SEJournal

Summer/Fall 2012, Vol. 22 No. 2,3

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A quarterly publication of the
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Author Rachel Carson, her notebook in hand on a wharf in Woods Hole, Mass., in 1951, the year she won the National Book Award for *The Sea Around Us*, her first book. For a retrospective on her life and work, see page 5.

PHOTO BY EDWIN GRAY, COURTESY LINDA LEAR CENTER FOR SPECIAL COLLECTIONS & ARCHIVES, CONNECTICUT COLLEGE

SEJ President's Report

It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is the most adaptable to change.

– *Charles Darwin*

By CAROLYN WHETZEL

What will the Society of Environmental Journalists look like in 2013 and beyond? That's the question SEJ's leadership tackled at a day-long retreat in late July.

Results of a research project underwritten by the Brainerd Foundation to identify SEJ's strengths and weaknesses served as a basis for a discussion on a strategic path for the organization over the next three years.

While the research armed the SEJ board of directors with some information to begin retooling, it's clear that more detailed data is needed from members on which programs and services they find most valuable, and what new ones they would like to see SEJ offer.

As a result, SEJ will be actively polling members to gather the necessary information.

Some of the data indicated SEJ should adapt and incorporate new technology to improve its website and communication tools, such as the listserv; offer regional events; offer programs for journalists working on new media platforms; and rely less on foundation grants and more on individual donations and earned income.

One clear message the findings showed is that SEJ is "a community of journalists who care about good reporting on the environment" and are a "network of people who help each other."

The next step for SEJ's leadership is to develop a focused roadmap for a sustainable future in the evolving media industry that will help all journalists navigate the complexities of covering environmental issues. That plan also must reflect the funding challenges facing nonprofit groups. As always, the plan will be posted on the website.

Organizations, like any species, must change to survive. The board's job is to ensure SEJ adapts and stays on the right side of change.

As I write this column, my last as SEJ president, Douglas Fischer, the board's future sites chair, is talking to officials at Colorado State University and other universities to pique their interest in hosting a future SEJ conference. SEJ recently accepted an invitation from the University of Tennessee, Chattanooga to return to that city for its 2013 conference — UT hosted SEJ's 1998 conference.

"None of these conference leads materialize out of thin air," Douglas told me. "They happen because interested members reach out to contacts in their city or local university and introduce them to me. We're talking to CSU because Fort Collins SEJ member Bobby Magill pitched the conference to university administrators there. I'm talking to University of Chicago thanks to a Michael Hawthorne introduction." Chattanooga only happened because SEJ member Peter Dykstra opened the door for Douglas to UT's David Sachsman, also an SEJ member, he added.

Douglas said he's ready "to work with other members to develop conference proposals."

In my nearly 11 years serving on SEJ's board, I have never ceased to be amazed at how much SEJ accomplishes with so little.

A dedicated, small team of full- and part-time workers are the engine that runs SEJ on a daily basis. But it's the member volunteers that fuel the SEJ engine and make possible the *SEJournal*, the annual conference, the awards program, the various listservs, the Freedom of Information Task Force, the freelance directory that connects editors with journalists, and much, much more.

SEJ also expands its reach by partnering and collaborating with other organizations, including the universities that host the conferences.

Earlier this year, Michigan State University's Knight Center for Environmental Journalism teamed up with SEJ to host two workshops for journalists and scientists to improve climate change coverage in the Great Lakes region. SEJ also partnered with Reporting on Health at the University of Southern California to host a webinar on using human testing in environmental health and storytelling and with the Environmental Law Institute to host a program on the environmental, energy, and natural resources issues the 2012 presidential candidates should address.

Meanwhile, SEJ has just named the winners of its 11th annual awards for environmental journalism, including for the first time awards for photojournalism. Staff also has just started processing applications for a new round of Fund for Environmental Journalism grants.

Randy Lee Loftis of the *Dallas Morning News*, co-chair of the 2012 conference, is working with SEJ's conference team and Texas Tech University to bring SEJ members yet another information-packed event in Lubbock Oct. 17-21.

In Lubbock, my two years as SEJ president come to an end. I have two remaining years in my term on the board and I will continue to help SEJ adapt to the challenges ahead so that it can survive to strengthen the quality, reach and viability of journalism across all media to advance public understanding of environmental issues. Thank you for the opportunity to serve on the board of this organization.

Carolyn Whetzel covers environment issues in California for Bloomberg BNA.

The Carson Effect

How Silent Spring shaped (and still shapes) modern environmentalism

In 1981, Rachel Carson was honored seventeen years after her death by appearing on a 17-cent First Class 'second ounce' commemorative postage stamp.

U.S. POSTAL SERVICE

By WILLIAM SOUDER

Half a century ago, at four o'clock on the afternoon of August 29, 1962, President John F. Kennedy stepped to a lectern at the State Department for a press conference. By the time he was finished the modern environmental movement had begun.

Kennedy started that day by announcing the retirement of Supreme Court justice Felix Frankfurter. He then took questions about farm policy, tensions in Berlin, and whether he would meet with Nikita Khrushchev during the Soviet premier's upcoming visit to the United Nations in New York. Kennedy was also asked about less routine matters. There were several vaguely portentous questions about a recent increase in shipping traffic from the Soviet Union to Cuba.

Near the end, a reporter brought up an unusual subject, but one that had lately been on everyone's mind: "Mr. President, there appears to be a growing concern among scientists as to the possibility of dangerous long-range side effects from the wide-spread use of DDT and other pesticides. Have you considered asking the Department of Agriculture or the Public Health Service to take a closer look at this?"

"Yes," the president answered quickly, "and I know that they already are. I think, particularly, of course, since Miss Carson's book, but they are examining the issue."

In this moment something new came into the world, as the gentle, optimistic proposition called "conservation" began its transformation into the bitterly divisive idea that would come to be known as environmentalism. The president's promise of an investigation into the contamination of the environment by a widely used and economically important class of products had no precedent. And like the worrisome line of Soviet ships heading to Cuba, the possible dangers of pesticides would soon be seen as posing an existential question: Was mankind on the brink of extinguishing itself?

The next day Kennedy appointed Jerome Wiesner, his science adviser, to head a commission that would examine the claims in "Miss Carson's book."

Unlikely figure at center of firestorm

Miss Carson was, of course, Rachel Carson — unknown to many people now, but in those days among America's most celebrated and beloved writers. Carson had written three lyrical books about the sea before the book to which President Kennedy had referred, the bristling, anti-pesticides polemic *Silent Spring*. Technically, it was not yet actually a book, as publication was still a month away at the end of September. But three long excerpts from *Silent Spring* had appeared in the *New Yorker* magazine in June.

By the time of Kennedy's press conference the *New Yorker* articles had raised public alarm in the United States and abroad — and prompted the chemicals industry to launch an angry and concerted effort to discredit *Silent Spring* and destroy its author.

The woman at the center of this firestorm scarcely seemed capable of becoming such a polarizing figure. Rachel Carson was 55 years old and had spent most of her adult life in the company of her mother — writing, bird-watching, and visiting the seashore. Petite, soft-spoken, and nearly apolitical, she now lived quietly in a leafy suburb of Silver Spring, Maryland with a cat and her orphaned ten-year-old grand-nephew, Roger Christie, whom she had adopted.

