

## Darkening Skies

Will violent storms have an impact on climate debate?

Harvest Public Radio: Filling a news void Japan's nuke crisis coverage: Thumbs up? Lessons learned from Gulf oil spill

A quarterly publication of the

Society of Environmental Journalists

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A virulent storm super-cell looms over Lawrence, Kansas, believed by the photographer to be the same system that later spawned the killer tornado that leveled much of Joplin, Missouri. See related stories beginning on page14. Photo: 

by David DeHetre via Flickr







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## A nod of thanks to our founders, who have put SEJ on a path to the future

By CAROLYN WHETZEL

SEJ learned of the death of David Stolberg, a key founder of the organization, on the Friday heading into Memorial Day weekend. A brief obituary follows on page 10 and more fitting tribute to Stolberg will come in the next edition of the *SEJournal*.

I never met Stolberg, so I never had the opportunity to thank him for his role in launching SEJ. In fact, I've never thanked any of the founders.

So, here's a belated "thank you" to Stolberg and all the original founding members. SEJ members owe them all a deep debt of gratitude. Thanks to their vision and leadership, SEJ remains a vital resource for working journalists and journalism educators.

Before I discovered SEJ, I'm not sure I ever thought of myself as an environmental journalist — just a reporter who covered environmental issues. But now I introduce myself as an environmental reporter.

SEJ not only helps me be a better reporter, it provides a rich, supportive professional community. A community that's eager to help me and other reporters fine-tune our ideas, find sources and facts, even on deadline — where else does that happen among working journalists except on SEJ's list-serve? Maybe in newsrooms, but those are shrinking, as the number of seasoned journalists who once filled them, and helped mentor new reporters, continues to drop.

I'm pretty sure my fellow board members and other SEJers feel the same way about this organization. Now it's up to all of us to see that SEJ continues to flourish well into the future.

Much of what SEJ will be able to achieve in the future hinges on its continued ability to attract funding (foundation grants, earned revenue, and gifts), grow membership, and attract university conference hosts.

From its very beginnings, SEJ has been fortunate to have a steady stream of support from charitable foundations, but those grants are becoming more difficult to win, and the awards are getting smaller. Dues and conference fees and earned income still provide only a small fraction of SEJ's revenue.

In between advising Miami conference co-chairs Jeff Burnside and Angela Posada-Swafford, Executive Director Beth Parke continues her stellar work courting foundations for funding opportunities to replace the loss of long-time funders, like the Hewlett Foundation.

Thanks to a pledge from the Grantham Foundation, SEJ will be able to offer another round of mini-grants through the Fund for Environmental Journalism, so watch the website for more



information on that program. This means SEJ can continue to help freelancers and others with journalism projects they might not otherwise be able to tackle.

On the membership front, SEJ currently has about 1,500 members. Unlike the early days, when most members worked for daily newspapers, the majority are now freelance journalists. No

doubt, this is a reflection of the ongoing loss of journalism jobs at newspapers.

SEJ still needs to actively recruit from traditional newspapers, radio and television stations, at the fresh crop of nonprofit news organizations, and at universities. Another potential recruitment opportunity is at the growing number of specialty or niche news publishers, who are hiring hundreds of reporters — think Bloomberg Government in Washington D.C.

The board of directors' future sites committee, led by Douglas Fischer, is reaching out to universities all across the country in search of hosts for the 2014 and beyond conferences.

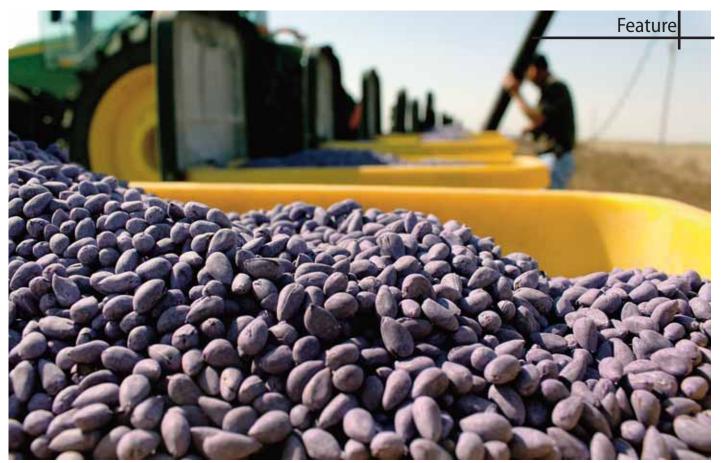
Finally, a long-term sustainable SEJ will require ongoing financial support from individual donors — SEJ always appreciates whatever support members can offer — and volunteers.

SEJ is always interested in feedback from members to help identify what programs work, what ones don't work and how members use the website.

Also, members need to be sure to keep their SEJ web profile up-to-date, especially your contact information. The website offers each member a personal profile space. Log in with your username and pass code then go to your personal profile page. You can upload a photo; provide information about your work, your blog, and more.

SEJ Board president Carolyn Whetzel covers environment issues in California for BNA Inc.





Many Harvest Public Media reporters do their own photography as well. Eric Durban covered Kansas farmers switching crops from corn to cotton, because of the fiber's somewhat lesser demand for water.

Photo by Eric Durban, Harvest Public Media

Photo by Eric Durban, Harvest Public Media

## As Midwest mainstream media withers, Harvest Public Media steps up to cover food, fuel and field issues

By MADELINE BODIN

On the first Monday in May, Frank Morris, Harvest Public Media's managing supervisor, heard that just across town from his office at KCUR, a National Public Radio affiliate, the *Kansas City Star* had laid off two dozen employees. It was the 10th round of layoffs for that paper in two years.

The region's newspapers once fed the nation food and agribusiness news. The *Star* even won a Pulitzer Prize in 2001 for its coverage of the U.S. Department of Agriculture. In contrast, Morris saw surging interest in food issues, popularized by Michael Pollan's books *The Omnivore's Dilemma* and *In Defense of Food*, as well as recent movies, such as Food, Inc.

What's more, Morris was about to add a seventh member to his new and growing reporting team at Harvest Public Media. "It has been great to be in expansion mode, both because of the folks that are available, and the needs and appetite for coverage," he says.

Harvest Public Media's mission is to fill that gap being left by the shrinking mainstream media. It reports on "food, fuel, and field" with stories on subjects as diverse as a program that helps combat veterans become farmers, raw milk cheese, the impact of an oil pipeline on farms, school lunches, and cellulosic ethanol. It is one of seven Local Journalism Centers created by the Corporation for Public Broadcasting in the past two years.

The Corporation for Public Broadcasting (CPB) saw the void in local news too, and recognized that it was a nationwide phenomenon, said Kathy Merritt, senior director of program investments for radio at CPB. "We looked at that and said, 'how can public media fill in to provide good, local news coverage?"

CPB also wants to encourage public radio and television stations to get better use of their resources by collaborating, Merritt said.

Its solution was to fund seven Local Journalism Centers that would allow teams of skilled journalists to focus on issues of regional importance, producing multimedia reports in collaboration with a small group of local public media stations.

When Morris's boss put a brochure on his desk with the CPB's grant proposal request, Morris already knew that agribusiness was the issue he wanted to focus on. He reached out to colleagues at other public media stations who shared his interest.

continued on page 7



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Harvest's six participating public media stations span America's breadbasket. They are KCUR, a public radio station in Kansas City; KBIA in Columbia, Mo.; Kansas Public Radio; Iowa Public Radio; NET, public radio and television in Nebraska; and High Plains Public Radio, which is based in western Kansas, but also serves eastern Colorado, and the Texas and Oklahoma panhandles.

KCUR in Kansas City, Mo. was well situated to be the hub of coverage on this topic, Morris says. Not only is it in the Corn Belt, but it is also in the center of the region's

agricultural research efforts, which include a Monsanto research facility near St. Louis, animal health research facilities in St. Louis, Kansas City, and Ames, Iowa, as well as USDA research facilities in Ames.

"When we looked at Harvest, it was a good alignment of stations in an area of the country that gets overlooked sometimes," Merritt said. "We thought we would really like this group of stations in the middle of the country to collaborate. And frankly, the topic was really interesting."

Harvest was one of the first LJCs funded, and while it originally presented its focus as simply "agribusiness," Merritt impressed the CPB as a compelling case for stepping up coverage of that subject. "It's about the food we eat. It's about fuel," she said. "The topic area leapt out at us as having resonance regionally as well as nationally."

Harvest's first hire, editor Donna Vestal, is an example of the forces at work behind the organization's founding. Vestal had been a business editor for 18 years and once worked for a fruit and vegetable industry trade publication. She had been laid off from the *Kansas City Star* just months before being hired by Harvest last July.

By autumn, a reporting team was in place, filing stories. "Right away we have a tremendously committed team who can't get enough of this topic," Vestal said.

With their wealth of experience covering agriculture, Vestal and Morris knew that one of the biggest challenges their new organization faced was credibility. "In talking with farmers, I found that they thought there wasn't a lot of completely credible reporting on agriculture," Morris said. The farmers thought that agribusiness was manipulating coverage in the farm press with its advertising, while they saw the mainstream media's championing of small, organic farms as out of touch with the realities of American agriculture.

"The people who have opinions in these matters hold those opinions strongly, as they should," Vestal said. "Trying to step into those tricky issues has been a lot of fun for the reporters, but it is also a huge challenge."

Harvest has risen to that challenge. In April, Harvest reporter Jessica Naudziunas won a 2011 Regional Edward R. Murrow Award for hard news audio reporting in small market radio for her piece "In Missouri's Bootheel, Black Farmers Wait on Unfulfilled Promises." Also in April, reporter Clay Masters swept the Great

Plains AP Broadcasters Awards for noncommercial agriculture coverage, with pieces that were awarded first, second, and third place. "Those were the first three big pieces he did for us," Vestal said.

"I think they are doing great work," Merritt added. "Their reporting has been picked up by NPR, the PBS Newshour, and a number of newspapers. They are serving the audience at the partner stations, but they are going beyond that. We are really pleased to see that happen."

Funds for the grant were awarded to CPB in previous federal budget years, so federal budget cuts won't affect the program,

Merritt said. But the grant will pay only for LJC's first two years of operation. Harvest's next challenge is to find funding so that operations can continue when the CPB grant runs out next year.

Already foundations and other potential funders have approached the organization. Harvest is proceeding cautiously, however. "We have to be really careful of the perception of who is providing funding for this effort," Vestal said.

"It's not just a money thing," Morris added. "The structure of the organization is going to have to change." The first step the group will take to address the funding issue is to develop an ethics or editorial policy that will make their role as a news-gathering organization transparent to the public.

Another grant, from American Public Media, one of the largest producers of public radio programming in the world, will bring Harvest into the Public Insight Network, which is sort of a cross between Help A Reporter Out (HARO) and Facebook, organizing over 100,000 people who have volunteered as sources. The full-time staffer, hired in May, will manage Harvest's interaction with this "social network on steroids," that can be used to develop stories from a grassroots level.

In spite of the growth over the last year, Vestal said the organization has just begun to blossom. "We are still

really little," she says, citing the group's 450 Facebook fans. "We didn't want to go out to build our audience without a body of work, and now we have that. It's time to reach out."

Madeline Bodin is a freelance journalist who writes about wildlife conservation and other environmental topics. She can be reached at MadelineBodin+SEJ@gmail.com.



Donna Vestal, Editor



Frank Morris,
Managing Supervisor
PHOTO: COURTESY HPM

## LJC grants fund more environmental coverage

Two additional Local Journalism Center grants were awarded earlier this year to bring the total number of LJCs funded by CPB to seven. One of those grants was awarded to a group of seven public media stations in Oregon, Washington, and Idaho that plans to develop a news unit that looks at regional stories through the lens of the environment, said Morgan Holm, vice president of news and public affairs for Oregon Public Broadcasting.

At press time, the unit had hired reporters for seven of its eight new positions, all of which were advertised as online journalism jobs. However, the group did not yet have a name. Holm said the unit will focus on sustainability, pollution/toxics, natural resources, energy, and science and research. He expects a formal launch in the fall.

# California weekly newspaper scores by unraveling green claims from corporate and enviro groups

By BILL DAWSON

Kera Abraham, assistant editor of the *Monterey County Weekly* in California, won the first-place honor in the 2010 SEJ Awards for Outstanding Small Market Reporting, Print.

