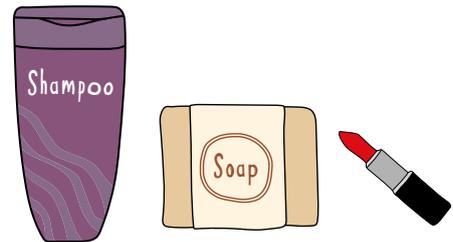
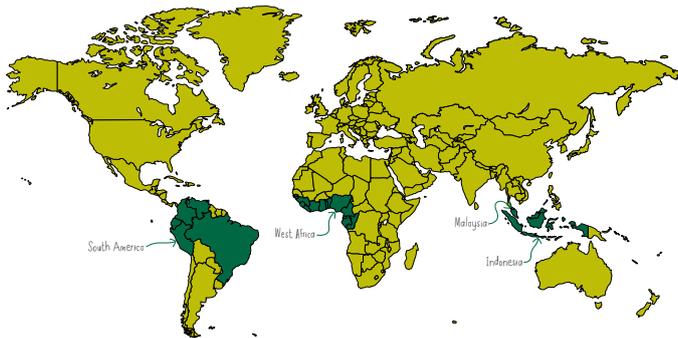


SECTION: SUMMARY OF SUSTAINABLE PALM OIL (A)

What is palm oil?

Palm oil is the most widely used vegetable oil around the world and it is a huge part of the national economies for Indonesia and Malaysia (approximately 85% of the world's palm oil is currently grown here). Oil palm tree plantations are now widespread in West Africa (where the oil palm tree originates from) and also South America.



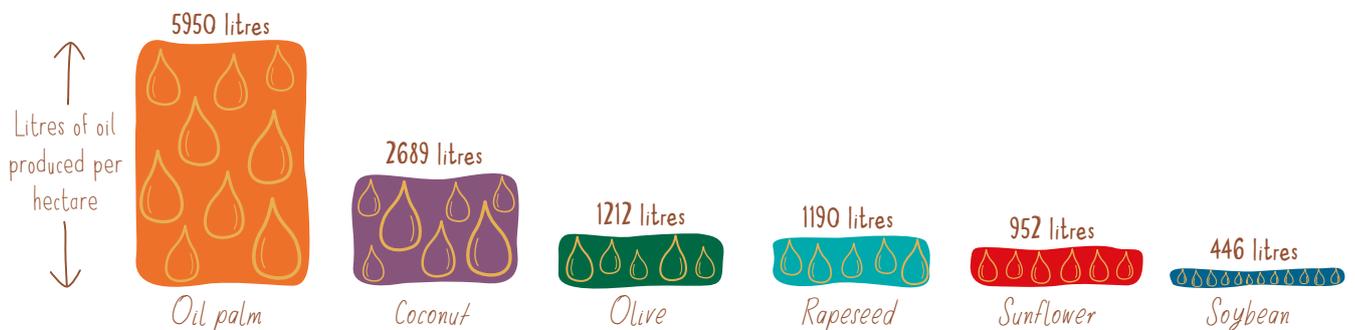
Palm oil can be found in over 50% of our store cupboard products such as chips, crackers, batter and can also be found in non-food items such as: toothpaste, soap, shampoo and a large majority of different cosmetics.

How is palm oil 'disguised' on products?

Palm oil is often named on labels as 'vegetable oil'. However, it is also often called any of these names:

Elaeis Guineensis, Etyl Palmitate, Glyceryl, Hyrated Palm Glycerides, Octyl Palmitate, Palm Fruit Oil, Palm Kernel Oil, Palm Kernel, Palm Stearine, Palmate, Palmitate, Palmitic Acid, Palmitoyl Oxostearamide, Palmitoyl Tetrapeptide-3, Palmityl Alcohol, Palmolein, Sodium Kernelate, Sodium Laureth Sulfate, Sodium Lauryl Lactylate/Sulphate, Sodium Lauryl Sulfate, Sodium Palm Kernelate, Stearate, Stearic Acid, Vegetable Fat or Vegetable Oil.

The oil palm produces five times more end oil product per hectare than any other type of vegetable oil. This high yield makes it extremely valuable and it is known colloquially as 'green gold'.



www.nestle.com/sites/default/files/asset-library/documents/media/statements/oil-usage-for-biofuel-production.pdf

Palm oil production has had a lot of negative press because in recent years it has predominantly been grown in the areas where rainforests would have been. The palm oil and palm kernel oil is harvested from the palm fruit and nuts of these trees. These rainforests were the homes for wildlife such as



orangutans who eat many varieties of different fruits, vegetables, leaves, bark, flowers and insects. Unsustainable Oil palm tree plantations have drastically reduced the variety of food available due to the removal of the forest or land to create farm land for oil palm trees. In a rainforest the forest trees would create a canopy layer over the river tributaries running through the forest. This means you would get an area of forest, then the river and then area of forest. Animals like the orangutans, monkeys and sun bears could transfer from one area of forest to the other by crossing through the canopy layer using the layer as a 'bridge'. However, as hardwood tree farming and palm oil production has grown, the trees are too young and therefore too short to be able to form a canopy bridge for the animals to cross over rivers. In addition, if there is only a palm oil plantation on the other side of the river there little point in the animals crossing in the first instance due to the reduced biodiversity. One of the main reasons for this is that oil palm plantations are planted as a mono culture, so unlike many other plants/crops they are not grown with other plants or trees around them. The result of this farming approach is that when forest or land is cleared to produce palm oil, nothing other than oil palm is planted in that area so it drastically reduces the area available for wildlife, the biodiversity of the area and the sources of food for the wildlife.



