Green Mission News

Jun 2011 Green Mission News

External Article Links:

- Farmer-Poet Wendell Berry on Mankind's Ecological Imprint (5 mins)
http://www.washingtonpost.com/national/poet-wendell-berry-on-mankinds-ecological-imprint/2011/05/04/AFySQBpF_video.html
Published on Thursday, May 5, 2011 by The Washington Post

- Regenerative Economy
www.greenconduct.com/news/tag/regenerative-economy/

- David Suzuki 'Force of Nature' lecture (60 minutes)
http://www.ovguide.com/movies_tv/force_of_nature_the_david_suzuki_movie.htm

- In Praise of the Non-GMO Project
http://www.responsibletechnology.org/blog/1267

- Say no to gmo's (rap, 4 minutes)
http://www.naturalnews.tv/v.asp?v=B459FF2B150FDF4651302A60993D9CF3

- Place-based Education Evaluation Collaborative
http://www.peecworks.org/PEEC/PEEC_Research/

- The Solar Highway of the Future:
http://www.wimp.com/solarhighways/
http://www.yert.com/video.php?post_id=3723954#SignTop

- How to Spot a GMO
http://www.citymarket.coop/blog/content/how-spot-gmo

- Baby male monkeys act more like female infants after BPA exposure in the womb
http://www.environmentalhealthnews.org/ehs/newscience/bpa-affects-male-infant-behaviors-in-monkeys

- GMO monkey passes jellyfish gene to offspring
http://www.newscientist.com/article/dn17194-gm-monkey-passes-jellyfish-gene-to-offspring.html

- VIDEO: Building the Green Economy: Green Water Infrastructure
http://www.greenforall.org/blog/building-the-green-economy-green-water-infrastructure

- "Identification of Flame Retardants in Polyurethane Foam Collected from Baby Products" www.greensciencepolicy.org.

- Organic Eggs Not Created Equal, Says New Scorecard
http://www.triplepundit.com/2011/05/organic-eggs-created-equal-new-scorecard/#

- The Solar Highway of the Future:
http://www.wimp.com/solarhighways/

- Tom Wright Interview Part One: Fundamentals Of Zero Waste
What is zero waste? Is it really zero? And what are the best practices being developed by companies pursuing a zero waste result?
www.triplepundit.com/.../tom-wright-interview-part-one-fundamentals-waste

- Deforestation – always silent yet devastating
http://www.thejakartapost.com/news/2011/04/09/deforestation-–always-silent-yet-devastating.html

- Germany's Nuclear phaseout by 2015 is possible
http://www.greenpeace.org/international/en/publications/reports/Germanys-Nuclear-phaseout-by-2015-is-possible/

- Decentralize, Grow Your Own, Buy Local.
https://foodfreedom.wordpress.com/tag/philip-bereano/

- GM Soy is neither Responsible nor Sustainable.
www.nongmoproject.org/2011/02/17/gm-soy-sustainable-responsible/

Full Length Articles Below:

# # #

Published on Thursday, May 5, 2011 by ClimateStoryTellers.org
Deep Green Resistance: Strategy to Save the Planet
by Derrick Jensen, Lierre Keith and Aric McBay
A black tern weighs barely two ounces. On bodily reserves less than a bag of M&Ms and wings that stretch to cover twelve inches, she'll fly thousands of miles, searching for the wetlands that will harbor her young. And every year the journey gets longer as the wetlands are desiccated for human demands. Every year the tern, desperate and hungry, loses, while civilization, endless and sanguineous, wins.

A polar bear should weigh 650 pounds. Her biological reserves may have to see her through nine long months of dark, denned gestation, and then lactation, giving up her dwindling stores to the needy mouths of her species' future. In some areas, the female's weight has dropped from 650 to 507 pounds.[1] Meanwhile, the ice has evaporated like the wetlands. When she wakes, the waters will stretch impassably opened, and there is no Abrahamic god of bears to part them for her.

The Aldabra snail should weigh something, but all that's left to weigh are their skeletons, bits of orange and indigo shells. The snail has been declared not just extinct, but the first casualty of global warming. In dry periods, the snail hibernated. The young of any species are always more vulnerable. In this case, the adults' "reproductive success" was a "complete failure."[2] In plain terms, the babies died and kept dying, and a species millions of years old is now a pile of shell fragments.

We are living in a period of mass extinction. What is your personal carrying capacity for grief, rage, despair? The numbers stand at 120 species a day.[3] That's 50,000 a year. This culture is oblivious to their passing, entitled to their every last niche, and there is no roll call on the nightly news.

We already have a name for the tsunami wave of extermination: the Holocene extinction event. There's no asteroid this time, only human behavior, behavior that we could choose to stop. Adolph Eichman's excuse was that no one told him that the concentration camps were wrong. We've all seen the pictures of the drowning polar bears. Are we so ethically numb that we need to be told this is wrong?

There are voices raised in concern, even anguish, at the plight of the earth, the rending of its species. "Only zero emissions can prevent a warmer planet," one pair of climatologists declared.[4] Or James Lovelock, originator of the Gaia hypothesis, who states bluntly that global warming has passed the tipping point, carbon offsetting is a joke, and that "individual lifestyle adjustments" are "a deluded fantasy."[5] It's all true. And self–evident. "Simple living" should start with simple observation: if burning fossil fuels will kill the planet, then stop burning them.