Abraham's contest entry, comprising three articles, was entitled "Green vs. Green: Environmentalists Duke it Out." The SEJ judges praised her work this way:

"By examining conflicts in which both sides laid plausible claim to being champions of the environment, Abraham offered an unusually sophisticated and thought-provoking examination of what it means to be green. Her pieces were thoroughly reported, engagingly told, fresh and fair-minded."

Abraham previously worked at the *Eugene Weekly* in Oregon, where her job also involved covering environmental issues. She answered emailed questions from *SEJournal*'s Bill Dawson.

Q: The SEJ contest judges said your three stories "examin[ed] conflicts in which both sides laid plausible claim to being champions of the environment." Did you set out to find different ways to examine that aspect of environmental politics, even thinking of the articles as an occasional series, or was that common strand more coincidental?

A: The common theme wasn't planned, but stories that involve clashing shades of green tend to compel me (and my editor) more than predictable conflicts pitting, say, developers against NIMBY neighbors, or polluters against activists.

But even that age-old dynamic is increasingly becoming a green-vs.-green fight. Developers are having more luck getting permits for projects with eco-friendly features. Companies are seeing the profit to be made from products marketed as crunchy and sustainable. In this crappy economy, it seems everyone's looking for redemptive green qualities in resource-intensive activities that generate money.

So it's not that I go looking for stories pitting different species of environmentalists against one another. It's more that within the environment beat, it seems sources on all sides are getting better at using green rhetoric.

## Q: Are green-vs.-green claims a frequent aspect of environmental controversies in Monterey County and the surrounding areas, or all over California?

A: Yes to both. The California Environmental Quality Act and the California Global Warming Solutions Act, among other laws, ensure every major project proposal is analyzed for its environmental impacts, including greenhouse gas emissions.



Kera Abraham
Photo courtesy Kera Abraham

Green-vs.-green squabbles are especially complex along the western border of Monterey County, within the coastal zone, where projects have to pass muster with the California Coastal Commission, and often the Monterey Bay National Marine Sanctuary. In one case, the controversy boils down to whether a big oceanfront "ecoresort" can ever be green enough to build in the face of inevitable sea level rise.

Move to east and south Monterey County and you're in ag country. The environment stories there are about pesticides, oil leases, contaminated farm runoff

— complex issues, but less nuanced in terms of who's on Team Green.

Q: The second of your award-winning articles to be published was about green marketing. It grew out of your coverage of a conference held in Monterey where, you wrote, "a parade of PR wizards" spoke and "employers paid up to \$2,595 per head, plus travel expenses, to send people ... on a shared assumption: Do-goodery, if marketed right, is profitable." You also discussed the marketing aspects of two controversial projects — a coastal resort and a huge solar power development — in the other two stories. Is green marketing a coverage subject you were already interested in before these stories? Do you see it as an important subject for environmental journalists to keep in mind as they do their reporting on subjects that aren't mainly about marketing, per se?

A: One thing about the environment beat is that it seeps into every other one — business, transportation, health care, even sports. Going into journalism, I expected my environmental science degree to equip me to report on the environment. But of course, real-world issues turned out to be much messier than I'd expected. And that made me so much more interested in reporting them.

So yes: I'd say a constant eye on the macro-economy, the political power of industry and the psychological power of marketing is at the heart of the green marketing beat. That means being skeptical of green marketing, but also open to the enormous impacts of industry-wide change.

Q: Your contest entry was titled "Green vs. Green: Environmentalists Duke It Out." The stories about the resort and solar proposals were long, magazine-style accounts, full of nuance and context and detail. The judges said your stories were "unusually sophisticated ... thoroughly reported ... fair-

minded," which seemed to me like an excellent description. Nonetheless, these are highly contentious issues. Did you receive much or any criticism or complaint from proponents or opponents of those projects, who thought you

weren't fair or that you should have taken their side? Related to that, do you think environmental politics is a tougher subject to cover in an environmentally-attuned place like Monterey County than it might be someplace that's not known as being particularly green?

A: Surprisingly, not so much. The solar farm developer and the leader of the opposing citizen group both sent nice notes after the story ran. The "eco-resort" piece got some heated letters from readers on both sides, and a few of the pro-resort sources were slightly chillier in later communications. The organizer of the Sustainable Brands conference remained cheery with me, but made a valid point that one of the companies I'd depicted as genuinely green, Tom's of Maine, is actually owned by Colgate.

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Award-winning *Monterey County Weekly* cover story by Assistant Editor Kera Abraham about a planned coastal eco-resort development project that claims it would be the world's greenest. Photo: COURTESY MONTEREY COUNTY WEEKLY

Q: To what extent have you followed up on the resort and solar issues, reporting developments after you did detailed examinations? Has either of them come to a decisive juncture or point of resolution, or are they still being fought out? Generally speaking, how much does your paper — an alternative newsweekly — pay attention to breaking-news developments, whether or not they're tied to issues you've

written about in long-form stories? I notice your website has a News Blog. Is this where a lot of the breaking stories appear? Is competition with newspapers and broadcast outlets on breaking news an important aspect of your mission?

A: I'll admit that follow-up can be a challenge as a steady stream of new stories rushes onto my plate. I keep a follow-up reminder list, but it helps when the sources check in. Both the solar farm and the eco-resort controversies are still being fought out, but they haven't been in the paper lately.

At *Monterey County Weekly*, Abraham. Photo I we try to stay on top of breaking news within the scope of what we can do with our staff, now up to three news reporters. We prioritize the stories we own — the ones we're uniquely positioned to tell in a more nuanced, colorful, quirky and/or investigative way than our mainstream competitors.

The News Blog at www.montereycountyweekly.com is for the tapas of the news world, the small bites that don't take long to write: the quick updates, the breaks that won't hold until our Thursday publication, and sometimes story tangents that had to

be cut for space in the paper.

Monterey County Weekly's mission is "to encourage independent thought and conscious action, etc." That "etc." is intentional, and the news team clearly understands it to mean breaking local news — which we do every week.

O: You've worked at the Weekly since January 2007, starting as a staff writer and becoming assistant editor in January 2010. An online profile says your responsibilities include "reporting on five geographical beats, along with environment, oceans and water policy; writing news articles (weekly) and cover stories (about monthly); occasional contributions to arts, culture and opinion sections; spearheading and editing some special issues; assisting with planning and editing [the] weekly news section, including edits on InCopy; posting web stories and updates at montereycountyweekly.com; compiling briefs of web stories for [a] weekly print

column; some editing of freelance assignments; [and] proofing of editorial copy."

That sounds like a lot of work. Um, do you typically work 80-90 hour weeks? Seriously, are all of those duties still on your plate? How do you generally apportion your time? How much of your time is devoted to environmental coverage, would you say? I guess there must be considerable

areas of overlap between your environmental and geographical-beat duties?

A: Ha. No, for my first four years at MCW I'd say I averaged about 45-50 hours a week — pulling late-nighters at the office when cover story deadlines loomed, and taking short Thursdays when I felt burnt out. But my baby's birth in late December forced me to take a step back. I just returned from maternity leave in late April, and I'm now working 80 percent time. I still have most of the duties listed above, with the exception of the web story briefs. It's manageable thanks to the divine coming-together of the paper's best and biggest news team yet, includ-



Artis'ts conception of a proposed dual-use solar farm to be developed on existing agricultural land in California's Panoche Valley, from another award-winning *Monterey County Weekly* cover story by Assistant Editor Kera Abraham.

Photo Illustration: Solargen / PV2 Energy

ing a fantastic and very understanding new editor. Having a tiny, amazing person to get home to helps with efficiency.

I'd say I spend about half my time reporting and writing for the paper, 30 percent editing and proofing, 10 percent writing web stories and 10 percent at meetings. Maybe a little over half my



Kim Williams, a small-family egg farmer, is working to preserve California's Panoche Valley for sustainable agriculture and ecotourism, from another award-winning *Monterey County Weekly* cover story by Assistant Editor Kera Abraham.

Photo by Nic Courty, *Monterey County Weekly* 

reporting is within the environmental beat, though the borders are fuzzy. Right now, for example, my never-ending assignment is the regional seawater desalination plant, which has an environmental foundation: the illegal over-pumping of the Carmel River is forcing the Monterey Peninsula to find a new water supply. But the day-to-day details involve all that wonky stuff that inevitably gets tied up in a \$400-million project.

Q: You previously covered environmental and other subjects for the Eugene Weekly, from 2004-07. Just before that, you earned a master's degree in magazine journalism from the University of Oregon after getting your undergraduate degree in environmental science at the University of California, Berkeley. Did you initially intend to do science as a career, rather than journalism, or did you pursue the science degree as conscious preparation for becoming a journalist? If you originally thought you'd be a scientist or do something else, other than journalism, when and why did you decide to take the journalistic path?

A: I headed to UC-Berkeley with competing passions for nature and writing. Berkeley didn't offer a journalism undergraduate degree, so I tried English — but got impatient with Chaucer when there was so much to learn about the planet, and how we live on it.

So instead I majored in environmental science, with the intent of using it as background for reporting. But I didn't know how to break into journalism after I graduated. So, after spending the little money I had bumming around Kauai, I went back to Berkeley and took the first position I was offered, with a company that monitored hazardous waste sites. Turned out that involved being outfitted for a gas mask and spending 10-day stretches taking well-water samples at toxic dumps in the SoCal desert with crusty older male colleagues. The commute was an hour and a half on three buses. I quit six weeks in, started bartending, and applied to J-schools.

A generous fellowship at the University of Oregon took me to Eugene, where I fell in love with the misty redwoods and my future husband. *Eugene Weekly* hired me right out of the master's program, and I've loved my job ever since.

Q: You were awarded a World Affairs Journalism Fellowship in 2008 by the International Center for Journalists. That allowed you to report on marine life in Chile and Peru, looking for clues about what increasing ocean acidity might mean for fisheries and other marine life off the California coast. Those are issues of keen interest and importance in Monterey County. Please tell me, in summary, what you learned and how the fellowship helped you in your later coverage in California. Any hints for other journalists about how to connect events and trends far away with their reporting at home, even if they never have a fellowship like yours?

A: That two-week "acid trip" reinforced a theme in my local reporting: Most people put themselves, their families and their way of life first. That determines their interactions with the environment.

The scientists I spoke with in Peru and Chile were animated about the data on ocean acidification — but, being scientists, they got dodgy about its real-world implications. The laypeople I met, in contrast, didn't seem to care much about the chemistry. They wanted to know how it would affect the ceviche.

My story pitch drew on a series of parallels between Monterey Bay and its latitudinal mirror in the Southern Hemisphere. That helped with the narrative arc. But my goal was to illuminate the hugeness of the issue: a subtle but unquantifiably significant change in the world's oceans, which will affect everyone everywhere in ways we can't predict.

That goes for the Internet, too, which emulsifies information and circulates it around the globe like an electric ocean. Sorry to be so vague in response to your last question, but there it is: Facebook, Twitter, RSS feeds, listservs, YouTube, Skype, SEJ.org.

Bill Dawson is assistant editor of the SEJournal.

## SEJ loses key founder, David Stolberg



The Society of Environmental Journalists has lost a father. David Stolberg, longtime Scripps Howard executive, died on May 24 in Southington, CT. He was 84. "I always believed in the value of networking, of the subliminal training that comes from an association with one's peers," Stolberg recalled for John Palen, of Central Michigan University, who wrote of SEJ's founding.

Stolberg, as assistant general editorial manager of Scripps Howard, had first floated the idea of forming a society to winners of the 1987 Edward J. Meeman Awards, Scripps Howard's annual prize for environmental coverage.

