hour. The entry will read: "Of the 44 countries which collectively account for 90 percent of the world's forests, the country which attains the highest annual rate of deforestation is Indonesia with 1.8 million hectares of forest destroyed each year between 2000 - 2005."

About Palm Oil

**Impact on local people:**
Local people on the islands of Borneo, Sumatra and Papua New Guinea are being affected by the palm oil industry. Millions of people in these areas rely on this industry for their livelihood and this is one reason we do not support a blanket boycott of all palm oil.

The development of new oil palm plantations is commonly associated with social conflict and human-rights abuses. Most of the area developed is the customary land of indigenous peoples and local communities.

Indonesian laws and land acquisition procedures provide these people with very little protection. In the name of the ‘national interest’, communities are being forced to give up their lands against their will and without getting adequate compensation. Many palm oil companies claim they bring work to the area, but do not always employ the local people. As a result conflicts between plantation companies and local communities are widespread and growing.

On many plantations there is heavy use of pesticides and no safety protection supplied and many of the river systems are polluted, leaving local communities with no fresh water for drinking or bathing. The pollution is also killing fish, an important food source.

Local people can and should be trained in environmentally sustainable agriculture, (including palm oil and other food sources) and other sustainable trades, crafts and professions.
Where are the Orangutan Care Centres

Where is Borneo?

Kalimantan Borneo is the world’s second largest island. The North and North-western part of the island are the East Malaysian state of Sarawak and Sabah, with the newly independent state of Brunei Darusalam between them. The rest of the island is part of Indonesia, divided into four provinces - East Kalimantan, West Kalimantan, Central Kalimantan and South Kalimantan.

The tremendous outspread of jungles and wilderness, which are so rich in natural resources such as timber, gas, oil and coal as well as scenic beauty - are comparable to that of a continent alone. Focal point for most visitors is the mighty Mahakam river, which meanders through thousands of kilometres through one of the world’s largest tropical rainforests, from its head water near the centre of the island. The twenty main Dayak tribes - once feared as head-hunters - have their homes in this river basin. A remarkable variety of plant and animal life including the famous fresh water dolphins - which often accompany boats along the river - make a visit to Kalimantan an enthralling venture to a different world. Tanjung Puting reserve, 415,050 hectares is situated in an ecologically diverse area of wetland, lowlands, swamp and hardwood rain forest. Borneo and Sumatra are the only places left in the world where Orangutans (the man of the forest) still survive in their natural habitat.
Orangutan Facts

Where are orangutans found?
Orangutans are found in Indonesia and Malaysia on the islands of Borneo and Sumatra.

How many species of orangutans are there?
There are two species of orangutan:
- the Sumatran orangutan (Pongo Abelii)
- the Bornean orangutan (Pongo Pygmaeus)

Are orangutans monkeys or apes?
Orangutans are a species of great ape along with gorillas, chimpanzees and bonobos. The great apes are a group of mammals that all have large brains, forward facing eyes and gripping hands. Humans are also great apes. In fact we share 97% of our genetic (DNA) makeup with orangutans. Apes and monkeys are both primates, and the easiest way to distinguish between them is to look for a tail. Apes don’t have tails where as most monkey species do.

How long do orangutans live?
In the wild, orangutans may live up to 60 years or more.

What does the word orangutan mean?
Orangutan means ‘person of the forest’. It comes from the Malay words ‘orang’ meaning people and ‘hutan’ meaning forest.
Orangutan Facts

What is arboreal?
Arboreal means tree-living. The orangutan is the largest arboreal animal in the world and is well adapted for life in the trees. The orangutan can grasp branches with both hands and feet and has mobile shoulder and hip joints. Both these features help the orangutan to travel through the forest canopy. Orangutans make and sleep in a new nest every night.

Are orangutans sociable?
Unlike gorillas, chimpanzees and bonobos, orangutans do not live in large social or family groups. They are semi-solitary animals. Adult males are usually found alone and adult females are usually accompanied by one or two offspring.

Do male and females look different?
Orangutans are what we call ‘sexually dimorphic’ – that is, there are visible differences between males and females. Adult males can reach 1.5m in height and weigh as much as 120kg. Females are much smaller and grow up to 1m tall and weigh about 45kg. Male orangutans develop large cheek pads and a throat pouch when mature. To attract females and alert other orangutans of his presence, he will inflate his throat pouch to make a loud sound called “a long call”.


