



SEJ Journal

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Glacier Chasers

Also in this issue:

Journalism “missteps” examined

Students tweet Montana pollution trial

Enviro stories snatch national awards

A quarterly publication of the

Society of Environmental Journalists



The
Reporter's Handbook
on Nuclear Materials, Energy,
and Waste Management

Michael R. Greenberg
Bernadette M. West
Karen W. Lowrie
Henry J. Mayer

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The *new*
must-have,
non-partisan
guide
to **hotly**
contested
issues of the
nuclear era

An essential reference, *The Reporter's Handbook* presents scientifically accurate and accessible overviews of the most important issues in the nuclear realm, including:

- health effects
- nuclear safety and engineering
- Three Mile Island and Chernobyl
- nuclear medicine
- food irradiation
- transport of nuclear materials
- spent fuel
- nuclear weapons
- global warming

The Reporter's Handbook contains background briefs on topics related to nuclear materials, energy, waste management, and risk; a glossary; key web and paper sources; and context regarding risk assessment, environmental impact, economics, and policy. Each "brief" is based on interviews with named scientists, engineers, or administrators in a nuclear specialty, and each has been reviewed by a team of independent experts. (The approach is based on that of their earlier book, *The Reporter's Environmental Handbook*, which won a special award for journalism from the Sigma Delta Chi Society of professional journalists.)

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An Extreme Ice Survey team exploring a meltwater canyon carved almost 200 feet deep into the massive Greenland ice sheet by increasing summer runoff.
Photo: © James Balog / Extreme Ice Survey

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New Orleans retreat examines SEJ mission in these difficult times

By CHRISTY GEORGE

SEJ's strategic planning retreat started with gumbo ya-ya and ended with new vision and mission statements, and new marching orders for our almost-20-year-old organization.

In a time of massive transformation in our industry, SEJ-ers are not the slightest bit unclear about who we are: a group of people who share a commitment to making sure people — lots of people — understand clearly what is happening to our environment. We aren't activists, but we are mission-driven. We don't advocate outcomes, but we do the work we do because we hope for good outcomes.

With 30 wordsmiths in one room, you might expect trouble. What we got instead was a clean, crisp re-statement of SEJ's vision — our overarching goal, the big vision that guides us as a 501(c)(3) educational non-profit. Whether we fully attain it or not, it's the lofty outcome we seek.

The group went from this: "SEJ members envision an informed society through excellence in environmental journalism" to this: "Credible and robust journalism that informs and engages society on environmental issues."

There's a lot packed into two adjectives and one verb. "Engages" — a commitment to making a bigger impact, "robust" — a vision of a changed future that is even healthier than it was before all this churning began, and "credible" — the enduring value we refuse to give up no matter how intense the economic pressure. This is a vision statement we'll actually remember.

The revised mission statement — our everyday mantra, a statement of what is possible, what we strive to accomplish with all of SEJ's programs and operations — also reflects where we are and where we hope to head.

Current:

SEJ's MISSION: To advance public understanding of environmental issues by improving the quality, accuracy, and visibility of environmental reporting.

Proposed:

SEJ's MISSION: To strengthen the quality, reach and viability of journalism across all media to advance public understanding of environmental issues.

Most noteworthy is who comes first in the new mission statement: Journalism, with a capital J.

It's not because we've stopped caring what our readers and listeners and viewers and surfers get out of our work. It's because, without us, they won't get serious, authoritative and trustworthy information. For the moment, we need to turn our gaze inward. We need to hold up high standards as we create new media outlets and platforms. We need to tell the story of the 21st Century, the story of the environment, to an even wider audience. We need to pass on our highest values to a new generation of reporters, editors and content producers. And we need to protect the brain trust of environmental journalists who've spent years learning this



challenging beat.

SEJ has always been about journalists helping journalists, in a field where there's a lot of complexity to master. Since SEJ was founded in 1990, the stakes have risen higher and higher. We now face a world where the environment itself is under severe threat, at a time when we, the messengers, face an uncertain future. The next three to five years are likely to be as critical for the fate of the planet as for the future of journalism.

The crisis has hit print hard, but no media platform is immune, and no funding model has yet emerged as a clear solution. It's not clear how bad things will get before the industry hits bottom. It's not just newspapers that have lost advertising revenues. Magazines, niche publications and newsletters are also cutting staff. Commercial television stations all over the country are buying out their highly paid anchors. Some for-profit companies see the answer to their woes as going non-profit. But even public broadcasting has hit hard times. National Public Radio recently laid off more than 50 people in its newsroom, and marquee PBS programs have been losing major funders for several years.

Will at least one newspaper survive in every major city? Will TV stations continue to produce local news, or will some pack it in, leaving big cities with one or two news teams instead of three or four? And in smaller towns, will any local TV survive? Will smaller dailies and weekly papers grow to fill the void left by shrinking big city dailies? Will online news sites ever make enough money to support many environmental beat reporters?

All of this was on the minds of SEJ's strategic planning group at the New Orleans retreat, where we committed SEJ's board and staff to re-examine our programs and services, find creative ways to grow and diversify our membership, engage both volunteers and staff to prevent burnout and renew SEJ, and make SEJ a leader in defining journalistic integrity.

One critical issue in the old plan that we didn't mention was building SEJ's stature. The reason? We're there. It's a testament to the hard work of SEJ's staff and volunteers that we have come so far in earning both public trust and the respect of our peers.

Are there bumps in the road ahead? Almost certainly. SEJ faces internal pressure from our growing number of freelancers to help them make ends meet. Some ideas are easy — like serving as a clearinghouse for information about publications. Some are harder, demanding significant staff time — like offering SEJ as a fiscal sponsor for members who win grants. Some may not be possible, like providing health insurance, which our lawyer has told us could run afoul of IRS guidelines for 501(c)(3) non-profit groups. But we are committed to exploring all of these possibilities, and many more.

There are also powerful external pressures. Keeping a steady stream of funding coming at a time when philanthropies are retrenching may be SEJ's biggest challenge of all. This summer,

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An experiment in Grace

Major case covered by new media produces satisfying results



PHOTO BY DANIEL DOHERTY

Andrew Schneider, formerly of the *Seattle Post-Intelligencer*, discusses the criminal prosecution of W.R. Grace & Co. with University of Montana environmental journalism and law school students. Schneider brought national attention to asbestos contamination in the Grace mining town of Libby, Mont., in 1999.

How journalism and law students teamed up and used new media to cover the criminal polluters W.R. Grace & Co. trial



By NADIA WHITE

The story of widespread asbestos contamination in the timber and mining town of Libby, Mont., was well told by the time the criminal trial designed to assess blame rolled around in February. But the question loomed: As the news industry contracted, who would cover the story?

Andrew Schneider broke the news of Libby's health crisis in the *Seattle Post-Intelligencer* in 1999. His stories triggered a decade of federal investigations and, arguably, the criminal suit itself. But his newspaper didn't live to see a verdict.

By spring, Schneider was covering the criminal trial of *U.S. v. W.R. Grace & Co.* and its managers and executives for his blog. The *Post-Intelligencer* had stopped publishing and also gone were the throngs of reporters who followed Schneider to Libby to meet for themselves the people poisoned by a dusty industrial disaster. Schneider's stories can be found at his website,

<http://andrewschneiderinvestigates.com/>

This is the story of how a large team of student reporters and legal analysts stepped in to fill a notable void in coverage of what *The New York Times* called, "A reckoning in one of America's worst industrial disasters." It was an experiment both in collaboration and the use of new media.

The Grace Case Project harnessed the energy of 14 undergraduate journalism students and 17 law students to cover the criminal prosecution — from jury selection to acquittal — of W.R. Grace & Co., and three of its former executives accused of intentionally poisoning a Montana town and conspiring for decades to keep that a secret.

In many ways the trial proved to be a one-room schoolhouse on environmental journalism. It featured dueling scientists, discussions of risk and risk analysis and close parsing of policy,

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especially the criminal provisions of the Clean Air Act. The Grace trial challenged reporters to tell the broad social narrative of the established story of W.R. Grace's effect on Libby in the very narrow confines of an awkward, overcharged, federal criminal case.

The journalists in the group used new media to offer old-fashioned trial coverage. The law students used the weblog format to offer analysis and explanation of legal strategy.

This was not, of course, the first trial covered using Twitter and blogs. Ron Sylvester of *The Wichita Eagle* pioneered trial coverage via Twitter. And a team of four bloggers with Firedoglake.com took collaborative blog coverage into federal court covering the trial of Lewis "Scooter" Libby. The Grace Case team built on those examples in size, depth and length – a bigger team, offering more analysis about a trial that ran longer than any previous live-blogged prosecution.

The trial ultimately ran almost three months – 35 trial days. Thirty-one reporters covered shifts in the courtroom, working in teams of two – one journalist, one law student. The weblog hosted dozens of background articles written by Grace Case Project participants and scores of links to additional coverage, evidence and outside legal sources.

Twitter skeptics — including many law students and lawyers who had never used it — found it addictive to watch the real-time coverage.

Those who followed the trial said the weblog and Twitter format worked:

"The blog, frankly, is an impressive piece of work," Ashby Jones wrote on the WSJ.com Law Blog. "It features recaps of just about every moment of courtroom action, dating to Feb. 19, the day the trial began. It has links to evidence, bios of all the major players, and links to other news reports. Perhaps most impressively, from where we sit, is its insistence on making it accessible to non-lawyers." (<http://bit.ly/yQuJz>)

That was a goal of the project: to provide trial coverage capable of informing at least two distinct audiences. Those groups were people personally affected by asbestos exposure, and attorneys and scientists interested in how this case played out.

The U.S. Environmental Protection Agency, U.S. Department of Justice and W.R. Grace, as well as the local provider for the town of Libby, were among the top networks viewing the site. Ultimately, almost 10,000 people tuned in at one time or another.

"Knowing that I've been writing for an audience, for real people with real interests and concerns, has made me put so much more care into the writing I've done for this class," said Carmen George, a junior journalism student. "Being a journalist is a very serious responsibility and obligation, and that only becomes real when you are actually doing the reporting for a real audience."

Twitter skeptics — including many law students and lawyers who had never used it — found it addictive to watch the real-time coverage.

"Their coverage provides amazing access to the courtroom,"

wrote Kate Bladow, a blogger with techno.la, a technology blog for legal aid and public interest advocates. “They are telling the story in a professional, yet engaging, way and in my opinion, it is much more fascinating than any episode of ‘Law & Order’.”

The tweets flowed into a box on the blog page. That meant people who checked the blog didn’t have to brave the new world of Twitter.com to read the tweets. They read them and were hooked. This was not frivolous twittering about breakfast choices.

Amy Guth, a lawyer who has worked in Libby for 20 years, said the Twitter updates were so compelling that she finally had to cut them off cold turkey.

“I was addicted to it,” Guth said. “It was fascinating and I’d just wait for the next update ... I finally had to just get off it and pay attention to my job.”

“... much more fascinating than any episode of ‘Law & Order’”

She said she forwarded the blog address to all the people she knew who felt strongly about W.R. Grace, one way or another.

“I think a great thing to come out of this trial and this project is that people have more interest in being educated about the Libby amphibole and what it is and how to protect themselves,” she said, referring to the geologic structure at the heart of the asbestos trial and public health concern.

Judge Donald Molloy, the federal district judge who presided over the W.R. Grace trial, supported the project because he wanted as many people as possible to see and understand the judicial process. He also said he hoped the collaboration between journalism and law students would improve the accuracy of the coverage of the legal aspects of the trial.

Not all judges embrace transparency that way.

During the final week of the Grace trial a celebrity-studded bankruptcy trial focused on the exclusive Yellowstone Club for the super rich was held in the same courthouse. Jonathan Weber, the founder of Missoula-based news site NewWest.net, used Twitter to cover the opening day of the trial. He arrived at the courthouse the next day only to have the judge demand he stop Twittering or lose all computer privileges in the courtroom.

Weber continued to file updates during breaks but his experience contributed to a growing concern that judges are conflating the problem of tainted juries and witnesses with new media.

Twittering is no different than posting to a blog or filing a breaking news story with NewWest, Weber argued to no avail. It’s still up to the jury and witnesses to avoid seeking out information about the trial.

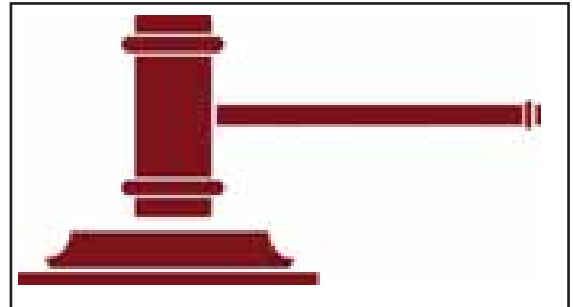
The same might be said about journalists using new media as a reporting tool: The rules remain the same.

While I teach reporting with Twitter in my advanced skills class each fall, it comes in the context of the main focus of the class: Learning to report stories that are accurate, timely and newsworthy.

Next generation journalists are going to have to be good at learning new applications. But it is the old school values that will earn an audience, and people’s, trust.

Nadia White teaches at the University of Montana School of Journalism in Missoula, Mont.

Getting started with live court coverage



- Talk to the judge, clerk of court and courthouse staff very early in the process. Be upfront about your goals and access needs. Many of our requests were initially denied, but later approved.

- Enter those talks with a sense of what you want, and a sense of what you absolutely need. We wanted laptops in the courtroom. If that had been denied, we would have needed a separate media room with a video feed. In the end, the court provided both.

- Create and sustain a shared set of journalistic values for reporters by talking about the group’s core values. This is especially important if coverage will be a citizen- or community-based collaboration.

- If you’re designing a single-purpose weblog or page for a trial, think about the features you want to offer and begin the design process early. Form may drive function.

- Develop background materials early. A rich trove of explainers, bios and backgrounders allow you to use internal links to enrich posts without making them longer.

Grace Case Project Analytics:

- 35 days in court
- 86 days between opening statements & verdicts
- 4,561 tweets sent
- 310 posts posted
- 1,332 comments posted
- 3,597 maximum unique viewers in a day
- 9,827 number of absolutely unique viewers
- 3 average number of page views
- 5:41 average time on site.

Texas journalist adapts and digs deeper on the e-beat

By BILL DAWSON

Greg Harman is a staff writer for the *San Antonio Current*, the alternative weekly in that city. He got into journalism a dozen years ago and has persisted in pursuing an interest in environmental and investigative reporting through a variety of jobs. They included work at small weekly and semi-weekly newspapers, dailies, alternative weeklies and a web-based environmental publication that he conceived and published in Houston.

Harman started his career at the semi-weekly *Pecos Enterprise* in West Texas, where he wrote about disposal of radioactive waste in nearby New Mexico. He then moved on to the daily *Odessa American*, also in West Texas, as the area reporter. At the *American*, he covered a variety of environmental topics, including the New Mexico disposal issue, black bears in Big Bend National Park and an environmental justice issue involving air pollution from a local chemical plant.