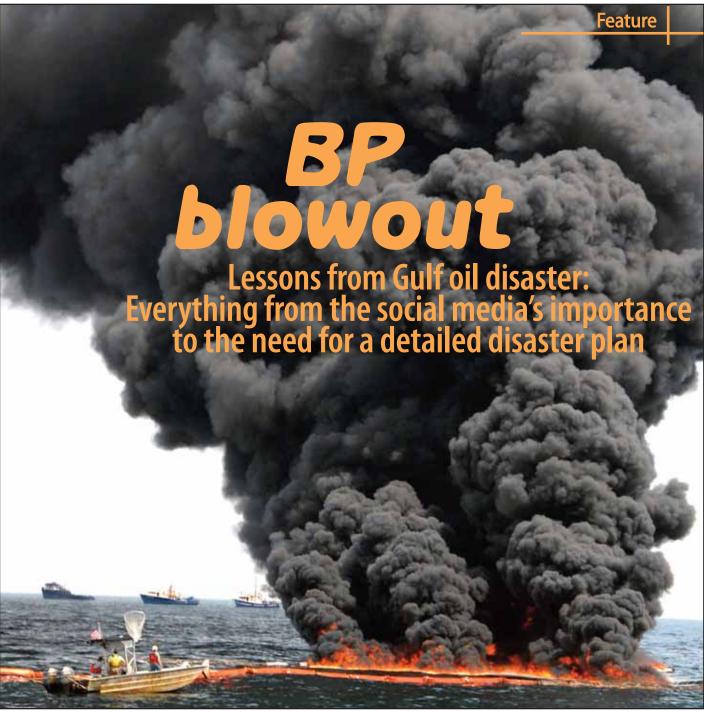
But none of them ran with the idea. Finally, in 1989, the Meeman winners acted on Stolberg's urging. In December 1989, 18 journalists met for the first time in Washington, D.C., to begin the process of forming SEJ.

Stolberg then helped the group secure funding to initiate the organization. "It was my concept," Stolberg told Palen. 'I'm extraordinarily proud of it.'

To honor Stolberg, SEJ annually awards its prize for volunteer service in his name. Beth Parke, SEJ executive director, said other plans are in the works this year to honor Stolberg.

A special story for the *SEJournal* is planned for next issue; it will detail Stolberg's role in the founding and his significance to SEJ.

-- MICHAEL MANSUR



A Vessel of Opportunity boat stands by while oil is burned off during a controlled in-situ burn on the waters of the Gulf of Mexico in mid-July.

U.S. AIR FORCE PHOTO BY TECH. SGT. POLLY BENNETT

## By BOB THOMAS

In the aftermath of what has been billed as the greatest marine oil disaster in U.S. history, the media were expected to cover the issues quickly and in depth. I assumed there would be a rush for Pulitzers, with all major media, especially on the Gulf Coast, primed from their experiences during the Hurricane Katrina events.

But 2010 was different. Experience and the presence of a cast of excellent journalists were trumped by a devil absent during the Katrina coverage in 2005 — downsizing.

As an example, when the BP oil disaster began, The Times-

Picayune in New Orleans had passed through a large buyout program and had a furlough system in place. The day the event occurred, *Times-Picayune* veteran environment writer Mark Schleifstein was on furlough and attending Jazz Fest. Since the event was sponsored by Shell Oil Company, Schleifstein immediately went to the Shell public relations people at the fest and queried them about covering such an oil disaster. While he was being schooled, funky music played in the background.

The Times-Picayune had also recently lost its person who specifically covers oil and gas.

Even so, it's interesting to examine what other lessons,

beyond the obvious dwindling of mainstream media, were learned from the BP oil disaster. We surveyed a variety of key journalists, scientists and others active in the disaster news coverage and its follow-up coverage:

Schleifstein and David Hammer, *The Times-Picayune*; Craig Pittman, *St. Petersburg Times*; Chris Kirkham, *The Huffington Post* (then with *The Times-Picayune*); Ben Raines, Mobile *Press-Register*; George Crozier, Dauphin Island Sea Lab; Nancy Rabalais, Louisiana Universities Marine Consortium; Ed Overton, Louisiana State University; Aaron Viles, Gulf Restoration Network; and Jill Mastrototaro, Sierra Club.

#### Here's our lessons learned:

1. We must be careful making comparisons among oil spills in different regions. Early reports compared Ixtoc, the Exxon Valdez and Deepwater Horizon. Now much has been written about the differences among the three (including types of oil, ecosystems, proximity to the coast, etc.).



In early June, a heavily oiled pelican struggles on an island beach in Barataria Bay, Louisiana.

Photo by Carolyn Cole / Los Angeles Times

- 2. Everyone wants to be on the cutting edge of breaking news, but when the disaster is of a highly technical nature, one often has to step back and dig deeper. Understanding the issues and conveying correct information is more important than being first.
- 3. Having a catastrophic emergency management plan is of paramount importance for all media. *The Times-Picayune* had been through Katrina, but still does not have a plan. Schleifstein says that once an emergency management plan is developed and accepted, senior executives and editors must meet every six months or so to review the document.
- 4. We were again reminded of the impact of social media, bloggers and those who comment on media websites. Many bloggers did yeoman's work reporting and analyzing oiling events. But there were plenty who had strong agendas and tended to feed distrust and controversy. Virtually all stories published online were

followed by accusatory commentary by unidentified writers.

- 5. BP and federal agencies immediately had a presence on social networks, especially Twitter and Facebook, and this became a real aid to reporters. Photos with notes, tags, and commentary posted on Flickr allowed reporters to know who was doing what and where.
- 6. Press conferences are vital sources of information, but under emergency conditions they can be vexing. Federal agencies attempted by strategy or just by defensiveness to put so many people on the scene that reporters were overwhelmed by press conferences. It was often impossible to attend them all (one in Baton Rouge, another in Grand Isle, an overlap with Venice, followed by a telephone conference), and it was also difficult to step back and consider the information presented.

Throughout the BP event, there were many telephone briefings. Journalists found it hard to get questions in and follow-ups were usually not allowed. Questions were cut off by moderators who were not on the scene so journalists could not ask for clarifications. There simply must be a better system in the future.

7. Surface oil collection was largely inadequate. Aaron Viles, Gulf Restoration Network, maintains that the oil industry appeared willing to gamble with their procedures and lacked response preparation.

Skimmers were not as effective as the companies believed them to be. BP spokespersons made early claims that they could skim 500,000 barrels of oily water per day, but as of July 6, 2010, 78 days after the incident, they had actually only skimmed a total of 670,000 barrels—some 37 million barrels below the promise. Reporters covering the issue came to realize that oil boom does not work in Gulf waters. Enormous resources were used to deploy boom, and it usually washed ashore, out to sea, or was otherwise rendered useless.

Ben Raines of the Mobile *Press-Register* found that there was no fire boom available along the Gulf Coast, in spite of a 1994 federal agency plan that pre-approved pulling the trigger to burn surface oil in the event of an oil catastrophe. Fire boom was supposed to be staged along the coast, at a rather modest cost (for the oil industry) of several hundred

thousand dollars each.

Industry also did not improve its methods for resolving blowouts between 1979 (Ixtoc) and 2010 (Deepwater Horizon). As Rachel Maddow pointed out (http://tinyurl.com/3qekzoo), the two blowouts in the Gulf of Mexico generally followed similar sequences of attempted solutions, both resulting in prolonged failure.

- 8. Most reporters did not understand what they needed to look for ecologically up and down the food chain.
- 9. The complicated technical aspects of the explosion and progression of corrective attempts underscored the importance of being on the site of breaking news. This was not a time for superficial reporting, and a reporter's lack of diligent work to understand the issues was readily apparent. *The Times-Picayune*'s David Hammer did not consider himself an environmental or oil

reporter, but he was excellent on complicated issues. He says one of the most important steps he took was to make several visits to oil rigs and platforms, experiencing the actual workplace, procedures, overall operational concerns faced by workers each day. It gave him valuable insights into the progression of events on the rig over the Macondo Well.

- 10. A reporter's expert pool changes from issue to issue: The BP blowout was so specialized that the usual broad-based experts were of less value. This disaster was out of everyone's depth, and reporters had to be very focused to communicate the information clearly.
- 11. The responsible party (in this case BP), as defined by the Oil Pollution Act of 1990, has power that controls the flow of information and the gathering of the story. The Coast Guard deferred to BP (stopped air traffic, access to beaches, boat movement), and federal agencies' policies were often misleading, such as the long delay before the gusher video feed was made public.
- 12. People must learn to recognize residual risk and how to address it. Schleifstein of *The Times-Picayune* often mentions the dire need to get ahead of the game in high-stakes situations (for example the offshore oil industry, hurricane protection levees, nuclear power, and more) and address risks that are not so obvious, the high-stakes risk of failures that are not expected to occur. He asks if the BP calamity was a result of not producing stories about residual risks in advance.

(And speaking of risk, reporters must be aware of personal dangers they face when they are in the field covering risky issues, such as chemical spills.)

- 13. Reporters need to be aware that individual states have their own agendas that affect the game. During the BP spill, Alabama officials were very concerned about closing channels on their barrier islands that were opened by Katrina. Louisiana was focused on getting financial help to rebuild its coast, so officials promoted moving sand from offshore to build berms and using rocks to close inlets into Barataria Bay.
- 14. Public officials in general did not always understand the ecological issues. Politicians were front and center in the news, but most did not grasp the technical aspects and characteristically focused on their parochial needs instead of the big picture.
- 15. It is important to know the actual record of oil spills prior to an emergency. Oil releases are routine in the Gulf oil fields, so people ignore them until a catastrophic event occurs. Certainly, the Deepwater Horizon gusher contributed well above the normal oil contamination experienced in the Gulf, but the Mississippi River daily transports mega-amounts of hydrocarbons to the Gulf sourcing from oil on land that is washed into rivers. Andy Revkin noted a few years back that a study by the American Petroleum Institute showed that in the Chesapeake Bay area, hydrocarbons equaling the Exxon Valdez spill reach coastal waters each year, originating from the drops that fall from a gasoline nozzle in gas stations and oil on the streets from leaks in cars.

Schleifstein reported that during the initial 104 days of the spill, BP sprayed 140 thousand pounds of dispersants per day. He further discussed that this daily amount is equivalent to the surfactants that are delivered to the Gulf each day by the Mississippi River.

16. It is easy for journalists, especially if on a solo assignment on an unfamiliar topic, to be sucked into innuendo and anecdotal information. Big stories like the BP oil blowout may be

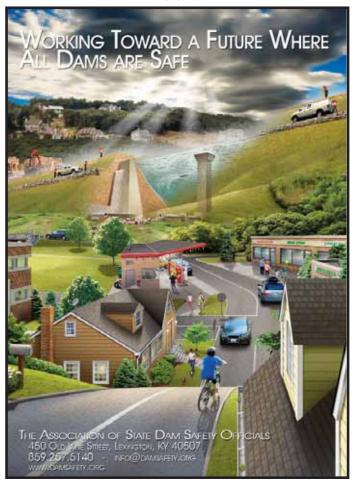
ripe with hoaxes perpetuated by an array of stakeholders. Trust your investigative journalistic training and instincts.

17. Although events may have horrible consequences, reporters need to cover stories of good things being done by the responsible parties. Most reporting on the BP blowout discussed the obvious environmental threats, damage, and challenges. In addition to damage to the environment, economy, and coastal culture, BP stepped up quickly, making money available for restoration of community losses. They put \$20 billion in escrow for such purposes, \$1 billion for immediate restoration, and \$500 million for ecological assessment research. These and related measures, for the most part, were reported rather passively. People close to the process knew that BP was not forced to take those steps, and saw them as positive goodwill on the part of the company.

Before the Deepwater Horizon, Gulf Coast reporters, for the most part, considered themselves prepared to cover oil releases. If heeded, these lessons learned from an event well beyond the routine — America's largest oil release in a marine environment — could help make journalists wiser and more prepared for the future.

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Advertisement





# Just as climate change becomes a dirty word in Washington, natural disasters strike. Will it reap a rethinking?

## By BUD WARD

How many puzzle pieces, I wonder, would it take to assemble a reasonable image of all that has happened over the past year or so to help shape our nation's energy future? And our public's understanding of, and concern for, it, or their lack of same?

Surely those puzzle pieces would need margins of error to allow for the inevitable uncertainties. They had better be three-dimensional, too. And they need to be chain-like, in that any missing link or misplaced piece would topple the whole thing and send it reeling.

It seems somehow trite — beguilingly charming, even — to recall how just recently so many in both the journalism and science communities viewed our warming Earth as "the story" of the century.

But now? Words like "climate change" or "global warming," let alone the name Al Gore, barely pass the public lips of policy makers in Washington's highest circles. The subject of climate change, it seems, is clearly verboten.