What is the difference between Bornean Orangutans and Sumatran Orangutans?
The remaining 2 species of orangutan are confined to the Southeast Asian islands of Borneo and Sumatra. The Sumatran species has a narrower face and longer beard, while the Bornean is slightly darker in colour and its males have wider cheek pads. There are also behavioural differences: Sumatran orangutans tend to be more frugivorous (fruit eating) and there is greater evidence of their use of tools than in Borneo.

**Sumatran orangutan**
- Female: 40 - 50 kg
- Male: 60 - 90 kg
- Female head-body length: 78 cm
- Male head-body length: 97 cm

**Bornean orangutan**
- Female: 40 - 50 kg
- Male: 60 - 90 kg
- Female head-body length: 78 cm
- Male head-body length: 97 cm
Orangutan Facts

**What do orangutans eat?**
Orangutan are frugivorus (fruit eating). They eat over 400 different kinds of food. Ninety per cent of their diet consists of fruit but they also love to eat nectar, honey, bark, leaves, insects and fungi. Their favourite fruit is durian which is renowned for its horrible smell!

**How long is a pregnancy?**
Female orangutans have their first baby at about 14-15 years of age. The pregnancy lasts for about 8 and a half months. Young orangutans have a lot to learn to survive in the forest so they will stay with their mother until they are about 8 or 12 years. This period of dependency is longer than any other primate apart from humans. Female orangutans only have one baby approximately every 8 years, so they will only have 3-4 infants in their lifetime. Twins have occurred in the wild but not very often.

**How intelligent are orangutans?**
Orangutans are highly intelligent animals. Their intelligence is comparable to that of a five or six year old child.
Orangutan Facts

How endangered are they?
Are we the last generation to see orangutans? In 1900, there were over 315,000 wild orangutans. Today, there are approximately 60,000. That is a decrease of more than 90% in just over 100 years. Only 6,300 of these remain living in Sumatra, so in 2010 there may be no remaining wild orangutans in Sumatra. The Sumatran orangutan is classified as ‘Critically Endangered’ and the Bornean orangutan is classified as ‘Endangered’.

Why are they endangered?
The orangutans’ rainforest is being felled for Palm Oil and other crops at an overwhelming rate with the remaining forest being degraded by drought and forest fires. Tropical rainforest are being cut down for timber and the land cleared for mining and palm oil plantations. Orangutans have lost 80% of their habitat in the last 20 years. The increased demand for palm oil – which is obtained from the fruit of the oil palm tree and can be grown only in tropical environments – is fuelling destruction of the rainforest habitat of Sumatran and Bornean orangutans, pushing those endangered species even closer to extinction. Estimates show that if something isn’t done soon to stop the spread of palm oil plantations into the forests that harbour these orangutans, they will be extinct in twenty years.

Supply and demand pressures are driving the production of palm oil up to an all time high. Palm oil is now the second most widely produced edible oil. Palm oil is found in many everyday products including biscuits, crackers, batters, chips, shampoo, skin care and beauty products and in different varieties of pet food, to name a few. It is also found in a wide array of products sold in natural food stores. Palm Oil is also used as a biofuel and the demand for this fuel alternative is adding to the problem. Orangutans are killed or injured by plantation owners and farmers who consider them to be pests. If a female orangutan is found with an infant, the mother is killed and the baby sold into the illegal pet trade.

What happens to these babies?
If the babies are found or confiscated by officials they will be cared for at one of the many rehabilitation centres that are set up to treat and care for sick, injured or orphaned orangutans with the ultimate aim of returning them back to the wild.
What keeps a baby Orangutan happy for hours?

Simple cardboard boxes to play in and destroy are by far the biggest enrichment success. They are low cost, readily available, and surprisingly long lasting. (Even once destroyed the orangutans will play with the tiniest portion of a box for hours.)
Baby Orangutans love to play

The Forest quickly gets too hot for the Orangutan babies. They normally would have to return to their cages at lunchtime to get out of the sun. But with the 'playgrounds' they could stay and play well into the afternoon.
Did you know?

Orangutans have a large bulky body, thick neck, very strong arms, short legs and no tail. Orangutans are about 1/3 the size of a gorilla. They are covered with long reddish brown hair.

Orangutans have senses very similar to humans, re hearing, sight, smell, taste & touch.