But that conclusion, in all its stark clarity, is not the one anyone's drawing, from the policy makers to the environmental groups. When they start offering solutions is the exact moment when they stop telling the truth, inconvenient or otherwise. Google "global warming solutions." The first paid sponsor, www.CampaignEarth.org, urges "No doom and gloom!! When was the last time depression got you really motivated? We're here to inspire realistic action steps and stories of success." By "realistic" they don't mean solutions that actually match the scale of the problem. They mean the usual consumer choices—cloth shopping bags, travel mugs, and misguided dietary advice—which will do exactly nothing to disrupt the troika of industrialization, capitalism, and patriarchy that is skinning the planet alive. But since these actions also won't disrupt anyone's life, they're declared both realistic and a success.

The next site offers the ever–crucial Global Warming Bracelets and, more importantly, Flip Flops. Polar bears everywhere are weeping with relief. The site's Take Action page includes the usual buying light bulbs, inflating tires, filling dishwashers, shortening showers, and rearranging the deck chairs.

The first non–commercial site is the Union of Concerned Scientists. As one might expect, there's no explanation points but instead a statement that "[t]he burning of fossil fuel (oil, coal,

and natural gas) alone counts for about 75 percent of annual CO2 emissions." This is followed by a list of Five Sensible Steps. Step #1 is—no, not stop burning fossil fuel—but "Make Better Cars and SUVs." Never mind that the automobile itself is the pollution, with its demands—for space, for speed, for fuel—in complete opposition to the needs of both a viable human community and a living planet. Like all the others, the scientists refuse to call industrial civilization into question. We can have a living planet and the consumption that's killing the planet, can't we?

The principle here is very simple. As Derrick has written, "[A]ny social system based on the use of nonrenewable resources is by definition unsustainable."[6] By definition, nonrenewable means it will eventually run out. Once you've grasped that intellectual complexity, you can move on to the next level. "Any culture based on the nonrenewable use of renewable resources is just as unsustainable." Trees are renewable. But if we use them faster than they can grow, the forest will turn to desert. Which is precisely what civilization has been doing for its 10,000 year campaign, running through soil, rivers, and forests as well as metal, coal, and oil. The oceans are almost dead, 90 percent of the large fish devoured, and the plankton populations are collapsing, populations which both feed the life of the oceans and create oxygen for the planet. What will we fill our lungs with when they are gone? The plastics with which that industrial civilization is replacing them? Because in parts of the Pacific, plastic outweighs plankton 48 to 1.[7] Imagine your blood, your heart, crammed with toxic materials—not just chemicals but physical gunk—until there was ten times more of it than you. What metaphor would be adequate to the dying oceans? Cancer? Suffocation? Crucifixion?

Meanwhile, the oceans don't need our metaphors. They need action. They need industrial civilization to stop destroying and devouring; failing that, they need us to make it stop.

Which is why we are writing this book.

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The truth is that this culture is insane. When Derrick asks his audiences, "Does anyone here believe that our culture will undergo a voluntary transformation to a sane and sustainable way of living?"—and he's asked it for years, all around the country—no one says yes. That means that most people, or at least most people with a beating heart, have already done the math, added up the arrogance, sadism, stupidity, and denial, and reached the bottom line: a dead planet. Some of us carry that final sum like the weight of a corpse. For others, that conclusion turns the heart to a smoldering coal. But despair and rage have been declared unevolved and unclean, beneath the "spiritual warriors" who insist they will save the planet by "healing" themselves. How this activity will stop the release of carbon and the felling of forests is never actually explained. The answer lies vaguely between being the change we wish to see and a hundredth monkey of hope, a monkey that is frankly more Christmas pony than actual possibility.

Given that the culture of America is founded on individualism and awash in privilege, it's no surprise that narcissism is the end result. The social upheavals of the 60s split along fault lines of responsibility and hedonism, of justice and selfishness, of sacrifice and entitlement. What we are left with is an alternative culture that offers workshops on our "scarcity consciousness," as if poverty were a state of mind and not a structural support of capitalism. This culture leaves us ill–prepared to face the crisis of planetary biocide that greets us daily with its own grim dawn. The facts are not conducive to an open–hearted state of wonder. To confront the truth as adults, not as faux–children, requires an adult fortitude and courage, grounded in our adult responsibilities to the world. It requires those things because the situation is horrific and living with that knowledge will hurt. Meanwhile, I have been to workshops where global warming is treated as an opportunity for personal growth, and no one but me sees a problem with that.

The alternative culture has encouraged a continuum that runs from the narcissistic to the sociopathic. Narcissists don't change. As one set of experts puts it, "Typically, as narcissism is an ingrained personality trait, rather than a chemical imbalance, medication and therapy are not very effective in treating the disorder."[8] Somewhere unarticulated, we all know that. And sociopaths can't change. We know that, too. Which is why no one raises a hand when Derrick asks whether the culture will voluntarily transition to a sustainable way of life.