Yet a sentient society — with an ever-watchful and responsible media — should be well beyond asking just what's going on

by now. Something a little more meaty than just "Wassup?" Instead, its voice keeps getting drowned out in the popular media by the likes of Royal Wedding déjà vus and ladies' hats, Paris Hilton's arrests and near-arrests, Charlie Sheen's antics, drummed-up presidential birth certificate brouhahas, and — oh yes — really worthwhile news like the successful taking down of Osama Bin Laden, the continuing housing crisis, and the weighty issues and politics surrounding the nation's debt ceiling.

Please consider:

**ITEM:** It's just more than a year now that the BP Deepwater Horizon (not, by the way, the term BP spinmeisters prefer it be named) plunged Louisiana and much of the Gulf of Mexico into what can at best be years or decades of uncertainty over the long-range impacts of what many legitimately consider our nation's worst environmental disaster.

With haunting undersea live images of incessantly leaking oil and a real-time widget tracking what at the time passed as best



Virtually all the trees in the path of the killer tornado that devastated Joplin, MO, were completely defoliated.

PHOTO: 
BY KEVIN J. HUNT VIA FLICKR

guesses of total volumes spilled, the tragedy brought a sudden halt to the Obama administration's just-announced plans for expanding offshore drilling. The oiled seabirds and marine life and gooey marshes cast a new light on the endless downsides of the nation's fossil fuel "addiction," as then-President George W. Bush rightly and famously labeled it. And it even appeared to give new life to expanded plans for domestic nuclear power, and, get this, perhaps, to a new push for renewables.

That it did all of those things with nary a public reference — save but from the most true-believers — about the relevance of climate change still befuddles many who see it, at the very least, as an educational opportunity missed. Lest one forget, we'll need individual and varying puzzle pieces and sizes representing

events, big and small ... and this is by no means a comprehensive listing.

**ITEM:** "Lions, and tigers, and bears, oh my!" goes the engrained jingle from "The Wizard of Oz."

But we're not just in Kansas anymore, and the past months could give rise to "Fires, and flooding, and tornadoes, oh my!" in summing up the weird weather tormenting much of the U.S. mainland and the world in general.

#### Keep in mind:

- Widespread and terrifying wildfires haunted extensive western Texas acreage in April, sending strong smoke odors as far east as Dallas and Fort Worth. And, come May, killer tornadoes ripped through Oklahoma and Missouri and claimed deaths in North Carolina and for the first time in about two decades caused deaths also in tidewater Virginia. The giant storm that destroyed one-third of Joplin, Mo., killing at least 140
- people there, has made 2011 the most deadly year on record for tornadoes. As of May's close, 520 had died in twisters.
- Global surface temperatures for 2010 tied 2005 as the warmest in 131 years of recordkeeping. As NOAA explains it, that 2010 record is especially surprising given that "the last half of the year was marked by a transition to strong La Niña conditions" generally associated with a cooling of Pacific Ocean surface temperatures. And this despite the often record-setting cumulative snowfalls that earlier last year had rocked major mid-Atlantic and northeastern population centers.
- The so-called "Middle East Spring" began in Tunisia and has since spread through Egypt, Syria, and Libya, surely contributing to the speculator-fueled higher gas prices at the pump so loathed by the American public and its vote-hungry politicians.
- On a more microlevel, thousands of visitors to the annual meeting of the American Association for the Advancement of Science (AAAS) in February 2011 weathered balmy, spring-like conditions one day and winter chills the next. More notably,

40-mph winds and the suburban wildfires — this is Washington, D.C., mind you, and not annually parched Florida or Santa Ana-winds-blown California — closed Interstate 95 both north and south of the city's iconic I-495 Beltway. Whooda thunk it?

• The double whammy of a calamitous at-sea earthquake and a treacherous tsunami in Japan result in one of the world's most serious nuclear power plant failures. Thousands of lives lost and thousands more missing tell only the most serious impacts from a tragedy striking one of the world's most sophisticated and technologically advanced countries. And, of course, there are long-term impacts for (make that against) nuclear power worldwide.



An Air Force C-130 Hercules from Colorado Springs, specially equipped to deliver fire retardant, drops a load in late April on a fire in West Texas, where over 1,000 square miles had already burned.

U.S. Air Force Photo By Staff Sgt. Eric Harris

• The 500-year Mississippi and Yazoo Rivers cresting at or near record-high flood stages and immersing parts of Memphis, Mississippi, and Louisiana have prompted rare openings of Mississippi River spillways to spare Baton Rouge and New Orleans at the expense of thousands of acres of farm land and presumably less "important" places like Morgan City.

This long list of calamitous climate events can't help but prompt some to wonder about a sentient population. Where is it? And what about that robust infrastructure of ever-watchful news media?

For now, the prospects for more "anomalous" weather appear more likely than the full-throated return of that watchful media and attentive and sentient public. But on that point, let's hope we're wrong.

Bud Ward is an independent journalism educator and founder/former editor of Environment Writer. He now is editor of The Yale Forum on Climate Change & the Media.

### By JENNIFER WEEKS

By any standard, the explosions and partial meltdowns at Japan's Fukushima nuclear plant were a challenging story. Not only did they happen thousands of miles away, as the result of a disaster that devastated an entire region — they also were an evolving crisis, centered on one of the most technically challenging issues on the environmental agenda, nuclear power.

Reporters struggled to parse official statements, describe the potential risks accurately, and find knowledgeable experts who were willing to comment about the accidents and what they might mean for nuclear power elsewhere.

*SEJournal* asked two experts on nuclear power and nuclear technology for their assessments of English-language media coverage of Fukushima in March and April:

- Lake Barrett has more than 30 years' experience in nuclear safety and management of high-level radioactive waste. Before retiring from the Department of Energy in 2002, he led DOE's Yucca Mountain geologic repository program through the site characterization and selection process, culminating with President Bush's recommendation to proceed with submitting a license application to the Nuclear Regulatory Commission. Barrett also held other positions within DOE's High Level Waste program and at DOE's Rocky Flats site in Colorado, and oversaw stabilization and cleanup at Three Mile Island Unit 2 after the accident there for the Nuclear Regulatory Commission. Barrett received bachelor's and master's degrees in mechanical and nuclear engineering from the University of Connecticut.
- Charles Forsberg is a research scientist at the Massachusetts Institute of Technology and director of MIT's Nuclear Fuel Cycle Study. Before joining MIT he was a Corporate Fellow at Oak Ridge National Laboratory. Forsberg received the 2002 American Nuclear Society Special Award for Innovative Nuclear Reactors, and in 2005 he received the American Institute of Chemical Engineers' Robert E. Wilson Award in recognition of chemical engineering contributions to nuclear energy. He holds 10 patents and has published more than 250 papers. Forsberg holds master's and doctoral degrees in nuclear engineering from MIT.

### These interviews took place separately on April 27.

Overall, how well do you think the media has covered the Fukushima disaster? What aspects do you think the media has explained best? What angles has it done worst at covering?

**Barrett:** It's gotten better with time. At the beginning nobody knew anything about what was happening in the buildings, although people like me who understood reactors could look at the TV footage and say "They've had a hydrogen explosion."

It's a complicated subject with many facets. Most reporters I've talked to have done good jobs, but I've seen some other reports that went way off track. My sense is that it was hard for reporters to sort out what they were hearing, which is understandable, since there's a wide range of views from the Nuclear Energy



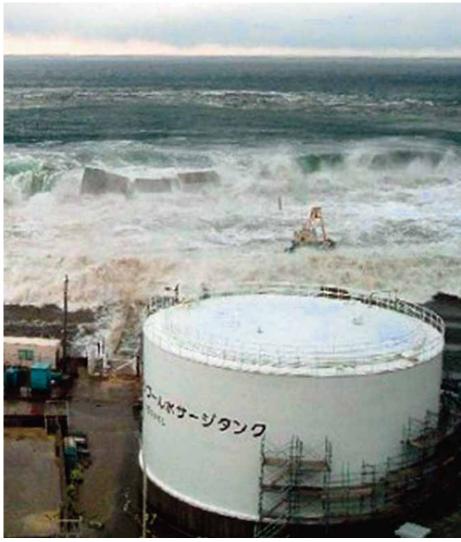
Tsunami waves overtop a protective wall and approach oil storage tanks at the Tokyo Ele March 11, but not released by TEPCO until May 19, 2011.

## Nuclear experts assess Fukushi

Institute to hard-line anti-nuclear groups. Everyone was trying to do tl worse than print, which is usually the case.

For example, I did a live interview with CNN on the so-called Ful after the disaster to assess and try to stabilize the damaged reactors an political statement about how they were all going to die, and then asked I had to politely disagree with her. Some reports played up the Chernological committing suicide, but that was inaccurate. Many workers were being

I was pleasantly surprised to see that many sources who aren't ne and Dave Lochbaum at the Union of Concerned Scientists did a very commercial interests — for example, people at nuclear utilities or con because they didn't want to discredit their organizations. Some grou



ectric Power Company's Fukushima nuclear power plant in this photo taken by a company employee on Photo: Tokyo Electric Power Company

# s how well media covered ma disaster.

(Hint: A little foggy)

heir job well, but some inappropriate sensationalism crept in. TV was

kushima 50 [workers who went into the plant in shifts in the first days d spent fuel pools]. The reporter started off with what I thought was a d a question that was somewhat related. I felt like that was a setup, and obyl parallel and speculated that workers at the plant were knowingly g cycled through the plant.

cessarily pro-nuclear answered questions very responsibly. Ed Lyman good job. There was a lot of uncertainty, and many experts who had npanies like Bechtel that build nuclear plants — weren't saying much ps on the far left took shots at nuclear power, but for the most part,

comments from the center-left were pretty fair.

Forsberg: At best I'd give the media coverage a B-minus. The worst aspect was reporting on radiation releases and exposures. When a story says that radiation is X units over an allowable limit, that's like telling me the temperature on Mars. Safety standards are set based on lifetime exposures, so that fact that a dose is ten times over a standard is probably totally irrelevant. Describing radiation relative to background levels is more relevant — it lets the audience know that there's a standard, and it lets them do some comparisons. You also have to pick a standard of comparison that the audience has some clue about, and convert it to understandable units, which for most of us is not millisieverts. This isn't just a problem in stories on nuclear power, but it becomes really obvious on this issue.

Secondly, I don't think most people understood just how severe this event was in Japan, including some U.S. government officials. An earthquake that measures 9 on the Richter scale is 100 times greater than the 1989 earthquake in San Francisco, and the tsunami was 54 feet high. The area around the reactors was like a war zone. Japanese rescuers' first priority was finding injured people, and their second priority was getting survivors to shelters and out of the rain and snow. The nuclear plant was third or fourth, and that's how it should have been.

• The Internet has speeded up the news cycle and made it possible to update unfolding stories almost constantly online. Do you think that online coverage of the situation at Fukushima made more information available, or did it just repeat what officials said at press briefings?

Barrett: Today there's much more demand for instant information, and expectations are much higher. But with an accident like this, information doesn't flow — it's a fog, like that famous quote about the "fog of war." I don't think Tepco was hiding information about what was happening in the core — I think they didn't know. There was a long communication chain from the reactors to corporate communications staff.

At Three Mile Island, our decisions ran three to four days behind what was happening at the plant. Fukushima is running weeks behind what's happening at the plant. Gathering basic information is the slow part. It takes time for people wearing boots and protective suits on the plant floor to obtain information.

Culture is also an issue. Japanese culture is very different from ours. They are reserved, very disciplined, and they verify and make decisions by talking about the problem and thinking about it. They are always aware of how what they do and say reflects on their superiors and their loyal subordinates. That means that the

¹In his classic text *On War* (1832), Prussian military analyst Carl von Clausewitz wrote, "The great uncertainty of all data in war is a peculiar difficulty, because all action must, to a certain extent, be planned in a mere twilight, which in addition not infrequently — like the effect of a fog or moonshine — gives to things exaggerated dimensions and unnatural appearance."



Seawater from the earthquake-triggered tsunami rushes into the Tokyo Electric Power Company's Fukushima nuclear power plant, as seen from the fourth floor of the radioactive waste disposal building in this photo taken by a company employee on March 11, but not released by TEPCO until May 19, 2011.