Carson earned a masters degree in zoology at Johns Hopkins University, but had never worked as a scientist. In the gloom of the Great Depression, she instead found a job as an information specialist with the federal government's Bureau of Fisheries, an agency later merged with the Biological Survey to form the United States Fish and Wildlife Service. In 1951 her book *The Sea Around Us* made Carson's literary reputation — it stood atop the *New York Times* bestseller list for thirty-nine weeks and won the National Book Award — and she left government service.

Every spring Carson and Roger drove north to Southport Island on the Maine coast, where she owned a cottage on a rocky bluff overlooking Sheepscot Bay. Here Carson passed her summers in reflection, gazing at the ebb and flow of the sea, collecting marine specimens in the tidal pools along the shore, and visiting, often deep into the fog-shrouded nights, with her neighbors Dorothy and Stanley Freeman. In the fall, she went home.

A slow writer who revised endlessly, Carson had worked on *Silent Spring* for almost four years — though she had worried for much longer than that over the new pesticides developed at the

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To strengthen the quality, reach and viability of journalism across all media to advance public understanding of environmental issues

The Society of Environmental Journalists (SEJ) is a non-profit, tax-exempt, 501(c)(3) organization. The mission of SEJ is to strengthen the quality, reach and viability of journalism across all media to advance public understanding of environmental issues. As a network of journalists and academics, SEJ offers national and regional conferences, publications and online services. SEJ's membership of more than 1,350 includes journalists working for print and electronic media, educators, and students. Non-members are welcome to attend SEJ's annual conferences and to subscribe to the quarterly *SEJournal.*

Send story ideas, articles, news briefs, tips and letters to *SEJournal* Editor A. Adam Glenn at aadamglenn@hotmail.com. To submit books for review, contact Book Shelf Editor Tom Henry at thenry@theblade.com.

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Carson Effect
continued from page 5

outset of World War II and in the years immediately after. One of the best known and most widely used of these compounds was a molecule of chlorinated hydrocarbon called dichloro-diphenyl-trichloroethane — DDT.

Although it had been first synthesized in 1874, no practical application for DDT was found until 1939, when a 40-year-old chemist named Paul Muller, who worked for Geigy Drug Industries in Basel, Switzerland, discovered that it killed insects. DDT was immediately deployed against an outbreak of potato beetles in Switzerland. It was astonishingly effective — highly toxic and long-lasting, DDT's fatal properties lingered on anything it touched. And because doses that killed insects appeared harmless to warm-blooded animals, including humans, DDT was soon used against lice, ticks, and mosquitoes that transmitted human diseases.

Production of DDT was ramped up during World War II to speed it to combat zones for use as a de-lousing agent, particularly on refugees streaming out of Nazi-occupied territories. When the U.S. Army sprayed more than a million civilians with DDT and successfully halted a 1943 typhus epidemic in Naples, the new pesticide was hailed as a panacea against the insect-borne diseases that plagued mankind. In 1948, Paul Muller won the Nobel Prize in Physiology or Medicine. At the award ceremony, DDT was declared a major discovery that illustrated the "wondrous ways of science."

Not everyone was sure of that.

Parallels drawn between pesticides, radioactive fallout

Rachel Carson had been worried about DDT since 1945, when she helped write a series of press releases alerting the public to threats it posed to wildlife that had been discovered in tests of the miracle insecticide carried out by the Fish and Wildlife Service at Patuxent Research Refuge in Maryland. Scientists at Patuxent warned that enthusiasm for DDT should be tempered with "grave concern." Like any poison, DDT, the researchers said, was a "two-edged sword" that was likely to cause extensive collateral damage in widespread use.

The studies continued, and by 1947 Patuxent had a staff biologist whose sole job was to investigate "DDT problems." Carson, who routinely supplemented her income with freelance work, pitched a story about the dark side of DDT to the *Reader's Digest.* But the magazine passed.

Meanwhile, as the Fish and Wildlife Service was monitoring the effects of aerial DDT spraying on forest ecosystems in

As a U.S. Fish and Wildlife Service writer and editor early in her career, Rachel Carson (right) spent many hours visiting refuges to gather material for the agency's publications, often accompanied by wildlife artist Bob Hines (left) who illustrated her third book, *The Edge of the Sea.* U.S.FISH & WILDLIFE SERVICE

Maryland, the United States exploded three nuclear devices — one at Alamogordo, N.M., in the test of a bomb called "Trinity," and two in Japan, where the cities of Hiroshima and Nagasaki were leveled and somewhere between 150,000 and 250,000 people died. During the Cold War of the 1950s and early 1960s, a number of countries — but principally the U.S. and the Soviet Union — continued to conduct atmospheric tests of nuclear weapons. A moratorium was agreed to in 1958, and such tests were suspended until the summer of 1961, when the Soviet Union announced it would resume its atmospheric program. Over the course of the next three months, the Russians exploded thirty-one nuclear devices, including one 3,300 times more powerful than "Little Boy," which had been dropped on Hiroshima.

Fearful of the Soviets gaining an advantage and under pressure from Congress and the public, President Kennedy, who had campaigned on a pledge to enact a permanent ban on testing, reluctantly re-started American tests in the spring of 1962. Between April and November the United States exploded 35 nuclear devices in the atmosphere — about one every five days. When a comprehensive ban ended the era of atmospheric testing in August of 1963, a total of 521 nuclear devices had been exploded above ground — 199 of them by the United States.

A by-product of these tests was the debris carried on high-altitude winds that eventually returned to earth as radioactive fallout — notably the isotopes strontium-90 and iodine-131. High concentrations came down in the central United States, where people, especially children, were exposed through the consumption of milk from cows that were pastured in areas where fallout landed.

Radiation exposure was understood to be a potential health hazard, but for years there was no scientific agreement as to how serious this might be. In 1957, a group of prominent scientists who believed radioactive fallout had as yet done little to harm humans, nonetheless urged the

> Carson recognized a parallel between pesticides and radioactive fallout that was "exact and inescapable."

United Nations to seek an international limit on atmospheric testing. The Atomic Energy Commission disagreed. The government's position was that atmospheric testing could continue as it had for decades without — in the words of the *New York Times* — "posing any danger to mankind." Then came the spate of testing in 1962, and by the following spring strontium-90 levels in milk had doubled in some areas.

Invisible and ubiquitous, undetectable without special instruments, radioactive fallout was a strange and terrifying thing — a poison whose effects might not be experienced for years or even decades following exposure. It was the same for DDT, which was also discovered in milk.

Carson recognized a parallel between pesticides and radioactive fallout that was "exact and inescapable." Our species, Carson reasoned, having evolved over thousands of millennia, was well-adapted to the natural world, but was biologically defenseless in an unnaturally altered one. Pesticides and radiation, apart from their acute toxicities, were also mutagenic — capable of damaging the genetic material that guides the machinery of living cells and provides the blueprint for each succeeding generation.

Carson believed that widely dispersed and persistent substances like DDT and radioactive fallout — which contaminated the environment not in isolated, specific places, but instead throughout the entirety of the global ecosystem — were the inevitable and potentially lethal developments of the modern age, each one a consequence as she put it bluntly in *Silent Spring*, of the "impetuous and heedless pace of man rather than the deliberate pace of nature."

"It was a spring without voices. On the mornings that had once throbbed with the dawn chorus of robins, catbirds, doves, jays, wrens, and scores of other bird voices there was now no sound; only silence lay over the woods and marsh."

