

The Go-Back Club

Newsbooklet of the Simple-Living Brigade: #24, October 2015

These are OUR stories: www.gobackclub.org

Our members live in 20 states, Washington D.C., two Canadian provinces, Korea and Nigeria.



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Non-Oil Transport for Organic Food Security!

Pedal Power Produce from Our Farm to the Market August 1989

By Mark E. Petersen, Roanoke, Virginia **Photos from 1997 by Mark E. Petersen**

Almost 20 years ago, students from Humboldt State University and auto-free activists came together and brain-stormed a business opportunity that would enable them to make a little pocket change, while demonstrating that produce could be delivered to the local Arcata farmer's market without using gasoline.

Founded in 1997, the mission of Pedal Power Produce has been to demonstrate sustainable transport of food without pollution or dependence on fast-



diminishing global oil supplies. Food security must be enhanced, instead of reduced, as is the case in the overpopulated U.S. Truly organic food must not be fraught with petroleum for transport and thousands of miles of roads. Exercise and convivial cooperation in bringing food directly to customers are additional features of Pedal Power Produce that aid health and community spirit.

Pedal Power Produce Farm

The idea for this project came when Jan Lundberg found the chance to combine his friend Jan VanderTuin's Eugene-based application of work bikes and PedEx, with VanderTuin's previous development of Community Supported Agriculture (CSA, a "subscription" food service).

In Blue Lake, California, nine miles up the Mad River from downtown Arcata, California is a farm that initially was copurchased by members of the Alliance for a Paving Moratorium. The 1997 season, our first, had the previous farm owner providing the produce to riders who made the weekly round trip from Arcata to bring over a hundred pounds of fresh-picked organic produce to the Saturday morning Farmers Market on Arcata's central plaza.

The project seemed it could only grow. The picture above, from the 1997 season, shows riders, some of whom rode only that day, and it was no trouble to find interested volunteers who enjoyed the ride. Some of us also biked veggies up to the Bioregional Congress north of Trinidad and we were lustily cheered by the conferees clasping hands in a circle under the redwoods. Our weekly rides to and from Arcata had safety enhanced on the country road by riding together and using helmets and flags.

Pedal Power continued on page 2

Pedal Power continued from page 1



Photos by Mark E. Petersen

Original members of Pedal Power Produce. The 1998-2001 seasons were managed by a new farm manager and new workers. The project continues to this day with assistance from Humboldt State University Center for Sustainability.





What on Earth is The Go-Back Club? A Simple-Living Brigade. Our Motto: Use it up, wear it out, make it do or do without.



Founder/Editor: Iona Conner

Contributors: Bill Boteler, Sandy Chilcote, John Conner, Allen Hengst, Len Frenkel, Mark Petersen, Sunny War Eagle, Elliott Worcester

Established: September 2013 **Web site:** www.gobackclub.org

Published 10 times a year: Free via email **Contact:** The Go-Back Club, c/o Iona Conner, 21431 Marlin Circle, Shade Gap, Pennsylvania 17255; 814-259-3680; gobackclub@pa.net.

What is The Go-Back Club about?

We want to change people's hearts. Our members live simply (or try to) so that our collective carbon footprint grows smaller and smaller every day. We are working toward a common goal of reducing our individual impacts on climate change to protect future generations and all life.

Who are we trying to attract?

We hope to reach people who are concerned about global warming and realize that they are part of the problem but don't know what to do. We invite them to join our Club.

What are we trying to achieve?

Our members are part of the global movement of people who know that global warming is an immediate threat and who want to prevent further harm and even reverse the situation. We look to others for inspiration.

People are "like a blind man walking randomly toward a cliff. The only thing that will save him is to go backwards." Michael Mann (climate scientist and member of the Intergovernmental Panel on Climate Change), to John and Iona Conner about climate tipping points on a visit to Penn State, where Mann is director of the Earth Systems Science Center

"Our life is frittered away by detail. Simplify, simplify, simplify! Simplicity of life and elevation of purpose." Henry David Thoreau

Please send us your stories and photos. We rely on our members' contributions.



Photo by Nick Cobbing

Glaciologist Jason Box, left, at work on the Petermann Glacier on Greenland's northwest coast, which has lost mass at an accelerated pace in recent years. Box and his family left Ohio State for Europe a couple years ago and he is relieved to have escaped America's culture of climate-change denial.

GBC Board Member Michael Mann Featured in "Esquire" Article on Climate Change

Submitted by John Conner Shade Gap, Pennsylvania

Esquire: July 7, 2015



When the End of Human Civilization Is Your Day Job: Among many climate scientists, gloom has set in. Things are worse than we think but they can't really talk about it.

he incident was small but Jason Box doesn't want to talk about it. He's been skittish about the media since it happened. This was last summer, as he was reading the cheery blog posts transmitted by the chief scientist on the Swedish icebreaker Oden, which was exploring the Arctic for an international expedition led by Stockholm

University. "Our first observations of elevated methane levels, about ten times higher than in background seawater, were documented . . . we discovered over 100 new methane seep sites.... The weather Gods are still on our side as we steam through a now ice-free Laptev Sea...."

As a leading climatologist who spent many years studying the Arctic at the Byrd Polar and Climate Research Center at Ohio State, Box knew that this breezy scientific detachment described one of the nightmare long-shot climate scenarios: a feedback loop where warming seas release methane that causes warming that releases more methane that causes more warming, on and on until the planet is incompatible with human life. And he knew there were similar methane releases occurring in the area. On impulse, he sent out a tweet.

"If even a small fraction of Arctic sea floor carbon is released to the atmosphere, we're f'd."

The tweet immediately went viral, inspiring a series of headlines:

CLIMATOLOGIST SAYS ARCTIC CARBON RELEASE COULD MEAN "WE'RE FUCKED."

CLIMATE SCIENTIST DROPS THE F-BOMB AFTER **STARTLING** ARCTIC DISCOVERY.

CLIMATOLOGIST: METHANE PLUMES FROM THE ARCTIC MEAN WE'RE SCREWED.

Box has been outspoken for years. He's done science projects with Greenpeace and he participated in the 2011 mass protest at the White House organized by 350.org. In 2013, he made headlines when a magazine reported his conclusion that a70-foot

Michael Mann continued on page 13

News Briefs Submitted by Our Members

Lawsuit: "We Need to Put a Stop to Fracking..."

Diné CARE files lawsuit to stop oil development in Eastern Navajo Agency.

Submitted by Sunny War Eagle Marianna, Florida

By Alastair Lee Biootsoi, excerpt Navaho Times: May 21, 2015

WINDOW ROCK, New Mexico - In one of its latest struggles to protect the Four Corners region from natural resource extraction, the non-profit Diné CARE has filed an injunction to prevent any more oil drilling from happening in the area.

Specifically, their motive for the injunction, which was filed in New Mexico District Court on May 11, is to protect the Greater Chaco Canyon area, including Chaco Culture National Historical Park, from ongoing oil development that is also impacting several Diné communities.

Along with Diné CARE, the suit includes a coalition of other nongovernmental, environmental organizations, such as the Western Environmental Law Center, WildEarth Guardians and the Natural Resources Defense Council.

"We need to put a stop to fracking in the Greater Chaco region because it impacts the living peoples, the water, the air, wildlife, medicinal plants and offering points," said Sarah White in a joint news release with the groups attempting to halt oil and gas development.

Building Tiny Houses into Big Help for L.A. Homeless

Submitted by Mark Petersen Roanoke, Virginia

By Christopher Weber (AP), excerpt The Arizona Republic: May 10, 2015

LOS ANGELES, California — Shortly after Elvis Summers befriended Irene McGhee, he learned she was sleeping on the streets of South Los Angeles.

So the man with the blue Mohawk and wrap-around shades decided to build the grandmother nicknamed "Smokie" a tiny house on wheels. Summers estimates that he spent less than \$500 on plywood, shingles, a window and a door for the 8-foot-long

structure that can be moved around by one person.

It turned out so well that Summers launched a crowd-funding campaign to construct similar shelters for other homeless people in his neighborhood. He had no grand ambitions beyond lending a helping hand in a city with thousands of residents without roofs over their heads.

"Honestly, I thought I'd raise enough money to help a dozen people, call it a day, and then go back to stressing about my job," said the 38-year-old, who runs an online apparel store.

Summers never thought more than 5.6 million people would watch a YouTube video of him constructing the house for McGhee, who's been homeless for more than a decade. It ends up with McGhee doing a little jig and hanging up a "Home Sweet Home" sign.

