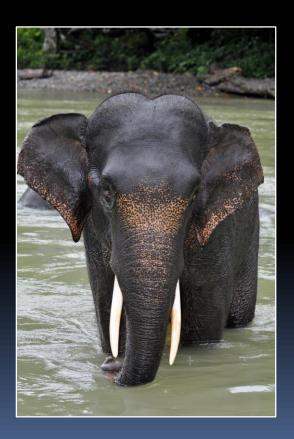
Palm Oil Awareness

Sharing resources for a unified message Learn what you can do!







What is Palm Oil?

- A commonly used vegetable oil
 - Found in about half of manufactured products at the store
 - More palm oil is produced and consumed every year than any other vegetable oil
- In many food, cleaning, self-care and beauty products...and more!





What is Palm Oil?

- A plant native to Africa that grows well in tropical climates
- It is a crop introduced to Indonesia and Malaysia, not part of the rainforest
- An important part of the economy in Indonesia and Malaysia

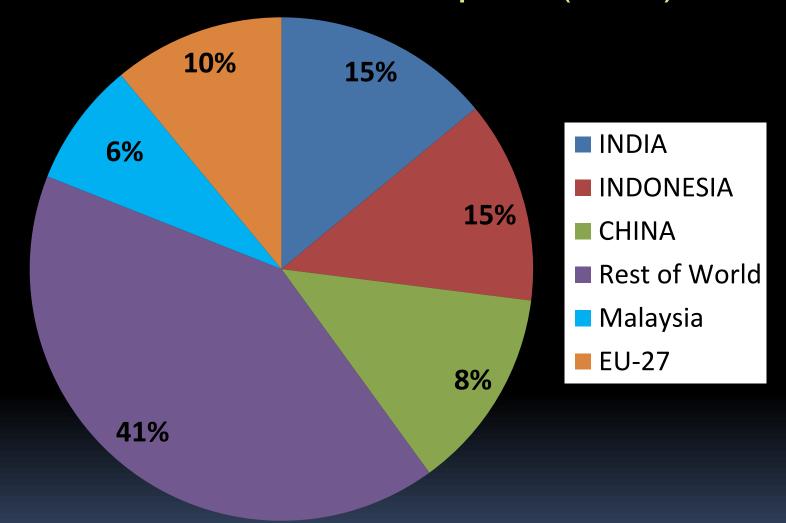


Where is the Majority of Palm Oil Grown?

Indonesia and Malaysia



Global Palm Oil Consumption (2016)



The U.S. consumes about 2% of the palm oil produced worldwide.
Source: USDA August 2017

Fresh Fruit Bunch (FFB) ready for harvest



- When palm plants are young & small the FFBs are easy to harvest
- When palms are 40 feet tall it takes a pole saw and incredible skill to harvest
- After a palm tree is ~25 years old it is too difficult to harvest (too tall!)





- After they are harvested the fresh fruit bunches need to reach a mill within 24 hrs in order to produce the best yield (the maximum amount of oil extraction).
- Each FFB weighs 40-60 lbs
- Each oil palm produces 1-3
 FFBs per month.

(FFB = fresh fruit bunch)



- Palm kernel oil is made from the white center
- Palm oil is made from the mesocarp, the yellow fruit flesh.

What's the Problem?

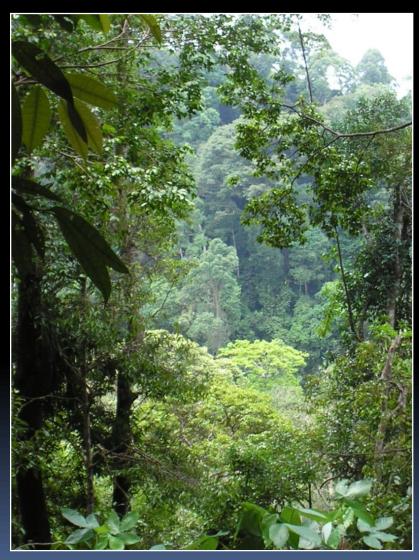


 Rainforest and peat land (swampy areas with special carbon-rich soil) in Indonesia and Malaysia are being cleared to make way for new palm oil plantations

What's the Problem?

 Some companies clear excess forest to get more money for wood and paper products





What's the Problem?