Orangutan hands are very much like humans. They have four long fingers plus an opposable thumb. Their feet have four long toes plus a big toe. What is an opposable thumb? Thumbs are called opposable because the thumb can move around to touch the other fingers, which gives the orangutan, others members of the great ape family and humans the ability to grasp things. Opposable thumbs help orangutans climb trees and gather and eat their food. Opposable thumbs help humans operate tools to make use of resources in our environment.
Did you know?

**Behaviour**

Orangutans are diurnal animals, which spend a large portion of daylight hours searching for and consuming food. Most of their lives are spent in trees where they travel from branch to branch by climbing and clambering. “Orangutans don’t leap through the trees, or brachiate like gibbons because they are too heavy. They try to always have a grip on a branch with a hand or foot in case they fall. Usually each night, a new nest for sleeping is constructed from branches and built 20 to 30 metres up in a tree. Although mostly arboreal, males will occasionally come to the ground to move between stands of trees. While females stay near their mothers' home ranges, males emigrate long distances. This helps minimize inbreeding within populations. In the wild, orangutans have been observed making simple tools to scratch themselves. They also use leafy branches to shelter themselves from rain and sun, and sometimes even drape large leaves over themselves like a poncho. They have also been observed using branches as tools during insect foraging, honey collection, and protection against bees, and to fish for branches or fruit that is out of reach.
Did you know?

Orangutans’ arms stretch out longer than their bodies height. From fingertip to fingertip, it can measure over 1.3 metres. They use their fingers to create and use a “hook grip”.

When on the ground, they walk on all fours, using their palms or their fists.

When male orangutans are about 15 years old, they often develop large cheek pads, which female orangutans apparently find attractive.

When males are fighting, they charge at each other and break branches. If that doesn’t scare one of them away, they grapple and bite each other.

For the first few years of his/her life, a young orangutan holds tight to his/her mother’s body as she moves through the forest in search of fruit. Later, he/she will follow the mother as she moves through the trees.

Orangutans have tremendous strength, which enables them to hang upside-down from branches for long periods of time to retrieve fruit and eat young leaves.
Useful Resources! - Great Reading

Library resource book

**Orangutans and their battle for survival**

Author: Leif Cocks
ISBN 1 876268 80 8.
Publisher; University of Western Australia Press under Tuart House imprint.
Suitable for Primary through to Secondary
THIS BOOK IS AVAILABLE FOR PURCHASE THROUGH OUR ONLINE SHOP.
These books have had repairs to the cover binding but are otherwise in perfect condition.
$15.00 each
Little Sibu, a playful orangutan, enjoys his life of swinging freely through the treetops of the tropical Indonesian rainforest under the protective gaze of his mother, Hati. Each night he returns to the safe haven of his mother's nest. But, when Little Sibu turns seven-years-old, Hati realizes that he must learn to care for himself. Little Sibu finds his own food, travels away from his mother during the day, and builds his own nest. He quickly discovers how to make his way in the world around him. Through this captivating story, author Sally Grindley presents a factually accurate portrayal of the everyday life of an orangutan in a tropical rainforest. She helps young readers to understand this endangered species, and appreciate the joy and tenderness of orangutan families. John Butler's colourful and dramatic illustrations will encourage readers to swing through the treetops with Little Sibu and his family.

The orangutan is our closest relative, highly intelligent and in critical danger of becoming extinct in the very near future. This poignant picture book tells the story of Mang the Orangutan, taken from the great rainforests of Borneo and now kept in a zoo. Ages 5+
Useful Resources! - Great Watching

**Orangutan Diary DVD** - In this set of five, thirty minute segments, Steve Leonard and Michaela Strachan visit the Nyaru Menteng Centre in Borneo. Steve is a qualified and experienced vet who works with the BBC Natural History Unit. Michaela is a TV presenter, singer and actor. Since 1990, she has presented many wildlife programmes. At the Centre, they meet Lone Droscher-Nielson, the carers, rescue workers and - of course - many orangutans in a variety of circumstances. Each segment represents a day, so, we are able to see the progress of several of the orangutans.

Available for purchase through the ABC shops.

**Saving Orangutans - DVD** - 1 x 1 hour Documentary - broadcast on Channel 10, 3:30pm, 15 December 2007

Follow Kim Watkins on her journey through Borneo, where she gets up close and personal to discover these amazing, charming and intelligent great apes. We learn why these animals are rapidly disappearing from the wild, and what we can do to help save them.