— Rachel Carson, *Silent Spring*

Parable of a town, entombed

Carson began *Silent Spring* with a short, foreboding fable that would become one of the great set-pieces in American literature. In it Carson imagined a nameless town "in the heart of America where all life seemed to live in harmony with its surroundings." This idyllic place, flanked in every direction by lush farm fields and cold, clear-running trout streams, was home to an abundance of wildlife — foxes and deer and especially birds, an aviary so rich during the migrations of spring and fall that people travelled great distances just to see it. So it had been, Carson wrote, since "the days many years ago when the first settlers raised their houses, sank their wells, and built their barns."

But then a "strange blight" invaded the area. It was like an "evil spell" that brought with it unexplainable sickness and death to livestock. Chickens laid eggs that did not hatch, cattle and sheep turned up dead, pigs gave birth to stunted litters that lived only days. The fish in the rivers died and the trout anglers stayed away. People, too, fell ill. Some died, leaving their families grieving and their doctors perplexed. The roadsides, formerly lush with bushes and wildflowers, were now brown and withered, "as though swept by fire." Here and there, a mysterious white powder clung to the rooftops and lay in the gutters of the houses in the town, deadly traces of something that had "fallen like snow" from the skies only weeks before. And everywhere there was an ominous quiet, a silence that closed off the town and its surroundings from the living world as if the area had become entombed.

There was a strange stillness. The birds, for example — where had they gone? Many people spoke of them, puzzled and disturbed. The feeding stations in the backyards were deserted. The few birds seen anywhere were moribund; they trembled violently and could not fly.

It was a spring without voices. On the mornings that had once throbbed with the dawn chorus of robins, catbirds, doves, jays, wrens, and scores of other bird voices there was now no sound; only silence lay over the fields and woods and marsh.

Impact immediate, as was counter-attack

The furor over *Silent Spring* began at once. In the weeks following publication of the first excerpts in the *New Yorker*, moody stories expressing shock and outrage began appearing in newspapers across the country. Some compared the book to *Uncle Tom's Cabin*, and predicted an earthquake of change in the way pesticides were used. Most reports nervously welcomed Carson's dire warning about chemical contamination of the environment, although many also acknowledged a rapidly building counter-attack from trade groups and a chemicals industry that decried Carson's book as unscientific and one-sided, arguing that she took no account of the economic and health benefits achieved through the use of pesticides.

Some of Carson's detractors imagined her in league with a lunatic fringe that included food faddists, anti-fluoridationists, organic farmers, and soft-headed nature lovers. A major pesticide manufacturer threatened Carson's publisher, Houghton Mifflin, with a lawsuit if *Silent Spring* was issued without changes, saying they believed and would attempt to prove that Carson was a front for "sinister influences" in the Soviet Union and its eastern European satellites that were intent on undermining America.

The Department of Agriculture meanwhile told the *New York Times* it was being deluged with letters from citizens expressing "horror and amazement" that the agency permitted the wide use of such deadly poisons. The Book of the Month Club announced *Silent Spring* as its main selection for October, proof that Carson was still expected to be popular even though she'd hit a nerve. A

"The fierce opposition to *Silent Spring* put Rachel Carson and everything she believed about the environment firmly on the left end of the political spectrum. And so two things — environmentalism and its adherents — were defined once and forever."

newspaper in London reported that "a 55-year-old spinster has written a book that is causing more heart-searching in America than any book since Upton Sinclair's *The Jungle* forced Chicago to clean up its abattoirs."

In October of 1962, just after *Silent Spring* arrived in bookstores, American intelligence discovered that the Soviet ships recently traveling to Cuba in large numbers were delivering missiles, launch equipment, and the personnel needed for construction of a base capable of initiating a nuclear strike against the United States from only ninety miles away. By the time *Silent Spring* had made it to the top of the *New York Times* bestseller list on October 28, Cuba was under a naval blockade and the U.S. and the Soviets were on the brink of war. War was averted — the Soviets backed down in the face of U.S. resolve and removed the weapons from Cuba — but public anxiety about the nuclear age remained high, joined now by a new worry about chemicals contaminating the environment.

Defining fault lines of environmental divide

The hostile reaction to *Silent Spring* contained the seeds of a partisan divide over environmental matters that has since hardened into a permanent wall of bitterness and mistrust. There is no objective reason why environmentalism should be the exclusive province of any one political party or ideology — other than the history of the environmental movement beginning with *Silent Spring.*

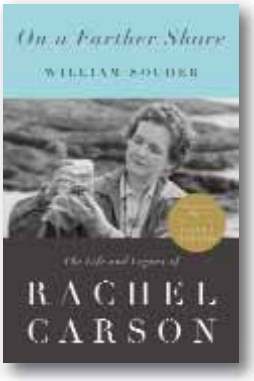
The labels for Carson rained down on her like fallout: subversive, anti-business Communist sympathizer, health nut, pacifist, and, of course, the coded insult "spinster." The fight against *Silent Spring* came from the chemical companies, agricultural interests, and the allies of both in government — the massed might of the establishment. The fierce opposition to *Silent Spring* put Rachel Carson and everything she believed about the environment firmly on the left end of the political spectrum. And so two things — environmentalism and its adherents — were defined once and forever.

In 1960, at the halfway point in writing *Silent Spring* just as she was exploring the connection between pesticide exposure and human cancer, Carson was herself stricken with breast cancer that had already metastasized by the time her surgeon performed what he falsely told her was a "precautionary" mastectomy. Carson endured a series of brutal radiation treatments that slowed but could not halt the advance of her disease.

Somehow, she finished *Silent Spring* and lived long enough to see it vindicated — first in the spring of 1963, during an hour-long installment of *CBS Reports* in which Carson convincingly answered her critics, and then in the report of President Kennedy's commission on pesticides. Eric Sevareid, who had anchored the *CBS Reports* program on Carson, reported in a follow-up that the presidential commission had confirmed that pesticides were, in fact, a "danger in the air, and in the waters and the soil, and the leaves and the grass."

Happy at this outcome but exhausted, Carson confided in a letter to her friend Dorothy Freeman a feeling that her work was at an end, as would be her life before long. "I'm just beginning to find out how much I wanted sleep," Carson wrote. "It is delicious to give in to it."

Rachel Carson died on April 14, 1964.



SEJ member William Souder is the author of two previous books: A Plague of Frogs *and* Under a Wild Sky, *which was a finalist for the Pulitzer Prize. This essay is excerpted from his latest book,* On a Farther Shore: The Life and Legacy of Rachel Carson (*© 2012 by William Souder, published by Crown Trade, a division of Random House, Inc.*). *The book will be published in September on the 50th anniversary of the publication of Carson's book,* Silent Spring, *in 1962. Souder lives in Grant, Minn.*

Bridging the journalism/science divide, professions seek new ways to collaborate

By BUD WARD

Rogers and Hammerstein taught us in the ageless musical Oklahoma that "the farmer and the cowman should be friends." But there's nary a word about the ideal relationship between the journalism and science communities. "Friends" is a term few ink-in-the-veins journalists might want to see attached to their news sources. In some ways, journalists and scientists are just beginning to get the message about the nexus between their professions. With their shared commitments to verification, authentication, transparency, and, if you will, "truth," there would seem to be lots of ways for their two disciplines to get along and learn from each other.

And they can do so while preserving their own independence and remaining loyal to their underlying principles — especially important at a time when traditional news organizations, in particular major metropolitan daily newspapers, are undergoing wrenching and in many cases foundation-shaking changes.

Scientist in the newsroom, reporter among the scientists

But there's evidence the two professions are trying to work together in new ways.