- Many species live in these rainforests, including orangutans, gibbons, elephants, rhinos, tigers, clouded leopards, hornbills, sun bears and more
- Massive amounts of carbon are released into the atmosphere through deforestation, fires and draining peat swamps

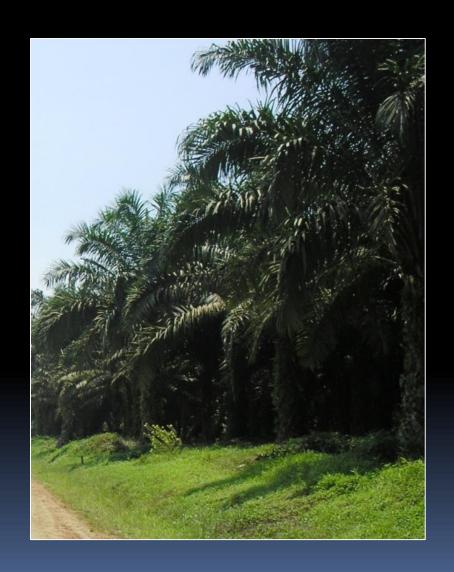
What's the End Goal?



- Healthy populations of orangutans, elephants, rhinos, tigers and other threatened and endangered species
- Save habitat
- Sustainable palm oil is the norm

What's the Solution?

- Produce palm oil sustainably
- Support the Roundtable on Sustainable Palm Oil (RSPO)
- Increase demand for RSPO certified sustainable palm oil that is deforestation-free



What is the RSPO?



An international multistakeholder initiative transforming markets to make sustainable palm oil the norm





RSPO Principles

8 PRINCIPLES FOR GROWERS TO BE RSPO CERTIFIED

Commitment to transparency

- 1
- 5 Environmental responsibility and conservation of natural resources and biodiversity

2 Compliance with applicable laws and regulations



Responsible consideration of employees, and of individuals and communities affected by growers and mills

- \$ 3 Commitment to long-term economic and financial viability
- 4
- Responsible development of new plantings

- ÷
- 4 Use of appropriate best practices by growers and millers



Commitment to continuous improvement in key areas of activities

Source: RSPO

What Makes Sustainable Palm Oil Sustainable?

- No HCV (high conservation value) land was cleared since 2005
 - HCV assessments prior to clearing land
 - Endangered species
 - Land of cultural value to indigenous people
- Conflicts with wildlife are handled appropriately
- If HCV land was cleared by an RSPO member, there is a compensation mechanism in place
- Land is reused; dead plants replaced right away

What Makes Sustainable Palm Oil Sustainable?

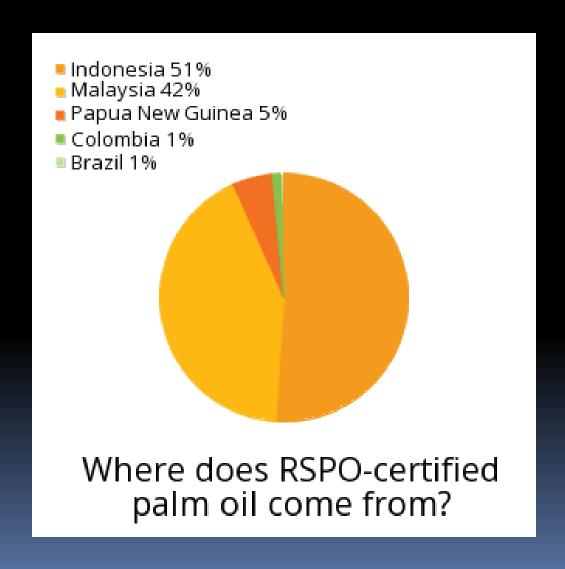
Fertilizer is used
 properly –producing high
 yields means less land
 needed



- Pesticides/herbicides are used responsibly
- Better treatment of workers & families
- GHG (green house gas) monitoring

Global CSPO Production

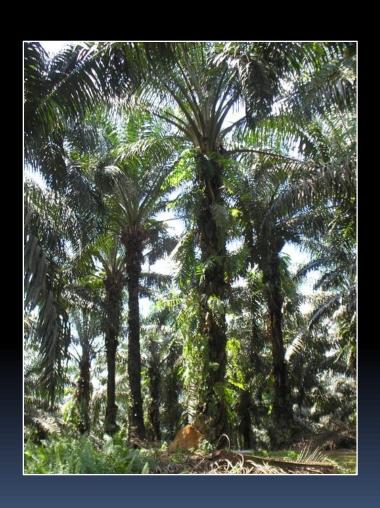
CSPO is certified sustainable palm oil



Source:

RSPO 2017

Challenges of the RSPO



- Certifying small holders is difficult
- Uptake not high enough
- Conservationists say criteria too lax
- Growers say criteria too strict



Challenges of the RSPO Certifying Small Holders

- Definition of Small Holder: Farmers controlling 50 hectares or less of cultivated land.
- Indonesia is home to about 3 million smallholders, Malaysia has about 150,000.