The GoFundMe campaign — called Tiny House, Huge Purpose — has brought in nearly \$60,000 in less than a month. And Summers' Inbox is overflowing with offers for help from carpenters, homeless advocates, retirees and children as young as

Why are Tons of Fresh **Produce Dumped** in Landfills Every Day?

Submitted by Elliott Worcester Raymond, Maine

www.pbs.org/newshour



Here's a scenario lots of us can relate to: tossing a bag of lettuce because it sat too long in the back of the fridge.

It doesn't take a long time for greens to turn to slime.

Bag by bag, this waste adds up. The Environmental Protection Agency estimates that the typical American family throws out about \$1,600 worth of food each year. And what we consumers toss out is just the last step in a long chain of waste.

Food is lost on farms, during processing and trucking. Supermarkets toss out unsold

We were curious about this downstream waste — the part of the food supply chain that's largely hidden from consumers.

And we wondered how the fast-growing, packaged produce and salads category which is expected to approach \$7 billion in sales by 2018 — might contribute to waste.

In the Salinas Valley of California —

known as America's salad bowl — we visited the municipal dump. The fertile strip of land surrounding the town of Salinas produces an estimated 70 percent of U.S. salad greens.

At the dump, we caught up with Operations Manager Cesar Zuniga as a dump truck pulled in. It was filled to the brim with salads and other waste from nearby farms.

"This one looks like a mixed load," Zuniga says. As it tipped its load, out tumbled a 15foot heap of greens.

And a lot of it looked crisp and ready to

"Some loads ... look very fresh," Zuniga says. "We question, wow, why is this being tossed?"

Zuniga says the load that arrived today is pretty typical. "This is what we see through the spring and fall months: We see a lot of food waste from the salad processing plants," he says.

As we step closer to the dumped load, Zuniga picks up a bag of salad and looks at the sell-by date stamped onto the package.

"What ended up here was good for [another] two weeks or so," Zuniga says.

So, why were these salad greens dumped? We called Taylor Farms, the brand name on the bags we saw at the dump. It's one of the big salad processors in the area.

In an email, Mark Campion, president of Taylor Farms Retail, told us that the "primary reason" that salad gets disposed of is that it gets too close to its "code date" what consumers think of as the sell-by date.

"If we overrun a particular product ... it might not have enough code date for the customer to receive it," Campion said.

The bags we saw at the dump still had almost two weeks before reaching the sell-by date. But that was probably not long enough to ship them and get them onto store shelves because grocery chains need plenty of time to sell the products while they're still fresh.

The bags we saw at the dump still had almost two weeks before reaching the sellby date. "Most [grocery store] customers require 10-11 days of useable code date upon arrival at their distribution center," explains Campion.

Campion says Taylor Farms gives surplus product to its employees and donates some to food banks, too. "The last option is sending product to disposal," Campion wrote. "It's rare that product gets disposed of but it does happen."

There are no official estimates of waste from salad processors. And, as the U.S. Department of Agriculture has noted, it's difficult to estimate food loss at the farm

News Briefs Submitted by Our Members

level not just for salad greens but for foods across the supply chain.

The Natural Resources Defense Council (NRDC) has surveyed California farmers about waste. "It's a a difficult topic," says JoAnne Berkenkamp, a senior advocate for the environmental group's Food & Agriculture Program. "Farmers don't want to talk about something they've grown and weren't able to sell."

It's a sensitive topic — especially in drought-stricken California — where farmers use a large quantity of the state's precious water. But Berkenkamp says the survey research shows that some farmers grow more than they can sell.

"Most large growers have strong incentive to over-plant," explains Berkenkamp, because they "don't want to run out of product or come up short on a contract."

The NRDC estimates growers may over-plant by about 10 percent. This may not sound like much. "But it can really add up to thousands of pounds of surplus product," Berkenkamp says.

And here's another issue: When bags of lettuce and other produce end up in landfills, it contributes to climate change.

As the food decomposes, "it will release methane — a very powerful greenhouse gas," explains Berkenkamp. And food waste in landfills is responsible for a significant portion of methane emissions.

Some of the methane gas from landfills is being captured and converted to energy. But a lot of it goes into the atmosphere.

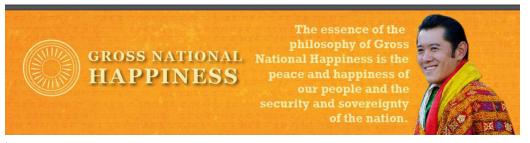
So, what steps can we, the shoppers, take to address this issue?

We can compost the greens we don't eat instead of tossing them. If more produce were composted, it could help reduce methane emissions, according to NRDC.

And, here's a novel idea: Maybe more of us should re-think our shopping habits — and only buy what we know we can eat.

Back at the Salinas Valley dump, there's a separate pile for compost. But because of all the plastic in the lettuce waste from the salad processors, it can't be composted.

So, where will it end up? A landfill.



Gross National Happiness Important in Bhutan

Submitted by Bill Boteler Washington, D.C. with the following note:

This is an official statement from the government of Bhutan: http://www. grossnationalhappiness.com/

There is no other country I know of where the government is actually interested in people being happy. They usually focus on national wealth or power or some abstract ism. Then they end up going to war.

If it really interests you, they have conferences and scholars working on this. They also have Gross National Happiness studies.

Welcome!

This web site is specifically dedicated to the works on Gross National Happiness (GNH). A short guide to GNH index 2012 is given in the link: A short guide to Gross National Happiness Index

A Detailed Analysis on GNH Index 2012: An Extensive Analysis of GNH Index

The Centre for Bhutan Studies and GNH Research is organizing an international conference on GNH from November 4th to 6th, 2015 in Paro, Bhutan.

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What You Can Do: Food and Climate Change

Submitted by Len Frenkel Bethlehem, Pennsylvania

By David Suzuki www.davidsuzuki.org: May 20, 2015

t's not only how we choose to travel or heat our homes that determines our carbon footprint. What we eat also has a climate impact. Understanding the resources that go into producing our meals can make us more aware of the relationship between food and climate change and help us make better choices.

There are several factors that contribute to food's climate impact, including: how low on the food chain it is, how much energy is used to produce it (and whether the food is grown organically or with chemical inputs) and how far it has to travel before it gets to the table.

Meat and Climate Change

Meat production is a major contributor to climate change. It is estimated that livestock production accounts for 70 per cent of all agricultural land use and occupies 30 per cent of the land surface of the planet. Because of their sheer numbers, livestock produce a considerable volume of greenhouse gases (such as methane and nitrous oxide) that contribute to climate change. In fact, the United Nations Food and Agriculture Organization (FAO) has estimated that livestock production is responsible for 18% of greenhouse gases.

The growing of livestock and other animals for food is also an extremely inefficient process. For example, it takes approximately five to seven kilograms (11 to 15.4 pounds) of grain to produce one kilogram (2.2 pounds) of beef. Each of those kilograms of grain takes considerable energy and water to produce, process, and transport.

As meat consumption has grown around the world, so has its climate impact.

The Problems with Chemical Agriculture

Other agricultural practices can impact the climate. Synthetic pesticides and fertilizers are widely used in agriculture and are often made from fossil fuels. Manufacturing and transporting these chemicals uses significant quantities of energy and produces greenhouse gases. Not surprisingly, studies have shown that chemical farming uses considerably more



Photo: Loose Ends via Flickr

energy per unit of production than organic farms, which do not use these chemical inputs. In addition, the use of synthetic nitrogen fertilizers in soils produces nitrous oxide, a greenhouse gas that is approximately 300 times more powerful than carbon dioxide at trapping heat in the atmosphere.

Organic farms, on the other hand — which rely on natural manure and compost for fertilizer — store much more carbon in the soil, keeping it out of the atmosphere.

Food That's Closer to Home

Where your food comes from is also a factor. Currently, the average meal travels 1200 km (745 miles) from the farm to plate. Food that is grown closer to home will therefore have fewer transportation emissions associated with it and also be fresher and support local farmers. And, as the distance food travels decreases, so does the need for processing and refrigeration to reduce spoilage.

Local or Organic: Which is Better for the Climate?

While it's good to buy locally grown food for many reasons, 'food miles' (the distance food is transported from the time of its production until it reaches the consumer) actually make up a relatively small percentage of the overall carbon footprint of food — approximately 11% on average, according to studies. How the food is grown makes up a much larger percentage — roughly 83%.

For example, one study showed that lamb raised in New Zealand and shipped 18,000 kilometers (11,178 miles) to the UK still produced less than one quarter of the greenhouse gases than local British lamb. Why? Because local flocks were fed grains, which take a lot of energy to grow, while the New Zealand flocks were grazed on grass.