PHOTO: TOKYO ELECTRIC POWER COMPANY

Japanese won't speculate, whereas in the U.S. we do that all the time. In Japan they don't want to verify anything immediately: instead of saying that a building blew up, they say that white smoke appeared above it, and they will verify later what actually happened. We see that as a corporate cover-up, but you have to understand how their culture works, and the fact that Tokypo Electric Power Company and Japanese regulators and the government are much more closely interconnected than their U.S. counterparts.

**Forsberg:** Online coverage definitely speeded up the cycle. Accidents at light water reactors develop slowly, which is good news for rescuers because they have time to get people out of the way. But it's really bad in terms of public relations, because it means that news drips out slowly.

In any kind of complicated industrial accident there's massive confusion at the start, and it takes a while to figure out what reality is. It's easy to assume that there's a conspiracy, but at the outset no one knows what's going on. And then when you translate it from Japanese into English, things get more complicated, especially for outsiders who don't understand Japanese culture. A literal translation from Japanese to English isn't worth the paper it's printed on.

• Do you think that news reports have presented an accurate explanation of risks from the Japanese plants,

whether those risks applied to the local area around the reactor, greater Japan, or possible risks to the U.S. from radiation transport?

Barrett: The really outrageous comment about risk was when the U.S. Surgeon General [Regina Benjamin] said that it was appropriate for Californians who were worried about radiation transport from Japan to buy potassium iodide pills<sup>2</sup>. That statement was flat wrong and incompetent, and she should have been asked to resign. Reporters printed what she said, which was legitimate news, but they didn't hold her accountable when the administration retracted the comment later.

**Forsberg**: The idea that west coast residents received significant radiation exposure from Fukushima reflects historical amnesia. Compared to years of nuclear testing in Nevada, any radiation doses from Fukushima are insignificant.

There are two things to remember here. First, we're really good at measuring radiation — we can detect and trace it at much lower levels than other substances, like airborne mercury. When I was a graduate student at MIT in the 1960s and 1970s, we had a couple of scrams at the university's research reactor because its

<sup>2</sup>Benjamin made the comment on March 15. On March 17 the Department of Health and Human Services issued a statement that the Surgeon General was not recommending that Americans take potassium iodide.

sensors picked up radiation from Chinese atmospheric nuclear tests. But just because you can measure something doesn't mean it's dangerous. Second, when you have any kind of accident at a refinery or a chemical plant or a reactor, there's fallout. Fallout is associated with any kind of industrial operation, not just with nuclear releases.

## Are there important angles to this story that media reports have overlooked?

**Barrett**: I was surprised that issues of water contamination have gotten relatively little play. Eventually there will be cesium-137 in the water throughout the northern Pacific, and it will show up in seafood. It's already there from nuclear testing in the 1950s, but levels will jump, although they'll still be safe. Discharging contaminated cooling water from the Fukushima reactors is a slower process than Chernobyl blowing up, so maybe it's not seen as newsworthy. That's not necessarily a bad thing, but I think it's interesting that it hasn't received more attention.

**Forsberg**: The reactors got a lot of attention, but Japanese officials were dealing with a much wider universe of issues. For example, the plant probably had six shifts of workers, but five of those crews were at home when the quake hit. What happened to them, and what kind of situation did that create for the plant operators?

And it wasn't just nuclear plants that went out. All of the non-nuclear power plants near Fukushima went down too, and a dam broke and washed out homes, but got much less coverage. Reactor accidents sell, but their problems are much bigger.

There also doesn't seem to be much historical understanding of why Japan invested so heavily in nuclear power. Japan ran out of oil in southeast Asia during World War II, and their alternatives were much worse. They looked at every kind of energy alternative after the war, and as nuclear power became available, they pushed it very hard. They also have invested in a lot of other resources.

## • What aspects of the situation in Japan do you think are most relevant to decisions about nuclear power in the U.S.? Any suggestions for journalists covering U.S. nuclear plants?

**Barrett**: Ask your local utility to tell you what Fukushima means to your local plants, and to describe what's similar and different. Talk to the Nuclear Regulatory Commission, and watchdog groups like UCS, and companies like General Electric that build reactors, and universities — ask for people in the nuclear engineering departments who don't have axes to grind.

It's also important to distinguish between risk and safety. Risk is a scientific term, but people make personal assessments about safety. I once met a man who lived near Three Mile Island and drove race cars on dirt tracks in Pennsylvania, which is hugely risky, but his big fear was that he'd gotten a skin rash because he lived across the river from the reactor.

And when you talk to a technical source who's not mediafocused, let them know in advance whether you're looking for a 10-second answer, a 90-second answer, or what your time frame is. Press officers know that, but scientists who aren't media-savvy may not. If you let them know how much depth you want, it will help them frame their answers.

Forsberg: I'm not sure there are major lessons to be learned

for the U.S. We don't normally locate reactors in places where they can be hit by a 50-foot wall of water. There will be lessons about how to make reactors more resilient. New designs are very different and resistant to what happened at Fukushima: for example, diesel generators are spaced out on opposite sides of the plant instead of being located all together. And there are areas where we can do things better, such as replacing zirconium fuel cladding with something that doesn't generate hydrogen.

Overall, though, this was a very strange accident. If you'd told me that you could melt down three reactor cores in a row and no one would likely end up dead, that would sound pretty good. I expect that within ten years the Japanese will have decontaminated virtually the whole neighborhood around the plant. You have to consider what kinds of events are predictable and which ones are acts of God.

Editor's update: As noted above, these interviews were conducted in late April. Since, much has developed around the world regarding nuclear power. In Japan, Prime Minister Naoto Kan has temporarily shelved any plan to expand nuclear power production in his country, bucking for now the country's powerful nuclear establishment. While cleanup and an investigation into the extent of contamination in Japan continues, the German government announced in late May that it would phase out its 17 nuclear plants in 11 years.

Jennifer Weeks is a Boston-based freelance writer and an SEJ board member.

Advertisement





Workers connect transmission lines to restore electric power to the tsunami-crippled Fukushima nuclear power plant in Japan.

Photo: Tokyo Electric Power Company

## Enterprising stories stand out in recent disaster coverage — from Japan to Texas

By BILL DAWSON

Disasters drive news coverage. Well, yes, that's not exactly an insightfully original observation. Dogs also chase cats. Night follows day. Editors cut stories.

Still, any examination or cataloging of environmental coverage has to deal with the central place of disasters on the environment beat.

The names of some iconic events — Three Mile Island, Chernobyl, Bhopal, Exxon Valdez — echo down through the years in follow-up coverage, anniversary coverage, coverage of seemingly never-ending policy debates and lawsuits.

Disasters and extreme weather have once again had a prominent place in environmental reporting in recent months, so The Beat this time takes note of a sampling of that coverage.

In particular, we focus on a few of the many enterprise stories that emanated from four clusters of events — the tsunami-caused crisis at Japan's Fukushima nuclear plant, drought and wildfires in Texas, death-dealing tornadoes in the Southeast and massive flooding in the Mississippi River system.

### **Fukushima**

Possible safety lessons provided a major focus for coverage after a March 11 earthquake launched the tsunami that crippled emergency generators needed to cool the Japanese nuclear plant's reactors.

Mike Soraghan of Greenwire reported on March 24, for instance, on the debate about whether backup power at most U.S. nuclear plants — batteries required to last four hours — is sufficient.

On April 9, **Todd B. Bates** of New Jersey's *Asbury Park Press* reported that his investigation had revealed "millions of gallons of radioactive water have leaked from nuclear power plants throughout the U.S. since the 1970s, threatening water supplies in New Jersey and other states."

Two months after the earthquake, the results of such journalistic inquiries were continuing to be unveiled.

On May 11, **Susan Q. Stranahan** reported for *iWatch News* (the newly rebranded website of the investigative Center for

Public Integrity) that fires are "nuclear power's more probable threat," but typically bring only "slaps on the wrist" from the Nuclear Regulatory Commission (NRC).

In an article from Tokyo on May 2, AP staff writers **Yuri Kageyama** and **Justin Pritchard** reported that their in-depth review of "Japan's approach to nuclear plant safety shows how closely intertwined relationships between government regulators and industry have allowed a culture of complacency to prevail."

Also with a Tokyo dateline, the *New York Times*' **Norimitsu Onishi** and **James Glanz** had reported on March 26 that "in the country that gave the world the word tsunami, the Japanese nuclear establishment largely disregarded the potentially destructive force of the walls of water."

On April 12, **Michail Hengtensberg**, **Gensche Sager** and **Philline Gebhardt** reporting for *Spiegel Online* produced a detailed "survey of the world's radioactive no-go zones," observing that this "look at some of the worst incidents is enough to demonstrate just how high the price of nuclear energy and nuclear weapons truly is."

Taking off from U.S. officials' call for Americans within 50 miles of the Japanese reactors to evacuate, *Mother Jones*' **Kate Sheppard** on March 22 examined the NRC's current 10-mile evacuation zone around U.S. plants. A chart listed dozens of U.S. cities within a 50-mile radius of reactors.

Five days before Sheppard's story was posted, **Bill Dedman** of MSNBC had reported that the NRC's new earthquake-risk calculations show the highest risk not at some California reactor near the San Andreas Fault.

It is, he reported, at the Indian Point Energy Center, 24 miles north of New York City — a 1-in-10,000 chance of damage to the reactor core each year, or "right on the verge of requiring 'immediate concern regarding adequate protection' of the public."

#### **Drought and Fire**

Did the spring's drought-associated rash of Texas wildfires officially constitute a disaster? Texas and federal officials were still disagreeing at the time this column was written. (The feds said no.)

Were the drought and fires in Texas a symptom of manmade climate change? Journalists weighed in on that issue, just as they did in regard to the destructive tornadoes and flooding along the Mississippi.

**Randy Lee Loftis** of the *Dallas Morning News* addressed the question head-on in a story on April 16, asking whether, besides La Nina ("the immediate cause," in scientists' estimation), "the drought and fires [were] also linked to climate change."

Loftis's answer: "Climate scientists say that question, though common whenever extreme weather arrives, is both unanswerable and misdirected." He added: "Most climate models — projections of future conditions from supercomputers processing huge amounts of data — say Texas will get less rainfall as global temperatures keep rising."

In an April 27 blog post that, like Loftis's story, prominently quoted Texas state climatologist John Nielsen-Gammon, the *Houston Chronicle*'s **Eric Berger** jabbed a local environmentalist for "scare-mongering" because the advocate had written his own blog post for the *Chronicle*, noting that "people starved to death during the Dust Bowl days" and that "Gaia creator James Lovelock has said that by 2100 there will be about 1 billion people on Earth, the other 6 billion or so having starved to death."

Texas Tribune reporter **Kate Galbraith** had a story on April 21, co-published in the *New York Times*, about how the West Texas oil city Midland was grappling with its dwindling water supply. Discussion of climate change only appeared in a shorter, associated blog post in the *Times* the next day.

The blog item also quoted Nielsen-Gammon: "Certainly global warming has contributed to the rate at which the ground has dried out because of the warm temperatures, [but] the magnitude of the dryness is well beyond what global warming would be able to do so far."

It also included comments by the Midland mayor, an "oilman," who said, in Galbraith's paraphrase, that "reducing carbon dioxide emissions seems like the right thing to do for the



Amarillo firefighters respond to a blaze in the parched Texas panhandle. Dry conditions throughout the fall and winter have created a wildfire danger in many parts of the state. Photo by Kay Ledbetter, Texas AgriLife Extension Service



While Mississippi floodwaters coursing through the parking lot of a casino in Tunica, Miss. may have kept gamblers at bay, the high water was a real winner for wading birds like this egret, drawn to the nutrient-rich river by the prospect of a new food source.

PHOTO BY LANCE CHEUNG, USDA

long term, taking into account future generations."

## **Deadly Tornadoes**

April's record-setting number of tornadoes likewise drew attention to the possible link to global warming. Here are some examples of coverage that addressed the question with due caution about current scientific understanding.

A story on April 25 by the *Times*' **A. G. Sulzberger**: "Though scientists believe that climate change will contribute to

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## Some spreadsheet techniques to help you check the scientists' studies

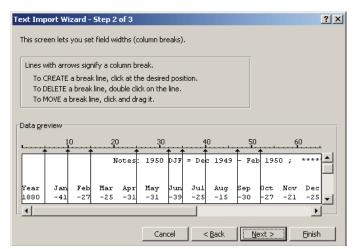
## By BRIAN ANGLISS

Nothing beats a journalist's intuition for something being "not quite right." But sometimes you want more than just your gut feeling, especially when the feeling is coming from a new published paper, a study, or even just some data you've been collecting for a while. Here are some simple tools available in spreadsheet programs that can help you mathematically check if your gut feel is accurate or not.