The word sustainable serves as an example of the worst tendencies of the alternative culture. The word has been reduced to the "Praise, Jesus!" of the eco–earnest. It's a word where the corporate marketers, with their mediated upswell of green sentiment, meshes perfectly with the relentless denial of the privileged. It's a word I can barely stand to use because it's been so exsanguinated by the cheerleaders for the technotopic, consumer kingdom come. To doubt the vague promise now firmly embedded in the word — that we can have our cars, our corporations, our consumption, and our planet, too — is both treason and heresy to the emotional well-being of most progressives. But here's the question: Do we want to feel better or do we want to be effective? Are we sentimentalists or are we warriors?

Because this way of life—devouring, degrading, and insane—cannot continue. For "sustainable" to mean anything, we must embrace and then defend the bare truth: the planet is primary. The life–producing work of a million species are literally the earth, air, and water that we depend on. No human activity—not the vacuous, not the sublime—is worth more than that matrix. Neither, in the end, is any human life. If we use the word "sustainable" and don't mean that, then we are liars of the worst sort: the kind who let atrocities happen while we stand by and do nothing.

Even if it was theoretically possible to reach an individual or collective narcissist, it would take time. And time is precisely what the planet has run out of. Admitting that might be the exact moment that we step out of the cloying childishness and optimistic white–lite denial of so much of the left, and into our adult knowledge. And with all apologies to Yeats, in knowledge begins responsibilities. It's to you grown–ups, the grieving and the raging, that we address this book.
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Ninety–eight percent of the population will do nothing unless they are led, cajoled, or forced. If the structural determinants are in place for them to live their lives without doing damage—like if they're hunter–gatherers with respected elders—then that's what happens. If, on the other hand, the built environment has been arranged for cars, industrial schooling is mandatory, resisting war taxes will land you in jail, food is only available through giant corporate enterprises selling giant corporate degradation, and misogynist pornography is only a click away 24/7, well, welcome to the nightmare. This culture is basically conducting a huge Milgram experiment with us, only the electric shocks aren't fake—they're killing off the planet, species by species.

But wherever there is oppression there is resistance: that is true everywhere, forever. The resistance is built body by body from the other two percent, from the stalwart, the brave, the determined, who are willing to stand against both power and social censure. It is our thesis that there will be no mass movement, not in time to save this planet our home. That two percent in other times has been able to shift both the cultural consciousness and the power structures toward justice: Margaret Mead's small group of thoughtful, committed citizens. It's valid to long for a movement, no matter how much we rationally know that we're wishing on a star. Theoretically, the human race as a whole could face our situation and make some decisions—tough decisions, but fair ones, that include an equitable distribution of both resources and justice, that respect and embrace the limits of our planet. But none of the institutions that govern our lives, from the economic to the religious, are on the side of justice or sustainability. Most of

them, in fact, are violently on the side of capital–E Evil. And like with the individually destructive, these institutions could be forced to change. The history of every human rights struggle bears witness to how courage and sacrifice can dismantle power and injustice. It takes bravery and persistence, political intelligence and spiritual strength. And it also takes time. If we had a thousand years, even a hundred years, building a movement to transform the dominant institutions around the globe would be the task before us. But the earth is running out of time. The western black rhinoceros is definitely out of time. So is the golden toad, the pygmy rabbit. No one is going to save this planet except us.

So what are our options? The usual approach of long, slow institutional change has been foreclosed, and many of us know that. The default setting for environmentalists has become personal lifestyle "choices." This should have been predictable as it merges perfectly into the demands of capitalism, especially the condensed corporate version mediating our every impulse into their profit. But we can't consume our way out of environmental collapse: consumption is the problem. We might be forgiven for initially accepting an exhortation to "simple living" as a solution to that consumption, especially as the major environmental organizations and the media have declared lifestyle change our First Commandment. Have you accepted compact fluorescents as your personal savior? But lifestyle change is not a solution as it doesn't address the root of the problem. As Derrick has pointed out elsewhere, even if every American took every single action suggested by Al Gore it would only reduce greenhouse gas emissions by 21 percent.[9] Aric tells a stark truth: even if through simple living and rigorous recycling you stopped your own average American's annual one ton of garbage production, "your per capita share of the industrial waste produced in the U.S. is still almost 26 tons. That's 37 times as much waste as you were able to save by eliminating a full one hundred percent of your personal waste."[10]Industrialism itself is what has to stop. There is no kinder, greener version that will do the trick of leaving us a living planet. In blunt terms, industrialization is a process of taking entire communities of living beings and turning them into commodities and dead zones. Could it be done more "efficiently"? Sure, we could use a little less fossil fuel, but it still ends in the same wastelands of land, water, and sky. We could stretch this endgame out another twenty years but the planet still dies. Trace every industrial artifact back to its source—which isn't hard as they all leave trails of blood—and you find the same devastation: mining, clear cuts, dams, agriculture. And now tar sands, mountain top removal, windfarms (which might better be called dead bird and bat farms). No amount of renewables is going to make up for the fossil fuel or change the nature of the extraction, both of which are prerequisites for this way of life. Neither fossil fuel nor extracted substances will ever be sustainable: by definition they will run out. And both getting them and using them are literally the destruction of the planet. Bringing a cloth shopping bag to the store, even if you walk there in your global warming flip flops, will not stop the tar sands.

We have believed such ridiculous solutions because our perception has been blunted by some portion of denial and despair. And those are legitimate reactions. I'm not persuading anyone out of them. The question is, do we want to develop a strategy to manage our emotional state or to save the planet?