Shipping the lamb to the UK was responsible for only 5% of the overall greenhouse gases, whereas 80% of the emissions were from farm activities. Similar lifecycle assessments have found the same results for other foods. One assessment done for packaged orange juice found that over a third of the lifecycle emissions came from just the synthetic fertilizer used on the orange groves.

Choosing to buy food that is organically grown can therefore be a better choice for the climate. But if possible, buy food that that is organic and local.

So What Can You Do to Reduce Your Impact? Eat Meat-Free Meals

- Try to eat at least one meat-free meal per day. If you're already doing that, gradually increase the number of meat-free meals you eat.
- Plan ahead. If going meatless means changing your habits drastically, you'll enjoy it more if you do some research and find really yummy recipes before you go shopping.
- Choose veggie restaurants and meatless menu alternatives when you go out they're sprouting up all over the place!
- Check out these cool web sites: Vegetarian Times, Epicurious, World Community Cookbooks.

Buy Organic and Local Whenever Possible

- Vote with your fork. Let your local farmers know organic is the way to grow! In addition to being better for the climate, organic food has many other advantages. First, it is grown without genetically modified organisms. As well, organic meat, poultry, eggs and dairy come from animals that are not fed antibiotics or growth hormones. And because organic foods are grown in healthy soils, they are typically more nutritious, containing more vitamins and minerals. Finally, organic farms promote genetic biodiversity, create less water pollution and soil damage and result in fewer poisonings of farm workers and less harm to wildlife.
- **Read labels when you shop.** Choose food that is organically grown and locally produced.
- Talk to the produce manager at your grocery store. Tell them what you want and why. Don't be shy.
 - Don't waste food. (See page 4.)



Iona's Memoir Ready

How on Earth Did I Become a Pacifist Activist?

Heart Leads, I Follow

By Iona (aka Susan Wynne Norris Hnatt Topf Conner)

First Review

"Your book has many touching stories inside. It's not only a book, it's an inspirational body. You are absolutely unique and you have made a lot of sacrifices and I still wonder why you did them."

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Appendix: The Awakening

Spiral-bound, 205 pages, 56 color images. \$25 includes shipping or I will email you the PDF for \$10. Please make check or money order payable to: The Go-Back Club and send it to Iona at 21431 Marlin Circle, Shade Gap, Pennsylvania 17255. Thanks!

GBC Member Publishes Book About Vegetarianism and Climate Change

Good morning everyone,

The book is finally ready! I hope that you will read it, share the information below with everyone and provide a review after you have read it.

I hope that you know that my purpose in writing this book is to attempt to save most life on the planet. That's why *One Last Chance* is in the title.

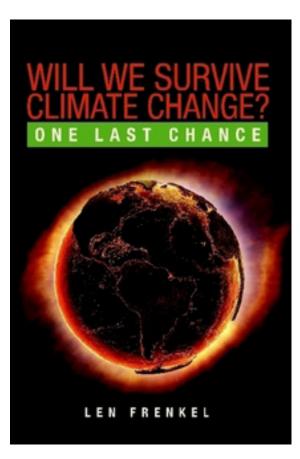
A modest aim, don't you think???

Because climate change is so unpleasant to read, think and talk about, and because it is so threatening to us, it is extremely important that we understand it and confront it.

This 46-page, easy-to-read book tells the story of climate change and offers us the one last chance we have to stop it.

A must-read for anyone concerned about our future. Before you read *Will We Survive Climate Change? One Last Chance*, please share this message with everyone you know.

Len Frenkel Bethlehem, Pennsylvania



Available from:

Softcover: http://www.lulu.com/shop/len-frenkel/will-we-survive-climate-change-one-last-chance/paperback/product-22230426.html.

E-Book: http://www.lulu.com/content/e-book/will-we-survive-climate-change-one-last-chance/16891718.

Web site: http://www.willwesurvive climatechange.com.

Facebook: https://www.facebook.com/groups/willwesurvive/

Author: Len Frenkel: frenkel@rcn.com

Will We Survive Climate Change? One Last Chance by Len Frenkel

Paperback, 62 Pages List Price: \$27.38 Price: \$10.95

You Save: \$16.43 (60%)

E-book: \$8.99

Ships in 3-5 business days.

This book provides basic information about climate change and its very serious consequences, followed by a compelling and compassionate plea for all of us to change one aspect of our lives in order to save ourselves and most life on the planet.

Note from the Editor: This is an excellent book! A friend gave me a copy as an early birthday present and I love it. I'm sure you will enjoy it, too.

Appeals Court Ensures Protection of Roadless Areas in Tongass Forest

Submitted by Allen Hengst Washington, D.C.

Tom Waldo: Attorney, Earthjustice, excerpt Earthjustice: July 29, 2015 Photo: Nancys/Shutterstock

JUNEAU, Alaska — In a major victory for America's largest rainforest, the U.S. Court of Appeals for the Ninth Circuit struck down a Bush administration exemption of the Tongass National Forest from the "Roadless Rule," a landmark conservation rule adopted in 2001 to protect nearly 60 million acres of wild national forests and grasslands from new road building and logging. The Court held the Bush administration failed to provide a reasoned explanation for reversing course on the Tongass. It concluded the Roadless Rule "remains in effect and applies to the Tongass."

"Today's decision is great news for the Tongass National Forest and for all those who rely on its roadless areas. The remaining wild and undeveloped parts of the Tongass are important fish and wildlife habitat and vital to residents and visitors alike for hunting, fishing, recreation and tourism, the driving forces of the regional economy," said Earthjustice attorney Tom Waldo.

"This decision saves the Tongass — again — and not just the Tongass but, hopefully, all old growth forests," said Niel Lawrence, senior attorney and Alaska director for the Natural Resources Defense Council. "It ensures that all of this forest's wildlands will be saved from timber sales and destructive logging roads."

"The decision is consistent with the real transition Southeast Alaska has already made toward a diverse and resilient regional economy," said Southeast Alaska Conservation Council Executive Director Malena Marvin. "We hope that our leaders, including Senator Lisa Murkowski, Governor Bill Walker and Forest Supervisor Earl Stewart, recognize that long-term economic prosperity for local communities means keeping the Tongass's wild salmon strongholds working for fishing families and supporting our booming tourism and fishing industries."

"We applaud the court for striking down the misguided Bush-era plan to exempt the Tongass National Forest from the Roadless Rule. Today's decision ensures that this stunning wilderness will continue to be protected for the wildlife who inhabit it and those who enjoy it — for this generation and those that follow," said Aaron Isherwood, Managing Attorney for the Sierra Club.

"The roadless areas on the Tongass are



important habitat for wildlife species found only in America's rainforest," said Rebecca Noblin, Alaska director of the Center for Biological Diversity. "This decision protects some of the last remaining stands of oldgrowth temperate rainforest in the world. Now it's time to put a stop to all old-growth logging on the Tongass to save unique wild-life like Alexander Archipelago wolves."

"The Tongass' roadless rainforests are a national treasure and the last, best intact wildlands in our bioregion," said Gabriel Scott, Alaska legal director for Cascadia Wildlands. "We are pleased with the court's decision and urge the State of Alaska to stop with these wasteful legal battles and recognize that it is a privilege, not a burden, to conserve these national treasures for future generations."

"Roadless areas in the Tongass provide important habitat for at-risk species, including the Alexander Archipelago wolf," said Senior Policy Advisor for Federal Lands Peter Nelson at Defenders of Wildlife. "Today's decision is a pivotal win for the conservation of wildlife, watersheds and forests in the Tongass."

"The roadless rule will help small businesses like ours," said Hunter McIntosh of The Boat Company, which operates a small tour business in the region. "The natural values of intact watersheds are essential for the visitor industry in Southeast Alaska. Very few folks will pay to go see clearcuts and decaying logging roads. There are thousands of jobs in Southeast Alaska in recreation and tourism. And there are thousands more in the seafood industry, which depends critically on salmon spawning streams in the old

growth forests of the Tongass."

This case originated in 2009 when a diverse coalition of Alaska Native, tourism industry and environmental organizations, represented by attorneys from Earthjustice and Natural Resources Defense Council, challenged the Bush Administration's 2003 rule "temporarily" exempting the Tongass from the Roadless Rule. The Roadless Rule blocks expensive and controversial new logging roads and clearcuts in intact forests while allowing other economic development — including hydropower, transmission lines, mining and tourism projects to proceed. The Tongass — occupying most of Southeast Alaska — is the nation's largest and wildest national forest.

In 2011, a federal judge in Alaska ruled in the coalition's favor, vacating the Tongass exemption and reinstating the Roadless Rule's application to the Tongass. The State of Alaska then appealed the decision to the Ninth Circuit Court of Appeals, where a three-judge panel last year reversed the Alaska judge's opinion by a 2-1 split vote. Today's order affirmed the district court's decision and maintains protections for the roadless areas of the Tongass.