The following assumes that you have access to MS Excel, 2003 or later. It's also written from the perspective of a PC user, so adjustments will need to be made for those of you who use Macs instead. Open Office Calc should have similar functionality, but I haven't verified it.

Before you can do any sanity checks on your data, you need to get it into your spreadsheet first. If your data isn't already in Excel format, then it may be in .csv, .txt. or .dat format. Open Excel, click "Open," and select "All Files" to see the non-.xls/.xlsx files. Don't simply double-click the file, as it may bring up the file in a text editor instead of your spreadsheet program.

While .csv files will often open without additional effort, .txt and .dat files will often bring up a box that defines your choices on how the file should be divided up into columns. Many .txt and .dat files have varying column widths and/or explanatory text at the start and end of the file. These confuse Excel's ability to automatically open the file, so you'll need to select "Fixed Width" instead. Click "Next" and bring up the data preview, an example of which is shown.



Vertical lines indicate where Excel will set column breaks. Notice that additional breaks are required between the "Mar" and "Apr" data columns.

Scroll down until you find the data and then click on the white spaces between numbers to define the columns with vertical lines. You can also move existing lines around if you need to. Once

you've broken up the data the way you want it, click "Finish." This will result in chopped-up explanatory text.

Once you've opened the data you're interested in, create a new worksheet where you can do your calculations and generate your graphs. Much scientific data (especially climate data) is done one row per year, one column per month. This row-oriented format is a problem for Excel since it functions best in column format, especially when creating graphs. There are several ways to switch the row data into column data, but one of the easier ones is to use the Excel "transpose" option.

To transpose row data into a column, select all the data in the row you care about and copy it by hitting Control "C". Then go to the calculation worksheet, select the starting cell, then select "Paste Special" in either the Edit tab or by right clicking. One of the options in the box that comes up is "Transpose." Select it and click "OK." This will paste the data as a column starting at the cell you select and filling down the column.



Transpose is at the bottom center of the box.

A more graceful way to do this is with Excel's "VLOOKUP" function, but it takes some time to get familiar with exactly how the function works.

Once you've got your data into a column, you can graph it by selecting Insert: Chart.

Here's a couple of hints for easier graphing. First, when you're selecting a lot of data, instead of dragging your cursor over all the data, select the first cell of the data, scroll down to the bottom of the data and then Shift-click the last cell of the data. This will select all the data between the two selected cells as the data you want to graph. Second, if you want to add more than one or two series of data, start by graphing a single data series. Click on the graph and then look at the cells of data. You'll notice that the data's name is surrounded by a green box, the Y-axis data is

highlighted by a blue box, and the X-axis labels are surrounded by a purple box. If you have multiple columns of data you want on the same chart, you can click the square on the blue/green box corner and drag to include the other columns. Third, you can also make new charts of the same type as your original by copying the original chart, clicking on it, and then dragging the edge of the blue or green box until the new column of data is highlighted.

A	Α	В	С
1	Year	Global mean Temp Anomaly	CO2 data
2	1880	-28	290.7
3	1881	-21	291.2
4	1882	-26	291.7
5	1883	-27	292.1
6	1884	-32	292.6
7	1885	-32	293
8	1886	-29	293.3
9	1887	-35	293.6
10	1888	-27	293.8

Click on the corner squares to drag in additional data. Click on the box edge to drag to different data.

Once you've got your data on your graph, generating a trendline is easy. Click on the data on the graph, then right-click to bring up the formatting options. One of the options will be "Add Trendline." Excel will give you several trendline options to choose between, as well as the option to display the trend's equation and "R-squared" (R²) value on the chart. You'll use the linear and polynomial trends most often, and you can add both by clicking "Add Trendline" twice. You should also display both the equation and the R² value since they're what will tell you whether or not the data you're sanity-checking makes sense.

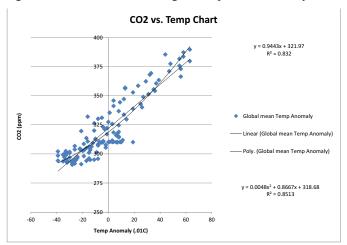
If the data you're working with comes from a scientist, you can compare your trends and  $R^2$  values against what is published in the paper. If your trend and/or  $R^2$  are close to what the paper says, then you can have some confidence in the results. If your numbers are significantly different, however, that's a clue that something may not be right, and if you double-check your numbers and they're still different, then it might be time to dig deeper into the paper or find expert help.

The reason you check both linear and polynomial trends is to see if there's a major difference in the R² value between the two. The polynomial curve's R² value should always be higher than the linear trend's R², but if there is a big difference between the two (0.05 or more), then a linear approximation probably isn't valid. Alternatively, if an accelerating trend is expected but the difference between the linear and polynomial trends' R² is 0.01 or less, then a linear approximation is more valid. In either case, if you're sanity-checking someone else's data and they're claiming a trend that seems invalid from your check, then that's a red flag. Don't use polynomial trends with an order greater than two, however, as it's easy to misinterpret the meaning of higher order polynomial trends.

The absolute value of R<sup>2</sup> is as important as how the relative values of R<sup>2</sup> for both types of trend are. Any R<sup>2</sup> value that's less than about 0.35 can be a result of random chance, so any

conclusions based on such a low  $R^2$  should be well explained. The higher the  $R^2$  value is, the more certain it is that the trend is real.

While I've assumed data vs. time thus far, it's also useful to graph one set of data vs. another, such as in the case of global temperature anomaly vs. atmospheric CO2 concentration. To do this, you generate a "scatter" chart (instead of a "line" chart) with CO2 on one axis and temperature on the other. Then you can generate both trends and the R² values for comparison. In the case of CO2 and temperature, the positive trends and the high R² values indicate that there's a pretty strong correlation between high CO2 concentrations and higher temperature anomaly.



CO2 vs. Temp Anomaly "scatter" chart with linear and polynomial trends displayed along with equations and R2 values.

Finally, while correlation does not prove causation, there is a way to check if causation is likely via correlations. To test causation, you run a set of what are known as "cross-correlations" between two sets of data. We do this with the Excel function "CORREL" where we select the two data series. In order to check if a causal claim is reasonable, you can run cross-correlations with different delays between one set of data and another. You delay one set of data by starting it a certain number of cells late and finishing the other set of data the same number of cells early. Square the correlation result to get the R<sup>2</sup> value.

continued on next page

10	A	В	C	CORREL(a	rray1, array2)	E	F	G
1	Year	Global mean Temp Anomaly C	O2 data			-		
2	1880	-28		290.7		Cross	correlat	ion
3	1881	-21		291.2		Lag	Correl	R^2
4	1882	-26		291.7		-15	0.7887	0.6221
5	1883	-27		292.1		-14	0.7953	0.6325
6	1884	-32		292.6		-13	0.8064	0.6503
7	1885	-32		293		-12	0.8198	0.6720
8	1886	-29		293.3	9	-11	0.8271	0.6842
9	1887	-35		293.6		-10	0.8335	0.6947
10	1888	-27		293.8		-9	0.8435	0.7116
11	1889	-17		294		-8	\$124,5C\$	0.7302
123	2001	47	3	71.07				
124	2002	56	3	73.16				
125	2003	55	3	75.81				
126	2004	48	3	77.54				
127	2005	63	3	79.78				
128	2006	55	3	81.86				
129	2007	58	3	83.73				
130	2008	44	3	85.54				
131	2009	58	3	87.35				
132	2010	63	3	89.78				

Cross-correlation of temp anomaly with CO2 concentration for CO2 lagging temp by 8 years. Note:1890 through 2000 are hidden for convenience.

Be careful with cross-correlations. First, you can get in trouble fast if you're just guessing about a correlation and don't have some understanding of what you're correlating (think of the high correlation between global warming and the drop in number of pirates). Second, CORREL assumes a linear relationship between the datasets you're cross-correlating, so it can give wrong answers when there's a non-linear relationship. But CORREL is still a good starting point for figuring out where you need to ask more questions.

Spreadsheet programs can be very powerful tools for quickly and easily checking claims based on statistical analyses of data. While I used a climate-based example, the same approach can be taken with regard to nearly any source of data, and I've used similar analyses to sanity-check health and economic data in the past.

Brian Angliss writes about climate science and politics for the blog scholarsandrogues.com. He can be reached at angliss@spamcop.net.

#### The Beat continued from page 21

increasingly severe weather phenomena, including hurricanes and thunderstorms, there is little consensus about how it may affect tornadoes."

Similarly, in a longer article on April 28 by the same newspaper's **Kirk Johnson**: "The prevalence of hurricanes, droughts and floods has been linked in many climate models to the impact of a warming planet. Such a connection is more tentative when it comes to twisters."

Stephanie Pappas of *LiveScience.com* on the same day: "Some climate models suggest that a warming future could herald more intense storms like those that ripped through the Southeast on Wednesday night. But that doesn't mean the southern storms and tornadoes were a manifestation of climate change, climate scientists say. That's because teasing out the influence of climate on weather takes time."

Also on April 28, the *Toronto Star*'s **Mitch Potter**: "While a raft of climate science points to a stormier future involving more frequent and possibly more severe hurricanes, researchers have yet to factor tornadoes into climate-change predictions with any certainty."

The Los Angeles Times' Eryn Brown on April 29, quoting Chris Weiss, an atmospheric science professor at Texas Tech University: "The role of global warming in the phenomenon is unclear," he [said], noting that it's hard to relate individual weather events to the long-term sweep of climate change, and that even if one could, there's 'significant debate' in the scientific literature about whether warming will increase or decrease the number of tornadoes.

**Ferris Jabr** in *New Scientist* on May 3: "Climate change cannot be directly blamed for such outbreaks [like the Southeast's thunderstorms and tornadoes]. And even as scientists' climate models have improved, the question of whether increasing global temperatures will change the frequency and severity of dangerous weather in the future remains open."

Editor's Note: Not long after this column was submitted, even more deadly tornadoes hit Oklahoma and Missouri. Most notably, the Joplin, Mo., tornado leveled a third of the town of 50,000

residents, killing at least 140 persons. It prompted President Obama to visit the devastated city in late May and helped make 2011 the most deadly year for tornadoes on record. Check an upcoming SEJournal for more on the media's tornado coverage.

#### Mississippi River

Once again, the issue of climate change was placed in the spotlight by some journalists as the mammoth flood crest on the Mississippi moved southward toward the Gulf of Mexico.

In an installment broadcast the week of May 6, Public Radio International's "Living on Earth" program interviewed Weather Underground co-founder Jeff Masters about the possible climate change connection to flooding on the Mississippi and its largest tributary the Ohio River, as well as the tornado outbreak.

**Bruce Gellerman** asked Masters "how bad [flooding in the area] could get, say, in 90 years — 2100."

A projected 20 percent rainfall increase over the Mississippi Valley could mean even more flooding, he replied: "The thought is it would increase runoff by more like 50 percent. Because what happens when you start getting heavier rains is now you've got a saturated soil that can't absorb rain anymore — so you tend to get more runoff."

In an "explainer" posted May 11, *Climate Central* managing editor **Andrew Freedman** reported that climate change can't be blamed for causing this year's flooding. He added:

"Scientists are working to detect the 'fingerprint' of global warming in specific extreme weather events, and their methods are still in their infancy. It will take many months for studies to be completed on whether climate change may have made April's heavy rains more likely. For now, though, we can look at studies that have already been completed that offer some clues about the relationship between climate change and heavy precipitation events."

**Ned Potter** of ABC News, meanwhile, discussed the matter of flood-borne pollutants and contaminants in a piece that was web-posted on May 11:

"ABC News arranged some testing of its own, taking water samples from two places along the river to a laboratory near Memphis. E. coli and coliform — commonly found in untreated waste water — were 2,000 times acceptable limits. The lab did not find gasoline, oil or chemical toxins. There were trace levels of heavy metals, but no more than would be found ordinarily, the lab reported."