(source: RSPO 2014)



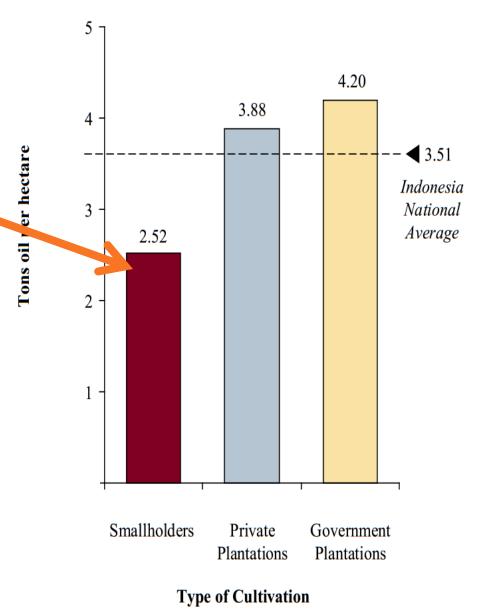
Productivity in Indonesia

*Small holders
vs.
Private Plantations
vs.
Government Plantations

* Certification can increase productivity

Image Source: *Improving the Livelihoods of Palm Oil Smallholders* by Greenpalm

Figure 2: Palm Oil Productivity in Indonesia



Challenges of the RSPO

Making it Possible for More Small Holder Plantations to be Certified



- Over 40% of all palm oil plantations are owned by small- holders
- Privately owned plantations or co-ops; harder to reach them; fewer resources
- Lower wages
- Lower yield
- The RSPO is working on solutions

Challenge of the RSPO: Uptake of CSPO is Too Low

- Low uptake does not push sustainability forward
- Growers put time, money, effort into getting a plantation certified



- These growers should be paid a little more (the premium) for the CSPO
- The uptake of CSPO is less than 50%:
 - Less than half of CSPO is sold at a fair price, which fairly compensates some growers.
 - Over half of the CSPO is sold at the lower non-certified price. This does not encourage growers to certify more plantations.

Challenge of the RSPO Uptake of CSPO is Too Low

- Manufacturers and retailers who are members of the RSPO must submit time-bound plans – when they will be using 100% CSPO
- If CSPO is available they should use/purchase it INCREASE UPTAKE
 - This will drive demand for CSPO
 - If there is more demand and they are fairly compensated, growers will certify more plantations
- This is where zoos and consumers can really make a difference:

If zoo guests support RSPO member companies, and demand companies use CSPO, UPTAKE WILL INCREASE.

Challenge of the RSPO Stakeholders Have Different Perspectives

- Conservationists say criteria are too lax
- Growers say criteria are too strict
- However Different stakeholders coming together to make decisions, moving the industry to sustainability...



...that is the purpose of the Roundtable on Sustainable Palm Oil

Why Support the RSPO





- It is the only multi-stakeholder entity working toward sustainable palm oil
- It is the most effective vehicle to reach sustainability
- The RSPO is making measurable progress

RSPO Making Progress - Trademark

RSPO Trademark / Logo tells consumers that the product contains certified sustainable palm oil

846 Trademark Licenses Issued by RSPO





Source: RSPO 2019

Why Support the RSPO It is Making Progress

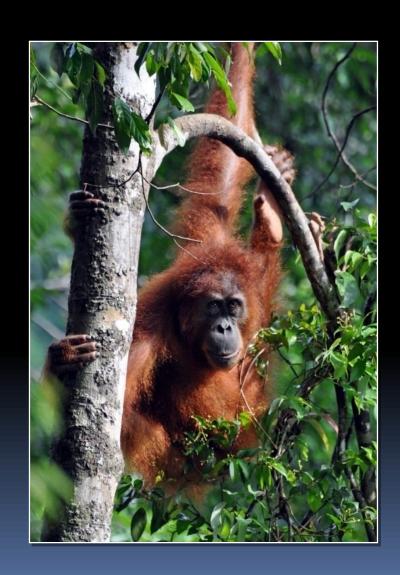


0% of palm oil produced in 2007 was RSPO certified

Image Source: RSPO 2019

Why Zoos Should Join the RSPO

- Zoos can change the industry...using the RSPO as the vehicle!
- Propose resolutions
- Demand traceability