Attorneys from Earthjustice and the Natural Resources Defense Council represent the following groups in the case: Organized Village of Kake, The Boat Company, Alaska Wilderness Recreation and Tourism Association, Southeast Alaska Conservation Council, Natural Resources Defense Council, Tongass Conservation Society, Greenpeace, Wrangell Resource Council, Center for Biological Diversity, Defenders of Wildlife, Cascadia Wildlands and Sierra Club. ...



When You Give a Tree an Email Address

The city of Melbourne assigned trees email addresses so citizens could report problems. Instead, people wrote thousands of love letters to their favorite trees.

Adrienne LaFrance, excerpt

The Atlantic: July 10, 2015

Photo by Jennifer Morrow/Flickr

"My dearest Ulmus," the message began. "As I was leaving St. Mary's College today I was struck, not by a branch, but by your radiant beauty. You must get these messages all the time. You're such an attractive tree."

This is an excerpt of a letter someone wrote to a green-leaf elm, one of thousands of messages in an ongoing correspondence between the people of Melbourne,

Australia, and the city's trees.

Officials assigned the trees ID numbers and email addresses in 2013 as part of a program designed to make it easier for citizens to report problems like dangerous branches. The "unintended but positive consequence," as the chair of Melbourne's Environment Portfolio, Councillor Arron Wood, put it to me in an email, was that people did more than just report issues. They also wrote directly to the trees, which have received thousands of messages — everything from banal greetings and questions about current events to love letters and existential dilemmas.

"The email interactions reveal the love Melburnians have for our trees," Wood said. City officials shared several of the tree emails with me but redacted the names of senders to respect their privacy.

Read more Love Letters to trees and the rest of the article at http://www.theatlantic.com/technology/archive/2015/07/when-you-give-a-tree-an-email-address/398210/

Jam a tree
Buffeted by
Forces of Nature
Beyond me.
Out of my control.
I'll learn.
Teach me, tree.

NOTE FROM THE EDITOR

I found this poem in one of my old journals. I don't think I wrote it but I don't know who did.



Photo by Natasha Khan

Tests continue on drainage from the Clyde Mine in East Bethlehem Township, Washington County for radiation and bromide levels. The mine, which is abandoned, is the responsibility of the Pennsylvania Department of Environmental Protection.

DEP's Testing Methods for Radiation in Pennsylvania Creek Questioned

Concerns about the environment and public health have not been quelled by the state environmental agency or by radiation results from university researchers.

By Natasha Khan PublicSource: July 31, 2015

State officials tested for radioactivity in a major tributary to the Monongahela River, as well as discharge water from an abandoned mine that flows into it, after significant rainfall in Southwestern Pennsylvania.

That led environmental groups who repeatedly asked the Pennsylvania Department of Environmental Protection (DEP) for the investigation to question whether the agency purposefully tested Ten Mile Creek after June's heavy rains, which could have diluted the pollution.

"DEP's recent sampling of Ten Mile Creek

flies in the face of common sense and reveals a disturbing lack of seriousness that is dismissive of the community in Greene County and the significance of this situation," Patrick Grenter, executive director of the Center for Coalfield Justice in nearby Washington County, wrote in an email.

On June 22nd and 23rd, department officials tested the creek — which feeds into a major source of drinking water for the Mon Valley — the inactive Clyde Mine discharge near Clarksville and the Tri-County Municipal Water Authority downstream from the discharge.

The creek water was flowing about 10 and six times more than the normal rate for those days, respectively, according to historical U.S. Geological Survey water data.

The DEP declined to answer questions about why officials tested on those days in late June.

High Water Levels

The United States Geological Survey [USGS] data for Ten Mile Creek show that the water's median flow rate on the days the

Department of Environmental Protection tested — June 22nd and 23rd — was 333.5 cubic feet per second and 149 cubic feet per second, respectively.

The USGS data show the median flow rates in the creek for the past 68 years is 32 cubic feet per second for June 22 and 25 cubic feet per second for June 23.

The flow, or discharge rate, is the volume of water that passes a given location within a given period of time.

"We are not responding to questions regarding the [Ten] Mile Creek sampling until we see the lab results and [have] had an opportunity to analyze them," said John Poister, a DEP spokesman. "We do not want to speculate on any aspect of the project at this time. Nothing is set in stone regarding this project — and if the results indicate we need to take further steps, we will."

The department expects results from these samples at the end of August, Poister said

Ken Dufalla, local chapter president of the Izaak Walton League conservation group

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in Greene County, called the testing a joke. "We are not going to accept these results."

Initial DEP water sampling from the creek and mine discharge from April 2014 showed high levels of radioactive materials and other chemicals typically related to Marcellus Shale drilling operations.

More than a year later, in early June, the DEP said it would more thoroughly test the water, sediment and fish to evaluate the scope of the problem and whether it could be a public health concern. It said it would also try to determine whether the pollution could be coming from shale gas drilling.

Test results released last week from West Virginia University's Water Research Institute show radiation levels in the creek and mine discharge were below federal limits for safe drinking water, according to director Paul Ziemkiewicz. Those samples were taken on June 25th.

Experts' Take

Three water quality experts told Public-Source that high water flow in the creek those June days would dilute the water and affect the detection of chemicals but that rainfall would likely leave the Clyde Mine discharge unaffected.

And it's the Clyde Mine discharge that could be the source of possible radioactive pollution in the creek, one expert said.

"That should really be the focus," said Avner Vengosh, a geochemist at Duke University.

How can drinking water with radionuclides affect your health?

Radionuclides, including radium, uranium and gross alpha, are radioactive elements that can occur naturally in the environment.

According to the EPA, people who drink water containing those elements over many years may have an increased risk of cancer. Drinking water with uranium over the long term may also result in kidney issues.

The initial sampling the DEP did on the mine discharge and the creek in April 2014 showed high levels of radionuclides, including radium 226 and radium 228, and bromides in the abandoned Clyde Mine discharge water. These chemicals are not typical of what you'd see in coal mine discharges but rather are common in fracking wastewater, water quality experts said.

Vengosh's research group also tested the Clyde Mine discharge in June for radioactive elements and other chemicals associated with Marcellus Shale but decided not



to test the creek because of the rain.

Vengosh said he has doubts about the other test results and he expects his group's results to bring a clearer picture of how much radioactive material is present, where it's coming from and how it could be affecting the creek.

Poister, the DEP spokesman, said the department used an inexpensive testing method called gamma spectroscopy for its 2014 sampling but will use more precise methods following EPA standards for analyzing its June samples.

The results released by the West Virginia (WVU) researchers have been interpreted in different ways by media and the gas industry, depending on which radiation readings they focused on. The WVU results show most radionuclides were detected at levels well below federal safe drinking water limits but shows one (gross alpha) close to or at the limit, which could indicate there is a larger contamination problem.

Energy in Depth, a gas industry public relations web site, and other local media focused on the low levels of radionuclides detected, while the *Pittsburgh Post-Gazette* reported the WVU data indicates there is evidence of radiation in Clyde Mine likely linked to past dumping of shale gas waste-

The WVU researchers sent its samples to a certified lab in Greensburg, Pennsylvania, which used EPA-approved methods for the analysis, Ziemkiewicz said. He said the tests did show higher-than-normal levels of bromides, a salt associated with the Marcellus Shale, coming from the Clyde Mine. This could still be an indicator that shale water is present, Ziemkiewicz said.

When mixed with chlorine at a drinking water treatment facility, bromides can create carcinogenic chemicals called triha-

lomethanes. The Tri-County Municipal Water Authority, one of the DEP's June sampling sites, has exceeded safe drinking water limits of these chemicals numerous times in recent years.

If the new testing and research points to a problem with radiation or bromides in the creek and they can prove it's coming from the Marcellus Shale, then the big question becomes, "How is it getting there?" That's one of the most intriguing questions, Vengosh said.

Dufalla, of the Izaak Walton League, has speculated for years that it's coming from someone illegally dumping fracking wastewater into abandoned coal mines in the area.

Regardless of what's causing it, Vengosh said the main focus for regulators and scientists should be figuring out how the water discharging into the stream is affecting the environment and health of area residents.

Local School to Test Water

After PublicSource published a story on June 5th about possible radiation in Ten Mile Creek, a superintendent of a small rural school district in Washington County decided to have the water tested inside the schools.

Linda Marcolini, superintendent of the Bethlehem Center School District in Fredericktown, Pennsylvania, said tests for radiation and other chemicals will be done on the water inside the three buildings on the school district's campus.

