

ORANGUTANS



ABQ BioPark
Zoo

Information Guide



ORANGUTAN
Pogo pygmaeus abelli

Order: Primata

Family: Pongidae

Range: Northern Sumatra [Indonesia]; formerly throughout entire island.

Habitat: Tropical rainforests, including hill forests and swamp forests

Diet: Herbivorous. Forest fruits, including durians, jackfruits, lychees, mangos and figs. Also eats leaves and shoots, occasionally small animals, tree bark, and soils rich in minerals.

Lifespan: In the wild, 40-50 years. In captivity, up to 60 years.

Size: Asia's largest primate. Males: 4 ½ feet tall, weigh 130-200 lbs. Females: 4 feet tall, weigh 90-110 lbs. World's largest tree-dwelling animal.

Behavior: Diurnal. Arboreal. Spend much of their lives high in trees. Solitary; typically encounter others only to mate. Move slowly through forest looking for fruiting trees; follow movements of hornbills and other fruit-eaters. At night, bend branches into nest platforms for sleeping. Shelter from rain and sun by holding leaves over heads. Use tools such as sticks to get honey and insects from holes and seeds from fruit. Males establish home range and defend it mainly through vocalization; "long call" can be heard 800m away. Also uses call to attract females.

Adaptations: Have very long arms [up to eight foot span] that nearly reach the ground when standing; allows brachiation from branch to branch. Hook-shaped hands and feet with long fingers assist in grasping branches while brachiating. Thumbs are short; long ones would get in way while swinging. Are quite dexterous and have been known to undo nuts and bolts in captivity. Legs are much shorter than arms. Have very strong, large jaws for cracking and crushing fruits with hard thick shells. Males have large throat pouches that resonate calls through trees.

Reproduction: Age of maturity: male, 7-12 years; secondary sexual characteristics include facial cheek flanges, big throat pouch, long hair on arms and back which may not develop until age 20. Female, 7 to 10 years—first birth typically at age 12-15. Give birth about once every eight years; usually single

birth. Gestation: average 245 days. Young clings to mother for about 1 year and stays close to mother until next offspring comes along. Weaned by 4th year but can eat solid food independently at age 1. Males do not assist in raising young. Young will often stay near and dependent upon their mother for 7 to 8 years while they learn to navigate through the dense forest in search of the hundreds of different edible foods. Adolescent males usually break ties with their mothers, but adolescent females return frequently to spend time around their mothers.

Status: Critically Endangered, CITES 1. Classified as one of 25 most endangered primates in the world by IUCN. Major threats include: habitat destruction caused by fire [natural and man-made]; land cleared for growing oil palm, fast-growing pulpwood, and other crops; logging; capture for pet trade. Estimated to be about 7000 left in the wild, with steady yearly losses.

Fun Facts:

- The word “orang-utan” comes from the Malayan language and means “forest man” or man of the woods”. Local indigenous people believed that these primates were different looking “wild” people who would not speak so that they would not be forced to work.*
- Orangutans are considered an “umbrella species”; if their home range and habitat are protected, many other species are automatically protected as well.
- Orangutans at the National Zoo are learning to use a symbol-based language on computers; their “dictionary” has 70 abstract symbols in seven different categories.**

SOURCES:

Rio Grande Zoo Education Guidebook 2007

www.animalinfo.org/species/primate/pongpygm

nationalzoo.si.edu/Animals/Primates/Facts/FactSheets/Orangutans

**nationalzoo.si.edu/Animals/ThinkTank/ResearchProjects/OLP

orangutancentre.org/about=orangutan

*Philadelphia Zoo Docent Council Red Book

COMMONLY ASKED QUESTIONS

What are some of the characteristics of Primates?

- Tend toward active, diurnal, arboreal existence
- Emphasis on sight rather than smell

- Grasping hands rather than claws
- Fruit rich diet

The Great Apes are part of The Order of Primates. Who do they include and any thing specific about The Great apes?

Include: Chimpanzees, Orangutans, Gorillas, and Bonobos. (Lesser apes are the gibbons)

- Larger and better developed cerebrums than lower primates:
- Don't have tails
- Highly intelligent and may be the closest relative to humans rather than chimps.

What is special about the Orangutan? (characteristics)

- Movement consists of climbing and walking through large trees and swinging from branch to branch
- Morning and late afternoon are peak activity times- rest period around the middle of the day.
- Diet is mostly fruit.
- Social structure is small groups or solitary. (Unlike other great apes)
- VERY QUIET—(Unlike other great apes)
- Exception is LONG CALL of the adult male—serves to claim territory. Hear it from ½ mile away.
- Orangutans are from south east Asia from the islands of Sumatra and Borneo (ours are from Sumatra)
- Endangered due to loss of habitat
- Extremely intelligent
- *Orang* means person, *hutan* means forest= *Man of the forest*. Derived from Malay and Indonesian word

Why does the orangutan looks so different from the other great apes?