And we've believed in these lifestyle solutions because everyone around us insists they're workable, a collective repeating mantra of "renewables, recycling" that has dulled us into belief. Like Eichmann, no one has told us that it's wrong.

Until now. So this is the moment when you will have to decide. Do you want to be part of a serious effort to save this planet? Not a serious effort at collective delusion, not a serious effort to feel better, not a serious effort to save you and yours. But an actual strategy to stop the destruction of everything worth loving. If your answer feels as imperative as instinct, then you

already know it's long past time to fight. After that, the only question left is: how? And despite everything you've been told by the Eichmanns of despair, that question has an answer. They have insisted that there is no answer, but that's the lie of cowards. Every system of power can be fought—they're only human in the end, not supernatural, not sent by god. Industrial civilization is in fact more vulnerable than past empires, dependent as it is on such a fragile infrastructure of pipelines and overhead wires, on binary bits of data encoding its lifeblood of capital. If we would let ourselves think it, a workable strategy is obvious, and in fact is not very different from the actions of partisan resisters across history.

So, will you think it—that one word: resistance? Will you notice that they've come for our kin of polar bears and black terns, who are right now being herded into the cattle cars of industrial civilization? Will you join the others who are yearning to action? The train can be derailed, the tracks ripped up, the bridge blown down. There is no metaphor here, as any General Officer could tell us. There is a planet being murdered, and there are also targets that, if taken out relentlessly, could stop it. So think "resistance" with all your aching heart, a word that must become our promise to what is left of this planet. Gather the others: you already know them. The brave, smart, militant, and, most of all, serious, and together take aim. Do it carefully, but do it.

Then fire for all your worth.

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[10] Jensen, Derrick, and Aric McBay. What We Leave Behind. New York: Seven Stories, 2008.

[**Note for readers**: This essay is an excerpt from the book Deep Green Resistance: Strategy to Save the Planet (New York: Seven Stories Press, April 2011). We'd like to thank the authors and the publisher for preparing this excerpt for ClimateStoryTellers.org.]

Activist, philosopher, teacher, and leading voice of uncompromising dissent, Derrick Jensen holds degrees in creative writing and mineral engineering physics. His books include What We Leave Behind with Aric McBay; Endgame volumes 1 and 2; As the World Burns with Stephanie McMillan; A Language Older Than Words; and The Culture of Make Believe. Derrick Jensen has been called the philosopher poet of the environmental movement and was named one of Utne Reader's "50 Visionaries Who Are Changing Your World".
Lierre Keith is a writer, small farmer, and radical feminist activist. She is the author of two novels, as well as The Vegetarian Myth: Food, Justice, and Sustainability, which has been called "the most important ecological book of this generation." She's also been arrested six times. She lives in Humboldt County, California.

Writer, activist, and small–scale organic farmer Aric McBay works to share information about community sufficiency and off–the–grid skills. He is the author of Peak Oil Survival: Preparation for Life after Gridcrash and What We Leave Behind with Derrick Jensen. He is creator of In the Wake: A Collective Manual–in–progress for Outliving Civilization.

# # #

How safe is soy?

By E - The Environmental Magazine

May 7, 2011

Americans today spend upwards of $4 billion yearly on soy food products. Although the versatile soybean provides many health benefits, some 90 percent of the U.S. crop is grown using genetically modified seeds, engineered to withstand repeated dousing with Monsanto's herbicide, glyphosate (popularly known as RoundUp). (Media credit/Timothy Valentine via Flickr)

Food products made with soy have enjoyed great popularity in the U.S. and elsewhere in recent years. Two decades ago, Americans spent $300 million a year on soy food products; today we spend over $4 billion. More and more adults are substituting soy—a great source of protein—for meat, while a quarter of all baby formula contains soy instead of milk. Many school lunch programs nationwide have added soy-based veggie burgers to their menus, as have countless restaurants, including diners and fast food chains.

And there are hundreds of other edible uses of the legume, which now vies with corn for the title of America's most popular agricultural crop. The U.S. Food and Drug Administration promotes the inclusion of soy into other foods to cut down on heart attack risk. Clinical studies have shown that soy can also lower the risk for certain types of breast and prostate cancer.

But there may be a dark side to soy's popularity and abundance. "Many of soy's health benefits have been linked to isoflavones—plant compounds that mimic estrogen," reports Lindsey Konkel in Environmental Health News. "But animal studies suggest that eating large amounts of those estrogenic compounds might reduce fertility in women, trigger premature puberty and disrupt development of fetuses and children." But before you dump out all your soy foods, note that the operative phrase here is "large amounts" which, in laboratory science, can mean amounts substantially above what one would consume in real life.

Also at issue is that upwards of 90 percent of the U.S. soybean crop is grown using genetically modified (GM) seeds sold by Monsanto. These have been engineered to withstand repeated dousing with the herbicide, glyphosate (also sold by Monsanto and marketed as RoundUp). According to the nonprofit Non GMO Project, this allows soybean farmers to repeatedly spray their fields with RoundUp to kill all weeds (and other nearby plant life) except for the soybean plants they are growing.

The U.S. government permits the sale and consumption of GM foods, but many consumers aren't so sure it's OK to eat them—given not only the genetic tinkering but also the exposure to so much glyphosate. Due to these concerns, the European Union has had a moratorium on GM crops of all kinds since 1998.