"I'm trying to err on the side of caution," she said. "It may be nothing but it may be something."

If the tests do show the presence of radiation or some chemicals, she said, "This might be a big thing down here."

The water will be tested as a safety precaution, she said, for the 1,300 K-12 students who come from the boroughs of Beallsville, Centerville, Deemston, Marianna and East Bethlehem.

Marcolini said she has not received any calls from parents but decided to set up the tests after learning about possible pollution in the creek.

The school gets its water from the Southwestern Pennsylvania Water Authority, located in Jefferson, Pennsylvania.

To reassure customers that the water is safe from radiation, plant manager Tom Goughenour said they are also testing the water at the authority for radionuclides.

Reach Natasha Khan at 412-315-0261 or nkhan@publicsource.org. Follow her on Twitter @khantasha.



Photo Backbone Campaign/flickr/cc

Activists surround a Shell drilling rig in Seattle as the oil company attempts to move its vessels into the Arctic for a drilling operation.

Shell Cuts Off ALEC But Greenpeace Says PR Stunt Won't Save Arctic

Oil giant cuts ties with right-wing lobbying group, still plans to drill for oil in the Arctic.

By Nadia Prupis Common Dreams: August 7, 2015

Royal Dutch Shell on Friday announced that it would not renew its partnership with the American Legislative Exchange Council (ALEC), citing the corporate lobbying organization's continued denial of climate change, in a move that environmental groups say does nothing to absolve the oil giant from its destructive business model.

"ALEC advocates for specific economic growth initiatives but its stance on climate change is clearly inconsistent with our own," said Shell spokesperson Curtis Smith on Friday. "We have long recognized both the importance of the climate challenge and the critical role energy has in determining quality of life for people across the world. As part of an ongoing review of memberships and affiliations, we will be letting our association

with ALEC lapse when the current contracted term ends early next year."

For decades, ALEC has pushed against federal efforts encouraging private companies to invest in renewable energy sources. Shell follows BP as the latest oil giant to abandon the controversial rightwing group after a campaign led by the Union of Concerned Scientists. According to the *Guardian*, the Canadian National Railway — a major coal transporter — also quietly severed its financial ties with ALEC on Friday.

But while the campaign against ALEC helps highlight the group's role in spreading climate science denial, simply ending partnerships with it is not enough to salvage the fossil fuel industry's reputation among environmental activists — particularly as Shell continues its controversial mission to drill for oil in pristine Arctic waters.

As Greenpeace spokesperson Travis Nichols said on Friday, "It's a bad sign for the climate denial movement that ALEC's rhetoric is too extreme even for a cynical exploitative corporation like Shell. It's also clear that Shell's ill-conceived Arctic drilling plan is causing a PR panic but this move won't fix Shell's bad name."

"It's completely absurd for Shell to claim it wants to confront climate change while engaging in this destructive plan to drill in the Alaskan Arctic," Nichols continued.

Charlie Kronick, a senior campaign adviser with Greenpeace, told the *Guardian*: "Shell is being dragged kicking and screaming out of [ALEC] due to investor and public pressure. But they have a long way to go to bridge the massive gap between the reality of their business plans, most notably their catastrophic plan to drill in the Arctic, their other anti-climate lobbying and their claimed leadership on climate change."

Added Nick Surgey, director of research at the Center for Media and Democracy, "It's obviously a positive step for Shell to stop funding [ALEC] and its climate change denial. Other oil companies should join them. Unfortunately this is another occasion when Shell's positive language about climate change doesn't match their actions. Drilling for oil in the Arctic might turn a profit for Shell but it must be stopped if we want to avoid catastrophic climate change."

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rise in sea levels over the next few centuries was probably already "baked into the system." Now, with one word, Box had ventured into two particularly dangerous areas. First, the dirty secret of climate science and government climate policies is that they're all based on probabilities, which means that the effects of standard CO2 targets like an 80 percent reduction by 2050 are based on the middle of the probability curve. Box had ventured to the darker possibilities on the curve's tail, where few scientists and zero politicians are willing to go.

Worse, he showed emotion, a subject ringed with taboos in all science but especially in climate science. As a recent study from the University of Bristol documented, climate scientists have been so distracted and intimidated by the relentless campaign against them that they tend to avoid any statements that might get them labeled "alarmists," retreating into a world of charts and data. But Box had been able to resist all that. He even chased the media splash in interviews with the Danish press, where they translated "we're fucked" into its more decorous Danish equivalent, "on our ass," plastering those dispiriting words in large-type headlines all across the country.

The problem was that Box was now working for the Danish government and even though Denmark may be the most progressive nation in the world on climate issues, its leaders still did not take kindly to one of its scientists distressing the populace with visions of global destruction. Convinced his job was in jeopardy only a year after he uprooted his young family and moved to a distant country, Box was summoned before the entire board of directors at his research institute. So now, when he gets an email asking for a phone call to discuss his "recent gloomy statements," he doesn't answer it.

Five days later: "Dr. Box — trying you again in case the message below went into your junk file. Please get in touch."

This time he responds briefly. "I think most scientists must be burying overt recognition of the awful truths of climate change in a protective layer of denial (not the same kind of denial coming from conservatives, of course). I'm still amazed how few climatologists have taken an advocacy message to the streets, demonstrating for some policy action." But he ignores the request for a phone call.

A week later, another try: "Dr. Box — I watched your speech at *The Economist*'s Arctic Summit. Wow. I would like to come see you."

But gloom is the one subject he doesn't want to discuss. "Crawling under a rock isn't an option," he responds, "so becom-



Photo by McKenzie Ross

Box takes temperature and conductivity readings at Kane Basin, near the Humboldt Glacier, Greenland. The customary scientific role is to deal dispassionately with data, but Box says that, "The shit that's going down is testing my ability to block it."

ing overcome with PTSD-like symptoms is useless." He quotes a Norse proverb: "The unwise man is awake all night, worries over and again. When morning rises he is restless still."

Most people don't have a proverb like that readily at hand. **So, a final try**: "I do think I should come to see you, meet your family and make this story personal and vivid."

I wanted to meet Box to find out how this outspoken American is holding up. He has left his country and moved his family to witness and study the melting of Greenland up close. How does being the one to look at the grim facts of climate change most intimately, day in and day out, affect a person? Is Box representative of all of the scientists most directly involved in this defining issue of the new century? How are they being affected by the burden of their chosen work in the face of changes to the Earth that could render it a different planet?

Finally, Box gives in. Come to Copenhagen, he says. And he even promises a family dinner.

* * *

For more than 30 years, climate scientists have been living a surreal existence. A vast and ever-growing body of research shows that warming is tracking the rise of greenhouse gases exactly as their models predicted. The physical evidence becomes more dramatic every year: forests retreating, animals moving north, glaciers melting,

wildfire seasons getting longer, higher rates of droughts, floods and storms — five times as many in the 2000s as in the 1970s. In the blunt words of the 2014 National Climate Assessment, conducted by 300 of America's most distinguished experts at the request of the U. S. government, human-induced climate change is real — U. S. temperatures have gone up between 1.3 and 1.9 degrees, mostly since 1970 — and the change is already affecting "agriculture, water, human health, energy, transportation, forests and ecosystems." But that's not the worst of it. Arctic air temperatures are increasing at twice the rate of the rest of the world — a study by the U. S. Navy says that the Arctic could lose its summer sea ice by next year, 84 years ahead of the models — and evidence little more than a year old suggests the West Antarctic Ice Sheet is doomed, which will add between 20 and 25 feet to ocean levels. The 100 million people in Bangladesh will need another place to live and coastal cities globally will be forced to relocate, a task complicated by economic crisis and famine — with continental interiors drying out, the chief scientist at the U. S. State Department in 2009 predicted a billion people will suffer famine within 20 or 30 years.

And yet, despite some encouraging developments in renewable energy and some breakthroughs in international leadership, carbon emissions continue to rise at a steady

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Photo on GBC web site submitted by Michael Mann No scientist has come in for more threats and abuse than Michael Mann, whose 'hockey stick' graph (so named because the temperature and emissions lines for recent decades curve straight ut) has become the

Mann, whose 'hockey stick' graph (so named because the temperature and emissions lines for recent decades curve straight up) has become the target of the most powerful deniers in the world.

NOTE FROM THE EDITOR: Michael Mann has

NOTE FROM THE EDITOR: Michael Mann has been on our Board of Directors since we started The Go-Back Club. Whenever I need help with a global warming question or anything else, Mike is always quick to respond. He is a good friend, whom we trust!

rate and, for their pains, the scientists themselves — the cruelest blow of all — have been the targets of an unrelenting and well-organized attack that includes death threats, summonses from a hostile Congress, attempts to get them fired, legal harassment and intrusive discovery demands so severe they had to start their own legal-defense fund, all amplified by a relentless propaganda campaign nakedly financed by the fossil-fuel companies.