If you would like to purchase a DVD of this show please email: xanon@forkfilms.com.au

**The Last Trimate** – DVD - Narrated by Mel Gibson and filmed in stunning high definition, THE LAST TRIMATE follows the incredible work of a formidable woman, Dr. Biruté Galdikas, as she highlights the plight of the elusive “red ape” and offers some hope for their survival as their very habitat is decimated at a startling rate. In turn, enlightening, devastating, uplifting, and moving - this documentary provides a compelling and heart-rendering account of one woman’s fight against a threat posed by her own race. DVD - 53 minutes feature documentary.

If you would like to purchase a DVD of this show please email: steve@animalmedia.com.au
Useful Resources! - Great Reading

Junior Primary – Primary reading

How to Babysit an Orangutan
Author: Tara Darling and Kathy Darling
Binding: Library Binding
Publisher: Walker & Company
Date Published: 1996

Story told by an orangutan care giver at Camp Leakey – OFI Care Centre – Borneo. Children will enjoy the array of colourful, candid full-colour photos of babies grooming, playing, feeding and mugging it up. A very good book but hard to source. Try www.alibris.com

Publisher: 10074743
Format: Hardcover
Date Published: April 2007
Age Range: 04 - 8 Years Old

It's high adventure over Borneo as Riley searches for orangutans from the ground and the sky! Join Riley, Alice, Aunt Martha and Uncle Max as they learn how figs, fig wasps and orangutans all rely on each other for survival. If you love sun bears, proboscis monkeys, flying snakes, orangutans, harlequin tree frogs, Sumatran rhinos and pygmy elephants you’ll love this book!

Animals in Danger is a series of non-fiction readers that gives the latest information on endangered animals around the world. In this book read about everyday lives of the orangutans lifecycles, food. Life in the rainforest. Learn about the dangers orangutans face, Habitat destruction, Poaching.

Publisher: Tick Tock Media Pty Ltd
Format: Paperback
Date Published: 2006
Age Range: Junior Primary to Primary

Animals in Danger is a series of non-fiction readers that gives the latest information on endangered animals around the world. In this book read about everyday lives of the orangutans lifecycles, food. Life in the rainforest. Learn about the dangers orangutans face, Habitat destruction, Poaching.
A baby orangutan called Chang sits in a tiny cage in an Asian Market. Captured by poachers, he is far away from his family deep in the Borneo rainforest. Follow Chang’s adventures as he tries to escape his plight, and learn about the struggle facing the dwindling number of wild orangutans and the people who are trying to help them survive.

Did you know that orangutans can learn to sign language? Did you know that orangutans use twigs to clean their teeth? Learn all about these amazing animals – where they live, how they grow, what they eat and the dangers they have to face.
Here, at last, is the riveting story of Birute Galdikas, a pioneering primatologist who has spent much of her life studying orangutans. In 1971, twenty-five-year-old Galdikas began living in the remote jungles of Indonesian Borneo, where she encountered menacing poachers, blood-sucking leeches, and swarms of carnivorous insects. Determined to penetrate the world of the elusive red ape in the name of science and conservation, Galdikas embarked on a quest of more than twenty years to become the foremost chronicler of orangutan life.

Publisher: Back Bay Books
Format: Paperback
Date Published: 1996
Age Range: Primary / Secondary

Colourful and captivating
Amazing Animals – Orangutan explores the life span, habitat and family life of the orangutan.

Publisher: Weigl Publisher Inc
Format: Paperback
Date Published: 2008
Age Range: Junior Primary to Primary
The dictionary defines an odyssey as "a long adventurous voyage." That's an apt description of Birute Galdikas's book Orangutan Odyssey, a pictorial journey into the still largely mysterious world of wild orangutans. Like all journeys, it has its highs and lows; this book will in turn make readers smile with delight, catch their breath in awe, and shudder with heartache. Given its large size and 100 colour photographs by award-winning photographer Karl Ammann, Orangutan Odyssey comes under the category of coffee-table books.

An illustrated introduction to orangutans as written by a psychologist and primatologist specializing in the Red Ape. Covering scientific history, habitat and behaviour, Russon offers a good overview of Asia's only great ape for the general reader. She concludes with a call for redoubling conservation efforts. The text is much enhanced by 100 colour photos.
A marvellous insight into the lives of the orang-utans. 'To look into the eyes of an orang-utan is to come face to face with one's own humanity. The species differences are blurred. Something intangible—a feeling of knowing and yet not knowing—passes between human and red ape. The fleeting exchange leaves a sense of wonder.' The Orang-utans gives a rare and intriguing insight into the amazing life of one of our closest relatives. Blending their own extensive experiences with orang-utans and the latest scientific knowledge, Gisela Kaplan and Lesley Rogers provide a fascinating and often moving account of these tree apes. And along the way we are introduced to such orang-utans as Judy, the orphan who thwarts all attempts to return her to the wild; BJ the schemer; Jessica and her new baby; motherless Abbie; and Raja the street-wise 'gangster'. The book also looks at the future prospects of these remarkable creatures. With their rainforest habitat diminishing, will they survive in the wild?
Orangutan – products to avoid!