Along the way to his job at the *Current*, he worked as a reporter at the *Las Vegas Sun*, was publisher-editor of a weekly paper in Alpine, Texas, for three years until the owner closed it, and served as environment writer at the daily *Sun Herald* in Gulfport-Biloxi, Miss. After that job, he joined the *Houston Press*, an alternative weekly, as a staff writer. After he lost that job in a staff reduction, he launched the web-based publication *Earth Houston*, which he produced for about eight months. After a brief stint at a non-profit wildlife rescue organization, he joined the staff of the *Current* (for which he had been doing some freelancing) a couple of years ago.

Harman's bio on the *Current's* Web site includes his future intentions: "He plans to quit the news-writing business just as soon as victimization and despair cease to be a natural outflow of economic progress." He answered e-mailed questions from *SEJournal* about his experiences as a person who wanted to be a journalist covering the environment and has stayed with that decision.

Q: Why did you decide to go into journalism? What drew you to environmental journalism? You've stuck with environmental reporting through a number of career changes. When did you realize that you had a particular passion for writing about environmental problems and issues?

A: I suppose it was somewhat inevitable that I would wind up in this mess. I grew up in a pretty politically minded family in the D.C. area. I had that not atypical connection youngsters have with all manner of the creeping, cold-blooded and scaly things. Of course, we also had James Watt at Interior and Reagan in the White



Greg Harman

PHOTO COURTESY GREG HARMAN

House. That was good inspiration.

My family moved across the country in 1985 and by the time I hit high school I had a fanzine going, dedicated to hardcore punk music and dripping with anti-war, pro-Earth type messages. But by the time I was supposed to move into career-land, I froze. Eventually I found newspapers.

Without any formal training, I figured one place was as good as the next to get the basics and I accepted a job in West Texas, a little 2,000-circulation, semi-weekly in Pecos. ("Home of the World's First Rodeo." Try fact-checking that one!) This was cattle country at one time, but overgrazing did a number there. Then it was cotton country, until a handful of folks got rich sucking the aquifer up. During my stay, the economic development drivers were prisons, sludge spreading, radioactive waste disposal, and a bit of oil and gas. Pretty much in that order. That is to say, it's great country for environmental writing.

After a few gigs at other newspapers, I settled into a lovely, seldom-traveled corner of West Texas to run a weekly paper just north of Big Bend National Park. For three years, we took on all sorts of good fights, but as we were a safe distance outside the oil patch now, much of the more overt environment writing slipped into the editorial page. It was only after the paper was sold and shut down that I realized what it was I really wanted to do. I have E. O. Wilson's *The Future of Life* to thank for clearing that up for me.

Q: You're now a staff writer for the *San Antonio Current*, the alternative weekly in that city. You've been giving a good deal of coverage lately to the transition of San Antonio's CPS Energy, the nation's biggest city-owned energy company providing both gas and electricity, to a more sustainable path. What are some aspects of the story that might be instructive to reporters elsewhere, regardless of whether they're in cities with municipally owned utilities? Have there been notable challenges or rewards in covering the story? What are some other topics and issues you've handled at the *Current*?

A: We kind of went at CPS Energy with both barrels back in 2007, right after they became the first utility in 29 years to file paperwork for new nuke plants in the States. With the declarative headline "CPS Must Die," complete with cover art worthy of a Metallica album, we suggested that an aggressive campaign of energy efficiency and new renewable power — all based on a decentralized power model — would be a better path forward for the city. I had no idea there were so many energy wonks in South Texas. It sparked a huge amount of interest among our readers and

has remained sort of a bread-and-butter topic since then.

Even though CPS is a city-owned utility, it operates independent of the council in everything but board appointments and rate-setting. They weren't used to public scrutiny, either, so Open Records (Act) requests have been a huge part of this story. I'll file an Open Records request on CPS sometimes before I even start making calls on a topic. While there are times the staff will refuse to comment due to the "pending legal request," we generally walk away with more than we would have gotten otherwise, being chummy.

When we came back for our second significant story, one chronicling some scary issues of workplace conditions and worker safety, their PR folks turned us over to the legal department and basically refused to play anymore. Fortunately, by then we had great access at the middle-management ranks, thanks to years of declining morale and contentious union negotiations.

While this whole fight was going on, not many had an inkling that our outgoing mayor would spring a richly developed sustainability plan on us during his last months in office. That, coupled with CPS's startling contract with sustainability guru Jeremy Rifkin earlier this year – he was hired to help create a roadmap toward decentralized, carbon-free power for the coming decades – have made the power beat a hugely important one for the *Current*. If it is happening in Texas, I'd wager there's not a utility in the country that hasn't started at least exploring how it's going to adjust to the coming low-carbon economy.

Water issues are huge here, too, and we've started to develop those a bit more deeply. And every once in awhile I can break away to do a little traveling. Last year, I spent three weeks on the U.S.-Mexico border, just meeting people and observing the realities on La Frontera – reporting, you know, through the lens of the national debate on the border wall. Not many people know that, together, the U.S. Fish and Wildlife Service and Texas Parks and Wildlife Department have spent tens of millions protecting thousands of acres of the most glorious and ecologically diverse habitat in the country. Now the border wall has begun to slice through this important wildlife corridor, places where the last known populations of ocelots in the States still roam, for instance. It's an important national story that, unfortunately, can't always out-compete the deftly manipulated fear over human migration.

Q: You worked for mainstream newspapers, including dailies in Mississippi and Texas, before moving to alternative weeklies in Houston and, now, in San Antonio. Has it been tough to make the switch from the mainstream to the alternative press? What are the biggest differences that you've experienced, especially in your environmental coverage?

A: It has been awkward. In Houston, I really just did straight-ahead investigative news features, albeit in that strict New Times mode. [Editor's note: New Times Media was the name of the national chain of alternative weekly newspapers. Owner of the *Houston Press*, New Times took the name Village Voice Media after acquiring that competing chain of alternative papers.] The pressures were intense, but I loved the freedom I suddenly had to

more fully develop a story. However, once it's written, the story, those people, are pretty much history. It's on to the next freak accident.

As a smaller paper, the *Current* requires its three news writers to turn around copy at a quicker clip. On the positive side, that allows me to sort of build a beat more approximate to what you would expect at a daily. That's been fun. It's also here that I've really started to play around with voice and just generally mouth off. At first, I reserved my more loaded language for the anonymous news column you see a lot of alt weeklies do. But as we started blogging more frequently, my byline started going into it and it all just started to blur a bit more. It's my natural voice, after all.

Now, if I'm writing short, it's typically in character, with the unmistakable sound of gum smacking. The news features I treat a bit more reverentially. They're the product of so much work, you really want them taken seriously. But, you know, there's a prune in every pot. One deeply researched story I wrote about sprawl and the effect that the absence of county controls was having, one which also ran in the *Austin Chronicle* (the alternative weekly in that city), hit a dead end with a local sprawl-busting non-profit. They refused to e-mail it to their membership, a board member told me later, because it had one unsanitized word in it. Now, I

It was only after the paper was sold and shut down that I realized what it was I really wanted to do. I have E.O. Wilson's The Future of Life to thank for clearing that up for me.

don't regret the word choice. It was definitely the right word for the occasion. But it was an enlightening experience for me.

Ultimately, yeah, it's also been sort of

scary making this switch. While there have been a couple SEJ members that have gotten a kick from my writings and have been crazy encouraging, there are those that judge my approach more harshly. This notion that what you're doing isn't "proper" journalism, or worse. If you let your guard down, you can kind of get walloped by that, especially when some of those that sort of hold you at arm's distance have been your role models in so many ways. But without a doubt, my job options have been affected positively and negatively by my willingness to become a writer with an obvious "activist" agenda.

Q: Early in your career, you covered WIPP – the deep geological disposal facility for radioactive waste in southeastern New Mexico – for the paper in Pecos and then for the much larger *Odessa American*. At the *American*, you also covered events at the Huntsman Polymers chemical plant that involved the burning of chemical wastes in flares and protests by minority residents nearby. An article you wrote about Huntsman for the *Texas Observer*, a nationally known biweekly in Austin, won an award from the Association of Alternative Newsweeklies. How did the WIPP and Huntsman stories shape you personally and shape how you view environmental journalism and your role in the field?

A: I think Huntsman was an incredibly defining — and empowering — story. I was the roving reporter for the *American*. The beat is literally one of the best in Texas, as far as I'm concerned. Thirteen enormous counties floating over the horizon off most larger dailies' radar screens. A feast of stories for the

taking. Problem is, not many reporters are willing to live in Odessa (or Pecos for that matter). So, it's a "those who dare" sort of thing.

On one of my in-office days, the local plastics plant botched an upgrade to its olefins unit and started burning off huge amounts of polyurethane and whatnot. Someone who would have been on-spot to cover it wasn't there and I ended up on the story. The black smoke of poor combustion went on for two weeks. Worse yet, some sort of cold-air inversion trapped it close to the ground for many of those days. Incredible, awful stuff.

Now Huntsman, I think, was our largest employer at the time and we gave them hell and got to know those neighborhoods stuck in the thick of it. After a couple weeks, the corporate owners flew down from Utah and asked our publisher to take me off the story. Now no one had accused us of getting the story wrong. Anyway, the publisher, Bill Salter, told them to stuff it. I had never gone up to the line on a story like this before and I honestly hadn't

That newspaper adage about comforting the afflicted and afflicting the comfortable ... I just try to live that.

expected the paper to be as ballsy as it was. But there it was.

I've seen that same equation several times since then — egregious examples in Mississippi — and it just sort of took some of my ideological prejudices and mixed the lime in there and cemented whatever it was I thought I knew about environmental racism from reading other people's observations. This was also about the period that George Jr. was starting to primp himself for the White House, and Odessa became something of a symbol of his environmental record as Texas governor in some circles.

Q: Are there any other particular stories you've handled (or are covering now) that have done a lot to influence you and your approach to the job?

A: That newspaper adage about comforting the afflicted and afflicting the comfortable? That was first shared with me by the editor of the Mississippi *Sun Herald*. I just try to live that. You can get a good ways on words like that. Huntsman was a story like that. But, like I said, West Texas is that story. The crap builds up where the money and influence is not. I enter every story with bias. It is the bias that urges me to first seek out the point of view of those who can't afford to hire a communications company. Then I'll get on the paper trail and see if I can substantiate what I've been told. Once I have that, then I'll open myself to the company line.

There was a Seabee base in Gulfport with a legacy of mishandled and dumped Agent Orange that reminded me a bit of that time in Odessa. Now, the residents had complained for years about supposed ill effects, but their story had never been really told. I spent time in those neighborhoods. It turned out the Navy had done the best surveys and cancer studies itself. It was all sitting in the library. The Navy documents showed they actually had to hire counselors for the contractors who went door-to-door hearing all these horror stories. As I put all that together, I found old news clippings reporting a rash of stillbirths and birth defects we now know to be linked to dioxin exposure. It was a relatively easy story to assemble in the end, but I had to be willing to trust

those that had lived it first.

Q: After being laid off at the *Houston Press*, an alternative weekly, you launched a Web site called *Earth Houston* and kept it going for several months. Please describe *Earth Houston* and tell me what you hoped to accomplish with it. What did you learn from the experience?

You identify yourself on your Linked In profile as an investigative reporter and multimedia producer. Your blog, *Harman on Earth*, has links to your videos, photos and audio, posted on YouTube, Flickr and Ovi, respectively. There's also a link to your Twitter comments. When, why and how did you get into multimedia work? As part of your *Earth Houston* venture or before that? How do you see it meshing with your role as an investigative reporter? Do you have any advice for other journalists about developing the varied multimedia skills that you've acquired?

A: First of all, I am not a Facebook baby. My generation was already deep into their 20s and 30s when all this social media stuff hit. So, it wasn't like a part of growing up or anything like that. When I took on *Earth Houston* a few years ago I didn't even know what a blog was. I took an HTML class and pretty much built the thing up from scratch. It was relatively successful in terms of traffic and got me a little more deeply enmeshed with the environmental community out there, but I simply had no idea what to do about the business end. I just ignored it. I did a bit of freelance as well, but selling stories has never come easy to me, and I eventually had to shut it all down and find steady work. Go figure that literally in the month or so before I pulled stakes I had two other media folks contact me about working with me on *EH*.

I started my blog only about two years ago. Coming back into the business, I decided that I needed to take a more direct role in promoting my work, that I couldn't leave it to my employer. There were lots of stories I had written in Odessa and Biloxi, for instance, that were only available to paid subscribers. I wanted those stories up on the Internet and findable.

The video and audio editing I do is also just since joining the

Folks hate the term branding, but reporters simply have to have a presence online these days.

Current. A lot of it I have taught myself. Some trickier elements our old IT guy down here helped me with. But with the economy of this last year I really did start sweating. So many better and more experienced writers were getting canned. I thought, what else am I qualified to do? The answer is nothing. So I've just dug in a little bit deeper, tried to make sure everything I do for the *Current* is available online somewhere. Folks hate the term branding, but reporters simply have to have a presence online these days. At least folks of more middling talent like myself do, I think. You want to be available in plain sight, for whatever story opportunity comes up.

Q: You had a job involving wildlife rescue and rehabilitation work near San Antonio between your work at the *Houston Press* and *San Antonio Current*? What did you do? Did that job influence your decision to try to keep working in journalism? Were there times when you seriously thought about getting out of journalism for good? What made you


decide to persist? Any advice for other journalists, based on your own experiences?

A: In 10 years, I had been cut adrift twice. The website, a feat of the heart, hadn't fared any better than my more heady moves with the papers. I was pretty fed up. I wasn't willing to go back to daily work if that meant covering a small-town council or chamber ribbon cuttings. I had found my stream on the eco beat, I felt. Off and on over those years, though, I had wondered about non-profit work, about advocacy. Would it be a better fit? I finally decided to give it a shot.

Wildlife Rescue and Rehabilitation offered me a position as their director of advocacy and education. They loved, for instance, that I'd been vegetarian for a dozen years. That turned out to be a requirement for the job. I don't know where that sits with Equal Opportunity law, but I wasn't asking those sorts of questions. I stayed for only seven months. I guess I would say if anyone out there is exploring the advocacy option, think hard. These groups are not only far more competitive and nasty with each other than I had realized, but the personality factor can't be overstated, especially if you don't have strong board oversight, as was the case with WRR.

I had connected with the editor of the *San Antonio Current* while I was freelancing out of Houston. I started to contribute again. When a slot opened, I leapt for it. I told my boss, Elaine Wolff, at the time: I still have a lot of writing left to do. I only hope that the forces guiding the market and our industry will allow all who feel similarly to have that kind of opportunity.

Bill Dawson is assistant editor of the SEJournal.



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Photographer had a passion to speak for those without a voice



Ramón Mena Owens
Nov. 3, 1960-May 21, 2009

Ramón Mena Owens, photojournalist and long-time SEJ member, died May 21 of a heart attack at age 48.

Born in Tillamook, Ore., Ramón served in the Navy and then attended Ohio University School of Journalism in Athens, Ohio, graduating in 1985. He started his photojournalism career as an intern at *The Boston Globe*, and worked at *The Columbus (Ohio) Dispatch* and the *Cleveland Plain Dealer*.

