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THE SOUTHWEST'S
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(Spa day. Repeat.)

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RENEGING ON RESOLUTIONS?

DUMPLINGS, BURRITOS, & CAKE POPS AWAIT!









HIGH ABOVE BORNEO, IT'S EASY TO GET A sense of how palm oil has changed both the world's economy and its landscape. This enormous tropical island—shared by Brunei, Indonesia, and Malaysia—has been so relentlessly burned, bulldozed, and logged for palm production over the decades that unruly rainforests are rapidly giving way to countless rows of neatly planted oil palm trees. Near the coast, a perpetual haze of acrid smoke hangs in the air as bio-diverse peat swamps are set ablaze to create still more cropland, releasing enormous quantities of carbon dioxide. Meanwhile, the Kinabatangan River, formerly clear and pristine, has become a coffee-colored ribbon of pollution carrying the endless debris of palm plantations out to sea.

And that's just a bird's eye view. Skirting the 348-mile-long Kinabatangan is a rich ecosystem of animal life, including orangutans, proboscis monkeys, pygmy elephants, otters, pigs, and crocodiles, not to mention the 90 species of fish who call the contaminated river home. Each of these animals is impacted by the loss of habitat and environmental destruction brought on by successive waves of clear-cutting, oil-palm tree cultivation, and palm-oil production. Making matters worse is that logging for palm oil enables animal poachers and traders access to areas that were once remote. Other parts of Indonesia, including the island of Sumatra, are impacted as well, along with Colombia, Papua New Guinea, and a considerable portion of Malaysia; indeed, oil palms (not to be confused with coconut palms) can flourish just about anywhere that heat and regular rainfall combine, meaning environmentally fragile regions across the tropic zone have become hot spots of deforestation.

Palm oil is a huge agricultural commodity, currently produced in 42 countries, with Indonesia and Malaysia accounting for 90 percent of the market. Other top producers include Thailand, Cambodia, and Nigeria. According to the US Department of Agriculture, the total world production of palm oil is 50.6 million metric tons a year—and growing. Palm oil has crept into a bewildering variety of everyday products, from margarines to detergents to cosmetics. It's estimated that no less than half of all household goods are made with palm ingredients. The push for palm got

a big boost in 2006, when the US government required food labels to disclose a product's trans fat content, considered a potent promoter of heart disease. Many manufacturers switched to palm oil, since it's trans fats-free; being high in saturated fat, however, it still contributes to LDL (or "bad") cholesterol, just as trans fat does. Palm oil is even used as a source of renewable energy, the demand for which is helping fuel the market for this versatile plant. All this begs the question: should we be consuming palm oil?

Wildlife on the Edge

Recognized by their reddish-brown hair and uniquely expressive faces, Asia's only great ape once ranged from China in the north to as far south as the island of Java. Already decimated by illegal logging, the zoo industry, and the pet trade, orangutan numbers have dwindled so drastically that they are now found only on Borneo and nearby Sumatra living in scattered bits of degraded forests—isolated bastions that are quickly vanishing. "Palm-oil production is taking their habitat," says Hollis Burbank-Hammarlund of Orangutan Foundation International. "Where they live, where they nest, where they reproduce—all of it is being transformed into mega-plantations."

Not only are these gentle animals losing their treetop dwellings, but because they face starvation, they seek food in developing palm farms and are subsequently persecuted as an agricultural pest. Workers may try to scare the animals away, but there's a much grimmer response, says Burbank-Hammarlund. "Orangutans are beaten, their limbs are cut off with machetes, hot oil is thrown at them, they're burned. It's gruesome. Often mothers are killed on or near plantations and their babies are taken for the pet trade. This is all

are frequent victims of poisoning by plantation workers. Fewer than 3,000 of these pachyderms remain in the wild. Even more critically endangered are Sumatran tigers, who depend on the dense vegetation of forests for their survival and are dying at a startling rate, with only about 400 of the cats left. The Malayan tapir—an elusive species that remained largely