CBS News, for instance, recently began a partnership with a respected environmental scientist, M. Sanjayan, bringing him into its flagship news operations to comment as the network's "Science and Environmental Contributor." What makes the collaboration so interesting — and so unusual in the "mainstream" journalism world — is that Sanjayan will continue in his capacity as lead scientist with The Nature Conservancy.

Given Sanjayan's considerable experience and skills in communicating with general audiences on complex environmental and science issues, the partnership no doubt has the potential to improve environmental and science communication for CBS News audiences.

But it's precisely the kind of church-and-state collaboration — pairing a "straight news" operation with a representative of an outside policy advocacy interest organization — that used to raise the hair on the backs of news executives. A pity, some might say, that CBS News couldn't, or didn't, find a full-time "credentialed" journalist to fill that need.

In another example, *New York Times* technology correspondent David Pogue recently regaled a National Academy of Sciences "Sackler Colloquium on the Science of Science Communication" with smart ways to have some audiences eat their science spinach — even when it may not tickle their taste buds. Recently named host of PBS's NOVA scienceNow (http://tinyurl.com/7vqdl), Pogue has written regularly for *Scientific American*, provided on-air science coverage for CBS's Sunday Morning, and been profiled on CBS's "60 Minutes" and "48 Hours." The online video of his 27-minute Sackler presentation (http://tinyurl.com/czswh24) is worthwhile viewing for SEJ members interested in broadcast science news.

Do what researchers do – pretend it's about cancer

On a somewhat lighter note, a posting poking fun at science writing at the American Association for the Advancement of Science's Science Career blog spoofs the practitioners and at the same time brings smiles and laughs, and also something of a scold.

In "The Unwritten Rules of Journalism," (http://tinyurl.com/cva9nej) writer/scientist Adam Ruben deadpanned that "Science writers appear to obey a collection of unwritten rules when trying to convey science to a mainstream audience." Some of his examples:

- "Start your article with a personal anecdote, even if it's narcissistic or tangential to the rest of the piece."
- "Put the reader at ease by discussing at length the small details of the day you met the scientist. Did you have coffee? Who ordered what? These elements are just as important as the details of the scientific discovery …. In your story, use one sentence, such as: 'Dr. Anderson, who showed up 5 minutes late and ordered a medium cappuccino, discovered something about cystic fibrosis. Or maybe anthrax. But definitely cappuccino.'"
- "Relate the research to readers' everyday lives …. If you truly find yourself unable to determine the relevance of the research, do what the researchers themselves do when asked to write a grant application: Pretend it's about cancer."
- "Don't think of what you're doing as 'dumbing down' science. It is, but don't think of it that way."
- "You are required to use one of the following adjectives when describing a new scientific result: 'breakthrough,' 'landmark,' 'game-changing,' 'innovative,' or 'revolutionary.'"
- "Enabling the equation 'one dissenter = controversy,' include in your article the views of at least one dissenter. Think scientists have settled whether Earth is round? Think again …

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Media on the Move

SEJ members publish e-books, change jobs, gain awards

Last fall **Mark Pendergrast** self-published an e-book and print-on-demand paperback called *Japan's Tipping Point: Crucial Choices in the Post-Fukushima World.* "I'm glad I did, because otherwise my amazing experience and conclusions from my sojourn in Japan would have pretty much served as interesting dinner-table conversation," he said. "In the current publishing environment, I doubt that it would have gotten into print." Having published five critically acclaimed books with major trade publishers previously, he saw this new approach as his best option for telling an important story about Japan's renewable energy efforts.

Mark Schleifstein is joining the Nola Media Group, Advance Publications' new online corporation, following the decision to turn *The Times-Picayune* into a Wednesday, Friday, Sunday publication. Most news reporting assets are being shifted to the new company to publish online at nola.com, while a separate company — Advance Central Services Louisiana — will continue to publish the print edition. Schleifstein, who has worked for *The Times-Picayune* for 28 years, will continue to report on the environment, levees and hurricanes on nola.com.

Jonathan Thompson has returned full-time to *High Country News* as a senior editor, based out of Durango, Colo. He will cover a wide range of environmental, economic and cultural issues, with an emphasis on how communities are digging out of the recession and what the implications are for the environment.

In addition to **Camilla Mortensen**'s duties as a reporter covering the environment and the county beat for the Oregon alt weekly *Eugene Weekly*, she was promoted to associate editor this spring. She's still keeping up with her other career as a folklorist, teaching a course on Folklore and Journalism at the University of Oregon this winter.

News reporter **Chuck Quirmbach** has been conferred the "Distinguished" prefix by the University of Wisconsin-Extension, the university division that operates Wisconsin Public Radio, who employs him.

After four years running *Science News for Kids*, **Janet Raloff** has been formally confirmed as its editor. The online publication reaches some 1.3 million unique visitors a year. In addition she is still senior editor of *Science News*, which has a substantially bigger reach with its separate print, web and iPad editions. She reports: "I've been in the same shop since the late Cretaceous — i.e., 2012 marks my 35th anniversary at *Science News*, a publication that itself turned 90 in March."

Kathie Florsheim continues photographing a summer community on the Rhode Island coast for a project she's headed up since about 2005. Her team of geologists, architects, a GIS specialist and a filmmaker has received a $2500 angel grant from the Boston Foundation for a documentary film and gallery show exploring how the community responds to a receding coastline.

Nate Seltenrich won first place in the Association of Alternative Newsmedia's 2012 AltWeekly Awards, short-form news story category (circulation under 50,000), for three environmental news stories written for the *East Bay Express* in Oakland, CA. This contest includes work from weekly newspapers across the United States and Canada.

Robert McClure has been promoted to executive director of InvestigateWest, a Seattle-based journalism studio covering the Pacific Northwest with an emphasis on the environment, public health and government integrity. With other former *Seattle Post-Intelligencer* journalists, he was a co-founder of InvestigateWest in 2009. InvestigateWest's work has appeared in a number of outlets including MSNBC.com, the *Seattle Times*, KUOW FM, KCTS 9 television and *Conservation* magazine.

Tara Waters Lumpkin is now Editor-in-Chief of IZILWANE (www.izilwane.org). IZILWANE is a participatory, online, multimedia platform that educates about the biodiversity crisis, sixth extinction, and human ecology. The ezine focuses on changing how humans perceive themselves in relationship with other species and ecosystems. Individuals (including youth) from around the world are trained, virtually and in person, by a team of writers, photographers, and videographers to be "citizen eco-reporters." The all-volunteer project is also looking for contributors and for editors, outreach assistants, grant researchers and others interested in participating.

Brett Israel joined the full-time staff of *Environmental Health News* and *The Daily Climate* in March as Senior Editor/Staff Writer. Brett was previously a writer for the website *Our Amazing Planet* and a part-time researcher/contributor for *EHN* and *TDC*.

He is one of two senior editors who oversee the daily aggregation published by *EHN*, and he'll pitch in as *EHN* and *TDC* increase their original reporting content.

The Southern Environmental Law Center awarded SEJ member **Bruce Henderson** this year's Phillip D. Reed Memorial Award for Outstanding Writing on the Southern Environment in the Journalism category. The veteran environmental journalist won for "Climate of Change: The Reshaping of North Carolina," published in *The Charlotte Observer*. He and the book winner receive a $1,000 prize and an award.