RSPO Members (E-NGO)

- **WWF**
- FFI (Fauna & Flora International)
- Wetlands International
- BORA (Borneo Rhino Alliance) And many more...
- **Conservation International**
- **NWF** (National Wildlife Federation)
- Oran Utan Republik
- World Resources Institute
- Orangutan Land Trust

- SOS (Sumatran Orangutan Society)
- Global Environment Centre

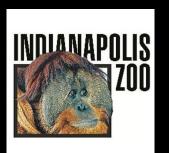
The RSPO has strong support and is helping the industry move towards sustainable palm oil.

Zoos and Aquariums that are Members of the RSPO











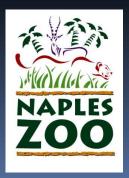




















Why a Palm Oil Boycott is not a good solution





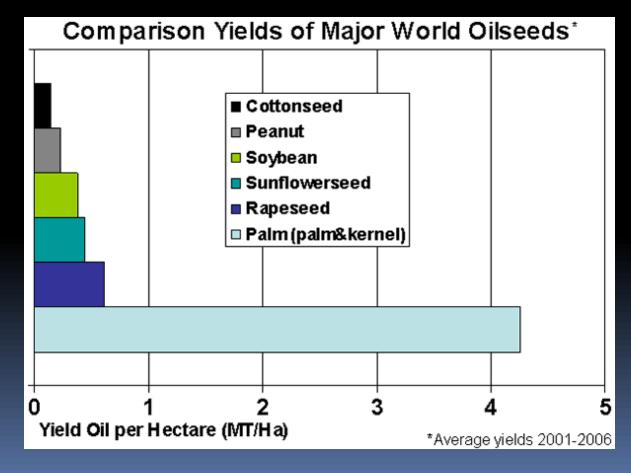
- Indonesia and Malaysia struggle with poverty... developing countries need some way to drive their economies
- We realize that palm oil would be replaced with another crop that could cause worse environmental problems (like soy in the Amazon)
- Indonesia, China and India are the world's largest consumers of palm oil

Why Not Boycott Palm Oil?

**Palm oil plants can produce 4-10 times more oil per parcel of land than other oil crops

**Less land is needed to produce more oil

Source: USDA
Foreign Agricultural
Service –Commodity
Report Dec 2007



Palm Oil Names & Derivatives

**It is next to impossible to really know if a product is palm oil free.

1.	arachamide mea	16.	isopropyl palmitate	34.	sodium lauryl sulfate
2.	capric triglyceride	17.	mono-glycerides of fatty	35.	sodium lauryl sulfoacetate
3.	caprylic triglyceride	4.0	acids	36.	sodium palm kernelate
4.	caprylyl glycol	18.	myristoyl	37.	sodium palmate
5.	cetyl alcohol	19.	octyl palmitate	38.	sodium stearate
6.	cocoa butter equivalent (CBE)	20.	oleyl betaine	39.	sodium laureth sulfate
		21.	palm kernel oil	40.	40. sodium laureth sulphate
7.	cocoa butter substitute (CBE)	22.	palm oil	41.	sodium lauroyl lactylate
8.	elaeis guineensis	23.	palm olein	42.	stearamidopropyl dimethyl
	9	24.	palm stearine		amine
9.	emulsifier (some can be palm oil derived)	25.	palmitate	43.	steareth-2
10.	epoxidized palm oil	26.	palmitoyl oxostearamide	44.	steareth-20
	(UV cured coatings)	27.	palmitoyl tetrapeptide-3	45.	steareth-21
11.	ethylene glycol monostearate	28.	peg-100 stearate	46.	stearic acid
12.	ethylhexyl palmitate	29.	peptide complex	47.	vegetable oil
		30.	saponified elaeis guineensis	48.	vitamin A palmitate
13.	fatty alcohol sulphates	31.	sls		
14.	glyceryl stearate	32.	sodium lauryl		
15.	isopropyl	33.	sodium lauryl sulphate		
		55 .	Sodium lauryi Sulphate		