The fact that genetically modified soy may be present in as much as 70 percent of all processed food products found in U.S. supermarkets means that a vast majority of Americans may be putting a lot of GM soy into their systems every day. And not just directly via cereals, breads and pasta: Some 98 percent of the U.S. soybean crop is fed to livestock, so consumers of meat, eggs and dairy are indirectly ingesting the products of scientific tinkering with unknown implications for human health.

Since GM soy has only been around and abundant for less than a decade, no one yet knows for sure what the long term health effects, if any, will be on the populations of countries such as the U.S. that swear by it. Natural foods stores like WholeFoods are your best bet for finding non-GM foods of all sorts.

CONTACTS: Environmental Health News, www.environmentalhealthnews.org; Non GMO Project, www.nongmoproject.org.
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also: http://www.reuters.com/article/2011/05/12/idUS215930907320110512

Published on Monday, May 9, 2011 by The Guardian/UK
Renewable Energy Can Power the World,
Says Landmark IPCC Study
UN's climate change science body says renewables supply, particularly solar power, can meet global demand
by Fiona Harvey
Renewable energy could account for almost 80% of the world's energy supply within four decades - but only if governments pursue the policies needed to promote green power, according to a landmark report published on Monday.

The Intergovernmental Panel on Climate Change, the body of the world's leading climate scientists convened by the United Nations, said that if the full range of renewable technologies were deployed, the world could keep greenhouse gas concentrations to less than 450 parts per million, the level scientists have predicted will be the limit of safety beyond which climate change becomes catastrophic and irreversible.
Investing in renewables to the extent needed would cost only about 1% of global GDP annually, said Rajendra Pachauri, chairman of the IPCC.
Renewable energy is already growing fast – of the 300 gigawatts of new electricity generation capacity added globally between 2008 and 2009, about 140GW came from renewable sources, such as wind and solar power, according to the report.
The investment that will be needed to meet the greenhouse gas emissions targets demanded by scientists is likely to amount to about $5trn in the next decade, rising to $7trn from 2021 to 2030.
Ramon Pichs, co-chair of one of the key IPCC working groups, said: "The report shows that it is not the availability of [renewable] resources but the public policies that will either expand or constrain renewable energy development over the coming decades. Developing countries have an important stake in the future – this is where most of the 1.4 billion people without access to electricity live yet also where some of the best conditions exist for renewable energy deployment."
Sven Teske, renewable energy director at Greenpeace International, and a lead author of the report, said: "This is an invitation to governments to initiate a radical overhaul of their policies and place renewable energy centre stage. On the run up to the next major climate conference, COP17 in South Africa in December, the onus is clearly on governments to step up to the mark."
He added: "The IPCC report shows overwhelming scientific evidence that renewable energy can also meet the growing demand of developing countries, where over 2 billion people lack access to basic energy services and can do so at a more cost-competitive and faster rate than conventional energy sources. Governments have to kick start the energy revolution by implementing renewable energy laws across the globe."

The 1,000-page Special Report on Renewable Energy Sources and Climate Change Mitigation (SRREN) marks the first time the IPCC has examined low-carbon energy in depth, and the first interim report since the body's comprehensive 2007 review of the science of climate change. Although the authors are optimistic about the future of renewable energy, they note that many forms of the technology are still more expensive than fossil fuels, and find that the production of renewable energy will have to increase by as much as 20 times in order to avoid dangerous levels of global warming. Renewables will play a greater role than either nuclear or carbon capture and storage by 2050, the scientists predict.

Investing in renewables can also help poor countries to develop, particularly where large numbers of people lack access to an electricity grid.

About 13% of the world's energy came from renewable sources in 2008, a proportion likely to have risen as countries have built up their capacity since then, with China leading the investment surge, particularly in wind energy. But by far the greatest source of renewable energy used globally at present is burning biomass (about 10% of the total global energy supply), which is problematic because it can cause deforestation, leads to deposits of soot that accelerate global warming, and cooking fires cause indoor air pollution that harms health.

There was disappointment for enthusiasts of marine energy, however, as the report found that wave and tidal power were "unlikely to significantly contribute to global energy supply before 2020". Wind power, by contrast, met about 2% of global electricity demand in 2009, and could increase to more than 20% by 2050.

As with all IPCC reports, the summary for policymakers – the synopsis of the report that will be presented to governments and is likely to impact renewable energy policy – had to be agreed line by line and word by word unanimously by all countries. This was done at Monday's meeting in Abu Dhabi. This makes the process lengthy, but means that afterwards no government or scientist represented can say that they disagree with the finished findings, which the IPCC sees as a key strength of its operations.

The launch of the report is streamed on the IPCC web site.

# # #

Published on Saturday, May 14, 2011 by YES! Magazine

Keepers of the Seeds

How Native farmers and gardeners are working to preserve their agricultural heritage.

by Winona LaDuke

For 14 years, Caroline Chartrand, a Metis woman who recently traveled from Winnipeg, Canada, to the 8th annual Great Lakes Indigenous Farming Conference, has been looking for the heritage seeds of her people. It is believed that in the 1800s, the Metis grew some 120 distinct seed varieties in the Red River area of Canada. Of those, Caroline says, “We ended up finding about 20 so far.”