Sara Shipley Hiles is an assistant professor at the University of Missouri's journalism school this year. She will be part of the magazine faculty, teaching writing, science/health/environmental journalism and convergence classes, and she will also oversee student journalism projects. Previously a reporter in St. Louis, New Orleans and elsewhere, she has been teaching journalism for six years.

Jeff Turrentine has been named the new articles editor at *OnEarth* magazine, where he'll be assigning and editing both features and front-of-the-book pieces as well as contributing to the web version of the magazine, at onearth.org. Prior to joining *OnEarth*, Jeff was a senior editor at *Architectural Digest* and a staff writer for *The Washington Post*. He is also a book and pop-culture critic whose work has appeared frequently in *The New York Times Book Review*, *The Washington Post* and *Slate*.

Longtime SEJ member **John Ryan** of Seattle has won the Society of Professional Journalists' Sigma Delta Chi award for

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EPA's ECHO database

Your two-faced best friend

By KATE GOLDEN

In late 2009, Wisconsin Gov. Jim Doyle touted ethanol producer Didion Milling Inc.'s award of $5.6 million in federal stimulus funds for energy-efficiency projects. The state had helped Didion get the award. But what Doyle didn't mention (http://tinyurl.com/2fk3uxt) was that Didion was one of the state's most chronic air and water polluters, designated by the federal government as a "high priority violator."

Didion, which casts itself as an eco-friendly company, settled a lawsuit with the state in 2010, agreeing to pay $1.05 million for 23 air and water claims that stretched back to 1989.

Had federal contract administrators simply checked ECHO, the U.S. Environmental Protection Agency's public database of environmental compliance, they would have seen that Didion had at least 11 notices of violation — among the most for any Wisconsin facility listed at the time.

That's how I learned almost instantly that the tip I'd gotten on Didion was good.

The Enforcement and Compliance History Online (www.epa-echo.gov/) shows enforcement data for more than 800,000 facilities regulated under the Clean Water Act, Clean Air Act, and the Resource Conservation and Recovery Act, the national hazardous waste law. It reveals how often a facility has been inspected, the number of notices of violations of each type, and whether the company has paid for any violations, among other things.

ECHO also is offering beta versions of records on drinking water and criminal enforcement, although I haven't used those much.

Naturally, this official database of numbers, permits and violations is bereft of the human stories that make us care about pollution. You'll have to find those elsewhere.

But ECHO can give you an excellent start on these kinds of questions: How well is a particular industry being monitored? Who are the biggest violators in your area? Are regulators following up on notices of violation with formal punishment? Are violators getting handouts from state or federal programs? (The handouts aren't in ECHO, but you can match the facilities with other databases or documents.)

The search query is nimble. You can search for facility names or by industry. By geographic region, down to the zip code. By its enforcement history. By how much toxic stuff it releases into the environment. And you can produce the output on a Google map or export a spreadsheet.

But as you begin, beware. Not all violations are equal.

Didion had built 15 grain silos, three mills and a grain dryer without ever applying for the required air pollution permit. Those were big. But some violations you'll encounter in ECHO are ho-hum, like late paperwork.

You have a few ways to winnow out less interesting violations. Narrow your search to "high priority violators," "significant" violations, facilities in current noncompliance, or ones that emit a lot of pollution and so are automatically more newsworthy. When you find something, call the enforcers and get the details. Then call local advocates and ask them how much they care.

That's my basic message on ECHO: It's a useful tool but not an authoritative source. You need actual people or other documents to verify what you find.

What ECHO is missing

ECHO's many official-looking details may give the appearance that it spits out everything of consequence about a site. Not so.

Scott Fallon, an environmental reporter at *The Record* in Bergen County, N.J., has been covering the toxic hexavalent chromium plumes underneath Garfield, N.J, which he calls "one

A row of grain silos at the Didion Milling company's ethanol plant in Cambria, Wisconsin, which also makes dried distiller grains as a byproduct that are used for animal feed.
PHOTO BY MATTHEW WISNIEWSKI, GREAT LAKES BIOENERGY RESEARCH CENTER

of the most contaminated sites in New Jersey." (http://tinyurl.com/2cbos2q)

Fallon notes that if you looked up the E.C. Electroplating facility in ECHO, you'd miss a lot: That it's been a Superfund site since October 2011. That the EPA is in charge (ECHO lists the state, which hasn't had control for years.) That the primary contaminant is hexavalent chromium. And that there is a public health threat; the chromium has migrated off the site and underneath nearby homes. ECHO doesn't even link to the Garfield Superfund page, Fallon says.

(ECHO) is a useful tool but not an authoritative source. You need actual people or other documents to verify what you find.

Another problem is that sites are listed by facility, not company. A search for "Didion" yields 13 facilities in Wisconsin, Missouri and Ohio. It's not at all clear which facilities are connected to the Cambria, Wis., facility with the terrible track record. So if you want to find a company that has a pattern of noncompliance at several facilities, you'll need to research where those facilities are and what they're called.

The focus on facilities rather than companies also makes it difficult to match bad actors with other databases, such as federal contracting records.

When ECHO is wrong

Fallon's example illuminates another problem: ECHO is rife with inaccuracies, lags and omissions. A 2010 audit (http://tinyurl.com/cf66bn8) found just 8.5 percent of "key data elements" in ECHO were wrong, but it's wise to tread cautiously. I have called state regulators about high-priority violators in current noncompliance only to find the problems were resolved, and I've seen ECHO omit violations I knew existed.

As a result, be wary of relying on metrics calculated from ECHO spreadsheets, like inspection or enforcement rates. EPA's Office of Inspector General uses the data that way (http://tinyurl.com/7lthur5), so theoretically you can too. But you should ask how promptly and accurately EPA or your state has been entering that data, and disclose the caveats.

It can be helpful to see what the EPA knows about the errors in ECHO. First, check EPA's "Data Alerts" on ECHO's front page, which gives you a heads-up about delays, errors and omissions in each state. Then check the State Review Framework (http://tinyurl.com/c9rs4cl), where EPA summarizes where each state fell short in enforcing the federal laws and entering the data into ECHO.

Such enforcement gaps may sometimes be stories, too. The inspector general's office said in a scathing 2011 report (http://tinyurl.com/7lthur5) that EPA's national enforcement is "significantly unequal" from state to state, "providing unequal environmental benefits to the public and an unlevel playing field for regulated industries." The analysis was based in part on data from ECHO.

Kate Golden is a reporter and multimedia producer at the Wisconsin Center for Investigative Journalism.

Approaching their final destination, Florida Wildlife Corridor Expedition members Carlton Ward, Jr. (foreground), filmmaker Elam Stoltzfus (back, left) and wildlife biologist Joe Guthrie paddle their kayaks through south Georgia's Okefenokee Swamp. PHOTO: © MAC STONE

Rancher Ron Bergeron, who is also a commissioner of the Florida Fish & Wildlife Conservation Commission, played host to the expedition team when they rode on horseback over his property located between Big Cypress National Preserve and the Seminole Big Cypress Indian Reservation. PHOTO BY MARIE BERGERON

Filmmaker Elam Stoltzfus (left) and bear biologist Joe Guthrie survey their surroundings after the expedition switched from kayaks to foot travel in Big Cypress National Preserve. PHOTO: © CARLTON WARD, JR.

Ascending north Florida's Suwannee River, the explorers encountered this Ogeechee tupe

Traveling Florida's Lost

Expedition highlights nat

By ROGER ARCHIBALD

Their premise was as old as the human impetus to explore. A small band of like-minded individuals sets out into the wilderness intent on reaching a distant destination, and achieving a likely more distant goal.