A traveler and a free spirit, in the 1980s he traveled to El Salvador and Honduras, starting a career in international journalism and hardening his resolve against war and for peace. Injustice bit at him, and he was driven to document that in an effort to make the world a better place.

In 1998, he moved to Colorado and started a freelance photography business. In 2005 he headed to California, where he worked for the *Desert Sun* and the *Press-Enterprise*. He covered Hurricane Katrina, wildfires, and homelessness in the California desert communities. After downsizing last September at the *Press-Enterprise*, he started *Back in Green*, a blog for environmental reportage.

Ramón described his life's mission as "speaking for those who have no voice." He had a knack for putting people he was photographing at ease with his humor and warm smile. He won numerous awards for his work, which focused on environmental issues and social problems: the AP Photographer of the Year Award in Ohio, a Ford environmental photography fellowship from the International Center for Journalists in Ecuador (2003), a Knight Fellowship in Armenia (2003), and a Best of Gannett Award in 2005 for his coverage of Hurricane Katrina. He was also awarded two SEJ fellowships. His work appears in the Smithsonian Museum of American History, in which he documented the lives of Hispanics in America; and in several books. See backinggreen.com and rmphoto.com for examples of his powerful photography.

Donations to local homeless shelters or food kitchens, local humane societies, and the American Red Cross would honor Ramón's memory.



Amid the fear and fretting, an idea for journalism's future



By BUD WARD

Each week, I am party and witness to the loss of cumulative decades of environmental journalism experience shown the door as the pink-slipping of newspaper newsrooms continues seemingly without end.

Stop there. There is no reason. No one gains, to overstate the situation. It's the slow, incessant drip-drip death-by-a-thousand-cuts that is sidelining countless years of environmental journalism experience and expertise.

The painful point is that amidst the widespread newsroom carnage, years of well-established reporting expertise is in danger of going unused or, at best, under-utilized. It's the case from Seattle to Gainesville and in-between. At household-name media organizations and at the specialized feeder news outlets often earliest on the story, the losses continue.

Try calling a daily newspaper reporter you know well but haven't spoken to in a few months. Open with the casual throw-away "How are you doing?" or "How have you been?" greeting.

The silence can be telling. The question has new meaning, however unintended, in today's mainstream newsrooms under unrelenting threat of "down-sizing," "out-sourcing."

Amidst the cacophony of journalism chaos and reporters fretting, and rightly so, about their personal futures, things like "10 Reasons You Should Hire a Journalist" – clearly aimed at non-journalism employers – become staples on journalism listserves. The latest bloodletting of reporters and editors becomes the stuff of web site and listserv navel-gazing.

Worthy and important ideas surface and resurface, ad infinitum. Calls for a journalism summit — what can we do about this journalism mess we find ourselves in — raise hope. But not until scores more jobs, and perhaps entire news outlets, bite the dust, and more decades of reporting expertise head elsewhere.

So, what to do when hand-wringing alone is not sufficient? What to do — not in 2010 or 2011, but now — about the undone stories we'll never know we've missed, the snipping of frail threads supporting an informed citizenry?

More talk, more navel-gazing, more planning for a summit...they're all needed. But alone, and even in combination, they're just not enough. Along with the fretting and commiserating, we need action. Acting now to salvage some of what we'll otherwise lose from recent pink slips and whatever else lurks around the next corner.

Take climate change, as an example. The issue, of course, is a personal hobby horse of mine over the past few years. The foremost environmental/economic development/national security issue of the century, we're told and have often told ourselves. And with the Obama administration and leading congressional politicians moving forward on an action plan in advance of a (we're told) seminal December 2009 Copenhagen conference, the time is now for intense journalistic attention.

So picture this, as just one potential future journalistic model, one I hope that can attract credible independent foundation funding, for SEJ or a collaboration of journalism partners...anyone who can make it happen:

We establish a climate change news syndicate, consisting initially of, let's say, a dozen outstanding, but recently laid-off, experienced environmental journalists, all with some impressive level of competency in reporting on climate science and policy. Through a grant, we would commission those 12 individuals to write a set number – let's say eight, to start – of regionally and locally based climate impact stories. One every six or seven weeks perhaps. These would be original reporting pieces, reflecting incisive sourcing built from each individual's own years of experience on the story.

Each reporter who is part of this de facto climate news syndicate would be fairly, but handsomely, compensated for the effort. What's a fair rate of an 800-word news story? \$1,000? \$1,200 maybe?

Once reported, written, and edited, the author of each of these reports is next charged with helping the syndicator — SEJ? My own *Yale Forum on Climate Change & The Media* (<http://climatemediaforum.yale.edu>)? A combination of these and/or others would place the piece in a prominent local news outlet. Perhaps the pink-slipped reporter's own prior employer, given the continuing goodwill presumed to exist in at least some of these instances.

There's more. The reporter then is charged with going the local talk-show route in her or his circulation area, talking up the original report just played so prominently in the local media. Here too, there's compensation: Reporters succeeding in conducting such on-air interviews are further rewarded, beyond the original price for their work.

Okay. It addresses "only" climate change. And it doesn't make up for the lost job security, or the health care coverage, for the retirement plans and paid vacation leave. It's not meant to.

Instead, it's meant to help those displaced but outstanding reporters buy time. It's meant to help them continue doing what only they can do well in their communities: provide honest, fact-based independent journalism on a pressing local, regional, national and international story needing badly to be told.

And it's meant to continue providing the public what it most needs at a time when it most needs it, pink-slipping notwithstanding.

A good idea? Some merits? None? Have at it. Make it better. Pan it entirely. But let's not do nothing; hand-wringing alone simply is not enough.

Let's not let the next announcement of more newsroom layoffs – and those inevitably still to come after that next one – generate only more hand-wringing and soul-searching. Let's greet such bad news, instead, with a resolve to act, to do something and not merely fret about what a shame.

Party. And witness. As the latter, I cannot be excused for long before becoming complicit – before becoming, in effect, party to the newsroom bloodbaths. I can only be witness for so long before I must accept the blame and guilt of having become party...and therefore complicit. And you?

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



Congratulations to the 2009 finalists
for the \$75,000 Grantham Prize —

Tad Fettig, Véronique Bernard, Beth Levison

for *e2 Transport*, from the series,
e2: The Economies of Being Environmentally Conscious
Produced by kontentreal for PBS

Blake Morrison and Brad Heath

for *The Smokestack Effect: Toxic Air and America's Schools*
USA Today

Andrew Nikiforuk

for *Tar Sands: Dirty Oil and the Future of a Continent*
Published by Greystone Books

Susanne Rust and Meg Kissinger

for *Chemical Fallout*
Milwaukee Journal Sentinel

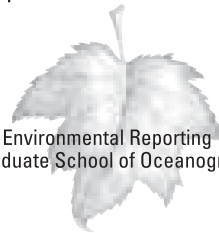
All honorees will be recognized at the 2009 Grantham Prize Seminar,
to be held October 5, 2009, at the Newseum in Washington, D.C.

Details about the winning stories available at www.granthamprize.org

Metcalf Institute for Marine & Environmental Reporting administers the Grantham Prize,
which was created to honor and encourage exemplary reporting on the environment.

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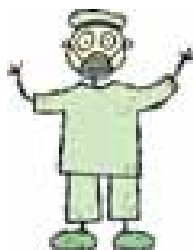
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The easy way to do cool stuff online, mostly for free

By DANIEL LATHROP

On the Internet no one can hear you scream.

Which is a good thing, because for a lot of journalists, the ever-changing landscape of Web technology is the continuing-ed equivalent of Whack-a-Mole. As soon as we learn something, it is immediately replaced by something else totally different. (Question: Which of the following is not a social media or micro-blogging service? A. Twitter B. InstaPost C. Ning)



SURGEON GENERAL'S WARNING:

The following advice may cause your colleagues, editors and audience to view you as a multimedia wunderkind. Do not disabuse them of this notion and do not tell them how easy it was. When they asked how you learned it, tell them "SEJ" and do not elaborate. Suggest that your colleagues join and your editor pays for dues, conferences, travel or a new laptop.

What is an ink-stained (or video-stained, pixel-stained or link-stained) wretch to do? You could scream. Go ahead, let it out. Feel better? I didn't think so.

The next option is to find some tricks that work for you and can be repeated over and over again to good effect. In the Commedia dell'arte these are called lazzi; those of us with a touch of Yiddishkeit call them schtick. A few good pieces of schtick and you're never lost for what to do or say.

The following guide is by no means complete, but for the topics we cover, it gives you everything you need. Every tool is free, although some are all free and some are just mostly free. It doesn't take Miracle Max to know that there is a big difference between mostly free and all free, but that is just the way of the world.

If you want multimedia to accompany a story (or to be the story), there are three basic gadgets on your utility belt: slide shows, charts and Google (or Yahoo) maps.

SLIDE SHOWS

The genre of the slide show contains many variations: the photo

gallery, the photo gallery set to sound, the photo gallery with narration, the photo and video presentation, the slide show the user navigates, the slide show that plays as a video, even an edited video package is a kind of slide show. In fact, when it comes to combining words, sounds and images, the slide show is beginning, middle and end.

So this has gotta be hard, right? It can be. But we can do it the easy way. Yes. We. Can.

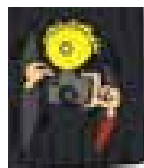
The easy way? It's called SlideRocket (sliderocket.com). This is my slide show tool. There are many like it, but this one is mine. My tool is my best friend.

TIP: There are three ways to do anything online: the hard way, the wrong way and the easy way. The hard way can generally be used to accomplish twice as much as the easy way, but it takes ten times the time and effort.



SlideRocket is billed as a tool for preparing business presentations, an online analog to Microsoft PowerPoint. In fact, if you know how to use PowerPoint, you can create a slide show in PowerPoint, then upload it to SlideShow and make it available online as a Flash application or Flash video embedded in a Webpage.

VOCAB: Flash is a technology from Adobe Systems used to create online animations and videos. It can have complicated interactivity or be as simple as play/pause/stop. It is the default standard for video and multimedia on the Web. Adobe makes expensive software for authoring and editing Flash applications and videos. These are the hard way.



How easy is it? Very easy. You can upload photos or videos, you can create transition effects, you can add sound clips to individual slides or take a music or sound file and set it as a soundtrack for the entire presentation. You can decide whether to have each slide automatically advance after a certain number of seconds or wait for the user to click "next," you can choose from several attractive visual styles. It's all done on the SlideRocket Web page, and if you get confused they have tutorials and instructional

videos. When you're done, click publish and e-mail the code it generates to a Web producer to embed in a page.



VOCAB: Search engine optimization, SEO to its friends, is the sometimes dark art of making content more likely to be found when a user searches for it. In other words, it's how to make Google find your stuff. Google can't index words if they're in a picture, and neither can your Web site's own search engine. SEO is a giant topic in itself, complete with folk wisdom, urban legends, sophisticated technology and flat out scams. Just Google it, and you'll see.

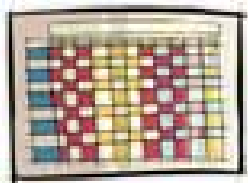
What's the catch? SlideRocket is mostly free, but not all free. It's free to create an account, and you get a limited period in which all the features are available. After that, to be able to put your SlideRocket on a Web page, you need an individual subscription (\$10 per month) or a business subscription (\$20 per month for each user). Once your boss is hooked on your multimedia slide shows, she'll be happy to fork over \$20 per month to keep them coming. Tell her it is a copyright license fee for the best-of-breed, cloud-based software as a service application you are utilizing to produce synergistic results with outsourced infrastructure.

TABLES

Next is a cheap trick that is sure to please. You have a story. You have some information that would make a great chart with the story. You've put those data into Microsoft Excel (or similar spreadsheet program). But if you send it to New Media or Graphics, they'll kick back a jpeg that looks goofy online and does a bad job of search engine optimization.

This trick is Tableizer (tableizer.journalistopia.com), and for creating it, Danny Sanchez of the *Orlando Sentinel* (his blog is at journalistopia.com) deserves the Pulitzer Prize for Kindness to Strangers. Tableizer lets you copy a bunch of cells out of Excel, paste them into a simple Web form, click submit and get back the (complicated and time-consuming to create) code to render that table on the Web.

WARNING: Do not use Tableizer for things that wouldn't be a table in print. Remember, if it's too big to read or too hard to read, the audience won't. My rule of thumb? More than 10 rows in a table or more than four columns, and you might want to think hard about it. More than 100 rows or more than six columns, and you're nuts.



It really is that scary. Copy, paste and click. Could it be easier? Yes. How much easier? Not much easier.

Are tables of words and numbers the sexiest way to display information? No, but they are often the best way to do it, so don't be ashamed. Your readers will thank you.

NOW MAPS

And finally we get the apogee on Web coolness: the Google Map. OK, so Google Maps are no longer the most amazing, mind-blowing thing ever (that's Twitter), but they're still darn cool and people think they're hard. In fact, doing them the right way is hard. But we don't use the "right" way, do we, my young apprentice? No, we use the way that is quicker, easier and more seductive.

First put the address and information into Excel in rows and columns. If you can, put the address, city, state and zip code each in their own column. You can create a column for the name, the date, an explanation or any other kind of information. Make sure to use simple column headings.

Next, go to BatchGeocode (batchgeocode.com). Leave the format on "Tab Delimited." Copy your data from Excel into the Web form. Click "Validate Source". Scroll down and check out which fields it is using for which information and fiddle with that as necessary. By changing the "Group" field, you can color-code points in different ways.

Click "Run Geocoder."

Under the map that appears, click the "Download to Google Earth (KML) File." Save it as something ending in ".kml".

Send this file to a Web producer and ask them to save it to a Web accessible location and send you back the URL.

Go to Google Maps (maps.google.com). Paste the URL for your KML file into the search box and click "Search Maps".

The map should now display. Click the "Link" button in the upper right hand corner of the map. Click "Customize and preview embedded map," then play with the resulting control panel until you're happy. Copy the code from "Copy and paste this HTML to embed in your website" and email it to a producer.

You're done.

Daniel Lathrop is co-founder of and chief data evangelist for InvestigateWest, a Seattle-based non-profit investigative reporting start-up that focuses on the issues and stories of western North America. He freelances for non-profit and journalism clients. Lathrop is lead author and editor of a forthcoming book from O'Reilly Media on Government 2.0. He has worked as a reporter and/or data wizard at the Seattle Post-Intelligencer, the Center for Public Integrity, the Daytona Beach News-Journal and The Ames (Iowa) Tribune. He lives in Seattle, Wash., with his wife and two Maine Coon cats.

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In these hard times, enviro stories take major prizes, honors

By BILL DAWSON

Wildfires. Toxic chemicals in everyday life. Lax federal regulation. Overseas dumping of U.S. waste. Coal ash.

Coverage of those environmental subjects by a variety of news outlets was honored recently in three major national journalism competitions – the 2009 Pulitzer Prizes, 2008 George Polk Awards and the 2008 Sigma Delta Chi Awards of the Society of Professional Journalists. The Pulitzer and SPJ winners were announced in April, the Polk winners in February.