Unlike the other great apes (gorillas, chimpanzees and bonobos), the orangutan is mostly arboreal, whereas the other apes are mainly terrestrial. The bright reddish brown hair is unique among apes. The orangutan is built to spend most of its life in the trees. Their feet are almost like hands, their arms and hips are very flexible, and their arms can stretch as wide as 8 feet or longer than their bodies. When on the ground they walk on all fours using their palms or their fists, unlike other apes who walk on their knuckles.

Why does orangutan behavior seems so much like human behavior?

Orangutans are highly intelligent with the ability to reason and think. This large, gentle red ape is one of our closest relatives, sharing 97% of their genetic

structure DNA with humans. Orangutans are thought to have developed cultural behaviors and practices that vary regions and populations and are maintained and transmitted through social learning, long considered only a human trait. Some populations make sounds such as “raspberries” or “kiss-squeaks” using leaves to amplify the sound, others use flat hands, others ball their hands into trumpet-like fists. Among some populations this behavior was rare or absent. Cultural behaviors such as these require strong mother-infant bonds and close interaction within a group. Orangutan offspring stay with their mothers until they are 7 or 8 years old.

Threats to Great Ape Survival

The main threats to great ape survival are habitat loss, degradation and clearance for agriculture; forest fires and hunting. Further risks include diseases, human conflict and mineral extraction.

***Deforestation**

The world's rainforests could completely vanish in 100 years at the current rate of deforestation. The forest perpetuates the water cycle by returning water vapor back into the atmosphere. The loss of trees drives climate change. The soil dries up without the protection from the trees. Many forest lands can quickly become barren deserts.

Logging

Logging for tropical timber and clearing for agriculture are an everyday occurrence in Great Ape habitats. In West and Central Africa, logging has increased in the 1990's due to the depletion of Southeast Asian forest. For example by 2000, 76% of Cameroon's forests have been logged or allocated for logging.

Farming

Fertile soils are scarce, human populations are sparse and land use practices are highly consumptive of space and forest. Local farmers are used to clearing and burning whole hillsides for one or two harvests before moving on. This is known as slash and burn agriculture. Often after the harvests the land is scared and no longer viable.

Roads

Roads provide access to mining and logging companies; habitats are broken up creating barriers in the forests causing fragmentation. The roads facilitate both the transport of bushmeat and access by poachers and settlers. They bring in invasive species and diseases.

Hunting Bushmeat

Logging and mining operations move into the forests without food. They supply their camps by hunting the local wildlife in the rainforests. The logging roads create new opportunities for poachers to reach the apes. Bushmeat is becoming commercial-catering to many people around the world. By 2000, the illegal bushmeat trade was estimated to be worth nearly one billion dollars annually. It is estimated by the conservation group Endangered Species International that 300 gorillas are sold each year in the Republic of Congo. Hunters sometimes make more money selling live babies to the illegal pet trade.

Disease

Apes are susceptible to the same disease as humans. Any form of contact with humans or human debris can transmit disease to apes. Ebola virus is lethal for and is one of the causes of population decline.

***The Palm Oil Crisis in a Nut Shell**



Demand from overseas consumers for luxury resources such as tropical timber and cheap staples like palm oil contribute to habitat loss. Palm oil is found in thousands of everyday products from food to cleaning agents, even in cosmetics and personal hygiene products. It is currently the most productive source of biodiesel fuel. Conversion