While images of Kon-Tiki or Lewis and Clark may rush to mind at such a thought, this band wasn't intent on conquering a vast ocean, or traversing an unknown continent to reach a far shore. Rather than forge a trail through an alien landscape to open the way for future humans to follow, the Florida Wildlife Corridor Expedition sought to do the exact inverse.

This expedition sought to plot a course through the human-forged environment that is present-day Florida in order to reclaim a tenuous natural migratory route that the state's surviving endemic wildlife might once again follow, as they had unimpeded up until the arrival of European settlement 500 years ago.

elo tree growing as a separate island in the tannin-stained 'blackwater' of the river.
PHOTO: © CARLTON WARD, JR.

Wildlife Highways

tural corridors at risk

Accompanied on foot by a group of public land and resource managers and state wildlife biologists, the expedition passes beneath I-75 through one of thirty-six wildlife underpasses specially constructed when the former two-lane "Alligator Alley," which bisects the Florida Everglades, was converted to an interstate highway. PHOTO: © CARLTON WARD, JR.

Illuminated by their headlamps, smart phones and the stars above, the expedition team on occasion traveled at night to keep on schedule and avoid the heat of day while traversing the vast sawgrass expanses of the lower Everglades.
PHOTO: © CARLTON WARD, JR.

Nearing the end of their three-month trek, the four members of the Florida Wildlife Corridor Expedition paddle their kayaks up the Suwannee River en route to south Georgia's Okefenokee Swamp, their final destination. PHOTO BY GENEVIEVE DIMMITT

Consisting of just four members, the team kicked off in mid-January 2012 from the southern-most tip of the Florida peninsula where the Everglades meet the Gulf of Mexico. Over the next hundred days, traveling by kayak, horseback, bicycle and foot, the explorers followed the spring north, threading their way through a thousand miles of the state's myriad inland landscapes.

After surmounting obstacles both natural and man-made in their efforts to ultimately link the various surviving natural habitats along their convoluted route, they successfully arrived at southeast Georgia's Okefenokee Swamp in a downpour, but ahead of schedule, on Earth Day, 2012.

Interior Florida a Key to Conservation

The concept for the journey had been years in the making by its

principal architect, conservation photographer Carlton Ward, Jr. (an SEJ member since 2001). He had spent his earlier career on six different biodiversity projects with Smithsonian Institution scientists in Africa, where he documented over 400 different species under study, work that led to his first photography book, *The Edge of Africa.*

An eighth-generation Floridian descended from one of the state's early ranching families, he was acutely aware of the developmental impact Florida's population of 19 million was having on its unique natural environment. "Every time I got back from Gabon," he recalls, "there was another new subdivision on a Florida ranch."

Following his last African expedition in 2004, Ward made a personal commitment to return to Florida permanently and devote his career to preserving and protecting what remained of the state's natural and cultural landscapes. With most of its population living on its coasts, he realized "that left large conservation opportunities in the interior." His first effort to coalesce both his conservation awareness and his professional photography into a proactive organization was the 2004 creation of the Legacy Institute for Nature and Culture (http://linc.us) "which works to celebrate and protect Florida's natural and cultural heritage through art."

Perhaps owing to his own long Florida lineage, the concepts of nature and culture are never separate for Ward. He sees the healthy vitality of established human subcultures dependent on the state's natural resources — such as Native American communities, coastal fisheries and family ranching – to be every bit as critical to the state's environmental health as the survival of wildlife and their natural habitats. Florida ranches, in fact, have been a special interest of his, leading to his second photo book in 2009, *Florida Cowboys: Keepers of the Last Frontier.*

His interest in the upwards of 7 million acres of privately owned ranches in Florida — land that goes relatively unnoticed by the public — led Ward to realize its significance to the survival of the state's indigenous wildlife. In the course of his ranchland photography, he met Joe Guthrie, a wildlife biologist affiliated with the Archbold Biological Station located west of Lake Okeechobee (Florida's largest lake, approximately half the size of the state of Rhode Island), who was conducting black bear research on the same properties.

In contrast to some other parts of the country, the collaboration between ranchers and wildlife researchers in Florida has been especially cordial. "Most ranchers are proud of the wildlife on their property," Guthrie said. "That's because bears and ranchers depend on the same habitat ... and anything you do to improve bear habitat improves Florida panther habitat as well," he added, in reference to the state's signature highly endangered large carnivore. "Carlton caught on to that story."

(The symbiotic relationship between rancher and researcher was tragically fused in 2008 when Guthrie's mentor Dave Maehr, a highly respected wildlife biologist from the University of Kentucky who'd done considerable field work in Florida, died in a plane crash during an aerial bear survey. The plane's pilot, local ranch owner Mason Smoak, was also killed.)

Stringing together natural migratory routes

Ward's first thoughts about reestablishing natural migratory routes between the various publicly protected tracts of Florida wildlands — from Everglades National Park in the south to Osceola National Forest in the north — were piqued in 2006 by a completely contrary state proposal to construct development corridors in the form of toll roads through some of central Florida's largest surviving tracts of natural wildlife habitat.

Route of the Florida Wildlife Corridor Expedition
MAP ILLUSTRATION BY MIKE REAGAN.

The idea of corresponding wildlife corridors came to mind, and he did a web search for "Florida Wildlife Corridor." It generated no responses. He subsequently registered that term as an internet URL; it would become the future expedition's website: (http://tinyurl.com/bvzbnlu).

But the concept of wildlife corridors was not new to Florida. Since 1995, Tom Hoctor, director of the Center for Landscape Conservation Planning at the University of Florida, has been working with the state's Ecological Greenway Network to develop safe passage zones for wildlife to move among adjacent habitats. His work has been especially concerned with specific 'critical linkages' in areas experiencing heavy economic development pressure.

In December 2009, both Hoctor and Ward participated in a black bear workshop at the Archbold Station that Guthrie helped organize in the wake of his mentor's death. It proved to be a seminal event for the creation of the Florida Wildlife Corridor Expedition. During a discussion of the various local wildlife corridors being developed in four different places on the Florida peninsula, Ward asked, "Why can't we string these all together?"

Up until that point, "we never thought to tie the various critical linkages together into a grand initiative," Hoctor says. "That was Carlton's idea."

Confluence of events, including housing bust, spurred expedition

Between the germ of the Florida Wildlife Corridor idea in late 2009 and the embarkation of the explorers in early 2012, a number of events had to happen to make the expedition feasible, many of them fortuitous. Among them, ironically, was the downturn in the economy and national recession that hit the housing market in Florida especially hard. That event significantly reduced the market forces pressuring private land owners to sell out to development interests.

During the same period, two major federal land management programs designed to protect the vast inland watershed of south Florida's Everglades were progressing towards fruition. Rather than fall back on public land acquisition to achieve the desired result, these initiatives instead relied heavily on conservation easements obtained from private property owners to keep their land perpetually in its natural state. And given the shambles of the state's real estate market, conservation easements backed by federal funds suddenly looked a lot more attractive to landowners who might otherwise have contemplated commercial development.

Both programs involve the tributaries of Lake Okeechobee. In July 2010, the Agriculture Department announced the $89 million acquisition of easements to protect 26,000 acres along Fisheating Creek, the only remaining free-flowing waterway draining into the lake, entering from the west.