Reporters of the *Milwaukee Journal Sentinel* won the Polk Award for environmental reporting and were cited as finalists for investigative reporting by the Pulitzer judges for their series “Chemical Fallout.” The examination of hazardous chemicals in everyday products last year had won the John B. Oakes Award for Distinguished Environmental Journalism and the SPJ award for non-deadline reporting by a large newspaper.

Susanne Rust and **Meg Kissinger** were praised by the Polk judges for “castigating the Environmental Protection Agency (EPA) and the Food and Drug Administration (FDA) for failing to monitor, regulate and ultimately ban toxins found in everyday materials, from ‘microwave safe’ plastics to baby bottles. Their reports about chemicals such as bisphenol A, or BPA, which causes neurological and developmental damage in laboratory animals, reverberated from the halls of Congress to homes and schools across America.”

Pulitzer judges cited Rust and Kissinger “for their powerful revelations that the government was failing to protect the public from dangerous chemicals in everyday products, such as some ‘microwave-safe’ containers, stirring action by Congress and federal agencies.”

The series reported these key findings:

- “U.S. regulators promised a decade ago to screen more than 15,000 chemicals for effects on the endocrine system. So far, not one has been screened.”
- “The government’s proposed tests lack new measures that would spot dangerous chemicals older screens could miss.”
- “Hundreds of products have been banned in countries around the world but are available here without warning.”



Rust and Kissinger have pursued the story. The lead on a story published May 16: “As federal regulators hold fast to their claim that a chemical in baby bottles is safe, e-mails obtained by the *Journal Sentinel* show that they relied on chemical industry lobbyists to examine bisphenol A’s risks, track legislation to ban it and even monitor press coverage.”

Bettina Boxall and **Julie Cart** of the *Los Angeles Times* won the Pulitzer for explanatory reporting for a five-part series, “Big Burn,” which examined the growth and cost of wildfires.

The Pulitzer citation recognized the pair “for their fresh and painstaking exploration into the cost and effectiveness of attempts to combat the growing menace of wildfires across the western United States.”

The Associated Press reported that the reporters “spent 15 months on their series, interviewing scores of firefighters and contractors, sifting through 43 plastic tubs of financial documents, and traveling as far afield as Australia.”

Boxall and Cart reported in the lead article: “A century after the government declared war on wildfire, fire is gaining the upper hand. From the canyons of California to the forests of the Rocky Mountains and the grasslands of Texas, fires are growing bigger, fiercer and costlier to put out. And there is no end in sight.”

Highlights of subsequent series installments:

- Fire commanders “are often pressured to order firefighting planes and helicopters into action even when they won’t do any good.”
- “More and more Americans are moving into fire-prone canyons and woodlands” where inadequate roads mean that “in a wildfire, everyone may not be able to get out safely.”
- Threatening to transform “the cultural imagery of the West,” a fire cycle fueled by non-native plants “is wiping sagebrush from vast stretches of the Great Basin.”
- “Wildfire is a pervasive danger in Australia, just as in much of the Western U.S.,” but many Australians protect lives and property themselves instead of relying on professional firefighters.

A “60 Minutes” segment on the dumping of electronic wastes in China won two top prizes for CBS News’ long-running news-magazine show – the Polk Award for television reporting and the SPJ award for television investigative reporting in the category for networks, syndication services and program services.

Sharing the award for “The Wasteland” were correspondent **Scott Pelley**, producer **Solly Granatstein** and co-producer **Nicole Young**.

According to the Polk Awards announcement, “the trio divulged how some American companies that are paid to recycle electronic waste have instead dumped it in China, which has led to environmental despoliation and severe health risks. After the ‘60 Minutes’ crew tracked a Denver recycling company’s shipment to southern China, the firm lost its contract and the EPA began investigating dozens of other suspect recycling businesses.”

In announcing the award, CBS News said that “60 Minutes ventured to one of the most toxic places on Earth — a town in China where you can’t breathe the air or drink the water, a town where the blood of the children is laced with lead.

“Much of the poison is coming out of the homes, schools and offices of America. The story is about how your best intentions to be green can be channeled into an underground sewer that flows from the United States and into the wasteland. That wasteland is piled with the burning remains of some of the most expensive, sophisticated stuff that consumers crave. And Pelley discovered that the gangs who run the place wanted to keep it a secret.”

Investigations that spotlighted regulatory shortcomings at the EPA earned recognition for reporters at two news organizations. **Douglas P. Guarino** of *Inside EPA* won SPJ’s award for public service in newsletter journalism. An entry from **John Shiffman**, **John Sullivan** and **Tom Avril** of the *Philadelphia Inquirer* was named as a Pulitzer finalist for national reporting.

Guarino was honored “for articles detailing EPA plans to weaken drinking water cleanup standards in the event of a ‘dirty’ bomb attack,” according to an announcement of the SPJ award in *Inside EPA*. The newsletter said that Guarino’s reporting “is responsible, at least in part, for an increased public focus on EPA’s decision-making over the policy,” which the Obama administration put on hold pending further review.

In January 2008, Guarino’s initial story on the issue was headlined “Draft EPA Nuclear Guide May Weaken Superfund Removal Standards.” Follow-up stories in April 2008 were headlined “EPA Nuclear Emergency Guide Prompts Alarm Among Agency Staff, States” and “EPA Plans to Limit Access To New Guide For Chemical Emergencies.”

The Pulitzer judges cited Shiffman, Sullivan and Avril of the *Inquirer* “for their exhaustive reports on how political interests have eroded the mission of the Environmental Protection Agency and placed the nation’s environment in greater jeopardy, setting the stage for remedial action.”

In an introductory blurb to the online version of the “Smoke and Mirrors” project, the *Inquirer* said that the “four-part series details how the Bush administration weakened the EPA. It installed a pliant agency chief, Stephen L. Johnson. Under him, the EPA created pro-industry regulations later thrown out by courts. It promoted a flawed voluntary program to fight climate change. It bypassed air pollution recommendations from its own scientists to

satisfy the White House.”

In a March follow-up story, the three *Inquirer* staff members reported that the Obama administration intended to close down an EPA program called “Green Club” that they had highlighted in the series. They said the Green Club was an effort “by the Bush Administration that rewards voluntary pollution controls by hundreds of corporations with reduced environmental inspections and less stringent regulation, according to EPA sources and internal emails.”

The “Smoke and Mirrors” investigation had found that “the program lauded companies with suspect environmental records, spent millions on recruiting and publicity and failed to independently confirm members’ environmental pledges” and “became so desperate to find new members...that it turned to gift shops and post offices to pad its numbers.”

As *The Beat* noted in the last issue of *SEJournal*, local and regional news organizations earned positive notice for their attention to the massive coal ash spill that occurred last December when a Tennessee Valley Authority dam collapsed and buried homes and farmland.

Coverage by one news outlet, WBIR TV 10 of Knoxville, Tenn., the city’s NBC affiliate, won the SPJ award for breaking news coverage by a small market television station. Honored were the Gannett station’s **Alison Morrow**, **Gerry Owens** and **John Martin**.

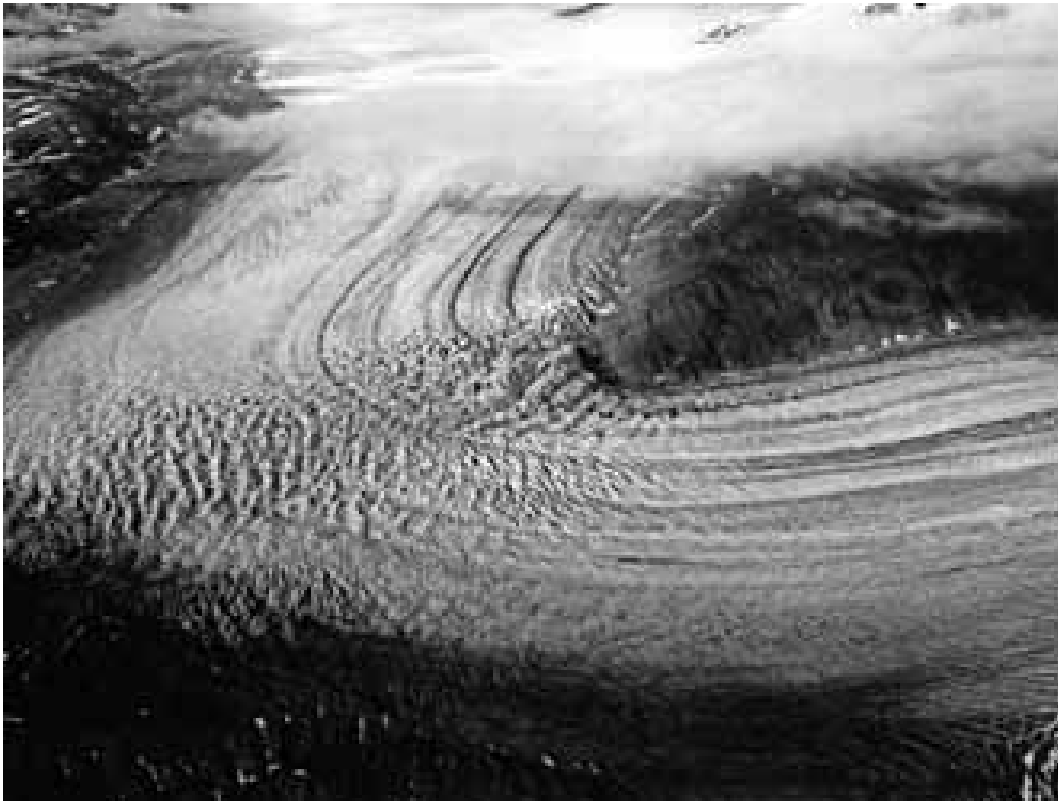
Bill Dawson is assistant editor of the SEJournal.



PHOTO © ROGER ARCHIBALD

“A century after the government declared war on wildfire, fire is gaining the upper hand,” the Los Angeles Times reported in a Pulitzer Prize winning series.

PHOTO © BRADFORD WASHBURN, COURTESY OF THE UNIVERSITY OF ALASKA ARCHIVES



Bradford Washburn's 1938 photograph of the Shoup Glacier where it makes an abrupt turn west of Valdez, Alaska.

Photograph images cap global war advance

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By ROGER AR

Two different photographers from different backgrounds have taken remarkably different approaches to document what is perhaps the most distinguishing visible evidence of global climate change: The retreat of the earth's great glaciers.

One of the projects is expeditionary in scope, gathering image data on an hourly basis from dozens of remotely operated cameras strategically placed at key locations throughout the northern hemisphere.

The other is primarily the effort of one individual who set out to take a second look at specific glacial locations in Alaska and the Alps that were first photographed in magnificent detail decades ago by one of America's last great explorers.

Together, the resulting photography from both projects reinforces the same unavoidable conclusion: the ice is melting, in some places very fast; and the world's glaciers are in a state of significant withdrawal.

While these two particular investigators using imagery are hardly the first to draw public attention to this precipitous environmental predicament (longtime SEJ member Gary Braasch has been photographing the climate story almost exclusively for over ten years now — see sidebar), the visual evidence they've amassed — in one case, over many decades; in the other, over sometimes only a few minutes—leaves a powerful impression that only pictures can convey. But beyond visual impact, both the fixed viewpoints and the temporal elements of the work of both transcend mere visual representation to provide quantitative data

as well, especially the effort led by James Balog.

Balog is founder and director of the Extreme Ice Survey (<http://www.extremeicesurvey.org>), which uses a multitude of remote cameras recording minute glacial motions at 15 different sites in Greenland, Iceland, Alaska and the Rocky Mountains. Balog has gone beyond photography to become the leader of what amounts to a major arctic and alpine expedition. "My entire adult life has come together in this project," he states without hesitation, referring to his thirty years as a professional environmental photographer.

Like many others of that calling, his career arose out of dissatisfaction with a prior vocation — in Balog's case, one "miserable" year as a soils engineer for which he had trained by earning a masters degree in geomorphology at the University of Colorado. But rather than geology, it was the outdoors and mountaineering, to which he'd first been exposed as a student at the Colorado Outward Bound School, which primarily drew him to Boulder, where he remains still. And there was that desire to record what he was experiencing while climbing mountains, like so many others, that initially attracted him to photography.

As one of only a few in the late 1970s practicing what has now come to be known as adventure photography, Balog got a major career boost with an assignment from *Smithsonian* to shoot a story on avalanche control. Before that, he'd relied on carpentry and mountain guiding to help make ends meet. But in the years that followed, his photography took him in unpredictable

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RCHIBALD



PHOTO © DAVID ARNOLD, USED WITH PERMISSION

When re-photographed in 2007 from the same spot by David Arnold almost 70 years later, the Shoup Glacier had retreated approximately five miles.

directions that, while adventurous in their own right, hardly fit the established genre of adventure photography.

Five of his seven books to date have been devoted to wildlife, not in the usual context of nature, but more often serving to illustrate the complex relations and behaviors that exist between the human and natural worlds. *Wildlife Requiem* in 1984 explored the intricacies of hunting; *Survivors* in 1990 depicted endangered species not in the wild, but against seamless studio backdrops, or such other surroundings as the center ring of a circus; and his nude pictures of apes and humans interacting in discrete ways in *Anima* in 1993 were nevertheless so provocative that he couldn't find a publisher, and ultimately had to publish the book himself.

The advent of digital photography presented Balog with the opportunity to make a groundbreaking image of a giant sequoia tree in California that would have been almost impossible, or at least prohibitively expensive, on film. Suspended at various points within a network of climbing ropes rigged to a height equal to the subject tree nearby, he shot hundreds of pictures, each one framed horizontally level and encompassing only a small portion of the entire tree before him. The resulting image created by electronically stitching all the constituent pictures together into a mosaic with almost schematic symmetry appeared on the cover of his 2004 book *Tree: A New Vision of the American Forest*, and is quite simply a view never before seen of one of the world's largest living things.

With such a background, it should come as no great surprise

that Balog would approach his most recent project as something demanding far more than one man with a camera. In fact, besides its 27 time-lapse cameras at 15 different hemispheric-wide locations, the Extreme Ice Survey lists a staff of 35, and major support from such organizations as National Geographic, Nikon, the National Science Foundation and NASA.

The goal is to document what global warming is doing to the planet where it's most vulnerable to temperature change — at natural accretion points of snow and ice. And toward that end, the project not only “provides scientists with crucial data on the speed and extent of glacial retreat,” according to its website, but additional photography and video shot at the various glacial locations “celebrates the otherworldly beauty of ice-cloaked landscapes” — a reference to such formations as glacial lakes and rivers found atop the Greenland ice sheet, and the eerily blue precipitous caverns called moulins through which melt water can abruptly drain to the base of the glacier far below.

It is toward these latter phenomena that the sentiments and sensibilities of James Balog — the mountaineer and photographer — are principally drawn. “To me, the story is not in the science, it's in the art,” he explained to NPR's Terry Gross. “It's not about computer models or statistical projections. This is the real living thing, proof of climate change happening right now.”

Referring to the experience of descending deep into a moulin, he continued, “Nobody's ever seen a sight like that before. It brings to the human eye and mind and heart a sense of grandeur

and majesty and exploration and novelty that people don't expect from something as abstract and distant as the Greenland ice sheet ... I feel like I'm witnessing something that no normal human should have a chance to witness."