So, unsustainable oil palm tree plantations make life a lot harder for the animals, but it doesn't have to be that way. Sustainable Palm Oil is a successful and viable alternative which helps protect the animals and habitats.



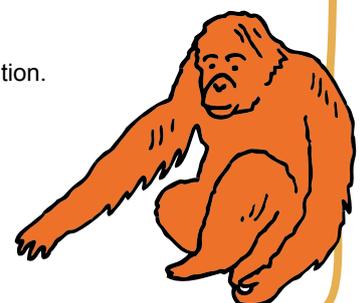
How can life for the rainforest animals be improved by farming certified sustainable palm oil (CSPO)?

Sustainable palm oil allows for conscientious production of palm oil, while providing a more diverse environment for the rainforest animals. Sustainable palm oil plantations involve many criteria, one of those is the owners of the plantations making sure they have 'forest corridors' either adjacent to their land or sometimes even through their land so that animals can move from one patch of forest to the other. It also includes that they have to monitor the animals that are passing through, maximising the production of the palm oil in that area so that they don't have to continue to clear fell areas of forest. Those things help maintain the biodiversity and maintain the numbers of species in the area that are supporting sustainable palm oil plantations. So, at Chester Zoo we are assisting our colleagues working out in the field to create wildlife corridors. So sustainable palm oil is the way to go!

What do plantation owners need to do to be certified as a sustainable palm oil plantation?

For plantations to be certified as a sustainable palm oil plantation by the Round Table (RSPO), plantation owners need to show:

- No rainforest was deforested for that plantation in the first place;
- No significant wildlife on the original land was impacted by the plantation;
- They must take good care of its workers, giving them fair pay, fair hours and work breaks;
- Workers with families must get free nursery and schooling for their children;
- Any wildlife found in the plantation area must be cared for;
- Wildlife corridors should be created on the site which connects to some natural habitat by planting a continuous corridor of trees within it which allow the wildlife to still move through or around the plantation.



How is Chester Zoo helping promote sustainable palm oil?

Palm oil is a complex issue. When sustainably managed, palm oil has a place in providing an economic future for people while still allowing wildlife space to survive and thrive. Chester Zoo is working together with its partners in South East Asia to protect the incredible rainforests that are being threatened by deforestation for agriculture, mainly oil palm production. Chester Zoo is supporting sustainable palm oil plantations, who make a commitment to re deforestation.

Chester Zoo is also working with HUTAN, one of their longest standing conservation partners. They have a flagship project, the Kinabatangan Orangutan Conservation Project (KOCP). This project has been running since 1998, in Malaysian Borneo. The KOCP's vision is for orangutan and other threatened species to thrive in mosaic landscapes where forest and agriculture must co-exist.

You can read more about HUTAN here:

www.chesterzoo.org/news/coexistence-for-orang-utans-agriculture/

www.chesterzoo.org/news/your-go-orange-donations-are-helping-orangutans/

How can schools get involved to help the animals in the rainforests?

Manufacturers, retailers and traders from all over the world have made commitments to removing deforestation from their supply chains. We need actions of school children who represent the next generation to spread the word about the importance of consumers looking for products which have been produced sustainably. Children could learn about the impact of unsustainable palm oil and take conservation action and help spread the word to consumers, shops and restaurants about the importance of buying sustainable palm oil.

Useful Definitions:

Certified Sustainable Palm Oil (CSPO)

Certified sustainable palm oil (CSPO) and palm kernel oil (CSPKO) is produced by palm oil plantations which have been independently audited and found to comply with the globally agreed environmental standards devised by the Roundtable on Sustainable Palm Oil (RSPO). These stringent sustainability criteria relate to social, environmental and economic good practice.

Roundtable on Sustainable (RSPO)

The Roundtable on Sustainable Palm Oil (RSPO) is a multi-stakeholder initiative dedicated to promoting sustainable production of palm oil worldwide. RSPO's more than 1000 members include palm growers, oil processors, traders, consumer goods manufacturers, retailers, investors and social and environmental NGOs. Founding members include WWF, Unilever, and the Malaysian Palm Oil Association (MPOA).

You can read more about Chester Zoo's Palm Oil Statement here:

www.chesterzoo.org/news/sustainable-palm-oil-statement/

So, unsustainable oil palm tree plantations make life a lot harder for the animals, but it doesn't have to be that way. Sustainable Palm Oil is a successful and viable alternative which helps protect the animals and habitats.