And in January 2011, the Interior Department announced the creation of the Everglades Headwaters National Wildlife Refuge and Conservation Area, a $700 million effort to protect up to 150,000 acres of the Kissimmee River basin, the lake's largest tributary, which drains from the north. Two-thirds of that acquisition will occur through conservation easements with private land owners, while the remainder will create the country's 556th Fish & Wildlife Service unit open to the public.

Considering the timing of the federal initiatives, Ward concluded, "These events worked out perfectly" as precursors to the Florida Wildlife Corridor Expedition which he and Guthrie were then in the midst of planning. "We couldn't have done this expedition two or three years ago," he added. "It wouldn't have been politically possible."

A bear named M34

One more fortuitous circumstance blessed the planners as they were hard at work developing the expedition's route — and that was provided by a bear. As part of his research at the Archbold Biological Station, Guthrie had fitted a young male designated M34 with a tracking collar in late 2009. The following May it embarked upon what Guthrie describes as an "extraterritorial sojourn," essentially a walkabout typical of such bears during the mating season.

Starting near Sebring, M34 headed north to the outskirts of Orlando where he was unsuccessful in crossing Interstate-4, which bisects the state at that point. He then turned west toward Lakeland, before hooking back southeast toward Lake Okeechobee, and eventually returning to roughly where he'd started. All told, M34 ranged over 500 miles through south central Florida in about two months.

The expedition team drew invigorated inspiration from M34's wanderings. "He filled in the map for us," Ward said. "He proved the route we were planning wasn't just theoretical, but actual from the perspective of a black bear ... He painted in our vision for the Florida Wildlife Corridor." Guthrie was equally effusive in his ursine elation, describing M34 in the expedition's early blog posts as "the bear whose travels helped galvanize our efforts ... whose movements essentially defined the scale at which this landscape needs to be protected."

Five years before embarking on the expedition, Carlton Ward, Jr. photographed this black bear with a camera trap on private ranch land near the central Florida town of Lake Placid. The explorers would later pass on foot within several hundred yards of this spot, as did the well-tracked M34 bear in 2010.
PHOTO: © CARLTON WARD, JR.

When the expedition finally shoved off in their kayaks last January from the southern-most point on the Florida peninsula near the Flamingo Visitor Center in Everglades National Park, there was an immediate sense of palpable relief that the frenetic pace of preparations was finally behind them. "Now we had to just go do the thing," Guthrie noted in the expedition blog.

He and Ward were joined by Elam Stoltzfus, a filmmaker from the Florida panhandle with long experience documenting the state's natural history, who planned to produce a PBS special, and conservationist Mallory Lykes Dimmitt, a former executive director of the Legacy Institute (http://linc.us), who was the team's most experienced kayaker (though a new position she had just accepted with The Nature Conservancy in Colorado kept her from completing all legs of the journey).

From the moment they embarked, the explorers to a great extent emulated what a wild animal might do if faced with the daunting task of making its way north through interior Florida. By their own motive force, they poled their craft up the vast River of Grass that dominates the Everglades' confluence with the sea (a journey rarely undertaken by others), occasionally bumping into an unsuspecting alligator. Ahead of them lay challenging highway crossings, the careful negotiation of an Air Force bombing range, and a wildfire that would force them to detour as they neared their ultimate destination.

But on January 18th, as the Florida Wildlife Corridor Expedition moved forward through the sawgrass on its first full day under way, the explorers' knack for perfect timing remained remarkably intact. Hundreds of miles to the north near Orlando, at one of the Everglade's many sources, Interior Secretary Ken Salazar officially accepted the first donation of land to create the Everglades Headwaters National Wildlife Refuge and Conservation Area.

Roger Archibald is the photo editor of SEJournal.

Colin McDonald puts boots on the ground

'If you're going to write about the environment, you'd better go see it.'

Preparing to post a blog from the field via BGAN satellite uplink, reporter Colin McDonald sets up his office in Big Bend National Park, Texas.
PHOTO BY JONATHAN SMITH / SPECIAL TO *SAN ANTONIO EXPRESS-NEWS*

By NADIA WHITE

In 2008, reporter Colin McDonald moved from Seattle to Texas by first shifting the starting line further north. His 600-mile paddle from Ketchikan, Alaska, to Seattle was an homage to the watery landscape of his youth. The trip also established his credibility as a journalist who was able to go to inaccessible places and return home with a story. Since then, McDonald, who has a degree in environmental journalism from Western Washington University, has built his newspaper career at the intersection of environmental news and adventure writing.

In 2009, he kayaked the entire coast of Texas for his new job as the water reporter at the *San Antonio Express-News*. That "Uncharted Coast" project (http://tinyurl.com/ctst3ft) explored how Texans live in a coastal landscape that changes with every storm, and how that environment is shaped by industries struggling to stay put.

Then, McDonald hiked 140 miles through the desert to preview a hiking trail proposed to connect three large pockets of public land in the Big Bend area (http://tinyurl.com/cbnnbyx). More recently, he floated the Devils River with state officials concerned about the impact greater access would have on the state's cleanest waterway (http://tinyurl.com/d6u326l).

Although each of these outings has been physically rigorous and presented the logistical challenges of outdoor adventure, McDonald said in a recent interview that the process of reporting should not be allowed to upstage the issue at the heart of the story.

"At its best, it's another tool to help tell stories," McDonald said.

"For me, at the most basic, if you're going to write about a watershed you should know that watershed. You should know what the ridges look like and you should know what the bottom looks like," he said. "It just makes reporting so much easier. Sources respect you; readers trust you."

SEJournal found McDonald in San Antonio in May to talk about how he manages to put his boots on the ground and his paddle in the water at a time when many reporters feel increasingly deskbound.

Q: How does your experience in the outdoors help your reporting?

A: If you're going to write about the environment you'd better go out and see it. For example, Big Bend Ranch State Park is trying to make a trail from the state park to Big Bend National Park, a trail that provides a John Muir-style destination long-distance hike. Well, it doesn't exist. It's a great concept. It's a perfect story. You put a satellite unit in your backpack and just walk it and tell,'This is what's out here.' There was no other way to get at that story without walking through it, through different desert ecosystems. I still get comments about that story and I did it three years ago.

Q: You have embarked on several long explorations to confirm the landscape of the news you cover. What made you confident you would find the news you went looking for?

A: That's the real kicker on these stories. By definition you're going to a place where there aren't a lot of people and you can't be sure what's there. When I kayaked the coast of Texas, we called it the *Uncharted Coast* because it changes all the time. My goal was just to go. If I kept my eyes open, there would be four stories a day, more than I could ever get to. There's a pure journalistic thrill. There are few people who know the area, your readers never see it. By definition, whatever stories you tell are new.

I was new to Texas when I did that, so I took fresh eyes to it. I was astonished that people had no access to fresh water. Everything had been under 20 feet of salt water. You have to bring fresh water in. People forget how amazing that is. The houses are on 30-foot stilts because that's what the storm surge is. It's those details that can help get across what it means to live in Hurricane Alley. I could have read reports and done all the reporting from my desk but it wouldn't have been as much fun or as real. It's the smaller details that make the stories authentic.

Q: Have you ever embarked on such a reporting trip and come home without the story you went after?

A: Yeah, I do that when I cover city hall. It's hubris to think that before you leave you know what's out there. If that's the case, you shouldn't go. You have to always check yourself and be open to what's going on. Especially in wilderness areas, there are stories that develop about a place. Border violence is the classic Texas news myth. Not that there isn't violence on the border, but the further away from the border you get, the more biased and tainted those stories become. When you're on the Rio Grande, it's a river. There are some drugs that come across, but it's a wild and remote river. If you mess up out here, you could be a skeleton very quickly. That's just the desert. That's not the drug lords or gun smuggling.