From reporter to image-maker

Quite in contrast to the focused momentum of the Extreme Ice Survey, David Arnold came to the task of documenting glacial retreat almost by accident. In fact, he was not even previously recognized as a photographer. During his 25 year career as a reporter for the *Boston Globe*, union rules actually prohibited him from even picking up a camera on the job.

But after taking a buy-out in 2003, he turned to freelancing and discovered editors appreciated writers who could provide art with their copy, especially video clips to augment web site content. So he brushed up on visual skills he hadn't used since graduate work in graphic design and the first two years of his journalism career when he was a page designer.

As a reporter in 1982, Arnold was assigned to cover a story about Bradford Washburn, legendary mountaineer, explorer and founder of the Boston Museum of Science who had recently retired after forty years as its director. Appropriately, they first met atop Mt. Washington, New England's highest point, where Washburn and his wife Barbara were busy collecting measurements to produce a highly detailed map of New Hampshire's Presidential Range.

It was not the first such effort for Washburn. As far back as his youth in the 1920s, he'd embraced the craft of cartography after seeing skillfully shaded and nuanced lithographic contour maps in Europe during a summer trek to the Alps. He became determined to create maps of similar quality of America's great mountains. To accomplish that, he first needed high-resolution aerial photographs taken from a number of different known points around an area to be mapped. In the decades between the 1930s and 1960s, rather than just climb mountains in the Alps and Alaska, he devoted his efforts to photographing them as well. Strapped into the back door of a small aircraft flying up to 20,000 feet, he operated a 50 pound hand-held camera loaded with nine-inch-wide film, while Barbara

recorded the plane's course, speed, heading and location at the precise moment of each exposure.

His efforts ultimately produced the definitive map of Alaska's Mt. McKinley. But beyond cartography, his photographs were striking works of art. "Epic in scale yet intimate in detail and shadings, they are more like portraits of individual mountains than landscapes," the *Boston Globe* reported in its obituary of Washburn, following his death at 96 in 2007.

David Arnold continued to report on Washburn's activities until he left the *Globe*, and kept in touch afterwards, even buying

a print of what's considered to be Washburn's iconic image — a 1960 view of the Doldenhorn in the Swiss Alps being traversed by a distant group of climbers. Driving home afterward with his new purchase, Arnold remembers wondering what the mountain might look like now.

That was the impetus for his Double Exposure project (<http://www.doubleexposure.net>): to re-photograph from the exact same spot in the sky a number of the mountains and glaciers Washburn had photographed decades earlier, then to compare the two images to reveal how time and climate had changed the face of the earth. In addition to cartography, "Washburn's goal had been to artistically capture the earth on film similar to his old friend Ansel Adams, particularly confrontations of natural forces," Arnold wrote in the *Boston Globe* in 2006. ("I just took a picture when I thought it was worth taking," Washburn admitted.) "My goal was to illustrate a chapter of the global climate story as told by retreating ice."

When approached with the idea, Washburn was "skeptical that there'd been any changes," Arnold remembers, "but he gave me his blessing." Armed with that support, he raised enough funding through private donors and foundations in Boston to

cover the expense of three trips to Alaska and two to the Alps, as well as obtain a hand-held 4"x5" camera in which he shot sheet black & white film. Altogether, he was able to replicate 14 of Washburn's decades-old originals from almost the exact same airborne vantage points, despite significant delays due to inclement weather. "It's not easy chasing the shadow of Brad Washburn," Arnold ultimately concluded.



PHOTO BY BOB REEVE, © BRADFORD WASHBURN, COURTESY PANOPTICON GALLERY, BOSTON



PHOTO COURTESY DAVID ARNOLD

TOP: Bradford Washburn at Valdez, Alaska, in 1937, roped into the back of a Fairchild 71 aircraft with his 50-pound Fairchild K-6 aerial camera. BOTTOM: David Arnold used a light helicopter and a 2-pound Cambo WDS 4"x5" film camera to photograph his Double Exposure project between 2005 and 2007.



Extreme Ice Survey director James Balog rappelling into a moulin on the Greenland ice sheet, a vertical cavern etched by meltwater on the surface of a glacier draining to its base.

Sending a similar message

The fruits of both James Balog's and David Arnold's efforts are not simply residing passively on web sites; both are actively circulating their work to as many audiences as they can reach. And some of the approaches they're taking are instructive to journalists concerned about how their messages will be disseminated in the future.

Rather than publications, both projects initially relied on exhibitions to report their results. The Extreme Ice Survey was featured at the Denver Museum of Nature & Science last fall, while Double Exposure commenced a tour that premiered last spring, naturally, at the Boston Museum of Science, and will travel to six other venues by the end of 2010 (next stop: The Carnegie

Museum of Natural History in Pittsburgh).

Both projects also solicit public support to help fund their ongoing activities. The Extreme Ice Survey seeks tax deductible charitable contributions through the Wild Foundation, which serves as its fiscal agent, while Double Exposure offers four different levels of corporate sponsorship.

In line with its magnitude, the Extreme Ice Survey has also generated a *National Geographic* story and book, a PBS Nova Special, numerous awards and its own special feature on Google Maps, where each of its far-flung camera sites can be decisively pinpointed. And director Balog seems tireless in promoting the project to any interested audience, from the Boulder Public Library to a luncheon gathering of House staffers on Capitol Hill to the Climate Congress last March in Copenhagen.

But despite their divergent approaches, the efforts of both James Balog and David Arnold seem to have been inspired by the same motivation that led Bradford Washburn to turn his considerable energies from adventure and mountaineering seventy years ago and instead build a world-class museum of science. "The great majority of our visitors probably will never be scientists," he was quoted as saying in his *Boston Globe* obituary in 2007, "but they will be better lawyers, businessmen, clergymen, scoutmasters, parents and citizens because of this fascinating glimpse of the wonders which lie constantly hidden on all sides of every one of us."

Roger Archibald (www.NaturalArch.com) is a freelance photographer and writer based in Boston and photo editor of the SEJournal.

Gary Braasch covers climate in both words and photos

By ROGER ARCHIBALD

The glacial retreat photography of both James Balog and David Arnold exemplifies a growing trend in depicting environmental issues that has come to be known as environmental photojournalism. An increasing number of nature photographers, concerned about the deterioration they're witnessing within the natural world, are being drawn into its ranks.

Many of them formed the International League of Conservation Photographers in 2005, which has since mounted five separate Rapid Assessment Visual Expeditions to document threatened environments at various places in the world (see *SEJournal*, Summer 2008). Taking a far more activist approach than any preceding photography organization, the imagery resulting from the ILCP's RAVEs is purposefully used to advance their goal of environmental protection.

Most working environmental photojournalists, like James Balog, started out as nature photographers, then were drawn into journalism by the desire to mediate what they were discovering. A lesser number, like David Arnold, started out as traditional journalists and turned to photography to advance their writing.

Perhaps the exemplar of the profession is Gary Braasch, who has followed both paths. This year marks his 10th anniversary (if that's the right word) of covering the climate, in both words and photographs. "I've made it the strong focus of my career since

1998," he says, the same year he joined SEJ.

That career commenced in traditional journalism. Following a graduate degree from Northwestern's Medill School of Journalism, Braasch spent a year in the UPI's Chicago bureau before serving three years in the Air Force toward the end of the Vietnam War. At Andrews Air Force Base, the home of Air Force One, he availed himself of the cultural opportunities as well as witnessing many of the historical events in Washington during that period. Upon discharge, he became a freelance writer specializing in natural history and relocated to the Pacific Northwest.

Along the way, he'd picked up a camera for photos to accompany the writing he was submitting to publications on such subjects as old growth forests. But he soon noticed that "editors were more interested in the pictures than the stories." Going with that flow, he concluded, "It was worth putting my entire effort into the power of my photography."

The first major fruits of that effort resulted in a cover and portfolio in *Popular Photography* in 1977, but the 1980 eruption of Mt. St Helens just north of his Oregon home made Braasch the go-to guy for coverage of that subject, the aftermath of which he still follows. Major assignments ensued, including an environmental series for *Life Magazine* for which he spent three weeks aloft in a single rain forest tree.

The climate story has led him to 22 countries and all seven continents, much of it self-assigned and self-financed beyond two media fellowships he received from the National Science Foundation to support work in Alaska and Antarctica. In 2007, his work

continued on page 25

We've
MOVED!

Five women move a mountain ... and end up in the trees

By LINDA L.S. KNOUSE

Have you ever wondered about the SEJ office? Where is it? What does it look like? How many people work there?

When you call the SEJ office you hear, “SEJ, Chris Rigel,” or “SEJ office, this is Linda,” or “SEJ office, Candy speaking, how can I help you?” If that’s all you know about the SEJ office, the following will be an eye-opener.

For many years the SEJ office has been in a second-floor suite in a small downtown district in Jenkintown, Pa., approximately 20 miles outside of Philadelphia. Quarters have gotten tighter each year as the archives grow, the programs grow and the member records increase. Occasional visitors to the office have been amazed that all SEJ programs — the conference, the awards contest, regional event support, listservs, the website to name a few — begin their development and are monitored from this small space with very few people. (The staff couldn’t possibly carry out all the programs but the amazing board of directors and members carry them out beautifully, making SEJ one incredible member-driven organization.) Currently five women staff the office, although men also have been on the staff over the years.

Earlier this year it was decided that a move was necessary. You might be wondering why, after a great many years in the same location. The reasons were varied; each had their own level of intensity, most were about our environment ... increasingly unreliable heat and air conditioning in the building; lack of owner maintenance; a water leak with quick-growing mold; bugs; an outside metal stair entrance that was healthy for exercise, unhealthy for handicapped accessibility; metered parking and parking tickets; parking blocks away was healthy for exercise, unhealthy for the handicapped or injured. The location was squeezing us out.

The move was planned over a period of months. First came the search of the real estate agents. Several went out looking for



PHOTO BY LINDA L.S. KNOUSE

It took days to make a path through the central room of the new SEJ office.

us, armed with our new office specifications. The recession made it a “buyer’s market” and a great location was found to house the staff and possessions of SEJ — *for less rent*. Horray recession!

Then came the battle of attorneys vs. lease language before our executive director pronounced a done deal.

Like a line of ants, SEJ staff began to carry boxes and bags filled with papers to the recycle dumpster at the church across the street.

We saved a tree, perhaps two. Boxes for professional shredding soon filled a section of the office.

We purged. We sold and gave away old office furniture that wouldn’t be moving with us. We haggled.

We interviewed moving companies and got estimates. We packed, packed, packed.

Where’s the Tylenol?

The day came when the phone and Internet service were cut off then channeled to the new location. We went into a blackout, lost our firewall, found it again; the server was up and down; and the Internet got lost in space for a few days. Cables are our friends.

It was a foggy moving day, May 16. We watched all the member files, accounts files, boxes of records, the history of SEJ conferences and awards, bookcases, desks and computers go down the treacherous outside staircase. Two trucks swallowed up the SEJ office and delivered it to our new home. In the new SEJ headquarters, each office has at least one wall of windows and all we see when we look

out are trees. We call our new place “the tree house” and we staffers are “the women of the treetops.”

Although the new location (115 West Avenue, Jenkintown, PA 19046) is somewhat smaller than the last, it’s a stimulating office space. The five women who moved a mountain of records, archives, SEJ history (and cables) are happy to be here; it might show in the voice you hear the next time you call the SEJ office.

Linda L.S. Knouse is the design editor of SEJournal and records manager at the SEJ office.

Media critic: Who will do regional or local investigations in science?

The Observatory, *CJR's* website for science media criticism, has become an essential stop for science and environmental journalists. Here are some insights from its editor.

By MICHAEL MANSUR

Whether it's the latest climate change research or a fresh take on the impact of the newspaper world's implosion on science and environment coverage, *Columbia Journalism Review's* Observatory is a key online resource.

Its mission: Critique science and its coverage.

Curtis Brainard, The Observatory's editor, took time recently to answer a few questions from the *SEJournal* about his blog — everything from how it operates to his views on key upcoming issues.

Be sure to check out The Observatory at http://www.cjr.org/the_observatory/.

What follows is a edited version of our e-mail conversation.

Can you tell us a little about your background, especially about how it relates to covering science and environment?

I completed a dual master's-degree program in earth & environmental science journalism at Columbia. It was an incredible program, requiring students to complete a research project that provided hands-on experience with laboratory and fieldwork. Mine involved collecting pristine fossil corals and using radiocarbon dating to glean insights about fluctuations in the Earth's magnetic field and the influx of cosmic radiation. Completing that thesis gave me a better understanding of the scientific method, which has helped me recognize articles that are insightful, accurate, credulous, exaggerated, etc. It has also encouraged me to look for coverage that explains the work that scientists do in addition to the results they produce. On the journalism side of things, I don't actually have any professional newsroom experience. That often gets an eyebrow raise out of other journalists, but in some ways I feel it's an advantage, or at least that's how I rationalize it ... I also like to drop the line (all in good humor) that Bob Costas was never a great ball player, but he knows the mechanics of the game as well as any athlete on the court. I don't actually know anything about sports.

How did you come to *CJR* or the Observatory?

I was simply in the right place and the right time. When I

graduated with a degree in environmental journalism in 2006, climate change was exploding onto the media scene. With global warming well on its way to becoming one of the biggest stories around, *CJR's* editor, Mike Hoyt, was looking for someone to parse all that coverage. I'd actually begun contributing to the Web site as a student and continued to work there on a temporary basis for about nine months after graduation.

But my work drew a wonderful reaction from the journalism community, which seemed to be looking for some kind of arbiter. With all of the controversy surrounding climate science and skepticism, shortcomings in the coverage quickly became part of the story itself — not unlike what happened at the beginning of the Iraq War. So, Hoyt and Brent Cunningham, our managing editor, decided to make the gig permanent. In January 2008, we launched The Observatory, *CJR's* first full-time desk dedicated to critiquing science, environment, and medical news (and a lot of the politics and business thereof).



Curtis Brainard

PHOTO COURTESY CURTIS BRAINARD

Can you detail how the blog works, in terms of production?

It's basically an intern (who rotates every three months) and me at the moment. Both of us try to average about two columns a week, one of which is often a roundup of one of the week's big stories and one of which is something more enterprising. In 2008, I had a decent freelance budget and was able to publish one or two outside contributions per week, which was very nice as we've attracted some top-notch, veteran, mid-career, and beginning science writers. Usually, they pitched ideas, but I have occasionally assigned pieces as well. Unfortunately, like so many of the publications that I cover, *CJR's* discretionary budget has all but vanished. Hopefully, that's temporary and I've had a few saving graces in the meantime. First and foremost is my colleague Cristine Russell, president of the Council for the Advancement of Science Writing (among so many other credentials), whom we recently made a *CJR* contributing editor. She and a number of other very dedicated journalists have made

contributions with little or no compensation. Though I don't purport to speak for them, I think they believe strongly in *CJR's* effort to advocate for a free and strong press.

What do you focus on?

