

# Green Mission News

October 2011 Green Mission News

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## External Article Links:

- Dreaming green in a polyethylene world

<http://www.businessrecord.com/main.asp?Search=1&ArticleID=14021&SectionID=32&SubSectionID=95&S=1>

- These are among the programs cited by Oran B. Hesterman, whose nonprofit Fair Food Network ([www.fairfoodnetwork.org](http://www.fairfoodnetwork.org)) aims to change the landscape of who gets to eat what and how it gets to us. He has outlined what has gone awry and how it might be repaired in his new book, *Fair Food: Growing a Healthy, Sustainable Food System for All* (PublicAffairs, \$24.99).

<http://www.star-telegram.com/2011/09/02/3332937/fair-food-advocates-for-locally.html#tvq#ixzz1Wu3l8pea>

- Ten Reasons to Buy Organic

<http://www.greenchipstocks.com/articles/organic-food-benefits/1431>

- Ecolabel index

<http://www.ecolabelindex.com/ecolabels/>

- Jim Hightower: DuPont's Herbicide Goes Rogue

[http://www.otherwords.org/articles/duPonts\\_herbicide\\_goes\\_rogue](http://www.otherwords.org/articles/duPonts_herbicide_goes_rogue)

- How to Avoid Genetically Modified Foods

<http://www.wikihow.com/Avoid-Genetically-Modified-Foods>

- Organic Farming for Health and Prosperity: Key benefits of Organic Farming Practices

<http://ofrf.org/publications/OrganicFarmingforHealthandProsperity.pdf>

- Frances Moore Lappé: The Food Movement: Its Power and Possibilities

<http://www.thenation.com/article/163403/food-movement-its-power-and-possibilities>

- Chris Hedges: The Tomatoes of Wrath

[http://www.truthdig.com/report/item/tomatoes\\_of\\_wrath\\_20110926/](http://www.truthdig.com/report/item/tomatoes_of_wrath_20110926/)

- Compostable Plastics And Organic Farming

[http://www.jgpress.com/archives/\\_free/002295.html](http://www.jgpress.com/archives/_free/002295.html)

- Sustainable Bioplastic Guidelines

<http://www.healthybuilding.net/bioplastics/SustBioplasticGuide.pdf>

Interview with Food Revolutionary Maria Rodale  
Huffington Post (blog)

LK: What can consumers do to demand non-GMO foods and products?

MR: First, recognize that GMOs are already in almost anything non-organic that includes corn or soy. So your first line of defense is to always buy organic foods. ...

See all stories on this topic »

- Corn Cop Out

[http://static.ewg.org/reports/2011/ag/corn\\_cop\\_out.pdf](http://static.ewg.org/reports/2011/ag/corn_cop_out.pdf)

- What is Regenerative Agriculture?

<http://newfarm.rodaleinstitute.org/features/0802/regenerative.shtml>

Regenerative Agriculture reminds us of the true importance of farmers in our society. The ridiculous image of the farmer as hick and redneck is forgotten.  
*Regenerative arming can sequester carbon and help reverse global warming!*

Learn more about the benefits and practice of various forms of organic no-till agriculture: <http://regenag.blogspot.com/2011/02/off-contour-11-permaculture-ecological.html>

<http://fukuokafarming.info>

[http://www.rodaleinstitute.org/no-till\\_revolution](http://www.rodaleinstitute.org/no-till_revolution)

<http://www.landinstitute.org/>

- A recent report prepared for the UN Human Rights Council may turn out to be a powerful tool against the further expansion of factory / industrial farming.

The report demonstrates that agroecology (a.k.a. human scale farming), if sufficiently supported, can double food production in entire regions within 10 years while mitigating climate change and alleviating rural poverty.

The report therefore calls for a fundamental shift towards agro-ecology as a way for countries to feed themselves while addressing climate and poverty challenges. In short, the report says that factory farming is LESS EFFICIENT than old-fashioned community farming.