66Especially in the last decade, there has been a meteoric rise in global demand for palm oil.**99**

illegal, but it happens." There have even been ugly whispers that some palm-oil companies were paying bounties on dead orangutans—a rumor that proved to be tragically true when two Indonesian plantation workers were arrested in 2011 for allegedly killing at least 20 primates. (The pair were convicted last year and sentenced to eight months in prison, while the men who ordered the killings were fined about \$3,000.) Graver still is the routine practice of clearing land with fire. Not only do these infernos kill orangutans, but palm-oil companies have been accused of forcing some fleeing apes back into the flames. All told, one recent study estimates that of the 50,000 or so surviving orangutans, more than 2,500 are killed every year in relation to palm oil.

Likewise, with their voracious appetites and taste for oil-palm fronds and fruit, Sumatran elephants are considered pests and unknown until recently—is disappearing as quickly as the rainforests, while sun bears, bearded pigs, and rhinos are also suffering the effects of habitat displacement.

Human Rights & Wrongs

Reports from around the globe paint a distressing portrait of palm-oil expansion, with land disputes, violent conflicts, and even murders carried out on behalf of palm-oil barons. "It's a modern-day gold rush," says Laurel Sutherlin of the Rainforest Action Network, a nonprofit with one of the most active and visible campaigns against palm oil. "Especially in the last decade, there has been a meteoric rise in global demand for palm oil. It's a very lucrative crop." As a result, he says, greedy governments are handing over millions of acres in Indonesia, Malaysia, and elsewhere to palm-oil interests, who then

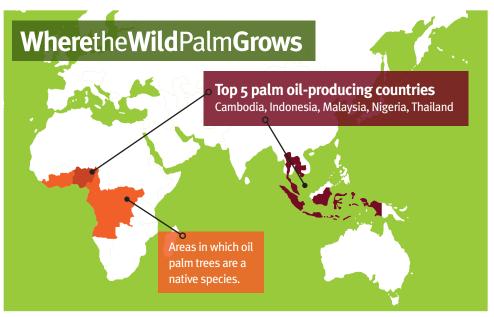




Palm fruit is trucked through the farm.

Harvested palm awaits transport to the processing plant.





evict the communities living there. "You've got tens of millions of indigenous people whose customary land rights have no legal standing. So they are having their future and livelihood literally swept out from underneath them by rampant palm expansion."

Implicated in the controversy are agriculture giants like Archer Daniels Midland, Cargill, and Monsanto, which have had to face tough questions about human-rights violations in their palm-oil supply chain. One of the most notorious examples occurred in 2011, when Indonesian police, allegedly

contracted by Wilmar—the world's largest palm-oil processing company and one of Cargill's suppliers—ejected 83 families from three Sumatran settlements at gunpoint, then destroyed their homes. "It's an egregious violation," says Sutherlin. "In many cases, you have people who have lived somewhere for many generations and live off that land, practicing agro-forestry and sustainable agriculture. Then, without any avenue to have their rights heard, they find themselves on the other end of a bulldozer. If they protest, special forces are brought in to suppress them."

Amadeo Payla, a Filipino farmer, never even had time to protest. "The guards came one day and pointed their guns at me," he says. "I watched helplessly while they sprayed my banana and coconut trees with chemicals, so that they eventually died. They uprooted my cassava crops. Then they bulldozed a part of my land to make way for the palm-oil plantation." Such confrontations ignore the rights of local inhabitants to Free, Prior, and Informed Consent, which has been affirmed in international human-rights law, including the UN's United Declaration on the Rights





Workers sort palm fruit for quality before it is processed.

The fruit must be cooked before the oil can be extracted.

ShrinkingSpecies

Most people equate palm-oil production with the destruction of orangutan habitats, but the apes aren't alone in having been either displaced or killed to make room for palm plantations. Here is a glimpse at the victims of palm.