(Photo courtesy of Edward Gerkhe)

In Canada, three-quarters of all the crop varieties that existed before the 20th century are extinct. And, of the remaining quarter, only 10 percent are available commercially from Canadian seed companies (the remainder are held by gardeners and families). Over 64 percent of the commercially held seeds are offered by only one company; if those varieties are dropped, the seeds may be lost.

That’s the reason Caroline and about 100 other indigenous farmers and gardeners—along with students and community members—gathered in March on the White Earth reservation in Northern Minnesota to share knowledge, stories, and, of course, seeds.

In Canada, three-quarters of all the crop varieties that existed before the 20th century are extinct.

A recent article by a prominent Canadian writer suggested that agriculture in Canada began with the arrival of Europeans. Caroline had to ask her, “What about all that agriculture before

then?" Caroline is a committed grower in the effort to recover northern Ojibwe corn varieties that once grew l00 miles north of Winnipeg—the northernmost known corn crop in the world. "That's some adaptable corn," said one of the conference participants said. "And," added Betsy McDougall of Turtle Mountain, "We Ojibwes, Metis, and Crees must have been really good farmers."

Indigenous farmers from the Winnebago reservation in Nebraska shared their struggles with genetically modified organisms (GMOs) encroaching on their fields, threatening to alter and potentially sterilize open-pollinated corn. While native corn varieties are richer in protein and much more resilient to climate change, they are not immune to GMO contamination. The advice shared amongst farmers was to eat from the edges and save seed from the middle, where corn is least likely to be affected by cross-pollination.

Despite the challenges, native farmers are having success in preserving the resilient crops that sustained their ancestors.

"Those seeds are the old ways. They gave our ancestors life for all those years," said Frank Alegria, Sr. The son of migrant farm workers, Frank has been gardening since he could walk and farming on the Menominee reservation in Wisconsin since he was sixteen. Now an elder, he continues to grow native varieties, including an 850-year-old squash variety found in an archaeological dig near the Wisconsin border.

Deb Echohawk told the story of the sacred corn seeds of the Pawnee. By combining efforts with the descendants of settlers who live in the traditional Pawnee homelands in Nebraska, the Pawnee are recovering varieties thought to be lost forever. Deb and others have been formally recognized as keepers of the seeds.

John Torgrimson, executive director of Seed Savers Exchange, the nation's largest non-governmental seed bank, talked about the organization's humble beginning as a campout by a small group of committed individuals in Decorah, Iowa. More than 35 years later, they now preserve and grow out over 25,000 varieties of unique vegetables, fruits, grasses, and even a heritage cow breed at their 890 acre Heritage Farm.

Likewise, the White Earth Land Recovery Project, together with North Dakota State University, is working with a number of tribal members and local farmers to grow out five or six corn varieties adapted for the region, including white, pink, and black varieties. One farmer chuckled as he mentioned seeing animals strut past the more abundant GMO corn to feast on the native variety.

One of the outcomes of the conference was a working group that will plan a regional seed library. At the table were tribal members from White Earth, Red Lake, Leech Lake, Bad River, Menominee, Standing Rock Lakota, the Winnebago of Nebraska, and other reservations, as well as the Pawnee tribe's keeper of seeds and the executive directors of Seed Savers Exchange and Seeds of Diversity (Canada). Many others joined the discussion, including a Midwest coordinator for USDA's Sustainable Agriculture Research and Education Program, local allied growers, representatives from University of Minnesota, and various tribal colleges.

Winona LaDuke is a contributing editor to YES! Magazine and an author and activist who writes extensively on native and environmental issues. Her most recent book is Recovering the Sacred. She is an Anishinaabekwe (Ojibwe) enrolled member of the Mississippi Band Anishinaabeg who lives and works on the White Earth Reservations

# # #

http://www.tgdaily.com/general-science-brief/55827-swiss-researcher-shows-natural-breeding-better-than-gmos

Swiss researcher shows natural breeding better than GMOs
Posted on May 9th 2011 by Chris Nova
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A Swiss researcher has developed a new apple_that is resistant to disease, appealing to the palate, and easy to grow, all without using genetic modification.

According to Natural News, it took Swiss orchardist and researcher Markus Kobelt twenty years of careful research and development to come up with the new apple variety. The RedLove apple is said to be "sweet, tangy and delicious."

For a long time, researchers from other food establishments have been trying to create a GM apple that has more nutrients, that is more resistant to disease and pests, and attractive to growers and consumers. However, Kobelt did it first with his non-GM variety, which he was able to create using natural breeding methods and cross-pollination techniques.

Amazingly he didn't have to use any GM to beat the companies who usually do a lot of gene splicing to make new varieties of crops. This means that the RedLove apple has none of the serious health risksthat many GM varieties do. It's a big win for natural agricultural methods.

"These varieties of new apple have been created through non-GE (genetically engineered) techniques which is fantastic," said Claire Bleakley from GE Free NZ in Food and Environment, a non-profit organization working to raise awareness about the dangers of genetically modified organisms (GMOs). "It cannot be logical to spend millions of taxpayers' dollars and research resources on a red GE apple we know could have dangers to the environment and people health and is simply not acceptable to the market, and already exists as a non-GE variant."

The RedLove apple works well if it's used raw or cooked and it has a distinctively awesome red color. It has much higher levels of antioxidants, and it resists scab disease. And all of these amazing traits were instilled the old fashioned way with no genetic alterations in a Frankenstein lab.