Messaging for Zoos & Aquariums

For 9 years Cheyenne Mountain Zoo has facilitated a palm oil awareness survey of US Zoos

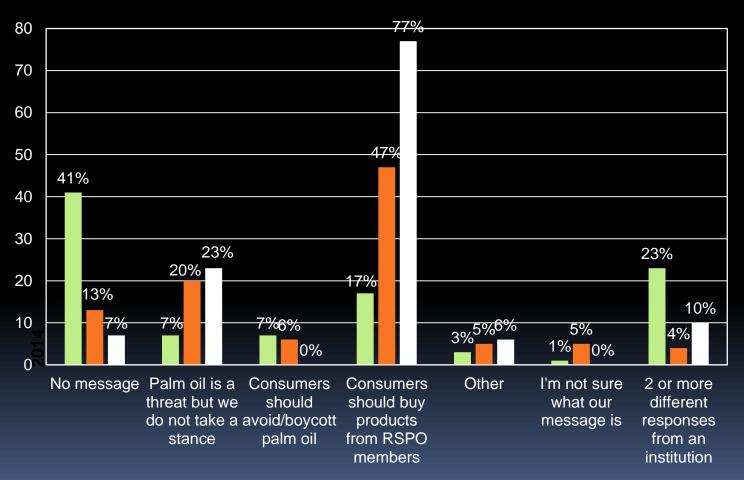




Results are showing that progress is being made toward a unified message about sustainable palm oil.

Consistent Messaging is Key

Palm Oil Messaging in N. America Zoos 2011, 2014, 2019





Share sustainable palm oil messages & action steps on social media



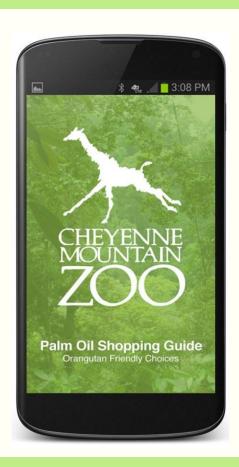






Promote CMZ's Palm Oil Shopping Guide App

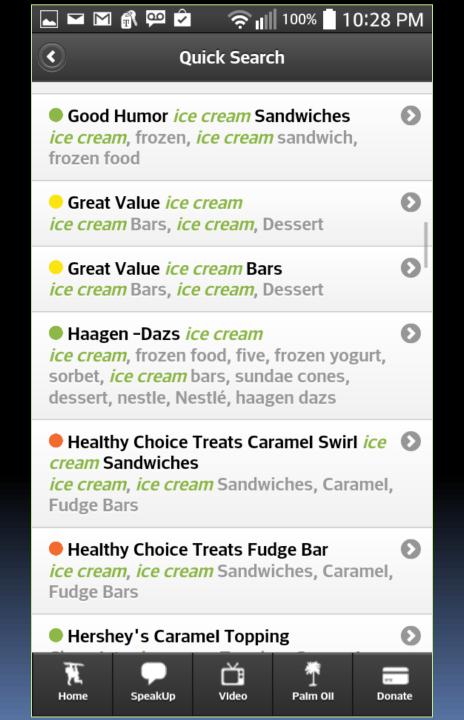




App Rating System

- Green = Excellent
- Yellow = Good
- Orange = NeedsImprovement

All green, yellow and orange choices are manufactured by RSPO member companies



Give guests a way to take action

- Hand out app cards at your zoo
 - Available at cmzoo.org/palmoil





Join the RSPO be part of the solution with your voting power





Boiling Down a Complex Issue

- Tell guests about palm oil
- 'Elevator Speech' Ideas
- Download at cmzoo.org/palmoil

Make a Difference for Wild Orangutans

When you talk about Palm Oil...

Whether you are an animal keeper interpreting during an orangutan demonstration, a concerned consumer using your shopping guide at the grocery store, or a conservationist chatting with your friends and family, a lot of us struggle to convey a brief, concise message about palm oil awareness. If the issue sounds too complicated, or the message dwells on "doom and gloom", or you exceed their attention span, the audience often tunes out and walks away. Here are some ways you can summarize the issue, and if people want to know more you have opened the door for them to ask questions.