I focus mostly on climate change and energy because that's my area of expertise and that is the biggest story on my beat right now. With the Obama administration and so many industries finally getting behind global-warming mitigation efforts, however, I've spent more time writing about the politics and business of climate, and less about the science. In fact, keeping up with the flow of news has become increasingly challenging. When I started this job just three years ago, it was fairly easy to keep track of climate and energy stories. These days it's like sipping from a fire hose, but that's good. A lot of people rightly argue that press still doesn't hammer climate and energy issues as well as it could. On the other hand, they are clearly not the obscure beats they once were just five years ago.

How is your blog faring? Is it finding more interest in this changing media world?

The Observatory continues to draw very positive reactions from readers. Since the launch two years ago, our readership has grown from 5,000 or so unique visitors per month to just under 15,000. During our most successful months, that's jumped as high as 25,000. So, yes, there seems to be a lot of interest in media criticism, which is probably attributable to the tumultuous state of the industry. But we're also dealing with the same tightening of financial resources as everybody else. Like many new outlets, we rely on a high degree of support from non-profit foundations, and obtaining grants has become much more competitive.

Has the media's coverage of climate change improved? Or how would you characterize how it's done?

Absolutely. Though there are still voices at major publications that deny the reality of human-caused climate change, most news coverage has moved past the question about whether or not global warming is real, and on to questions about what to do about it. For instance, the whole "balance as bias" dilemma, whereby reporters would quote a skeptic in articles about the basic science simply for propriety's sake, has largely faded from the news.

On the other hand, opinion polls show that most of the public is still not engaged on the climate and energy issue and that a record number think that the media exaggerates the risks of global warming. So many outlets, especially in television news, still aren't hammering this issue hard enough.

And there's plenty of room for improvement quality-wise, too. Now that reporters have largely accepted the basics of man-made climate change, the story has actually grown more difficult, dealing now with the much more complicated and uncertain science related to the timing, severity, and location of specific impacts. Then there is the matter of following the politicians'

and businesses' attempts to deal with the problem. Trying to gauge the climatic and economic consequences (good or bad) of various proposals and attempts to mitigate warming is very difficult.

Much recent coverage has focused on the layoffs and financial difficulties in the print world. What do you see as emerging and important there?

Yes, this has become the other area – in addition to climate and energy – that I focus on most heavily. It used to be that I rarely wrote about breaking, industry news, but now there is something to be covered almost every week. Obviously, it's a very discouraging time to be working in journalism with so many layoffs, buyouts, and closings. There are fewer staff jobs for specialized environmental reporters and fewer resources available to those who do have jobs. Tragically, this is happening at a time when environmental issues are finally getting more attention from the political and business realms.

On the flipside, there are a lot of new online environmental news start-ups — both magazines and blogs — that are filling the vacuum. But they're not filling all of it. These outlets provide only a limited number of jobs. They offer mostly opinion and some advocacy writing, rather than objective news writing and investi-

gations. And, in terms of readership, many people have argued that they tend to reach mostly those who are already interested in environmental issues, rather than bringing these subjects to a wider demographic. I guess I try to balance my coverage between "hope and

despair" as I once put it in a headline. But I hope I come off as emphasizing the former. My job is to encourage the idea that we can improve journalism.

Are there some crucial things you'll be watching in the near future on that front?

Well, the fate of newspapers will be the fate of science and environmental journalism at newspapers. They're hemorrhaging jobs like mad, as so many of this journal's readers are painfully aware, and I certainly have no idea what will staunch the bleeding. However, I can say that it's been phenomenally impressive to watch how well print reporters have transitioned to the Web over the last few years. I really have no idea how practical it is — because there's still no reliable business model for any kind of (web) journalism — but I would love to see them band together regionally, as they've talked about doing in the Northwest, to establish new, online outlets. Those might then work out new content sharing as distribution platforms. That might lead to interesting mergers and partnerships, such as some of those we've seen in the last year.

For example, *The New York Times* and *The Washington Post* now run content from E&E Publishing and *Grist*, respectively. Online, one of the things to watch is the rise of scientist-run blogs, especially those that have been picked up by major outlets. That's happened at *Discover* magazine, for instance, which has also pulled a couple blogs away from Seed's Scienceblogs.com

... opinion polls show that most of the public is still not engaged on the climate and energy issue and that a record number think that the media exaggerates the risks of global warming

community. I'm also keenly interested in different types of ventures, such as Climate Central, which contributes climate coverage to the News Hour and has an office that is half scientists and half journalists. We're really going to have to expand the boundaries of the traditional newsroom, but there's great potential in experimenting with a variety of these models.

The SEJournal is working on a piece about major awards won by enviro reporters this year. There's an impressive list. How does that jive with what's happening in the mainstream press? Are more/fewer quality pieces being produced?

Obviously, there are still tons of talented environmental journalists out there. But if you look at the membership roles of groups like SEJ and the National Association of Science Writers, more and more people are becoming freelancers.

With fewer and smaller news outlets there is less space for their work overall and it's also harder for them — and staff reporters as well — to find support in the form of travel and expense budgets, research assistance, and just time to report. For all of that, however, environmental issues are a very hot topic right now; I don't give a damn what the Gallup polls say (which is the opposite). It started with climate, I think, and has grown into larger concern for natural resources, the global economy, national security, and health. So whether its fisheries, energy, the Arctic, or environmental toxicology, journalists are making sacrifices or doing whatever it takes to get the job done. And plenty of newsrooms, even in their dilapidated state, know good work when they see it.

What is being lost in these hard financial times?

My biggest is probably for investigative reporting ... new online outlets are helping to mitigate some of the industry's decline, (but) they tend to provide more commentary than incisive news. And I'm especially worried about locally focused investigation. Blogs may be opinion-oriented but they are also predominantly focused on national news and the Beltway. So although it's a shame that many regional papers no longer cover the EPA because they closed their D.C. bureaus, plenty of people are bird-dogging Lisa Jackson and following the latest climate-change studies published in *Science* and *Nature*.

But who is watching all the municipal waste departments out there, looking over the environmental impact statements of local energy projects, or paying attention to water quality? Who will be keeping track of all environment-and energy-related stimulus money as it filters down to the lowest levels of government and out to businesses and contractors? Regional news outlets are the only ones who can reliably monitor such things. That's exactly where we've lost so many of our very best journalists.

Are there any hopeful developments that you'd point to?

Only that there are a lot of very smart people thinking about new ways to keep the public abreast of important and interesting issues related to science and the environment. J-Lab is a good example. Also, the Knight Foundation is pouring some \$100 million into over 100 new media projects over the next few years.

And, honestly, the dedication of groups like SEJ gives me hope. I'll be sitting on a media-focused panel at the annual meeting of the Environmental Grantmakers Association this fall. SEJ's executive director and my co-panelist, Beth Parke, helped

get that on their agenda — that's a real testament to the value of the organization.

Michael Mansur, a former SEJ board member and longtime environment writer, is SEJournal editor.

Gary Braasch covers climate continued from page 21

culminated in the book *Earth Under Fire: How Global Warming is Changing the World*, which was released in April in paperback by the University of California Press with substantial updates. Braasch not only shot the book's 110 photographs but wrote 90,000 words as well, attracting the endorsement of former Vice President Al Gore, who deemed the book "essential reading for every citizen."

Braasch continues to cover the climate on the web site www.WorldViewOfGlobalWarming.org which has become a popular internet portal on the subject ("I get e-mails from students wanting me to write term papers for them," he sighs), as well as his personal web site www.braaschphotography.com

Like both James Balog and David Arnold, Gary Braasch relies on images of glacial retreat to illustrate global warming. He's been covering the story so long, in fact, that he's now starting to re-photograph some of the glaciers he first shot ten years ago, seeking evidence of additional change just within that short geological time span. And true to the tenets of environmental photojournalism, he's also managed to include the hand of man in his glacial retreat photography (see back cover), his own.



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NYT reporter's 'misstep' causes furor among 'skeptics'

By BUD WARD

Veteran *New York Times* science writer Andy Revkin calls it “my worst misstep as a journalist in 26 years.”

A vocal and prolific British climate contrarian is less charitable. “Deliberate misrepresentation,” said Christopher Monckton in complaining that Revkin, in an April 24 front-page article, “offends grievously” the newspaper’s journalism ethics guidelines.

Monckton asked *Times* Public Editor and Readers’ Representative Clark Hoyt to conduct a “disciplinary enquiry into Revkin’s conduct.”

While they’re at it, Monckton wants to see the *Times* give more coverage to those who share his largely discredited views of the science of climate change and to report the issue “in a more impartial, neutral fashion” reflecting what he sees as the “imaginary” risks of anthropogenic global warming.

This is far from the first time that Revkin’s reporting has comforted one side or the other in the climate change arena. As the nation’s most high-profile, most closely watched, and most widely respected reporter focusing on the issue, he’s used to the barbs from all sides. That said, his reporting over the past two decades has focused largely on the science of climate change, and that’s an area generally seen as having moved steadily, if often incrementally and fittingly, toward increased concern over the issue.

Bottom line here: Revkin’s reporting occasionally raises the eyebrows of those committed to the so-called “consensus science” of IPCC, those who also are eager to move forward with stringent controls on carbon dioxide and other greenhouse gases. It very likely more often gets under the skin of the so-called climate “skeptics” or contrarians.

The Nature of the ‘Misstep’

So what exactly was Revkin’s “misstep”? A serious journalistic lapse or oversight? Or a blip in an impressive journalism career? Perhaps both?

The story in question was basically one of those “gotcha” stories the media often love, complete with an element of cover-up and sleight of hand.

Headlined “Industry Ignored Its Scientists on Climate,” the story reported that a once-powerful but now long-defunct fossil-fuel-based industry coalition, the Global Climate Coalition (GCC), had ignored its own scientific and technical experts. Based on a

recently uncovered GCC internal report, Revkin reported the industry experts’ view that “The scientific basis for the greenhouse effect and the potential impact of human emissions of greenhouse gases such as CO₂ is well established and cannot be denied.”

The group’s policy leaders then turned around, appeared to deep-six that internal technical advice, and in a publicly distributed “backgrounder” continued to refute the science while “policy makers and pundits were fiercely debating whether humans could dangerously warm the planet,” Revkin reported.

Revkin also reported that “some environmentalists have compared the tactic to that once used by tobacco companies, which for decades insisted that the science linking cigarette smoking to lung cancer was uncertain.”

That’s an ouch. Dem’s fightin’ words, as they say.

Those generally identified as contrarians were quick to pounce, yelling and blogging foul, but providing scant evidence to counter Revkin’s report.

... One mistake is more powerful than 750 stories reported accurately ... ever-tightening time demands on reporters can make reporting errors more common

With Al Gore testifying on Capitol Hill the same day the *Times* article was published, the former vice presi-

dent was quick to point to the Revkin article to buttress his own position. Gore alleged “a massive fraud far larger than Bernie Madoff’s fraud. They are the Bernie Madoffs of global warming,” he complained, pointing to the disgraced Wall Street investor.

Monckton speculated on a conspiracy between Gore and Revkin and his *Times* colleagues, but offered no proof to substantiate his accusation.

Revkin and the *Times*’ Hoyt replied to Monckton’s “deliberate misrepresentation” accusations only to find the next day that there indeed was a problem with the Revkin report.

The paper on May 2 posted an editor’s note saying that the Revkin article had pointed to one version of a Global Climate Coalition public “backgrounder” without knowing there was a subsequent backgrounder “that included language that conformed to the scientific advisory committee’s conclusion.” The newspaper’s correction continued: The later version was distributed publicly in 1998, but existed in some form as early as 1995, according to an online archive kept by Greenpeace. The amended version, which was brought to the attention of the *Times* by a reader, acknowledged the consensus that greenhouse gases could contribute to warming. What scientists disagreed about, it said, was

“the rate and magnitude of the ‘enhanced effect’ (warming) that will result.”

The paper pointed out that the coalition in that later back-grounder did omit any reference to the internal report section saying “contrarian” theories on rising temperatures “do not offer convincing arguments against the conventional model of greenhouse gas emission-induced climate change.”

Revkin on the Pains of His Mistake

Revkin pointed to that last omission in saying he thinks the story would have been news even if he had been fully aware of that second back-grounder. He said he had downloaded that subsequent document but had not read it carefully enough to pick up on the differences.

Would it still have been a front-page story? And did it really merit such prominent front-page placement (below the fold) in the first place, given that the group has long been out of existence? According to Revkin, “The underlying issue — illustrated in the GCC’s removal of the critique of ‘contrarian’ arguments from its internal primer — still stands ... but the featured example of public doublespeak doesn’t.”

But Revkin said he couldn’t answer whether the story as originally published warranted page-one coverage or whether a story reflecting the subsequent back-grounder still would have commanded such prominent play. He said those placement decisions are made by editors.

Asked about his characterization of this as his “biggest misstep” in 26 years, Revkin said he could not identify a comparable mistake of the same magnitude. “I can’t think of one bigger,” he said.

‘Tyranny of Time’ ... and Journalism as ‘Self-Correcting’

Clearly discomfited by his reporting error, Revkin said “one mistake is more powerful than 750 stories” reported accurately. He said the mistake confirmed his “biggest frustration” that ever-tightening time demands on reporters can make reporting errors more common.

“It’s the tyranny of time,” Revkin said, “and it makes me a victim of my own lessons” to journalists about the need to take their time to ensure their accuracy in reporting on such issues.

Revkin’s own pains with the situation notwithstanding, the mishap clearly provided an opening for critics and helped create a “distraction” from serious attention on the issue, Revkin said.

Prolific blogger Marc Morano, former staffer to Senator James Inhofe (R-Okla), for instance, rushed to put out a “Breaking” Saturday, May 2, e-mail blast celebrating the correction.

More philosophical in commenting on the Revkin mistake, former National Association of Science Writers President Cristine Russell, now associated with the Belfer Center for Science and International Affairs at the Harvard University, told Revkin in an e-mail that he “handled the correction extremely well. Very fair and transparent, straightforward.

“Journalism is a self-correcting process, and you have shown how to handle something like this,” said Russell, who earlier had worked as a science reporter for *The Washington Post* and, before that, with the old *Washington Star*.

This article first appeared in the Yale Forum on Climate Change & the Media, where Bud Ward, an SEJ founder, is editor.



To advance public understanding of environmental issues by improving the quality, accuracy, and visibility of environmental reporting.

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Biofuels: The sequel

The science behind second generation biofuels

By BILL KOVARIK

Making fuel from cellulose? Will it be the fuel of the future and how is the U.S. system promoting or haring it?

New political carrots and sticks are leading the biofuels industry into a second generation phase, and many critics of the biofuels industry think it's long overdue. The question for the industry, though, is whether the science is ready to scale up.

Among the carrots is a USDA budget request for \$1.1 billion in funding to support development of advanced bio-refineries and other stimulus funding for renewable energy, along with about \$384 million previously allocated in 2007.

The sticks include the low carbon fuel standards passed by the California Air Resources Board in April (See CO2 sidebar) and possible new EPA limits on carbon emissions.