In your daily life there are also plenty of opportunities to help with orangutan conservation. A sensitive and thoughtful approach with your interaction with nature is a big step in the right direction. Adopting a lifestyle which embraces less consumption of goods and services, recycling of waste products, the wise use of water, and the use of public transport, where possible, will not only help our local environment but helps all flora and fauna which includes orangutans.

There are specific things which you can do to help which will directly impact on the future of the orangutans. Every day it is estimated that some 6000 hectares of virgin tropical forest disappears in Indonesia alone. This could be home for some 30+ orangutans and millions of other living creatures. Some 70% of all timber exported from Indonesia is illegally logged. Your best option when buying wood-products is to buy our own country’s beautiful woods rather than opt for any of the tropical hardwoods. By doing this you can help us save the forests of Indonesia, and save the last orangutans.

**Items to avoid:**

**Tropical Plywood**

Tropical plywood production has swept through Southeast Asia like a 40-year fire since its inception in the Philippines in the 1930s. The Philippines is over 80% deforested, as is Thailand. Sabah and Sarawak on the island of Borneo, the two Malaysian states that promoted logging, are over 50% logged out. And, Indonesia is now the major producer of tropical plywood in the world, with about 90% of the global trade!

The generic term for tropical plywood is Lauan but may also be called meranti. In general, lauan has almost completely replaced domestic hardwood plywood. The woods used in its production include hundreds of species including any Dipterocarps (a family of trees). The large trees which are targeted, are then cored laterally (peeled like a roll of toilet paper) into thin sheets and then laminated (glued) together at 90-degree angles to make the plywood.

The plywood is used for many of things, the biggest use being the facing (skin) of interior (hollow core) doors. You will find it in many home improvement centres and most timberryards. Furniture makers use a lot of lauan for the backing of dressers, dresser drawers and the backing of shelf units. It is used frequently in construction for sub-flooring and sub-roofing. It is also used in general construction where small pieces of plywood are required.

There are no sustainable tropical plywood projects. However in Australia, we do have sustainable wood products.
Orangutan – products to avoid!

**Products to avoid.**

**Dowels**
The largest use of ramin is for dowels. Ramin is an endangered species that grows in the peat (swamp) rainforests of Borneo. Loggers are eliminating it from its entire range. Indonesia has become the world’s largest dowel producer. Dowels are used in numerous ways, but by far the largest use is for tool handles. Rakes, brooms, mops, plungers, brushes and the handles of other tools are often made from ramin dowels. So where possible buy tools with a plastic handle or metal frame.

**Rayon**
Rayon is made from wood pulp -- a particular kind called "dissolving pulp" which demands a very clean input stream. Indonesia has now eclipsed Japan and Korea as the largest producer of rayon. The rayon mills are huge consumers of rainforests. People should avoid rayon if at all possible and consider garments made of cotton, silk or linen.

**Palm Oil**
Palm oil plantations are a huge problem for orangutans (both in Indonesia and Malaysia), as entire forests are taken down to make way for the plantation. These large scale palm oil plantations clear land by cutting the forest then burning the land to clear it for planting - this contributes to widespread, often uncontrollable fires in Indonesia. Indonesia is the second largest producer of palm oil in the world after Malaysia. In 1997 there were 2.2 million hectares of oil palm groves in Indonesia--the forest must be clear-cut/burned to establish these groves.

**Patchouli**
Patchouli is another product to be avoided. The plant this oil is harvested from is also grown on plantations that cause forest fragmentation.

**Teak, Ironwood, Ebony, and Sandalwood**
Four hardwoods from Indonesia are teak, ironwood, ebony and sandalwood. These are slow-growing trees, so the sustainability of these species depends on their careful and restrained management.
Why we can't give up!

With his tufts of hair sticking straight up and what appears to be a big smile on his wrinkled little face, this baby orangutan deserves a chance to take on the world.