<http://www.healthhabits.ca/2011/03/10/factory-farming/>

- Ray Anderson: A Summons, Maybe Even A Provocation

<http://www.healthybuilding.net/news/110819-ray-anderson.html>

## Full Length Articles Below:

- Sunless Photovoltaic Power
- Arctic Ice Cover Hits Historic Low, Due to Global Warming, Say Scientists
- From Lab to Plate: A Primer on GE Food

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*Published on Thursday, 04 August, 2011 GreenMuze Staff*

### Sunless Photovoltaic Power

<http://www.greenmuze.com/climate/energy/4110-sunless-photovoltaic-power.html>

(Image from MIT's Institute for Soldier Nanotechnologies.)

*Massachusetts Institute of Technology (MIT)* researchers have developed a photovoltaic power generator that does not require sunlight to power it.

Using nano-scale engineered surfaces that are tuned to produce energy in specific wavelengths of light, *MIT's* devices are more efficient than previous designs. The principle is based on a thermal emitter that radiates heat and light onto a photovoltaic diode that in turn generates electrical power.

When heat falls on the high-density nanoscale pitted tungsten surface, it generates energy in a particular part of the electromagnetic spectrum related to the pit size, and this energy is then focused onto photovoltaic receivers that are also tuned to the same wavelength, greatly increasing the electrical power generation compared to an un-tuned system. The heat power source can come from the sun, burning fuel, a decaying radioisotope or any other heat source (maybe even the human body or low grade waste heat from power plants, homes and offices).

The potential applications for this technology are very diverse, ranging from embedded biomedical devices, smart phones, to powering spacecraft.

Ivan Celanovic, a research engineer in *MIT's Institute for Soldier Nanotechnologies (ISN)* explained, "Being able to convert heat from various sources into electricity without moving parts would bring huge benefits." Their team hopes to increase threefold the power generation as they further their research.

The *MIT* prototype button-sized power generators use butane and last three times longer than an equivalent weight lithium-ion battery, with instant recharging using a new butane fuel cell.

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*Published on Sunday, September 11, 2011 by Agence France-Presse*

## **Arctic Ice Cover Hits Historic Low, Due to Global Warming Say Scientists**

The area covered by Arctic sea ice reached its lowest point this week since the start of satellite observations in 1972, German researchers announced.

An iceberg is seen off Ammassalik Island in Eastern Greenland. The summer ice retreat in the Arctic has reached a record low.

"On September 8, the extent of the Arctic sea ice was 4.240 million square kilometers. This is a new historic minimum," said Georg Heygster, head of the Physical Analysis of Remote Sensing Images unit at the University of Bremen's Institute of Environmental Physics.

The new mark is about half-a-per cent under his team's measurements of the previous record, which occurred on September 16, 2007, he said.

According to the US National Snow and Ice Data Center (NSIDC), the record set on that date was 4.1 million sq km. The discrepancy, Heygster explained by phone, was due to slightly different data sets and algorithms.

"But the results are internally consistent in both cases," he said.

Arctic ice cover plays a critical role in regulating Earth's climate by reflecting sunlight and keeping the polar region cool.

Retreating summer sea ice - 50 per cent smaller in area than four decades ago - is described by scientists as both a measure and a driver of global warming, with negative impacts on a local and planetary scale.

It is also further evidence of a strong human imprint on climate patterns in recent decades, the researchers said.

"The sea ice retreat can no more be explained with the natural variability from one year to the next, caused by weather influence," Heygster said in a statement released by the university.

"Climate models show, rather, that the reduction is related to the man-made global warming which, due to the albedo effect, is particularly pronounced in the Arctic."

Albedo increases when an area once covered by reflective snow or ice - which bounces 80 per cent of the Sun's radiative force back into space - is replaced by deep blue sea, which absorbs the heat instead.

Temperatures in the Arctic region have risen more than twice as fast as the global average over the last half century.

The Arctic ice cover has also become significantly thinner in recent decades, though it is not possible to measure the shrinkage in thickness as precisely as for surface area, the statement said.

Satellite tracking since 1972 shows that the extent of Arctic sea ice is dropping at about 11 per cent per decade.

NSIDC director Mark Serreze has said that summer ice cover could disappear entirely by 2030, leaving nothing but heat-trapping "blue ocean."

The NSIDC likewise monitors Arctic ice cover on a daily basis, but has not announced record-low ice cover. Data posted on its website as of Saturday only covered the period through September 6.