At least eight major cellulosic biofuels plants are in production or under construction in the U.S. and Canada. (See industry sidebar)

So, it's now or never for cellulosic biofuels — the “fuel of the future” for almost a century, and long seen as the only way to replace petroleum in a liquid fuel system.

“We think, ultimately, cellulosic materials are the only materials where you can produce enough under environmentally sustainable conditions,” said Chris Somerville, director of the Energy Biosciences Institute at the University of California at Berkeley at the 2008 Society of Environmental Journalists conference.

But which cellulosic materials, how are they to be harvested and processed, and what fuels will come out the other side of the pipeline?

Life Cycle Analysis

California Air Resources Board (CARB) estimated that cellulosic process came out with the lowest carbon intensity, measured by CO2 equivalent per megaJoule — expressed as gCO2e/MJ. (MegaJoules are about 948 Btus, or about one tenth of a gallon ethanol).

CARB – ARGONNE CARBON INTENSITY CALCULATIONS

- 20.40 gCO2e/MJ cellulose ethanol from farmed trees
- 22.20 gCO2e/MJ cellulose ethanol from waste wood
- 73.40 gCO2e/MJ sugarcane ethanol (* includes 46 gCO2e/MJ for land change)
- 96 gCOe/MJ gasoline from California
 - 99.4 gCO2e/MJ corn ethanol (* includes 30 gCO2e/MJ for land change)

(* The land change penalty accounts for situations where new cropland is brought into production somewhere else to offset corn or sugarcane grown for ethanol.)

Grain

producers reacted with dismay to the new standards, which will effectively keep corn ethanol out of California. Some scientists, such as Bruce Dale from Michigan State, say that the grain ethanol industry should not be held accountable for the carbon debt of industries outside the US (<http://tinyurl.com/pym2y9>). Others, such as David Tilman of the University of Minnesota, think the land penalty might be higher.

CARB says that the new standard will eventually lead to the development of 1.5 billion gallons of cellulosic biofuel, 25 new plants and 3,000 new jobs in California. <http://www.arb.ca.gov/fuels/lcfs/lcfs.htm>

MATERIALS AND PROCESSES

Materials (feedstocks)

Energy crops – trees (eg, hybrid poplars); perennial field crops (miscanthus and switchgrass). Advantages: Higher yield per acre than corn, lower carbon footprint, lower collection costs, more predictable components better suited to enzymatic processes.

Waste — paper from garbage, leftover crop residues (corn husks, rice hulls) and timbering waste. Lower unit costs but higher collection costs, sometimes better suited to acid or pyrolysis processes.

Aquatic and marine biomass — Algae and kelp — Higher photosynthetic efficiency, less energy needed to break down cellulose, unlimited resource availability; disadvantage is purity, dewatering and collection costs. Potential for third generation biofuels and oils that would need less processing.

Processes

Pretreatment — Often a combination of pressure, acid and agitation separates cellulose from other components of biomass, such as lignin (glue) and hemicellulose (five-carbon sugars) and makes it more accessible.

Acid — Cheap, well-known and used for centuries to break wood down into materials for paper. Disadvantages include environmental impacts and lower process efficiencies. For instance, newsprint is cellulose with a high lignin content, which is why it is cheap and ages quickly. Higher purity cellulose paper is used by artists and by book publishers for longevity. The product is then fermented to ethanol or other biofuels (eg butanol).

Enzyme — Better process efficiencies, lower environmental impacts, but higher engineering standards needed. Some pilot plants have lost one batch in three due to contamination in the process. Fermentation to ethanol also required.

Gasification (pyrolysis) — Applying heat to biomass in a closed chamber results in a release of gas. The gas can then be processed and fermented using varieties of clostridium bacteria or it can be reformed in the

presence of a catalyst. One advantage of reformed gas is the increased variety of fuels that can be made.

History and background

The idea that cellulose would be the foundation for replacing petroleum was championed by Henry Ford, Isaac Asimov, and even, 90 years ago, by the scientist who founded the Cellulose Chemistry division of the American Chemical Society – Harold Hibbert.

“It looks as if in the rather near future, this country will be under the necessity of paying out vast sums yearly in order to obtain supplies of crude oil from Mexico, Russia and Persia,” Hibbert said in a 1921 journal article. “It is believed, however, that the chemist is capable of solving this difficult problem ... (and) it would seem that cellulose in one form or another is capable of filling that role.”

In 1925, Henry Ford told reporters: “The fuel of the future is going to come from fruit like that sumac out by the road, or from apples, weeds, sawdust — almost anything.” Ford’s optimism about cellulosic biofuels was unusual for the auto, oil and chemical industries, which had all placed their bets on leaded gasoline and foreign oil.

Of course, cellulose processes were (and still are) important for paper and chemicals such as celluloid and rayon. During the early 20th century, the acid process was improved to allow a greater variety of woody feedstock such as southern pine. Paper mills of this era were well known for billowing clouds of foul-smelling pollutants, although steam and pressure pulping eventually reduced costs to the environment.

The idea of turning cellulose into renewable fuels remained attractive, and science writers followed it over the years. In 1940, for example, *New York Times* science writer William L. Laurence wrote about Ernst Berl, a Jewish scientist who left Germany to work at Carnegie Institute. Berl developed a pressurizing process for reducing cellulose from all kinds of plant materials to either liquid or solid biofuels.

Berl’s work “assures mankind of an illimitable supply of the prime movers of the wheels of civilization for all time, after natural deposits have been exhausted,” Laurence said.

The idea was compelling, especially in light of the possible exhaustion of coal and oil reserves which, even in the 1940s, had long been a concern for scientists and policy makers.

Another WWII era development was the discovery of a voracious cellulose-eating fungus in the remote jungles of the Pacific. Soldiers called it “jungle rot,” because the fungus was turning their cotton clothing into sugar. Polyester clothing solved the problem, but Elwyn T. Reese and other Army chemists recognized a key to one of the great longstanding problems of science: How to efficiently split the strong bond that holds molecules of glucose together to form cellulose. Although it was possible to produce fuel as a side-stream at paper mills, an enzymatic process could make fuel cheaper, many believed.

In the 1970s, Reese and others told congressional committees that they could produce fuel from cellulose at low cost, and without affecting food supplies, but they were unable to attract much research support as grain-state and oil-state politicians fought for control of energy markets.

Reese’s optimism notwithstanding, cellulosic biofuels are an enormously complex area of biochemical engineering.

Commercial Cellulose Development

Enzyme process — Combinations of mild acid and pressure pre-treat the plant material, then enzymes break cellulose down into glucose, and then ferment the glucose into ethanol or other chemicals.

- POET – 20,000 gal/yr — Scotland, S.D. Enzyme process. Operating, will lead to 25 million gallons per year commercial facility in Emmetsburg, Iowa, making ethanol from corn cobs and stalks in tandem with a standard grain ethanol plant.

- ABENGOA Bioenergy — Hugoton, Kan. Enzyme process. Wheat straw. Starting construction in 2010, in production by 2011.

- IOGEN — Ottawa, Canada — Enzyme process. One of the earliest firms to work on the cellulosic enzyme process, Iogen declined a partial US-funded deal and is working with a start-up plant in Canada.

- DUPONT DANISCO — Vonore, Tenn. — Under construction, plant will use switchgrass and enzyme processing.

- VERENIUM - Jennings, La. — 1.4 million gallon demonstration-scale plant / waste biomass sugarcane
<http://www.technologyreview.com/Energy/20828/?nlid=1099>

Advanced enzyme process — Along with enzyme breakdown of cellulose into glucose, a chain of enzymes can produce a variety of products, not just ethanol.

- MASCOMA - Rome, N.Y. — Began in February 2009 with capacity of 200,000 gallons of cellulose ethanol, gasoline or other chemicals from wood chips, grasses, corn and sugar cane residues. An affiliate is developing a commercial-scale facility in Kinross, Mich.

Concentrated acid process — Strong sulfuric acid is added to dried biomass, heated and then separated under pressure. This is very similar to the way cellulose is separated for paper.

- BLUEFIRE Ethanol — Irvine, Calif. Acid process. Garbage, wood waste, ag residues — Still hung up on siting.
<http://www.bluefireethanol.com/>

Synthesis gas — Heat and pressure are applied and biomass is turned into biogas — hydrogen and carbon dioxide streams —that are then re-combined in the presence of catalysts to create different kinds of fuels or chemicals.

- RANGE BIOFUELS — Soperton, Ga. Pyrolysis to synthesis gas (syngas) using heat, pressure and steam, and catalytic treatments. Under construction. First 20 million gallon phase by March 2010.
<http://www.rangefuels.com/our-plants.html>

Researchers in hundreds of university and government labs have taken decades to create an industry that is nearly commercial — isolating, characterizing and testing the complex chemical structures of plants, and working on cascading systems of enzyme reactions. One of the scientists intrigued with Reese and his discoveries was Patrick Foody, who founded Iogen Corp. in 1974. The company now has a commercial scale enzyme biorefinery under construction in Saskatchewan.

Science fiction writer Isaac Asimov found all this fascinating. “Cellulose can be broken down into glucose molecules,” Asimov said in a 1986 article, “and the glucose solution can be fermented into alcohol ... (and) used as a liquid fuel.” The advantage? “Cellulose is self-renewing if we are careful to conserve our forests, so the fuel we get from it could last indefinitely, whereas oil from the ground must be completely used up eventually.” Yet Asimov found it hard to resist the science fiction notion that we need to beware of mutant microbes that might get outside their tanks and dissolve the forests.

Low oil prices in the 1980s dissolved political support for second-generation biofuels research, but higher energy costs and the need for non-toxic octane-boosting gasoline additives in the 1990s launched the grain ethanol industry. Questions about the energy efficiency and carbon footprint of grain ethanol kept high interest in second-generation biofuels.

One milestone was the 2005 “billion-ton” biomass study at Oak Ridge National Labs. Waste wood, switchgrass and other cellulose sources amounted to 1.3 billion tons, which could replace at least 30 percent of U.S. petroleum, the study said.

The billion-ton study changed the federal government’s approach to energy, but there are concerns about the use of Conservation Reserve Program land, about increased forestry, and other impacts from intensified biomass harvesting.

Research today on switchgrass and miscanthus shows high potential — more than 1,000 gallons of biofuel per acre, as op-

posed to hundreds of gallons of ethanol per acre with corn. Among researchers working on energy crops are Ken Vogel at the University of Nebraska, David Bransby at Auburn, Stephen Long at the University of Illinois, John Sheehan of the National Renewable Energy Laboratory (NREL), and Chris Somerville of the University of California at Berkeley.

One flaw of cellulose crops according to Somerville, is that they require high energy processing to break down cellulose into glucose, ferment the glucose, and then distill the ethanol. Envisioning a third generation of biofuels, Somerville says more research is needed on plants that produce oils and fuel-like substances that would be very close to gasoline and diesel, and consequently need less energy to refine.

Another issue involving cellulosic biomass came up with research by Timothy Searchinger, published in 2008, that indicated CO₂ releases from converting forests or pastures to cropland are significant. The carbon intensity of various crops was considered in recent carbon standards issued by the California Air Resources Board.

Several interesting efforts to dramatically broaden the resource base using aquatic and marine organisms are under way. One company (Algenol) is hoping to make ethanol efficiently from algae in fresh water situations where lots of carbon dioxide gas is available.

Two marine research efforts involve cellulose from kelp at the University of Costa Rica and the Scottish Association for Marine Sciences.

As it turns out, this too is nothing new. As early as 1918, the Pasteur Institute was reporting in *Scientific American* that it had been able to distill about 10 gallons of fuel ethanol per ton of seaweed.

Bill Kovarik, an SEJ board member, is working on The Summer Spirit, a book about the history of renewable energy.

Links worth checking:

Costa Rican marine cellulose research

<http://blog.wired.com/wiredscience/2008/06/biofuel-solutio.html>

Scottish marine cellulose research

<http://www.thebioenergysite.com/news/2695/project-to-make-biofuels-from-kelp-funded>

Algenol

http://www.baltimoresun.com/news/local/baltimore_city/bal-te.md.algae08may08,0,5830715.story

Billion Ton Study (2005)

http://www.ornl.gov/info/ornlreview/v40_1_07/article03.shtml

Cellulose biofuels industry information

<http://www.ethanolrfa.org/resource/cellulosic/>

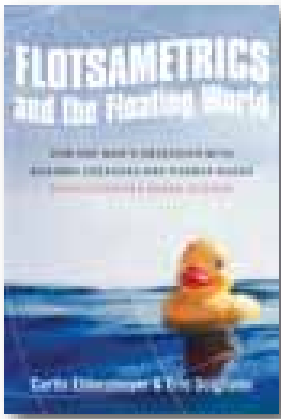
Department of Energy Cellulose Biomass resources

<http://www1.eere.energy.gov/biomass/news.html>

http://www1.eere.energy.gov/biomass/past_solicitations.html

Energy balance of cellulosic biofuels processes versus grain ethanol

<http://rael.berkeley.edu/ebamm/>



Tracing the oceans' many
'garbage patches'

Flotsametrics and the Floating World

by Curtis Ebbesmeyer
and Eric Scigliano

Harper Collins, 2009, \$26.99

Reviewed by JENNIFER WEEKS

In 1991, Curtis Ebbesmeyer was a successful middle-aged oceanographer who had studied offshore oil platform design in the North Sea, sewage dispersion in Puget Sound, and eddies in the North Atlantic. But he found his true calling when thousands of Nike shoes, which had spilled from a cargo vessel crossing the Pacific months earlier, started washing up on Northwest beaches. Fascinated with all kinds of “drifty things,” Ebbesmeyer saw the shoes as a unique opportunity to study the oceans.

“These thousands of lost sneakers composed a giant scientific experiment on a silver platter, fully if unwittingly funded by Nike – a serendipitous window into the ocean’s deepest secrets,” Ebbesmeyer recalls.

In *Flotsametrics and the Floating World*, co-written with journalist Eric Scigliano, Ebbesmeyer describes how he has used flotsam (floating objects accidentally lost at sea), including shoes, plastic bath toys, Japanese urns, and human body parts, to map and time ocean currents. Knowing when objects fell overboard and when they washed ashore, Ebbesmeyer and his colleagues could test computer models of ocean circulation and calculate how long it took objects to travel all the way around gyres – huge closed current loops that rotate in the middle of the world’s major seas.

Ebbesmeyer coined the term “garbage patch” to describe zones of floating junk that have formed at the centers of most of the world’s 11 ocean gyres. Media accounts usually focus on one patch in the western Pacific, but Ebbesmeyer has documented eight garbage patches around the globe. Combined, he estimates, they would cover an area more than twice as big as the continental United States.

As Ebbesmeyer recounts, humans have been throwing stuff into the oceans for centuries. Byzantine emperors beheaded their defeated opponents and threw their corpses into the Bosphorus Strait. Norsemen tossed their favorite possessions overboard in the 9th and 10th centuries and settled where the goods washed up — the modern site of Reykjavik. This was good science, Ebbesmeyer observes: If flotsam from ships washed up there, so would usable stuff like dead whales and driftwood.