Shortly before a pivotal climate summit in Copenhagen in 2009, thousands of their email streams were hacked in a sophisticated espionage operation that has never been solved — although the official police investigation revealed nothing, an analysis by forensics experts traced its path through servers in Turkey and two of the world's largest oil producers, Saudi Arabia and Russia.

Among climate activists, gloom is building. Jim Driscoll of the National Institute for Peer Support just finished a study of a

group of longtime activists whose most frequently reported feeling was sadness, followed by fear and anger. Dr. Lise Van Susteren, a practicing psychiatrist and graduate of Al Gore's Inconvenient Truth slide-show training, calls this "pretraumatic" stress. "So many of us are exhibiting all the signs and symptoms of post-traumatic disorder — the anger, the panic, the obsessive intrusive thoughts." Leading activist Gillian Caldwell went public with her "climate trauma," as she called it, quitting the group she helped build and posting an article called "16 Tips for Avoiding Climate Burnout," in which she suggests compartmentalization: "Reinforce boundaries between professional work and personal life. It is very hard to switch from the riveting force of apocalyptic predictions at work to home, where the problems are petty by comparison."

Most of the dozens of scientists and activists I spoke to, date the rise of the melancholy mood to the failure of the 2009 climate conference and the gradual shift from hope of prevention to plans for adaptation: Bill McKibben's book *Eaarth* is a

manual for survival on an Earth so different he doesn't think we should even spell it the same and James Lovelock delivers the same message in *A Rough Ride to the Future*. In Australia, Clive Hamilton writes articles and books with titles like *Requiem for a Species*. In a recent issue of *The New Yorker*, the melancholy Jonathan Franzen argued that, since Earth now "resembles a patient whose terminal cancer we can choose to treat either with disfiguring aggression or with palliation and sympathy," we should stop trying to avoid the inevitable and spend our money on new nature preserves, where birds can go extinct a little more slowly.

At the darkest end of the spectrum are groups like Deep Green Resistance, which openly advocates sabotage to "industrial infrastructure" and the thousands who visit the web site and attend the speeches of Guy McPherson, a biology professor at the University of Arizona, who concluded that renewables would do no good, left his job and

moved to an off-grid homestead to prepare for abrupt climate change. "Civilization is a heat engine," he says. "There's no escaping the trap we've landed ourselves into."

The most influential is Paul Kingsnorth, a longtime climate activist and novelist who abandoned hope for political change in 2009. Retreating to the woods of western Ireland, he helped launch a group called Dark Mountain with a stirring, gloomy manifesto calling for "a network of writers, artists and thinkers who have stopped believing the stories our civilization tells itself." Among those stories: progress, growth and the superiority of man. The idea quickly spread and there are now 50 Dark Mountain chapters around the world. [more coming in our November issue] Fans have written plays and songs and a Ph.D. thesis about them. On the phone from Ireland, he explains the

"You have to be careful about hope. If that hope is based on an unrealistic foundation, it just crumbles and then you end up with people who are despairing. I saw that in Copenhagen — there was a lot of despair and giving up after that."

Personally, though he considers them feeble gestures, he's planting a lot of trees, growing his own vegetables, avoiding plastic. He stopped flying. "It seems like an ethical obligation. All you can do is what you think is right." The odd thing is that he's much more forgiving than activists still in the struggle, even with oil-purchased politicians. "We all love the fruits of what we're given — the cars and computers and iPhones. What politician is going to try to sell people a future where they can't update their iPhones ever?"

He laughs.

Does he think it would be wrong to take a transatlantic airplane trip to interview a climate scientist?

He laughs again. "You have to answer that yourself."

All this leaves climate scientists in an awkward position. At NASA's Goddard Institute for Space Studies, which early in the year was threatened with 30 percent budget cuts by Republicans who resent its reports on climate change, Gavin Schmidt occupies the seventh-floor corner office once occupied by the legendary James Hansen, the scientist who first laid out the facts for Congress in 1988 and grew so impassioned he got himself arrested protesting coal mines. Although Schmidt was one of the victims of the 2009 computer hacks, which he admits tipped him into an episode of serious de-

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pression, he now focuses relentlessly on the bright side. "It's not that nothing has been done. There's a lot of things. In terms of per capita emissions, most of the developed world is stable. So we are doing something."

Box's tweet sets his teeth on edge. "I don't agree. I don't think we're fucked. There is time to build sustainable solutions to a lot of these things. You don't have to close down all the coal-powered stations tomorrow. You can transition. It sounds cute to say, 'Oh, we're fucked and there's nothing we can do,' but it's a bit of a nihilistic attitude. We always have the choice. We can continue to make worse decisions or we can try to make ever better decisions. 'Oh, we're fucked! Just give up now, just kill me now,' that's just stupid."

Schmidt, who is expecting his first child and tries to live a low-carbon existence, insists that the hacks and investigations and budget threats have not intimidated him. He also shrugs off the abrupt-climate-change scenarios. "The methane thing is actually something I work on a lot and most of the headlines are crap. There's no actual evidence that anything dramatically different is going on in the Arctic, other than the fact that it's melting pretty much everywhere."

But climate change happens gradually and we've already gone up almost 1 degree centigrade and seen eight inches of ocean rise. Barring unthinkably radical change, we'll hit 2 degrees in 30 or 40 years and that's been described as a catastrophe melting ice, rising waters, drought, famine and massive economic turmoil. And many scientists now think we're on track to 4 or 5 degrees - even Shell oil said that it anticipates a world 4 degrees hotter because it doesn't see "governments taking the steps now that are consistent with the 2 degrees C scenario." That would mean a world racked by economic and social and environmental collapse.

"Oh yeah," Schmidt says, almost casually. "The business-as-usual world that we project is really a totally different planet. There's going to be huge dislocations if that comes about."

But things can change much quicker than people think, he says. Look at attitudes on gay marriage.

And the glaciers?

"The glaciers are going to melt, they're all going to melt," he says. "But my reaction to Jason Box's comments is — what is the point of saying that? It doesn't help anybody."

As it happens, Schmidt was the first winner of the Climate Communication Prize from the American Geophysical Union and various recent studies in the growing field of climate communications find that frank talk about the grim realities turns people off — it's simply too much to take in. But strategy is one thing and truth is another. Aren't those glaciers water sources for hundreds of millions of people?

"Particularly in the Indian subcontinent, that's a real issue," he says. "There's going to be dislocation there, no question."

And the rising oceans? Bangladesh is almost underwater now. Do a hundred million people have to move?

"Well, yeah. Under business as usual. But I don't think we're fucked."

Resource wars, starvation, mass migrations . . .

"Bad things are going to happen. What can you do as a person? You write stories. I do science. You don't run around saying, 'We're fucked! We're fucked! We're fucked! It doesn't — it doesn't incentivize anybody to do anything."

Scientists are problem solvers by nature, trained to cherish detachment as a moral ideal. Jeffrey Kiehl was a senior scientist with the National Center for Atmospheric Research when he became so concerned about the way the brain resists climate science, he took a break and got a psychology degree. Ten years of research later, he's concluded that consumption and growth have become so central to our sense of personal identity and the fear of economic loss creates such numbing anxiety, we literally cannot imagine making the necessary changes. Worse, accepting the facts threatens us with a loss of faith in the fundamental order of the universe. Climate scientists are different only because they have a professional excuse for detachment and usually it's not until they get older that they admit how much it's affecting them - which is also when they tend to get more outspoken, Kiehl says. "You reach a point where you feel — and that's the word, not think, feel — 'I have to do something."

This accounts for the startled reaction when Camille Parmesan of the University of Texas — who was a member of the group that shared a Nobel prize with Al Gore for their climate work — announced that she'd become "professionally depressed" and was leaving the United States for England. A plainspoken Texan who grew up in Houston as the daughter of an oil geologist, Parmesan now says it was more about the politics than the science. "To be honest, I panicked 15 years ago — that was when the first studies came out showing that Arctic tundras were shifting from being a net sink to being a net source of CO2. That along with the fact this butterfly I was studying shifted its entire range across half a continent — I said this is big, this is big. Everything since then has just confirmed it."

But she's not optimistic. "Do I think it likely that the nations of the world will take sufficient action to stabilize climate in the next 50 years? No, I don't think it likely."