'Elevator Speech' Ideas

Version One:

The biggest threat to wild orangutans is deforestation due to agriculture. The main crop that is planted after the forest is cleared is palm oil. Palm oil is used in so many foods we eat and products we use every day, like cookies, crackers, toothpaste and lotion. Palm oil is a crop that is really important to the economy and people in Indonesia and Malaysia, but it can be produced in a responsible way without cutting down the rainforest -this is called sustainable palm oil. The easiest thing you can do to help wild orangutans is to support the companies in this shopping guide -they are making the commitment to use sustainable palm oil. (~38 seconds)

Version Two:

I am about to tell you a really easy way you can help wild orangutans...do you want to know what it is? Use this shopping guide next time you go to the store. The biggest threat to wild orangutans is deforestation due to agriculture, but you can make a big difference depending on what you buy at the store. So many things we use and eat contain palm oil but this crop can be grown without cutting down the rainforest...when it is produced responsibly it is called sustainable palm oil. By using this shopping guide you are supporting sustainable palm oil and helping many species that live in the rainforests of Indonesia and Malaysia -like orangutans! (-37 seconds)

Points you can add:

- If your favorite companies or brands are not listed on the shopping guide —write them an email and ask them to join the RSPO, the Roundtable on Sustainable Palm Oil.
- Here are a few examples of what makes a plantation sustainable. A sustainable plantation does not use HCV (high conservation value) land or forests. It also can't harm endangered animals that wander onto the property, they have to use pesticides more responsibly, and their workers get better treatment.
- The companies in this shopping guide have made commitments to use 100% certified sustainable
 palm oil by a certain date (often 2015), but they're not all using 100% sustainable palm oil yet. And
 we want them to! So we can write letters to encourage them to —and have a letter/petition printed,
 or direct them to http://cmzoo.org/conservation/palmOilCrisis/

These are just suggestions to help you give a quick summary. Volunteers are great for handing out shopping guides while you are talking. At the end of your talk it is good to say 'I'll be here for a few minutes if anyone has questions, thanks and have a great day!' And sometimes a few people will stick around and get engaged in more detailed palm oil conversation. Read your audience, don't be pushy.

Answering Questions

- This link posts some Frequently Asked Questions (and Answers) about palm oil: http://cmzoo.org/conservation/palmOilCrisis/palmOilFAQ.asp
- Don't be afraid to admit that you're not sure and direct them to CMZoo's website, or anyone can email <u>palmoil@cmzoo.org</u> with questions.



Rev. Feb 2013



Engage Guests

The grocery game shows guests that using a shopping guide can help them make wildlife-friendly choices at the store.





Available at cmzoo.org/palmoil

Give Guests a Way to Take Action



- Letter writing (staff & guests):
 - Companies that are not RSPO members -ask them to join
 - Use only 100% segregated certified sustainable palm oil (CSPO) that is deforestationfree in your products.
 - Ask companies to use RSPO's trademark

Give Kids a Way to Take Action

- Kids can color & sign at your facility or event.
 Collect letters and mail them to the companies.
- Download at cmzoo.org/palmoil

Date:

Campbell Soup Company 1 Campbell Place Camden, NJ 08103-1701

Dear Campbell Soup Company,

Please join the Roundtable on Sustainable Palm Oil (RSPO) and use only 100% segregated certified sustainable palm oil that is **deforestation-free**. I like Goldfish crackers and Campbell's soups but want to know that making these foods does not hurt orangutans, elephants, rhinos, tigers and other animals in SE Asia.

Age:

Sincerely,

Name:

City & State:



What Zoos Can Do Connect Guests with Animals



 Create trading cards of animals at your zoo, affected by the palm oil crisis.

Engage Guests - Animal Art



Animal art has potential on many levels.

- It is animal enrichment, animal training, we can talk about tooluse in zoos and in the wild.
- It is also great for fundraising; proceeds can go to help wild orangutans.
- With every piece of animal art you sell, you can include information about sustainable palm oil and action steps.

Connect Guests, Share Messages & Action Steps Shows, Demos & Keeper Talks



Palm Oil Awareness Tool Kit Get tools to move sustainable palm oil forward

Visit cmzoo.org/palmoiltoolkit





- Find your own ways to engage guests
- Share your ideas and tools with the zoo community

Imagine the Difference We Can Make if Zoos & Aquariums Work Together





Great resource: WWF Scorecard

Website: cmzoo.org/palmoil