More recently, the Guinness brewery dropped 200,000 bottles

containing commemorative messages into the Atlantic and Caribbean to mark the company’s 200th birthday in 1959. And religious evangelists have thrown thousands of “gospel bottles” into the seas to reach potential converts. Even when senders’ motives are a little strange, these launches are useful data sources for Ebbesmeyer, who reviews the available historical data on 32 drifter launches that took place over the past 150 years from locations around the world. (Response rates varied from 1 to 50 percent, depending on where the bottles were launched, what reward they offered for a reply, and how well they were sealed and weighted.)

In sum, flotsam can tell us a lot. An increasing share of ocean junk is plastic, which lasts longer than paper, wood, cloth or metal, although it breaks down into increasingly tiny fragments. Sometimes these bits choke marine animals and birds. Many contain phthalates and other endocrine-disrupting or toxic components, which can kill or alter sea life more slowly. Thanks to quirks in coastal topography and ocean currents, some “junk beaches” accumulate tons of plastic waste every year.

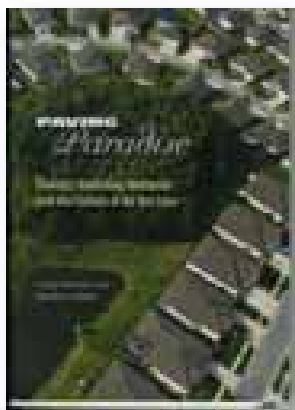
“Sometimes I feel like an albatross myself, choking on so much grim but exquisite data gleaned from the waves,” Ebbesmeyer ruefully observes. As one response, he argues that shipping companies should have to report anything they lose or throw overboard. (This is required now only when ships lose at least eight freight containers, because spills on this scale are considered threats to navigation.)

Flotsametrics is full of insights about how the oceans have shaped human history. For example, Columbus made good time across the Atlantic because he picked up the Atlantic Equatorial Current, which moves ten miles per day. And some of the first Japanese settlers in Hawaii arrived there because their fishing boats were pushed out into the Pacific by powerful coastal currents.

It’s also a window into the mind of a curious scientist, always looking for new angles on the “floating world,” with vivid descriptions of how oceans and currents work. Ocean waters contain numerous blobs and slabs of water with varying densities and temperatures, which the authors compare to a huge, flattened lava lamp. “If each slab were a different color, the ocean would look like a Pointillist painting,” they write. And the Gulf Stream “shakes loose like a fire hose from its pivot point at North Carolina’s Cape Hatteras, spraying uncountable drifting objects east toward Europe.”

This exuberant book will make you want to kick off your shoes and go beachcombing. If you turn up anything interesting, you can report it to a citizen-science network that Ebbesmeyer helped create to collect information on flotsam finds (their newsletter, *Beachcombers’ Alert!*, is online at <http://beachcombersalert.org>).

Freelancer Jennifer Weeks, jw@jenniferweeks.com, is based in Watertown, Mass.



Detailing the destruction of what once made Florida a paradise

Paving Paradise: Florida's Vanishing Wetlands and the Failure of No Net Loss

by Craig Pittman and Matthew Waite

University Press of Florida: Gainesville, 2009, \$27

Reviewed by JoAnn M. Valenti

It began with a tip about a report from the National Academy of Sciences titled "Compensating for Wetland Losses Under the Clean Water Act." A real page turner.

Craig Pittman, who had been covering environment issues for *The St. Petersburg Times* for five years, was blown away by the document's indictment of the U. S. Army Corps of Engineers. He figured it was time to cover the statewide picture, not just report one loss at a time as wetlands disappeared.

When he checked the Corps' website, he discovered that more wetland destruction permits were being issued in Florida than in any other state and Florida had lost more wetlands than any other state. Thousands of acres had been bartered off to developers, never mind that yards in the new subdivisions could sprout cypress trees and float septic tanks.

A national policy of "no net loss" had been established in 1989. Clearly, the policy was in shambles. Wetlands in Florida were being converted to concrete jungle. More homes for people rather than alligators or panthers, more stores, more parking lots and more roads leading to more of the above. The Corps' mission: development enablers.

Although the Corps uses Geographic Information Systems to pinpoint wetlands, it didn't take long for Pittman to discover that the data were unreliable. His search for a GIS guru led to Matt Waite, a metro G.A. from one of the *Times'* bureaus assigned to computer-assisted reporting. The two teamed up to learn the technology and to begin the tussle for federal agency data.

Since the Corps' data were less than useful, Waite came up with a way to go after the story using satellite-imagery analysis. He had to take a couple of courses in remote sensing at the local university just to understand how to compute the number of acres lost. It took nearly a year to analyze where paradise had been paved.

The duo's investigative report, available at www.sptimes.com/wetlands, ran May 22-23, 2005. Additional

stories followed. Pittman and Waite won SEJ's top reporting awards in 2006 and 2007 for their exposé of the illusion of wetlands protection. The expanded book-length tale, 17 chapters with two appendices explaining the authors' complex methodology and a useful list of remote sensing sources, could have been called: "Tides of Destruction," "They Couldn't Say No," "A Landscape of Greed, Lies and Incompetence," or maybe "Swamped by Sprawl."

The reporters name names: Disney's empire over Jane Green Swamp with "It's a Small World After All" piped in; Scripps Institute initially ignoring a national refuge; universities that would be better named "mildew U.;" mega-companies, the ever notorious Wal-Mart and lots of Florida legislators cussing all the way to re-election. Even some of the good guys turn out to be bad guys. They get them all. A real plus, the book includes photos from the *Times'* morgue and but only two maps. I craved more maps.

"We got quite a few [letters to the editor], plus lots of e-mails, phone calls and letters sent directly to us from readers who were outraged at what we found," Pittman told me in an e-mail. "Several of those contacts became sources for the book."

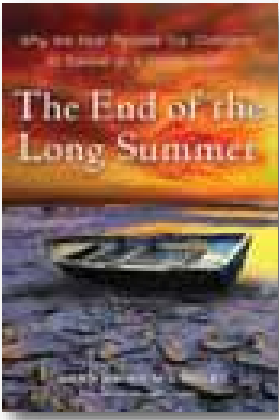
The choice of the title *Paving Paradise* recalls the haunting '60s tune and seems better suited to the book's place in the Florida History Series, over 50 titles to date including Bill Belleville's *Losing It All To Sprawl: How Progress Ate My Cracker Landscape* (2006), Julian Pleasants' *Orange Journalism: Voices from Florida Newspapers* (2003), and two titles from the incomparable Al Burt: *The Tropic of Cracker* (1999) and *Florida: Snowbirds, Sand Castles, and Self-Rising Crackers* (1997). It's an impressive, must-read series.

Read Pittman and Waite's book first. Confronting the larger story in 350 pages was a near death blow for me, each page documenting another battle lost, maybe even the whole war. It's more than a legacy of hanging chads or threatened offshore drilling fouling Florida's image. Like Pittman, as a Florida native, I'm outraged daily by the senseless destruction of all that was Florida. There were only two million of us in 1945 when I was born; the state's population now nears the 20-million mark. Page one reminders of the crowd's impact are critical if anything is to be salvaged. A climate of fewer investigative reports a la the oft-seen Pittman byline threatens to erase even our memory from history.

In spite of the authors' prescribed 12-step program, recently another Pittman and Waite story's headline read: "Is more growth the solution?" Less than astute legislators were suggesting easier permits to revive the economy. Opponents pointed to the overabundance of vacant houses and letters again poured in from readers. The story is far from over. It took four years to write this book. The sequel may not take as long.

Paving Paradise provides some lessons for reporters who want to dig deep. For example, it shows that traditional reporting doesn't always cut it on the environment beat. In addition to the usual search for documents, face-to-face interviews, rewriting and endless editing, you should be prepared to learn more technology than you ever expected to master, perhaps requiring more college coursework to finally get the story. Maybe you'll end up with an award-winning series, and then a book. A really good book.

JoAnn M. Valenti, Ph.D., SEJournal editorial board and emerita professor, is back home in Tampa trying not to go down with the ship. [valentijm@yahoo.com]



A rare book delivers a sobering message for us

The End of the Long Summer: Why we must rethink our civilization to survive on a volatile Earth

by Dianne Dumanoski
Crown Publishers, 2009, \$25

Reviewed by JoAnn M. Valenti

Rachel Carson famously observed after the publication of *Silent Spring* that the subject of a book selects the author, not the other way around. Anyone who knows Dianne Dumanoski, or has read her work as a co-author of *Our Stolen Future*, or followed her award-winning reporting for many years at the *Boston Globe*, won't be surprised to see her take on the big question: Are we going to make it or is it too late?

This is one of those books that comes along at the right time, a rare necessity for those struggling to put it all together and figure out if we've totally screwed up the planet and anyone will be around after all or not.

Neither communicators nor leaders realize where the 20th century has taken us, she states at the beginning of the book. Who better to figure it out for us than a Ph.D. drop-out who decided to become a top-notch environmental journalist instead? Dumanoski has been a front-line witness and chronicler of the crisis we're in now. She covered Stockholm, Rio, Johannesburg, Chernobyl. She's now in demand worldwide for her insightful lectures and courses on science and environment issues. *The End of the Long Summer* is heady stuff, thanks to her detailed research, the depth of her concern and her skill at walking her readers through philosophy, science, environmental polemics and then some.

When she was a journalist working on deadline, Dumanoski had no time to reflect on the omens of a doomed planet. Decades of notes, a passion for investigation and analytical thinking have birthed this book. Maybe not since *Silent Spring* have we had such a strident warning or a writer brave enough to take on the mission of truth-telling, written with a journalist's dedication to clarity, solid sourcing and engaging information. The book has given her the latitude for a more poetic style and depth. This is a scary book. Daunted? Not yet, she says. Just damn close.

Dumanoski challenges the world's devotion to growth, going far beyond the current attention to sustainability. She rethinks how progress is defined and what it means to be a steward of nature. The myth of controlling nature, she argues, has been vanquished, and what's more, nature is returning with a vengeance. Climate change is only the beginning. Whether any current species will survive is a sobering question. We've busted up the whole dynamic, the Earth's unified systems and metabolism. "Sirens are

wailing in a planetary emergency," she writes. "The decades ahead promise unimaginable loss...the century ahead promises to be a wild trip." Yet somehow, she finds joy in being a part of the drama. Maybe it's the stake she drives deep into the heart of capitalism. Or maybe it's just in a journalist's nature.

Human dominion is done and Nature's back on center stage. "The rare interlude of climate grace — a long summer — is over," she says. Thus, the title. Though she presents a cacophony of overwhelming disaster, she offers a smidgeon of hope. Probably couldn't see the point of writing a total doomsday book. Instead, she delivers a vision for hope laced with long-term uncertainty, and tells us to learn to cope with tragedy.

She calls for "shock-proofing our human systems," functional redundancy in the face of globalization-caused vulnerability, more regional and local self-reliance, enhanced social capital (so others can rebuild post-chaos...ouch!). It's a call for nothing less than a total redesign of social and economic systems. She hasn't written a book on adaptation, but rather one on how to survive chaos.

JoAnn M. Valenti is an emerita professor and serves on the editorial board of SEJournal.



President's Report continued from page 4

SEJ's board and staff will sit down with funders to brainstorm ways to keep environmental reporting strong, and better yet — to take advantage of this transition to create that vision of environmental journalism that is even more robust and credible.

Two members of the SEJ board recently lost their jobs, casualties of the current industry chaos. And yet, we're still fundamentally optimistic about the future. There will be a new model for journalism. And our story is so compelling that the need for people who can cover it well can't do anything but grow. The hard part is getting from here to there.

I love the sign you often see on tip jars in Portland coffee-houses — "Fear change?"

Sure, change is frightening, because it shakes our world and forces us to go somewhere new, a place where we're no longer comfortable. But afterwards, we often find ourselves somewhere better.

SEJ can handle change.

A week after SEJ's new website launched in May, SEJ staff moved into a new headquarters. The rent is cheaper, but the new offices are filled with light, and views of trees and green leaves. The new website is not just beautiful — it's infinitely better organized. And as we finish one transition, we get ready for the next, and the next, and the one after that.

Like the gumbo, the strategic planning retreat was a renewal of historic values, with added spice.

Christy George, SEJ board president, is special projects producer for Oregon Public Broadcasting.

New Books from SEJ Members 2008-2009

Members - To advertise your 2008-2009 book email the SEJ office at lkhouse@sej.org



wnt10

Paving Paradise by Craig Pittman & Matthew Waite

Pittman & Waite explain the illusions of "No Net Loss" wetland protection, exposing the unseen environmental consequences of rampant sprawl. University Press of Florida

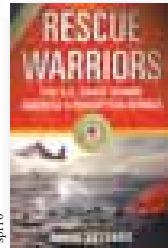


spring10

Gators, Gourdheads and Pufflings

by Susan D. Jewell

"In the great tradition of American nature writing" *Sun-Sentinel*. Jewell's witty tales as a wildlife biologist are engrossing. Infinity Publishing



spring10

Rescue Warriors The U.S. Coast Guard America's Forgotten Heroes

by David Helvarg

Brings you into the daily lives of "coasties" whose mix of altruism and adrenaline helps assure the safety of our waters. St Martin's Press

Global Fever

How to Treat Climate Change

by William H. Calvin

The climate doctors have been consulted; the lab reports have come back. Now it's time to pull together the Big Picture and discuss treatment options. University of Chicago Press



summer09

Smithsonian Ocean Our Water Our World

by Deborah Cramer

This companion to the Smithsonian's new Sant Ocean Hall sheds new light on the meaning of the sea in our lives.



wnt10

Smithsonian Books/Harper Collins



summer09

Lake Effect: Two Sisters and a Town's Toxic Legacy

by Nancy A. Nichols

A heart-wrenching story of two sisters, their cancers, and the polluted town they grew up in along the shores of Lake Michigan. Island Press

The Crooked Mile

by Kevin Clemens

Award winning journalist and author, Clemens examines the past, present & future of the energy & infrastructure issues associated with automobiles & transportation.

Demontreville Press, Inc.



wnt10

The Reporter's Handbook

on Nuclear Materials, Energy, and Waste Management

by Michael R. Greenberg

Bernadette M West
Karen W. Lowrie
Henry J. Mayer

An essential reference book presenting scientifically accurate and accessible overviews of 24 of the most important issues of the nuclear era.



spring10

Vanderbilt University Press

Save Gas,
Save the Planet



wnt10

Save Gas, Save the Planet

by John Addison

Millions of Americans are now reducing their transportation carbon footprint by riding clean, riding less and riding together. Optimark Inc



wnt10

Green Your Work

by Kim Carlson

An accessible and compelling how-to guide for making any workplace environmentally friendly & socially responsible-centric. Adams Media

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- ~ *Rural Sprawl: Ecological Consequences of
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PHOTO © GARY BRAASCH

Gary Braasch comparing a 1932 image of Glacier Broggi in the Peruvian Andes, made by Hans Kinzl of Austria, with the scene as he found it in 1999, when the glacier had become just a small patch one kilometer above its previous location. (See related story on page 21.) From *EARTH UNDER FIRE: How Global Warming is Changing the World*, by Gary Braasch (University of California Press, 2007), just released in paperback, April 2009.