By last week, it said, sea ice is almost completely gone from the channels of the Northwest Passage. The southern route - also known as Amunden's Route - was also ice free, as was the Northern Sea Route along Siberia.

But even as the thaw opens shipping lanes, it disrupts the lives and livelihoods of indigenous peoples, and poses a severe threat to fauna, including polar bears, ice seals and walruses, conservation groups say.

"This stunning loss of Arctic sea ice is yet another wake-up call that climate change is here now and is having devastating effects around the world," said Shaye Wolf, climate science director at the Center for Biological Diversity in San Francisco.

The last time the Arctic was incontestably free of summertime ice was 125,000 years ago, during the height of the last major interglacial period, known as the Eemian.

Air temperatures in the Arctic were warmer than today, and sea level was also four to six meters higher because the Greenland and Antarctic Ice Sheets had partly melted.

Global average temperatures today are close to the maximum warmth seen during the Eemian.

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*Published- WASHINGTON - September 29*

## **From Lab to Plate: A Primer on GE Food**

### **Food & Water Watch Publishes Overview on Genetic Engineering's Implications for the Food System, Environment and Human Health**

Food & Water Watch today released a report that provides scientific and political background behind the introduction of genetically engineered food in the United States,

and its potential impact on consumers, the environment and farmers. The report, ***Genetically Engineered Food: An Overview***, outlines how the genetic engineering of crops and animals for human consumption is not the silver bullet approach for feeding a growing population that the agribusiness and biotechnology industries claim it is. Conversely, studies find that GE plants and animals do not perform better than their traditional counterparts and raise a slew of health, environmental and ethical concerns.

“Through glitzy advertising campaigns and scientists whose research is paid for by the industry, agribusiness and biotechnology companies try to persuade consumers that genetic engineering is the only hope for feeding a growing population, which is completely untrue,” said Wenonah Hauter, Executive Director of Food & Water Watch. “Before consumers accept genetically engineered food, they need to consider the risks and potential consequences involved with radically manipulating the genetic makeup of plants and animals.”

The report outlines the potential risks of GE foods including increased food allergies and unknown long term health effects in humans; the rise of superweeds that have become resistant to GE-affiliated herbicides; the ethical and economic concerns involved with the patenting of life and corporate consolidation of the seed supply; and the contamination of organic and non-GE crops and livestock through cross-pollination and seed dispersal.

It also documents how the lack of coordination, oversight and enforcement from a patchwork of federal agencies – the Food and Drug Administration, Department of Agriculture and the Environmental Protection Agency – has put human and environmental health at risk.

“Public opinion surveys show that many people do not want GE food in their diet and the vast majority of those polled are insistent that GE food must be labeled, at minimum, so they can make informed choices,” said Hauter. “Lax enforcement, uncoordinated agency oversight and ambivalent post-approval monitoring have allowed GE plants and animals to slip through the cracks and into our food system without the public’s knowledge.”

Biotech firms’ long-promised high-yielding and drought-resistant GE seeds remain commercially unavailable while the most prevalent GE crops – Roundup Ready crops – require much more herbicide as resistant superweeds evolve, lowering farm yields and leaving farmers no choice but to use other chemicals with proven health risks like 2,4-D (an Agent Orange component) and Atrazine.

Additionally, the report reveals that biotech companies block independent research on GE foods and press for lighter regulatory oversight. Records show that between 1999 and 2009, \$547 million was spent on lobbying and campaign contributions to ease GE regulatory oversight, push GE approvals and prevent GE labeling.

The report concludes with several recommendations including a moratorium on new U.S. approvals of GE plants and animals; a policy that would more rigorously evaluate potentially harmful effects of GE crops before their commercialization; improved agency

coordination and increase post-market regulation; and mandatory labeling of GE foods.

The report can be downloaded at:

<http://www.foodandwaterwatch.org/blog/reports/genetically-engineered-food/>

*Food & Water Watch is a nonprofit consumer organization that works to ensure clean water and safe food. We challenge the corporate control and abuse of our food and water resources by empowering people to take action and by transforming the public consciousness about what we eat and drink.*