Bearded pig

Malayan tapir





Orangutan

Proboscis monkey





Rhinoceros

Sumatran elephant





Sumatran tiger

Sun bear

of Indigenous Peoples. Like Payla, people in many communities say the first they knew about a proposed plantation was when the bulldozers arrived. Lacking official land titles, local communities are frequently left with no choice but to accept oil-palm farming. Even more troubling are stories of security forces on palm-oil payrolls storming into villages and killing indigenous people, many of whom have refused to relinquish their land. Human-rights organizations and media outlets alike have recently reported such murders in Colombia, Guatemala, Honduras, Indonesia, and the Philippines. Rahmat Ajiguna, delegate of a 2012 international fact-finding mission investigating complaints of land grabbing, says that in 2011, Indonesian state authorities murdered 22 people involved in land struggles with palm-oil companies: "When they resisted, they were killed."

Already the world's biggest producer of palm oil, Indonesia plans to double its output over the next few years to 47 million tons, or 80 percent of the international market. Watchdog groups say the country's domination of the palm-oil trade has involved not only violence, but slavery. Indeed, the US Department of Labor now includes palm oil from Indonesia and Malaysia on its "List of Goods Produced by Child Labor or Forced Labor" (anything made by a person younger than 15, or who does his job because not doing it will result in some form of punishment). RAN documented the stories of two Sumatran villagers, ages 14 and 21, who were lured to a plantation in Indonesia by a representative of palm-oil company Kuala Lumpur Kepong with promises of good jobs. Instead, they were forced to spray fertilizer without any protection from the chemicals and were kept locked up at night in a work camp under guard. The two managed to escape after two months without pay. It was another black eye for Cargill—the biggest importer of palm oil into the US—since KLK is one of its suppliers.

Ecological Disaster

There is an unquestionable link between palm-oil production and a range of environmental consequences. The industry's liberal use of toxic fertilizers and chemicals—including some 25 different pesticides, herbicides, and insecticides—contaminates the soil, groundwater, and crops, while tons of untreated palm oil-mill effluent is discharged into rivers and seeps into the terrain. And as fires flatten the timbered landscape to make

way for those meticulous rows of oil palm trees, villages and neighboring countries alike are shrouded in a smoky fog, forcing people to wear masks.

These blazes aren't just devastating to animals and humans, they are choking the lungs of our planet, says Holly Gibbs of the University of Wisconsin-Madison's Center for Sustainability and the Global Environment. "Tropical forests store more than 340 billion tons of carbon, an amount equivalent to 40 years of global fossil-fuel emissions, so it is critical to protect these globally important carbon stores." Perhaps the most urgent example is Tripa, a peat swamp forest capping the northern tip of Sumatra. Harboring one of the highest orangutan densities in the world, Tripa is blanketed in a spongy accumulation of organic matter (peat) that is composed almost entirely of carbon. Despite a moratorium on land clearing in the area, fires set by palmoil companies raged across the peat forest throughout much of 2012, releasing perhaps a million tons of carbon dioxide. In 2007 the palm-oil frenzy made Indonesia the thirdlargest emitter of greenhouse gases in the world (after China and the United States) and the country remains one of the top 20 emitters today.

Not all peat swamps are burned, but even the act of draining them and clearing the trees has dire results. "The worst thing you can do, in respect to greenhouse gases, is to have deforestation on peatland forests," says Tim Killeen, a conservation scientist. "It's way worse than that of normal forests, which is bad

GirlScouts **Look**Out

The leaders of the future are already concerned about palm oil's devastating effects on orangutans. In 2011, Rhiannon Tomtishen and Madison Vorva were honored with a Brower Youth Award—a recognition of North American youngsters working for environmental advocacy—for their campaign that aimed to remove palm oil from Girl Scout Cookies. Though the ubiquitous treats still contain palm oil, Girl Scouts of the United States of America do work with growers who are members of the Roundtable on Sustainable Palm Oil.

enough." Actually, peat forests are the single most essential terrestrial ecosystem for the regulation of greenhouse gases. According to the Global Environment Centre, peatlands, while covering only three percent of the planet, contain twice as much carbon as the world's forest biomass, storing and sequestering atmospheric carbon for thousands of years.