of forests into oil palm (*Elaeis guineensis*) plantations is the primary cause of permanent rainforest loss in both Indonesia and Malaysia. Indonesia's rainforests are the second largest in the world after the forests of Brazil. Unfortunately, over the years Indonesia has lost approximately 80% of its original forest habitat and continues to lose 6.2 million acres a year. According to a recent article in the conservation journal *Oryx* 1000 orangutans are lost in Sumatra each year; in Borneo the number is probably even higher. The sudden increase in palm oil use had led to the clearing of Indonesia's tropical forests to create monoculture oil palm plantations. Studies in Malaysia and Indonesia have shown that between 80 to 100% of native species cannot survive in oil palm monocultures. These countries produce 87% of the world's palm oil and the combined harvested area for oil palm had reached 6.5 million hectares. The tree cutting and burning of the forest to clear land for plantations is causing climate changes. It is responsible for 15% of global carbon emissions - some 140 million metric tons of carbon emitted to the atmosphere. In 2004, there were such serious fires that the resultant haze was threatening human health in Borneo's cities. As a result of fires, Borneo's orangutan population may have been reduced by 33% in just one year. Large numbers of orangutans were killed by people while fleeing the flames and smoke during and after the fires. The displacement of apes may have precipitated a Shockwave of 'refugee crowding in adjacent forests causing stress and possible starvation. This reduces their breeding success. Orangutans are unable to survive long term in heavily logged forests. Their survival as a wild species depends on the abundance and variety of mature fruit trees found only in the primary tropical rain forest of Borneo and Northern Sumatra. With deforestation, orangutans are distributed among small and isolated subpopulations in fragmented islands of habitat. There are now few locations where a viable population of at least 250-500 individuals inhabits a forest area that is both protected in law and potentially protectable in practice. Slow-moving, slow breeding orangutans, which depend largely on fruit, are very vulnerable to rapid forest clearance whether for plantations or logging. There are signs that local governments in some areas are beginning to work more with local people to protect their forests. Hopefully these efforts will continue. We can help by being conscience consumers. We need to choose to purchase sustainable products and avoid those with palm oils. Make sure to look at the ingredients lists on products to see if palm oil is used. Also review the list of other names palm oil is associated with. Lastly, choose products that are sustainably certified. Together we can reduce the demand for palm oil and in return save the orangutans.

Sources:

Orangutan Foundation International www.orangutan.org

World Atlas of Great Apes and their Conservation by UNEP World Conservation 2005

Time Magazine *Palm Oil Plantation Equal Deforestation* by Bryan Walsh March 7, 2011

Euphemisms for palm oil used on labels

In food products

cocoa butter equivalent (CBE)

cocoa butter substitute (CBE)

palm olein

palm stearine

vegetable oil

Non-foods products

arachamide mea

capric triglyceride

caprylic triglyceride

caprylyl glycol

cetyl alcohol

elaeis guineensis

emulsifier (some can be palm oil derived)

epoxidized palm oil (uv cured coatings)

ethylene glycol monostearate

ethylhexyl palmitate

fatty alcohol sulphates

glyceryl stearate

isopropyl

isopropyl palmitate

mono-glycerides of fatty acids

myristoyl

octyl palmitate

oleyl betaine

palm kernel oil

palm oil

palm olein

palm stearine

palmitoyl oxostearamide

palmitoyl tetrapeptide-3

peg-100 stearate

peptide complex

saponified elaeis guineensis

sleareth

sis

sodium laurel

sodium laureth sulfate

sodium laureth sulphate

sodium lauroyl lactylate

sodium lauroyl lactylate

sodium lauryl

sodium lauryl sulfate

How Can I Use my Purchasing Power to Help Orangutans?



Orangutans face extreme challenges in the wild, and it is easy for people living far away to feel unable to make a difference.

However, in the case of orangutans, you CAN make a difference! As the world's largest consumers, Americans have the power to vote with their wallets. This year, make a purchase that benefits an orangutan!

Clothing made from fibers such as bamboo or wool

Clothing and products made from rayon come from a wood pulp found in Indonesia –

which is now the world's largest producer of rayon – and the rayon mills are huge consumers of the rainforests' trees and other resources.

Candy with a conscience

Palm oil is increasingly being used as a food ingredient and cooking oil in a variety of baked goods and candies. Huge tracts of the Borneo and Sumatra rainforests – where orangutans once flourished – have been cut down to plant palm oil trees. Most palm oil products should be avoided in your local store; however products containing sustainably-produced palm oil (orangutan friendly!) are increasingly available.

Sustainable shopping guide for candy can be found at:

<http://www.cmzoo.org/docs/halloweenGuide2012.pdf>

Picture frames or furniture made of rainforest-friendly wood

By avoiding illegally or unsustainably harvested wood, you protect the orangutans' habitat. Avoid wood products that say, "Made in Indonesia," and look for products labeled with the Forest Stewardship Council (FSC) stamp or labeled as SmartWood.

Bath and beauty products with a conscience

Palm oil is also included in many personal care products. Choose those which use sustainably harvested palm oil or no palm oil at all. You'll look good and feel good!

Adopt an orangutan

Many conservation organizations are dedicated to protecting wild orangutans, rehabilitating orangutans and caring for those that cannot live in the wild. Places to start:

www.orangutan.com

www.Redapes.org

www.nmbioparksociety.org

Join a conservation group

Give the gift that lasts all year with a membership to a group dedicated to wildlife and habitat conservation.

Gifts that educate

Books, videos, magazine subscriptions, and puzzles are just a few ideas. Spark an imagination this year, and encourage a loved one to learn more about orangs.

Downloadable shopping guides are available on The Cheyenne Mountain Zoo website: <http://www.cmzoo.org/conservation/palmOilCrisis/>

Additional information on palm oil can be found at www.rspo.org.