The day before, on May 10, NPR's **Scott Neuman** related some pertinent historical context about the current floods in a piece entitled "Along the Mississippi, an old sense of dread arises." He reported:

"The flooding has prompted comparisons to the Great Flood of 1927 — a catastrophe that riveted the nation's attention, spurred demands for government action and ultimately changed how Americans think about natural disasters.

"A year later, Congress passed the Flood Control Act of 1928, which authorized the U.S. Army Corps of Engineers to design and construct a system of levees and spillways to control flooding on the Mississippi River and its tributaries."

Bill Dawson is assistant editor of the SEJournal.

## New UN science panel deals with dwindling natural resources

By CHERYL HOGUE

"Doing more with less" is a slogan that frequently accompanies budget and personnel cuts in government and other organizations, including newsrooms.

Now, an international panel of scientists brought together by the United Nations is focused on this theme too. It is providing advice to help the world do more with fewer natural resources, such as fossil fuels, metals and rare earth materials, while wreaking less environmental damage, such as pollution and ecosystem destruction, from their extraction and use.

The panel's reports, and the policy discussions they provoke, will provide solid story material for environmental journalists.

The International Resource Panel (IRP) is analogous to another global scientific group familiar to most SEJ members — the Intergovernmental Panel on Climate Change. Formed in 2007 by the United Nations Environment Programme, IRP is conducting scientific assessments on the sustainable use of natural resources and the environmental impacts of resource extraction, use, recycling and disposal.

"People believe environmental 'bads' are the price we must

pay for economic 'goods,'" says Achim Steiner, executive director of the United Nations Environment Programme. "However, we cannot, and need not, continue to act as if this trade-off is inevitable."

The main focus of IRP is how to separate economic growth from the rate at which resources are used and from the degree of adverse environmental impacts that accompanies their extraction and use. The panel calls this process "decoupling," a term that might be familiar to those who have studied electronics or physics.

Decoupling is not as simple as sounds. Any talk of decoupling the economy from the environment "is physical and practical nonsense," says Mark Swilling, a lead author of an IRP report which was released in May.

The world economy is expanding and expected to continue to do so. The rate of natural resource use is anticipated to rise as developing countries climb out of poverty and more people have access to the amenities that can make modern life long and pleasant. Decoupling is the idea of using fewer resources per unit

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A new U.N. panel is helping the world do more with fewer natural resources, while reducing environmental damage from their extraction at such places as this open pit mining operation in California's Mojave Desert.

Photo: © Roger Archibald



## New Antartic adventures, award-winning collaborations and new media jobs for SEJ members

By JUDY FAHYS

Susan Moran, a Boulder, Colo. member of SEJ, continues to work on a variety of projects generated from her time as an Antarctica fellow on the Marine Biological Laboratory's monthlong Logan Science Journalism Program over the winter.

Moran crossed the Drake Passage on a research vessel and spent more than two weeks at Palmer Station on the Western Antarctic Peninsula (dubbed the "Banana Belt" of Antarctica because it's balmy compared with McMurdo and the South Pole station locations). Moran blogged at OnEarth magazine's website (www.onearth.org/author/smoran) and on her own website (www.susankmoran.com).

She also reported on site for a weekly science show on KGNU radio (Denver/Boulder) and began work on print and radio features that will appear in the coming months.

Her adventures included walking up the glacier behind Palmer around midnight — magical sunset hour during the austral summer — and hearing the roar of its calving — "a bittersweet sight," she said, "given how fast the glacier has been receding in recent years." Moran also hung out by Adelie penguin colonies, witnessing their comical and tender interactions as they incubated

Moran said the experience left little time for sleep, partly because the austral summer upset the circadian rhythm and partly because she had so much to do.

"Between following and interviewing scientists and then working in the lab most days, writing articles and blogs at night, and feeling too wired or exhilarated in the wee hours of the morning," she said, "sleep was not a high priority — a small price to pay for a peek at the bottom of the world."

Meanwhile, a collaboration in northern California on the health hazards of wood-stove smoke garnered a first place award from the Association of Health Care Journalists.

The four-part series focused on potential health hazards of the wood-burning stoves used by countless households in California and across the continent. Produced as a partnership between the new Center for Health Reporting at the University of Southern California and the Chico Enterprise-Record, a 30,000circulation MediaNews daily in rural far Northern California, the series won in the community newspaper category for papers with a circulation of less than 150,000.

David Little of the Enterprise-Record rallied his small newsroom staff to cover this story from all angles. Nine staffers reporters, editors, photographers, etc. — worked on this project while doing their usual assignments. The Center for Health Reporting, a small team of six health care journalists based at USC that receives non-profit funding to work with media outlets

throughout California on stories affecting their local communities, sent Richard Kipling and Deborah Schoch to Chico for a month to assist the newspaper.

"I'm heartened that "A Burning Issue" won this award, since it represents a new collaborative approach to specialty journalism," Schoch said in an email. "Because of my own background in environmental journalism — and with SEJ — it's great to see a project on air pollution recognized by the Association of Health Care Journalists."

The partnership is just one of many noteworthy projects reported this year by SEJ members.

Former SEJ Board member, Peter Dykstra, formerly of CNN's science news team and the Pew Charitable Trusts, joined Environmental Health Sciences this spring as publisher of Environmental Health News and The Daily Climate, led by former SEJ board member Marla Cone and current SEJ board member Douglas Fischer. His main focus: working to increase the reach of EHN and The Daily Climate, and to expand their value as sources of original content and as news aggregators.

Dykstra, who will work from home in Conyers, Georgia, was a producer at CNN for 17 years, from 1991 to 2009. He won an Emmy for the coverage of Mississippi River floods in 1993, the DuPont Columbia Award for coverage of the 2004 quake and tsunami, and the 2005 Peabody Award for Hurricane Katrina coverage. All three of these were shared with a host of others at CNN.

Christy George is back at Oregon Public Broadcasting, this time producing for television, including another segment for History Detectives and an hour-long documentary about the Columbia River Gorge.

Deborah Fryer developed a 21-minute documentary for the Colorado School of Public Health and Denver Urban Gardens about the intersections between community gardening and public health. Fryer wrote and edited the film. She also contributed about five minutes' worth of beauty shots of the gardens. The clip can be seen online at http://lilafilms.com/dug.htm.

Dawn Stover landed a full-time stint as an editor for the Bulletin of the Atomic Scientists from April through June, the weeks following the massive earthquake and tsunami at the Fukushima nuclear plant in northern Japan. Said Stover: "It's an interesting time to be there."

David Biello told Media on the Move that his PBS documentary aired nationwide — "finally" — in April, May and-June. Here's a link to the Beyone the Light Switch web site: http://tinyurl.com/2b9e35y

Christine Heinrichs had an interesting wildlife crime story run in *The Cambrian* last spring.

"A story this long (4,000 words) is unique for them," she

wrote, "but it was a shocking local crime that officials declined to explain. I was able to get the lead investigator to tell me about his investigation, although not every detail was shared. The perp died before they could get an indictment."

Meanwhile, **Christie Aschwanden's** feature story, "Pet Project," was named a finalist for a National Magazine Award. She wrote the story for *Runner's World*, where she is a contributing editor.

Cara Ellen Modisett, editor-at-large of *Blue Ridge Country* magazine, reporter/producer for WVTF public radio, was keynote speaker at the annual Roanoke Regional Writers Conference at the end of January, at Hollins University in Roanoke, Va. This is the conference's fourth year: http://tinyurl.com/437sphq

**Eve Byron** reported that, in January, she became an "adjunct professor," team-teaching a "Writing for News Media" course at Carroll College in Helena, Mont. Besides being special projects Editor for the [Helena] *Independent Record*, she covers natural resources and federal agencies.

**Craig Saunders** said he has a book coming out soon, a library reference for a sixth-grade audience, "What is the Theory of Plate Tectonics?" by Crabtree Publishing Company. http://tinyurl.com/3krtxyu

Carolyn Johnsen will retire in June from the University of Nebraska-Lincoln, where she has taught science writing since 2004. Before this gig, she was a general-assignment reporter for the Nebraska Public Radio Network, although she focused her reporting on the environment and agriculture. In retirement, Johnsen plans to write rather than talk about writing her book on the Ogallala Aquifer in Nebraska. She will continue her membership in SEJ.

**Dan Sullivan** wrote that *BioCycle*, a magazine covering composting, renewable energy and organics recycling for more than a half century, moved across town in Emmaus, Penn. Following 20 years in the same location, the monthly publication and its publisher JG Press have settled into a rehabbed historical foundry building. It meant cozier digs for the staff of seven, helped jumpstart spring cleaning and embodied the magazine's philosophy of preserving valuable resources.

Judy Fahys is environment reporter at The Salt Lake Tribune. Contact her about news of your latest award, book project or job change at fahys@sltrib.com.

## Freelancers

If you are a freelance member of SEJ, be sure to get your bio listed in the

## sej.org Freelance Directory

http://www.sej.org/freelancers

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of economic output — such as less water per bushel of corn or less energy for each manufactured product — and lowering the rate of ecological damage while doing so.

There are big challenges ahead, IRP's report says. For example, deposits of the highest-quality and most easily accessible mineral ores and fossil fuels are being exhausted. Extraction from newer, more far-flung, or lower-quality sources takes additional energy and wreaks greater environmental damage, such as land disruption and more intensive use of water and energy, the report says. And extraction of resources is increasingly happening in countries with weaker environmental protections, which often leads to greater ecological impacts per unit of extracted material.

Industry has been a leader in decoupling — it has developed more resource- and energy-efficient methods that produce less waste and pollution. But IRP's recent report says the decoupling needed for a sustainable society will require behavior changes by corporations and consumers and new government policies.

Swilling, academic director of the Sustainability Institute at the University of Stellenbosch in South Africa, says the bottom line for decoupling is this: shifting the main driver of the global economy from debt-financed consumption to sustainabilityoriented investments in innovation.

Steiner says, "Decoupling is part of a transition to a low carbon, resource-efficient green economy needed in order to stimulate growth, generate decent kinds of employment and eradicate poverty in a way that keeps humanity's footprint within planetary boundaries."

IRP is likely to be a solid source of story ideas. The panel is preparing reports that will offer policy options for decoupling in specific sectors. Those reports will address the flow of metals through the economy, land and soil, technology to reduce greenhouse gas emissions, recycling, and water.

Cheryl Hogue reports for Chemical & Engineering News. She wants to decouple the space in her house from the clutter it collects.

### **Sources:**

### **International Resource Panel:**

http://www.unep.org/resourcepanel/

### IRP report on decoupling:

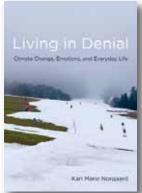
http://tinyurl.com/6yg7aff

Mark Swilling, lead author of the IRP report on decoupling, and academic director, Sustainability Institute at the University of Stellenbosch in South Africa: Swilling@sun.ac.za

Ernst U. von Weizsacker, co-chair of the IRP and dean, Bren School of Environmental Science & Management, University of California, Santa Barbara: ernst@bren.ucsb.edu

Nick Nuttall, United Nations Environment Programme spokesperson, phone + 254 20 7623084, mobile +254 733 632755 or +41 79 596 57 37, nick.nuttall@unep.org

## **Book Shelf**



Delving into how even the most astute can't cope with the idea of climate change.

## **Living in Denial:**Climate Change, Emotions, and Everyday Life

by Kari Marie Norgaard

MIT Press, \$25 (paperback)

Reviewed by: MIRANDA SPENCER

The "denial" in this book's title refers not to the rejection by politicians and pundits of the scientific facts of climate change.

Rather, it addresses the process by which people cope by distancing themselves from painful truths, what Norgaard — a professor of sociology and environmental studies at Whitman College — calls "knowing yet not knowing."

She argues that this process — not lack of information or concern — causes emotional numbness at all levels, which may help explain the world's inaction on the overwhelming reality of climate change.

Norgaard's ideas are both insightful and accessible, if you're patient with academic jargon. They come from her yearlong (2000-2001) ethnographic study of the close-knit residents of an idyllic Norwegian town she calls Bygdaby (a pseudonym).

There, people don't argue with the reality of the greenhouse effect: They can see it all around them during an unseasonably warm winter when snow comes two months late, disrupting their economy and culture.

Yet they barely broach the topic in conversation, much less organize around it, locally or nationally.