Seeking Solutions

Unsettled by all the criticism, in 2004, a consortium of palm-oil producers, food companies, and conservation groups established the Roundtable on Sustainable Palm Oil, which provides certification to companies that produce palm oil responsibly, all based on principles and criteria defined by the group. "These ensure that fundamental rights of previous land owners, local communities, plantation workers, small farmers, and their families are respected and fully taken into account; that no new primary forests or high conservation value areas have been cleared for palm-oil production since November 2005; and that mills and plantation owners minimize their environmental footprint," says Pamela Bons of the RSPO. "That's all greenwash," argues Sutherlin. Membership to the RSPO is based on dues and adherence to a loosely defined code of conduct—not production standards. To be certified by the RSPO as sustainable, companies must adhere to certain criteria, though Sutherlin finds those lacking, too. "[The RSPO] is the best game in town, but it has not yet been able to ensure that palm oil is not connected to species extinction and humanrights violations." In general, NGOs fault the RSPO for lacking real teeth. "The standards are commendable, but they're not enforceable," says OFI's Burbank-Hammarlund. "Also, palm oil is not traceable. It comes from so many different sources and is blended so that when it finally reaches a manufacturer, there's no way

to document if it's truly sustainable." Sutherlin agrees. "It's a shell game," he says. "You've got big companies that are buying from small holders or from subsidiaries that have murky connections to the parent company. They end up pouring all the palm oil into bulk vats and shipping it out of Malaysia."

One manufacturer, Dr. Bronner's, is sourcing its palm oil from West Africa—where oil palms are a native species. The maker of vegan bodycare products buys organically grown palm fruit from 300 small family farms in Ghana where no forests have been cleared. Meanwhile, Earth Balance, which uses palm oil in its plant-based spreads and nut butters, has been getting an earful from the public. "Forty percent of our customer feedback is people inquiring about palm," says company spokesperson Adriane Little. "But it's an essential ingredient to our buttery spreads and sticks, so we're doing everything possible to get the most sustainable palm we can." While she won't exactly spill the beans on productdevelopment plans, Little doesn't deny the company could be working on palm-free products to please ethical eaters. "I know it would satisfy a lot of consumers out there. It's definitely top of mind," she says. Earth Balance is also financially supporting OFI's efforts to rescue, rehabilitate, and protect hundreds of orangutans on Borneo.

One approach to sustainability could be to break the link between palm oil and deforestation, suggests Helen Buckland of the Sumatran Orangutan Society. "There are literally millions of hectares of non-forest land in Indonesia alone that are suitable for growing oil palms. All future expansion of plantations should be redirected onto these lands, of course also taking into account the rights and wishes of local communities and indigenous people."

Achieving a way to ethically produce one of the planet's most bitterly controversial

What'sinaName?

Scanning a product label for palm ingredients is a bit like the seek-and-find puzzle in *Highlights* magazine: you know what you're looking for, but it's well hidden. That's because palm oil can be listed under a wide variety of names. These include:

- ---- Elaeis guineensis
- ··· FP(K)O (Fractionated palm oil)
- ----- Glyceryl stearate
- ··· Hydrated palm glycerides
- ··· OPKO (Organic palm kernel oil)
- ··· Palmate
- ··· Palmitate
- PHPKO (Partially hydrogenated palm kernel oil)
- --- PKO (Palm kernel oil)
- --- Sodium dodecyl sulphate
- --- Sodium isostearoyl lactylaye
- --- Sodium laureth sulphate
- --- Sodium lauryl sulphate
- ··· Stearic acid

commodities may be the agricultural challenge of the decade. In the meantime, what do we drop into our shopping carts? If conscientious consumption means we avoid contributing to suffering, palm is clearly problematic. Becoming informed consumers, urging companies to adopt better practices or abandon palm oil all together, and working to repair the damage already done in the name of palm are what lie on the high road. Taking it won't be easy, but it offers a beautiful view of Borneo.

Mark Hawthorne makes palm-free margarine at home—at least for now. His new book, Bleating Hearts: The Hidden World of Animal Suffering, will be published later this year.