Food activists say that the development of the RedLove apple is a strong example of why GMO foods are second-rate and unnecessary. In addition to being dangerous to animals, the environment and humans, GMOs don't provide any benefits for the agriculture industry over natural varieties. Fruits and vegetables and plants can be naturally bred to have the most desirable characteristics.
# # #

Glyphosate drift to rice a problem for all of us
Mike Wagner, President, Mississippi Rice Council
Farm Press, May 12 2011
http://deltafarmpress.com/rice/glyphosate-drift-rice-problem-all-us

[Editor's note: the following commentary was adapted from a speech by Mike Wagner, rice farmer and president of the Mississippi Rice Council, at this
year's Mississippi Agricultural Aviation Association meeting.]

Airplanes and ground applicators have been used to apply amendments to rice crops in Mississippi since the mid-1950s, and the interests and success of rice producers and aerial aviators have become intricately intertwined.

In the late 1990s, technology inserted into cotton, soybeans, and corn allowed over-the-top application of glyphosate onto those crops. The technology immediately revolutionized the production systems for those crops.

The U.S. rice industry never adapted the glyphosate-resistant technology for fear that its product - consumed with virtually no processing - would be forsaken by consumers worldwide. And so, non-transgenic rice is planted in a sea of genetically modified crops that are tolerant to glyphosate.

For years, this seemed to pose no real problem or threat. In the early to mid part of the last decade, however, reports of rice damaged by glyphosate drift began to surface with increasing frequency. Rice specialists noticed that rice that had no obvious damage through the growing season would yield and mill poorly and would exhibit the classic trait associated with late glyphosate drift

- the kernel would be shaped like a parrot beak instead of its normally elongated, symmetrical shape.

In 2006, immediately after most crops were planted in the Delta, a wet and windy period set in. Airplanes set out to spray cotton, corn, and soybean fields plagued with weeds. Not many thought much of it at first.

By mid-May, however, reports of dead rice and rice burned off to the ground began to surface. Soon the reports were widespread. It was estimated that 30,000 to 50,000 acres of rice were damaged or destroyed that year by glyphosate.

So much glyphosate seemed to go out in such a short time over such a large area that it was often difficult to identify the offenders. Many farmers were never compensated for damages.

The extensive damage to what was already an economically challenging crop did not set well with Mississippi's rice industry. Frustrations were on two levels: (1) penalties often seemed insignificant and violators (especially repeat violators) were given what our industry perceived to be a wrist-slapping, and (2) the level of liability insurance coverage was in many cases not enough to cover one claim, much less multiple claims.

Mississippi's rice farmers petitioned the state capitol and the Mississippi Department of Agriculture and Commerce for change and got it. The responsibility for the dispensing of penalties for aerial applicators found in violation of rules was given to the Bureau of Plant Industry. Aerial applicators and ground applicators now work with the same penalty structure, commonly called the Penalty Matrix. This provides a uniform system of penalty assessment among all applicators, aerial and ground, and penalties are now meted out in uniform fashion.

In addition, after careful consideration the MAAA acted to increase their

minimal liability insurance requirements from $100,000 to $300,000, with a $500,000 aggregate.

One can divide the window of timing and the types of damage that glyphosate drift onto rice can have into two periods.

The first is from emergence to flooding. Rice hit at this time could be thinned, burned off to the ground only to re-emerge in various maturity and health stages, or killed. In some cases, with increased expense, it can be managed so that the crop grows out of the damage and goes on to make a normal or somewhat reduced yield.

If the young crop is killed, it can be replanted with rice (which research indicates will generally suffer a yield loss), or if pre-emerge herbicides applied to the rice allow, the land can be planted to an alternate crop.

Either effort will increase production costs and generally produce a crop with decreased yield potential.

The second distinct period that glyphosate damage occurs - and by far the most detrimental - is from a short time before internode elongation to the time when the crop begins to dry down. Mississippi's rice crop generally begins its internode elongation period around June 1, and it is at this time that much yield potential is set.

Damage inflicted by derelict glyphosate during this period is often invisible and not noticed until harvest. Damage is characterized by significantly decreased yields and milling and the rice often exhibits the first signal that it has been hit with drift - kernels shaped like a parrot's beak.

Damage occurring at this time does not allow for an alternate crop to be replanted. Consequently, the farmer has two nooses around his neck: (1) he is stuck with a crop that will generate lower revenues, and (2) he has already incurred nearly all expenses that are associated with that crop. With anticipated 2011 direct expenses between $450 and $600 per acre and indirect expenses ranging from $200 to $300 per acre - total expenses range from $650 to $900 per acre - one can see that any losses can be staggering. This is a losing proposition for our rice industry, and one that continues to occur. Our alarm is warranted.

This is the main reason the Mississippi Rice Council unanimously passed a resolution in 2010 recommending an annual cutoff date of June 1 for the aerial application of glyphosate to alleviate the possibility that we will be severely impacted by drift without recourse when it is too late. Rice farmers do not like regulation any better than anyone else, but we will take all necessary measures to protect our crops.

Some areas in the Delta suffer more than others, and farmers have reduced or eliminated rice acreage in those areas. Because rice is a high expenditure crop, cutting acreage impacts the local economy, and it significantly impacts aerial applicators.