Through interviews with those she lived alongside and building on scholarship across the social sciences, Norgaard explains how Bygdaby folk figuratively pull their ski caps over their eyes on the issue of climate change, even though — like many other Norwegians — they are educated, environmentally conscious, and among the more politically astute who regularly read newspapers, march for human rights, and revere their mountains and fjords.

They have trouble reconciling their national self image as a simple, conscientious, and past-suffering people with the fact that their nation rivals Saudi Arabia in oil exports and the United States in per-capita CO2 emissions.

Essentially, processing the idea that they (and the rest of us) are both "perpetrators and victims" of a seemingly insurmountable environmental crisis is almost literally inconceivable.

As one resident told the author, people "want to protect themselves a little bit."

Included is a "tool kit" for "collective actions ... taken to restore a sense of equilibrium and social stability," including particularly local traditions of stoicism (not expressing messy feelings), good deeds (religiously recycling) and more universal

excuses such as distractions (shopping to do; bills to pay) and diversion (at least we're not as bad as those Americans!).

In the latter part of the book, Norgaard extrapolates her thesis to the rest of the "privileged" first world, particularly the United States, and makes a few recommendations for breaking the cycle she has described.

By the end of this critical-yet-compassionate book, American climate denialism almost makes sense.

What does Bygdaby have to do with journalism?

Quite a bit, though Norgaard doesn't explicitly say so except to make the point that presenting more and better information via the news media is unlikely to change matters.

For one thing, her findings suggest that if we want our work to have impact, we should understand our audiences as socialized beings rather than simply individuals, and take into account the role of emotion in processing information (or not, if we're not willing to receive it).

And to understand that "people judge as serious only those problems for which they think action can be taken."

Miranda Spencer is an SEJ associate member who has freelanced for a variety of publications including E, American Forests, and The Daily Climate. She recently joined the staff of Environmental Health News as a morning researcher.



An elegant explanation of climate change and its dire health threat.

# Changing Planet, Changing Health: How the Climate Crisis Threatens Our Health and What We Can Do About It

hat We Can Do About It by Paul R. Epstein, MD and Dan Ferber

University of California Press, \$29.95

Reviewed by CHRISTY GEORGE

Back when everyone was buying extra canned goods to ring in Y2K, my editor at Marketplace Radio, Stu Seidel, was soliciting story ideas.

One of the best was that the 20th Century was when humans vanquished disease with vaccines, then lost the battle by abusing them.

This idea of losing ground in the fight against disease is merely the starting point for the new book, *Changing Climate*, *Changing Health*, by Dr. Paul Epstein and Dan Ferber. It's an egocentric and riveting tale about how the changing climate can hurt the people we love most — us.

Chapter by chapter, the authors identify the climate fingerprint in the re-emergence of epidemics from 19th Century diseases such as cholera and malaria, as well as "new" diseases such as Ebola and AIDS.

Mosquitoes can survive farther north and at higher elevations. Microbes can ride out decades-long cold spells by hitchhiking rides on the chitinous shells of zooplankton.

It's not just human diseases that threaten us. The climatedriven spread of animal and plant diseases, such as bark beetles ravaging the pine forests of the Rocky Mountains, indirectly threatens humans when wildfires feed on the dead trees and spread to homes built in the precarious zone known as the urbanwildland interface.

Then there's our water and food — from farms to fisheries — directly threatened by changes that by century's end, or sooner, may create an unrecognizable Earth.

How just one degree of warming, for instance, can tip the balance for a disease to spread, undermining the sunny prognosis of climate skeptics who call climate change the greening of Earth, and crow that the northern Midwest and Canada can become the new agricultural breadbasket of North America. But what then of the South?

I'm a sucker for big picture thinking and unified field theories. One of the big ideas in this book is the rise of systems analysis: how scientists such as Paul Epstein looked beyond their specialized silos and began connecting dots on a grand scale. As his understanding of climate change deepens, the full implications of extreme and/or abrupt climate change also dawn on the reader.

The news is not good.

Beyond the melting ice, declining snowpack, acidifying ocean, wild weather and spread of disease-carrying bugs is the global economic system as it's being practiced in the early 21st Century.

Yes, they went there.

In what was for me the most fascinating section of the book, the authors coherently condense 350 years of economic history and ideas, and explain how the failure — the deliberate undermining — of economic philosophy led to climate change, and will lead the world to a climate catastrophe if things do not change, and soon.

It's not just economics that come under scrutiny by Epstein and Ferber. They consider the interrelationships of human choices in energy, transportation, agriculture and development, and how all that drives climate change and health problems, for people and for ecosystems.

The book ends with a blueprint for change, based on a return to true Keynesian economics, which the authors argue would be as good for business as it would be for the planet. Indeed, they point out that many businesses have been crying out for a set of rules to guide them on their own quest to reduce waste and combat climate change.

Changing Climate, Changing Health is written with great clarity, elegantly explaining tricky concepts such as negative feedback loops, and simplifying complex science into why, among other things, pests seem to prefer food crops grown in higher CO2 conditions.

One wonders about Dan Ferber's role in the book, because most of it is written in first person from Paul Epstein's viewpoint. I know that Ferber can report, and I know that Epstein can write.

Back in the 1970's, I first wrote for the *East Boston Community News*, and remember Paul's dispatches to the *Community News* from Mozambique — a sojourn that formed the beginning of his own journey to understanding the role of climate change in promoting disease.

But the format in this book leaves it unclear who's doing what. That quibble aside, it's well worth reading, whether you know a little, or a lot, about climate change.

If you want to get up to speed on climate change in all its grandeur and sweep, this is a superb primer — a familiar story, told in a new way, through the lens of health. And that point of view makes the sometimes vague, sometimes wonky story of climate change something quite fresh — a story that is all about us.

Christy George, former SEJ board president, is an independent broadcast producer based in Portland.

A study of Alaska's stunning climate change impacts

## Early Warming: Crisis and Response in the Climate-Changed North

by Nancy Lord Counterpoint, \$26



Reviewed by JENNIFER WEEKS

Alaska's official tourism website touts the state's stunning scenery, outdoor activities and historic sites under the header "Find Your Alaska."

Writer Nancy Lord has spent years doing just that as a commercial salmon fisherman, a natural historian on adventure cruise ships, and the state's writer laureate.

In *Early Warming*, she examines how climate change is altering Alaska, neighboring regions, and the lives of indigenous people who live there.

Global temperatures are rising worldwide, but the effect is stronger at the poles.

That's mainly due to a positive feedback loop between rising temperatures and shrinking ice and snow cover. Ice and snow reflect the sun's rays back into space, but melting exposes darker earth and water, which absorb solar heat. That causes more warming, which causes more melting.

Alaska is warming dramatically: In the past 50 years, year-round average state temperatures have risen by 3.4 degrees Fahrenheit, and average winter temperatures have increased 6.3 degrees. That matters, Lord argues, because "what happens in the Arctic doesn't stay in the Arctic. The polar regions function as the cooling system for our planet."

As the climate and environment of the North change, so will the climate and ocean systems that regulate the entire world.

What's more, as lower latitudes warm, impacts occurring in Alaska will move southward.

Lord finds many impacts during her travels that can be attributed to climate change.

Stream temperatures on the Kenai Peninsula are rising above

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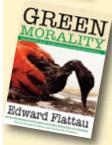
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## **America's Climate Problem**

#### by Robert Repetto

Robert Repetto, a leading environmental expert, applies the latest analysis and findings to illuminate America's curent climate change controversies and our best policy options. *Earthscan* 



## **Green Morality**

#### by Edward Flattau

A journalist's polemic on human beings' ethical relationship with the natural world around them. The main theme is the moral obligation to future generations to leave the planet in as good or better shape than we found it. *The Way Things Are Publications* 



## Saved by the Sea A Love Story with Fish

#### by David Helvarg

David Helvarg has lived a life often as endangered as the ocean he now works to protect. Saved by the Sea is their story. St. Martin's Press



## Inside the Outbreaks

### by Mark Pendergrast

The Epidemic Intelligence Service has battled everything from smallpox and zoonoses to pesticides, lead poisoning, emerging diseases, and the health impacts of climate change. *Houghton Mifflin Harcourt* 



## Show Me Nature's Wrath

#### by Don Corrigan

A compendium of great Missouri weather disasters with a final chapter on climate change impact as factors in recent meteorological events. *Reedy Press* 



## **Green Guide Families**

The Complete Reference for Eco-Friendly Parents

### by Catherine Zandonella

The go-to guide for a new generation of parents, filled with practical advice backed by the latest research. *National Geographic Society* 

state standards for spawning and rearing salmon. Lakes and wetlands are drying up, and fires are spreading more widely as the landscape becomes less damp. Birds are wintering farther north. Coastal erosion is intensifying as permafrost thaws and sea ice retreats from shore, exposing beaches and bluffs to wave action.

Lord also describes conservation efforts, especially work by indigenous people in Alaska and Canada's Northwest Territories. Climate change is altering subsistence lifestyles in many ways: for example, weather patterns are harder to predict, and fishing grounds are shifting.

Lord finds some creative adaptations, such as a community garden in Fort Yukon designed to take advantage of lengthening growing seasons, and a proposal to create a sustainable wood biofuel program there to replace diesel fuel.

In a region where survival is a much bigger daily concern than climate change, initiatives such as this make sense; they help people adapt to new conditions and also make their lifestyles more sustainable.

In her most interesting chapter, Lord visits Shishmaref, a village on a small island off Alaska's northwest coast that is slowly being eroded by storm waves.

Global print and broadcast stories have covered Shishmaref's dilemma: The community voted in 2006 to move to a site on the mainland, but has not figured out how to pay for it (the Army Corps of Engineers estimated the cost at \$179 million for 142 households). Former Vice President Al Gore has called Shishmaref's residents "the first climate refugees."

Climate change is magnifying much broader problems that affect Shishmaref and other marginal communities around the world. Those issues, Lord writes, "were tied to all kinds of environmental, social, and cultural changes. Perhaps above all, they were economic — the costs of energy, a lack of jobs and job skills, the challenge of trying to live modern lives without an economic base."

Alaska is taking a laissez-faire approach: Communities can move if they want, but the state has not committed to keeping communities together or helping them maintain their cultures. But as Lord points out, if Alaska can figure out how to help impacted communities relocate and create more sustainable lifestyles in the process, it could create a model for other parts of the world.

Lord writes fluidly about climate change impacts and Alaskan landscapes, but her focus tends to wander.

This book is partly a science report, partly a travelogue, and partly a meditation on the fate of indigenous people (she clearly cares deeply about this issue, but rhapsodizes about the richness of indigenous culture and subsistence lifestyles a few too many times.)

She doesn't provide any dates for her trips, some of which date back at least as far as 2008, and sometimes the time frame changes abruptly forward or backward.

It also would have been nice if the book included some color photos of the phenomena Lord describes, such as the light-green rings of new plant growth around shrinking lakes that she sees from an airplane (there are a few small black and white photos at the beginning of chapters, but no captions linking them to the narrative.)

Lord is a good guide, but more showing and less telling would make her story even more powerful.

Jennifer Weeks is a Boston-based freelance writer and an SEJ board member.



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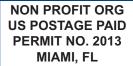
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## "We were lucky tonight ..."



"One hour SW of here there were some severe storms and tornados that hit the Joplin, MO area," Darin House commented on the upload to the Flickr photo sharing site of this striking double rainbow photo he took at the end of his driveway on the evening of May 22nd. "So far a confirmed 30+ dead and they expect that number to rise by morning." Dozens of others witnessed and shared imagery of this same phenomenal experience — largely missed by established media outlets — in what might best be described as an act of both spontaneous and collective citizen photojournalism. Some of them described the rainbow's colors as the most vibrant they had ever seen, and commented on the poignant irony of such a day of devastation for Joplin, Mo., ending in such beauty. Starting on page 14, much of the photo coverage in this issue of the recent disasters wreaked on the American midwest by a combination of wind and water owes its presence to the generosity of citizen photojournalists making their work freely available through Creative Commons licensing, including the cover. In an era when conventional journalists are seeking to fast-track themselves into multimedia journalism, the mounting contributions of citizens like Darin House have the potential to make a substantial impact on the future course of journalism. This post he concluded simply with, "Prayers for the folks in Joplin."