She was living in Texas after the climate summit failed in 2009, when media coverage of climate issues plunged by two-thirds—the subject wasn't mentioned once in the 2012 presidential debates—and Governor Rick Perry cut the sections relating to sea-level rise in a report on Galveston Bay, kicking off a trend of state officials who ban all use of the term 'climate change.' "There are excellent climate scientists in Texas," Parmesan says firmly. "Every university in the state has people working on impacts. To have the governor's office ignore it is just very upsetting."

The politics took its toll. Her butterfly study got her a spot on the UN climate panel, where she got "a quick and hard lesson on the politics" when policy makers killed the words "high confidence" in the crucial passage that said scientists had high confidence species were responding to climate change. Then the personal attacks started on right-wing web sites and blogs. "They just flat-out lie. It's one reason I live in the UK now. It's not just been climate change, there's a growing, ever-stronger antiscience sentiment in the U.S.A. People get really angry and really nasty. It was a huge relief simply not to have to deal with it." She now advises her graduate students to look for jobs outside the U.S.

No one has experienced that hostility more vividly than Michael Mann, who was a young Ph.D. researcher when he helped come up with the historical data that came to be known as the hockey stick — the most incendiary display graph in human history, with its temperature and emissions lines going straight up at the end like the blade of a hockey stick. He was investigated, was denounced in Congress, got death threats, was accused of fraud, received white powder in the mail and got thousands of emails with suggestions like, You should be "shot, quartered and fed to the pigs along with your whole damn families." Conservative legal foundations pressured his university, a British journalist suggested the electric chair. In 2003, Senator James Inhofe's committee called him to testify, flanking him with two professional climate-change deniers and in 2011 the committee threatened him with federal prosecution, along with 16 other scientists.

Now, sitting behind his desk in his office

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at Penn State, he goes back to his swirl of emotions. "You find yourself in the center of this political theater, in this chess match that's being played out by very powerful figures — you feel anger, befuddlement, disillusionment, disgust."

The intimidating effect is undeniable, he says. Some of his colleagues were so demoralized by the accusations and investigations that they withdrew from public life. One came close to suicide. Mann decided to fight back, devoting more of his time to press interviews and public speaking, and discovered that contact with other concerned people always cheered him up. But the sense of potential danger never leaves. "You're careful with what you say and do because you know that there's the equivalent of somebody with a movie camera following you around," he says.

Meanwhile, his sense of personal alarm has only grown. "I know you've spoken with Jason Box — a number of us have had these experiences where it's become clear to us that in many respects, climate change is unfolding faster than we expected it to. Maybe it is true what the ice-sheet modelers have been telling us, that it will take a thousand years or more to melt the Greenland Ice Sheet. But maybe they're wrong; maybe it could play out in a century or two. And then it's a whole different ballgame — it's the difference between human civilization and living things being able to adapt and not being able to adapt."

As Mann sees it, scientists like Schmidt who choose to focus on the middle of the curve aren't really being scientific. Worse are pseudo-sympathizers like Bjorn Lomborg who always focuses on the gentlest possibilities. Because we're supposed to hope for the best and prepare for the worst and a real scientific response would also give serious weight to the dark side of the curve.

And yet, like Schmidt, Mann tries very hard to look on the bright side. We can solve this problem in a way that doesn't disrupt our lifestyle, he says. Public awareness seems to be increasing and there are a lot of good things happening at the executive level: tighter fuel-efficiency standards, the carbon-pricing initiatives by the New England and West Coast states, the recent agreement between the U. S. and China on emissions. Last year we saw global economic growth without an increase in carbon emissions, which suggests it's possible to "decouple" oil and economic growth. And social change can happen very fast — look at gay marriage.

But he knows that gay marriage had no

"We need the deniers to get out of the way. They are risking everyone's future.... The Koch Brothers are criminals.... They should be charged with criminal activity because they're putting the profits of their business ahead of the livelihoods of millions of people, and even life on Earth."

-- Jason Box --

huge economic downside and the most powerful companies in the world are fighting to stop any change in the fossil-fuel economy. So yes, he struggles with doubt. And he admits that some of his colleagues are very depressed, convinced there's no way the international community will rise to the challenge. He gets into that conversation in bars after climate conferences, always pushing the side of hope.

Dealing with all of this has been a long emotional journey. As a young scientist, Mann was very traditional: "I felt that scientists should take an entirely dispassionate view when discussing matters of science," he wrote in a book called *The Hockey Stick and the Climate Wars*. "We should do our best to divorce ourselves from all of our typically human inclinations — emotion, empathy, concern."

But even when he decided that detachment was a mistake in this case and began becoming publicly active, he was usually able to put the implication of all the hockeystick trend lines out of his mind. "Part of being a scientist is you don't want to believe there is a problem you can't solve."

Might that be just another form of de-

nial?

The question seems to affect him. He takes a deep breath and answers in the carefully measured words of a scientist. "It's hard to say," he says. "It's a denial of futility if there is futility. But I don't know that there is futility, so it would only be denial per se if there were unassailable evidence."

There are moments, he admits, flashes that come and go as fast as a blinking light, when he sees news reports about some new development in the field and it hits him — "Wait a second, they're saying that we've melted a lot."

Then he does a peculiar thing: He disassociates a little bit and asks himself, "How would I feel about that headline if I were a member of the public?"

I'd be scared out of my mind.

Right after Hurricane Sandy, he was in the classroom showing 'The Day After Tomorrow' with the plan of critiquing its ridiculous story about the Atlantic conveyor belt slowing down so fast that it freezes England — except a recent study he worked on shows that the Atlantic conveyor belt actually is slowing down, another thing that's happening decades ahead of schedule. "And some of the scenes in the wake of Hurricane Sandy — the flooding of the New York City subway system, cars submerged — they really didn't look that different. The cartoon suddenly looked less like a cartoon. And it's like, "Now why is it that we can completely dismiss this movie?"

He was talking to students, so it got to him. They're young, it's their future more than his. He choked up and had to struggle to get ahold of himself. "You don't want to choke up in front of your class," he says.

About once a year, he says, he has nightmares of Earth becoming a very alien plan-

The worst time was when he was reading his daughter Dr. Seuss's *The Lorax*, the story of a society destroyed by greed. He saw it as an optimistic story because it ends with the challenge of building a new society but she burst into tears and refused to read the book again. "It was almost traumatic for her."

His voice cracks. "I'm having one of those moments now."

"Why?"

"I don't want her to have to be sad," he says. "And I almost have to believe we're not yet there, where we are resigned to this future."

Published in the August 2015 issue. http://www.esquire.com/news-politics/a36228/ballad-of-the-sad-climatologists-0815/

UN's World Heritage Committee Agrees to Examine Plight of Monarch Migration

Submitted by Sunny War Eagle, Marianna, Florida with this note:

I went through the loss of sooo many monarchs out in California. I lived right on their migration path and would go and see them come in on their migration run. Let's see if we can stop them in this!

(See petition at end of article.)

By Rebeca Rilye, NRDC Senior Attorney Switchboard.nrdc.org: July 2, 2015

I'm writing from Bonn, Germany with good news: the UNESCO World Heritage Committee will start looking into the plight of the monarch butterflies that spend every winter in Mexico's Monarch Butterfly Biosphere Reserve. For the first time, the Committee asked the United States and Canada to inform on their actions on monarch conservation.

NRDC's (Natural Resources Defense Council's) incredible community is a big reason why the decline of the monarch population is receiving this critical international attention. I'm proud to say that I delivered more than 50,000 petition messages from NRDC supporters asking the UNESCO's World Heritage Committee to take action to protect monarch butterflies.

Earlier this year, NRDC and other partner groups submitted a petition to the World Heritage Committee showing how the 90 percent decline in the monarch population in the reserve in central Mexico over the past 20 years was due largely to the skyrocketing use of the herbicide glyphosate in the United States and Canada. Glyphosate wipes out milkweed, the only plant on which monarch butterflies lay their eggs. The petition detailed



Milkweed photo by Iona

how the plummeting butterfly numbers meant the Monarch Butterfly Biosphere Reserve in Mexico should be included on the "World Heritage in Danger List."



Before any final determination on an "in danger" listing can be made, a series of meetings and documents will need to be produced and provided to UNESCO. For the first time since the Reserve was designated a World Heritage Site, UNESCO requested that the United States and Canada join Mexico in producing a report on what's being done to protect the migration.

This is good news for the monarchs because, as we know, the United States is not doing nearly enough and the government needs to hear this from more and more people and institutions around the world.

The petition we submitted asked the World Heritage Committee to help spur recognition that more needs to be done to preserve the incredible natural wonder of millions of monarch butterflies descending on the forest reserve in Mexico.

To save the iconic and mysterious monarch migration, the United States and Canada must act immediately to protect the monarchs' milkweed breeding habitat by limiting glyphosate use and promoting programs to restore milkweed.