On my own farm, if wind conditions allow, I normally make two aerial applications of rice herbicides that would cost about $15, and make four flights for fertilizer that would cost near $25 - a total of $40 (this excludes fungicide and insecticide applications). Planted in soybeans or corn, that same land might get at most two aerial trips that will generate $10 to $15. The financial benefit to applicators of increasing rice acreage is obvious.

Yet another reason to curtail applications after June 1 is the mounting evidence that corn, even if it is glyphosate-tolerate, is subject to yield damage if it is hit after it passes the V-8 to V-12 stage - corn from 24 to 48 inches tall.

It isn't the intention of the Mississippi rice industry to single out aerial applicators as the sole cause for our losses and focus only on remedies regarding that industry. We are well aware that ground applications have and are causing a lot of our woes and we are well aware of the need to educate all applicators.

My own most recent loss was caused by a neighbor who wouldn't heed my warning about the wind carrying the glyphosate drift from his floppy red boom to my rice field.

The Mississippi rice industry appreciates the meaningful dialogue that has taken place with aerial applicators this past year. 2010 saw a significant drop in the level of glyphosate drift on rice. I think our industries working together helped reduce the incidence of glyphosate drift on rice. Our interests are intricately intertwined, and each of our industry's survival depends on the other industry's welfare.

When we plant a crop, we do so only with God's blessing. It is only through his grace that it grows and multiplies. However, he entrusts each of us to tend its daily cultivation.

The recent rains, flooded conditions, and cool weather have added an unwelcome dimension to our 2011 Delta crop - they will be late and in extreme cases won't be planted. This means we all must "get it right" the first time as replanting with a "used up" calendar may not be an option. With this in mind, please use added caution when applying herbicides that could harm your or your neighbor's adjacent crops. Read the label, know the habits of the chemistry you are considering, and always apply common sense before anything else.

# # #

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Restoring the World's Forests While Feeding the Poor

Trees are being cut down for farming, but a new study shows that a lot of land already cleared could be used instead

by Nigel Sizer and Lars Laestadius

"We are one shock away from a full-blown crisis," stated Robert Zoellick, the president of the World Bank, at a recent meeting of the bank and the IMF. He was referring to a critical increase in poverty, resulting from the escalating cost of food. The UN's food price index has risen 37% since March 2010. Basic cereal prices are up 60% over this period. Wheat is up 63%, and maize 83%.

Cleared virgin forest on land given over to palm oil plantations in Borneo. (Photograph: Romeo Gacad/AFP/Getty Images)

Roughly 1 million people slide into extreme poverty for each 1% rise in global food prices, the bank's analysts calculate.

Availability of land for farming is a key factor in long-term food supply and prices. As the human population expands, the remaining forests, wetlands and other fragile ecosystems will come under greater threat as farmers push further into the frontiers of the Amazon, Borneo and the Congo, as well as intensifying production in North America, Europe and beyond. Feeding billions more and feeding the poor properly will be possible only if better use is made of available land.

About half the world's forest has been cleared for farming or seriously damaged by logging, fires, drainage, pollution and other ills. But where forests once grew they can grow again.

A new analysis, carried out by the World Resources Institute, South Dakota State University, the International Union for Conservation of Nature and the Global Partnership on Forest Landscape Restoration, found that more than 1bn hectares of land where forest once stood is now degraded, and could be put to more productive uses. This is an area larger than the entire United States.

Some of this degraded and underused land could be used for food and tree crop production without cutting down another square inch of standing forest. In order to make this possible, governments and development agencies need to invest in more careful planning, incentives, investment and controls. Special care is needed to ensure that local communities that may be using parts of the land are respected and fully involved in decisions to intensify use or to restore forest.

The remainder of the 1bn hectares could be restored to forest and woodland. Once restored, it will also play a greater role in supporting nutrient cycling, reducing erosion, sequestering carbon,managing water and further supporting food production across the wider landscape downstream.

In Indonesia, the World Resources Institute, together with a local partner, Sekala, is putting these ideas to the test by working with the Indonesian government, communities and industry to shift new oil palm estates on to already cleared and burnt land instead of cutting species-rich rainforest. Indonesia has rapidly become the world's largest producer of palm oil. The government plans to expand oil palm plantations by about a million hectares a year to meet surging global demand for vegetable oil and biofuel. Until now, it was assumed that most of this expansion would result in the clearing and burning of precious rainforest. With more careful mapping and analysis, a new vision has emerged. Top officials are proposing new plans to use degraded land for the expansion of plantations. Mapping has shown that there is more than enough such land potentially available to meet demand.

Brazilian groups are looking to the Indonesian experience as they struggle to find space for that country's expanding beef, soya and sugar cane enterprises. Through a careful process of defining degraded land, mapping it, and consulting with existing landowners and local communities, plans and policies encourage a shift in future investment to this kind of land and away from the forests of the Amazon.

Development agencies, charities, national governments and business should transfer some of their attention to the opportunity of restoring already cleared and degraded land to more productive use. This needs to be done equitably and should be driven by the local communities, who have the most to gain from the long-term potential of these efforts to contribute to enhanced food production, ecosystem services and poverty reduction.

Nigel Sizer is director of the World Resources Institute's Global Forests Initiative, and Lars Laestadius is a senior associate of the WRI, both in Washington, DC.