As parties to the World Heritage Convention, the United States and Canada have committed to help protect World Heritage sites and to avoid actions that might directly or indirectly damage sites located in other countries. The UNESCO World Heritage Committee cannot force a country to act but it can marshal international attention to the Heritage sites and recommend "corrective measures" to ensure the conservation of a site.

The UNESCO process is quite long but it is critically important to maintaining

and securing more international support for protecting the migrating monarch population.

We'll be back in touch with updates as the process moves along.

Here's what the activist community is doing to help.

SAVE MONARCHS FROM DOW'S CHEMICAL ASSAULT!

Industrial agricultural giant Dow Chemical unveiled its newest toxic herbicide, Enlist Duo, which destroys milkweed plants that monarch butterflies need to survive. And monarch populations are crashing from nearly 1 billion butterflies 20 years ago to just 57 million last winter.

Tell Dow's CEO to shelve the company's plan for selling this potent chemical cocktail — before it wreaks more destruction on monarchs.

MAKE YOUR VOICE HEARD!

If you care about Monarch butterflies, you can sign the petition to EPA at https://secure.nrdconline.org/site/Advocacy?cmd=display&page=UserAction&id=3745

Your message will be sent to:

Andrew Liveris, President, Chairman, CEO, Dow Chemical Company

Subject line: Shelve plans to bring Enlist Duo to market

D.I.Y. Education Before YouTube

Credit: Mark Jay Goebel Collection Getty Images

Three girls reading in the mid-1880s.



Submitted by John Conner Shade Gap, Pennsylvania

By Jon Grinspan, excerpt The New York Times: July 11, 2015

EACH summer, when school ends, education mostly stops short, too. But it hasn't always been that way. For the striving youths of 19th-century America, learning was often a self-driven, year-round process. Devouring books by candlelight and debating issues by bonfire, the young men and women of the so-called "Go-Ahead Generation" worked to educate themselves into a better life.

Is this old-fashioned culture of self-improvement making a comeback? The mainstream school system — with its barrage of tests, Common Core and "excellent sheep" — encourages learning as a passive, standardized process. But here and there, with the help of YouTube and thousands of podcasts, a growing group of students and adults are beginning to supplement their education.

School isn't going away. But more and

more people are realizing what their 19th-century predecessors knew: that the best learning is often self-taught.

Back then, it was a matter of necessity. There were plenty of schoolhouses in 19th-century America but few young people could attend them regularly. They had to work. Most pieced together a semester of classes here, three months there.

In 1870, students averaged under 80 days in school each year. Even though America had incredibly high literacy rates and admirable schools for those with free time, most young Americans supplemented formal schooling with their own makeshift curriculums.

This was especially true of many working-class kids, who could never find enough time. Michael Campbell, an 18-year-old Irish immigrant who spent his days laboring in a New Haven factory, making \$6 a week, wrote in a diary about his experiences. After work, he attended lectures, joined libraries and read obsessively, studying bookkeeping, phrenology, child raising and "scientifics." It was all part of his mission — which he wrote about in the third person — "to work hard six days a week and study and read all he can."

Michael was a recognizable type: the self-improving young American, convinced that he could study his way into the middle class. This up-by-your-bootstraps mentality can seem naïve today but to an 18-year-old with no clear path to adulthood, it sounded like his best hope.

Perhaps the Literary offers the best lesson for modern self-educators. For all its shortcomings, 19th-century self-education taught young Americans to openly engage with the conflicts of life, to debate and argue, not to rely on adults to shape their futures. Every step of the modern school system discourages this contrarian individualism.

Hopefully, we can learn to combine the 19th century's opinionated go-aheadism with the 20th century's structure, to offer young people an independent but stable path in the 21st century.

Maybe it starts during this long, lazy summer vacation.

Jon Grinspan is a curator and fellow at the National Museum of American History and the author of a forthcoming book on young people's contributions to 19th-

century American democracy.

Poetry by Sandy Chilcote, Newfoundland, Canada

my clearing the clearing where there are universes of flowers and trees and a small caribou herd in autumn and, in winter, sleeping seeds

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See cover, review and ordering information on page 7. Spiral-bound, 205-page book is \$25 or, if you'd like to receive it in pdf format, \$10. Please make check or money order to The Go-Back Club and send it to Iona, 21431 Marlin Circle, Shade Gap, Pennsylvania 17255. Thanks very much.



Letters and Emails from our Members



Dear Iona

I'm Very Worried! I Just applied the system to find temperatures from CO₂ concentrations from 2010 onward which is just projections to the graph. It came out to be Projection A2 which is the scariest one of all. It doesn't seem that bad; then it suddenly skyrockets!

By the way, can you send me some names and address of where some Environmental scientists and Climatologists work at Penn State?

Sincerely,

Brendan Wissinger, Pennsylvania

Note from the Editor: Brendan is our youngest member, 14. I gave him Michael Mann's email address with Mike's OK. I think they're going to enjoy each other!

Dear Iona,

It is a pleasure to receive your letter. I'm not sure how I came across it in my emails — was searching for a term "lovely spot" to find a GPS point I saved last week while working down on the border of the Great Basin and Mojave ecoregions. And your email from last October popped up!

Thank goodness I found this. I had lost touch for some time. I'm looking forward to reading your memoir, important work, and love your writing cabin! Incredible dedication it took to print the other newsletter, working in a sewing factory demonstrating your dedication.

I am well and living in Reno these days, doing work as a field technician botanist and working with lichens in my free time. Not writing as much as I would like but that will change. I need to channel the creative side

and then I will.

Hope all is well with you, Iona, *Nastassja Noel*, Nevada

Dear Iona, sister in the Universe,

Thank you so much for your efforts for publishing the newsbooklet of July. You are working so hard all the time. I am proud of you.

Nowadays Koreans are very nervous because of MERS (middle east respiratory syndrome). It is not epidemic but people worry about the spread of the disease nationwide. And many meetings and seminars have been cancelled and will be cancelled. I hope we can contain the spread of the disease soon by all kinds of efforts.

But I think the people are so sensitive to the disease. As president Roosevelt said, "The only thing we have to fear is fear itself."

Koreans have to be brave to cope with the virus which causes the disease.

Pyong Roh, brother in the Universe, Korea

Thank you, Iona.

Lovely effort!

I hope that a greater emphasis will be put on environmental protection and alternate sources of energy. Every fast-food restaurant's roof could have solar panels — and the government could encourage it with tax breaks, and also for individuals.

Just hoping!

Sandy Chilcote, Newfoundland, Canada

Hello, Iona.

Would love to know how to contact Patrick Reeder [cover story, July 2015; see www. gobackclub.org] — he's so knowledgeable; and I have been doing a lot of reading about hydroponics and just got my garden here in North Carolina up and somewhat running — would like to learn much more about it — especially kale and spinach . . . do you have a web site or contact for Patrick?

Also, anything you can write about growing our own avocados, fruits, would be great!

Thanks for all the work you do, Iona — the newsbooklet is so full of great info!

Keep up the wonderful work — do you take contributions? If so, please let us know how to support you!

Deby Morrow, North Carolina

Note from Editor: Yes, I welcome contributions. Please make check or money order payable to The Go-Back Club and mail to Iona Conner, 21431 Marlin Circle, Shade Gap, Pennsylvania 17255. Thanks!

Hey, Iona!

It's Ben. We just met outside the Harrisburg Airport. I read the newsletter you gave me and I really enjoyed it! My favorite article was the one about the revoking of PGE's waste permit [cover story, June 2015; see www. gobackclub.org]. Good to know the streams will remain clean for now.

I've been interested in 'going back to our roots' for some time now and I'll spread the word about The Go-Back Club. If there's any way you'd like me to contribute, I would be glad to.

Unfortunately, I'll be training for a month and won't have access to the internet but any emails you send will be read whenever I get out.

Pleasure having met you, **Ben Barnhart**, Pennsylvania

King Coal, Long Besieged, Is Deposed by the Market

By James B. Stewart, excerpt **1** The New York Times: August 6, 2015

In April 2005, President George W. Bush hailed "clean coal" as a key to "greater energy independence," pledging \$2 billion in research funds that promised a new golden

age for America's most abundant energy resource. But a decade later, the United States coal industry is reeling as never before in its history, the victim of new environmental regulations, intensifying attacks by activists, collapsing coal prices and — above all — the rise of cheap alternative fuels, especially natural gas.

This week President Obama slammed the industry with tougher-than-expected rules from the EPA limiting power plant carbon emissions, which will accelerate an already huge shift from coal to natural gas and other alternative fuels, especially natural gas. "Clean coal" remains an expensive and thus far impractical pipe dream.