That's the desert. By going out there, you have something to offer the readers that's not a part of that myth.

Q: You often blog during your trips. How do you communicate with your readers during your trip? Is technology a boon or bane for this type of reporting?

A: It's amazing. I can carry a satellite messenger, a cell phone, a laptop and extra batteries. There's no place where technology helps you more. It allows for a tremendous amount of work. That's a great thing and it's an annoyance. If I'm on a trip and it's about a place, if I have to get three or four decent photos and come up with some story about that day, I just have to be on all day. It's exhausting but it intensifies what you're doing. It makes it a lot easier to justify these trips to editors and lets them know you are working.

Q: How did you convince your editors to let you step away from the newsroom for these trips? Are there magic words that make this type of reporting easy for an editor or publisher to say 'Yes' to?

A: I don't really know. I produce a lot of copy. Last year, I did a lot of stories about a water utility with major financial and water supply problems. It was nothing but talking to CPAs and going over spreadsheets. It was the exact opposite of going across Big Bend. There's a balance there. In my own mind, I need to balance those two types of stories. I think editors recognize that. I try to never give them a complaint that I'm not producing enough. And I've been very fortunate to have editors who believe in this stuff.

Q: Have they ever said no to a trip you've proposed?

A: On my bucket list are the lower canyons of the Rio Grande and the Wild and Scenic designation of the Rio Grande River. A lot of people from San Antonio who are now 70-plus years made that happen, oh, 40 years ago. That was the first story my editors just flat out said no.

Q: Why did they say no?

A: We had a reporter go down to the mountains in western Mexico and disappear …If anything happens — and it's not that things can't happen if you go to Detroit, but … to go down the river and ask anybody and everybody you see, 'Why are you here and what are you doing?' If something happens to you, there wouldn't be a lot of sympathy.

With any kind of wilderness experience, there's a constant evaluation of 'What am I perceiving as a danger and what's the reality?' That only gets more complicated on the Mexican border. For now, we're sticking to coverage based on court documents and visits to border towns. This is new to me and I'm not sure how to navigate it. I'm also a gringo who doesn't speak Spanish.

(Editor's note: Former Express-News *executive editor Robert Rivard wrote about the 1998 death of reporter Philip True in the 2005 book,* Trail of Feathers.*)*

Q: What one or two things should a journalist undertaking such a trip do to maximize their success journalistically?

A: All the standards apply: Do as much background research as you can. You will be surprised at what you find, but you don't want to find something out in the field you could have known back home.

I think one of the reasons I'm able to do these trips is I don't get hurt on them. The trip is a way to get to the story and the information. I make the point that my physical wellbeing won't be an issue for my editors, that my technology works. Things can go wrong, but we're supposed to be professionals so you should be able to foresee these things, unless you want to do a story on how I repeatedly messed up. Be prepared.

Q: You have done very arduous reporting trips. To what extent do you share your personal challenges with your readers — the process of moving through a landscape as opposed to the news you are seeking?

A: Unless it's essential to the story, I don't share that very much. It's the same as covering the state legislature. It's a very intense experience that demands all your resources and you have to pace yourself through that. When you're covering city hall and there are big meetings that go past midnight, it's tough but no one writes, 'I sat on an unpadded jury seat for 12 hours.' No one cares. Just because you're camping on a mountain top doesn't mean it's news. You have to be very careful about when you put yourself into the story.

Reporter Colin McDonald hangs on during the Texas Water Safari, a 260-mile river race from San Marcos, Texas, to the Gulf Coast. PHOTO BY BILLY CALZADA / *SAN ANTONIO EXPRESS-NEWS.*

Q: What are your favorite examples of writing at the intersection of journalism and adventure? Who inspires you?

A: Jon Krakauer is probably the standard. *National Geographic* often does a phenomenal job. They play that balance, sometimes the author seems self-centered, sometimes they're just telling the story. Timothy Egan is a great writer about place, and knows when to use I and when not to.

Nadia White teaches environmental journalism, among other things, at The University of Montana. Formerly a long-time reporter at the Casper Star-Tribune, *she is working on a book about journalism and adventure writing. She is following her great-grandmother's migration from Oklahoma to the Klondike gold fields, by bike, kayak and canoe. That adventure unfolds at www.travelswithjosie.com .*

Winners Named in SEJ Awards' New Photo Category

A Vietnamese trader's family has dinner over a pile of bomb shrapnel, cluster bombs and an artillery shell in their hut in Etoum. Vietnamese traders come to the area to buy scrap metal from locals who collect it in the surrounding fields and forest. PHOTO: © JERRY REDFERN

By ROGER ARCHIBALD

In recognition of the contribution photography makes to environmental journalism, the SEJ has included it for the first time as a separate category in the 2012 annual SEJ Awards competition, and several winners were announced during the summer.

The top award went to Jerry Redfern, a freelance photographer and media trainer from Peralta, N.M., for "The Flavor of Danger," published in *Gastronomica* magazine. It documents the estimated 600,000 tons of unexploded ordnance remaining in Laos following the Vietnam War that has killed or injured up to 20,000 mostly rural Laotians since the end of that conflict.

Redfern has spent over six years on the project to produce *Eternal Harvest: The Legacy of American Bombs in Laos* to be published later this year. (Just two days before the announcement of his award, Hilary Clinton visited Laos to discuss the lethal ordnance legacy and other residual issues from the Vietnam War, the first such visit by a U.S. secretary of state since 1955.)

Both second and third place honored photographers for work that appeared in *National Geographic* magazine. David Guttenfelder, chief Asia photographer for the Associated Press working on assignment for the magazine, received runner-up honors for "Japan's Nuclear Refugees," his coverage of the mass evacuations following the March 2011 earthquake and tsunami that disabled the Fukushima nuclear power plant.

"No other organization or photographer took the risk to document this tragedy in such depth," *NG* executive editor Dennis Dimick said. "Guttenfelder took many of these pictures by avoiding security barriers and entering closed areas off limits to everyone."

The final photography honor went to Jim Richardson, a freelancer based in Lindsborg, Kansas, who has been covering food

In a gym in Hirono, Japan, residents in protective suits are briefed before being escorted to their abandoned homes for a visit last June. PHOTO: © DAVID GUTTENFELDER / ASSOCIATED PRESS

and agriculture for the *Geographic* for over twenty years. His story "Food Ark" explored the threat to the human food supply by "the large-scale loss of genetic diversity in domesticated crops and livestock." His coverage of such a broad topic involved travel to five different continents and a frigid island in the Arctic.

The photo winners were chosen by a panel of three judges, part of a team of 21 judges representing writers, photographers, editors and educators all involved with environmental journalism, who selected winners in seven separate awards categories. Top-place finishers in the SEJ Annual Awards receive $500, while others are given certificates.

In a departure from other photojournalism competitions, entrants were not only invited to submit their photos (up to five with captions) of one or more environmental topics. They were also encouraged to include a cover letter of up to 1,000 words that described the difficulties they faced in obtaining the photos entered, the need for photos, and other context-providing information.

Those interested in entering the competition next year might want to remember one thing: While the rules didn't require photographers to limit all their entries to one subject or topic, all of the winning photographers did choose to do so. All the honored work can be viewed on the SEJ website at: http://www.sej.org/node/12442/ .

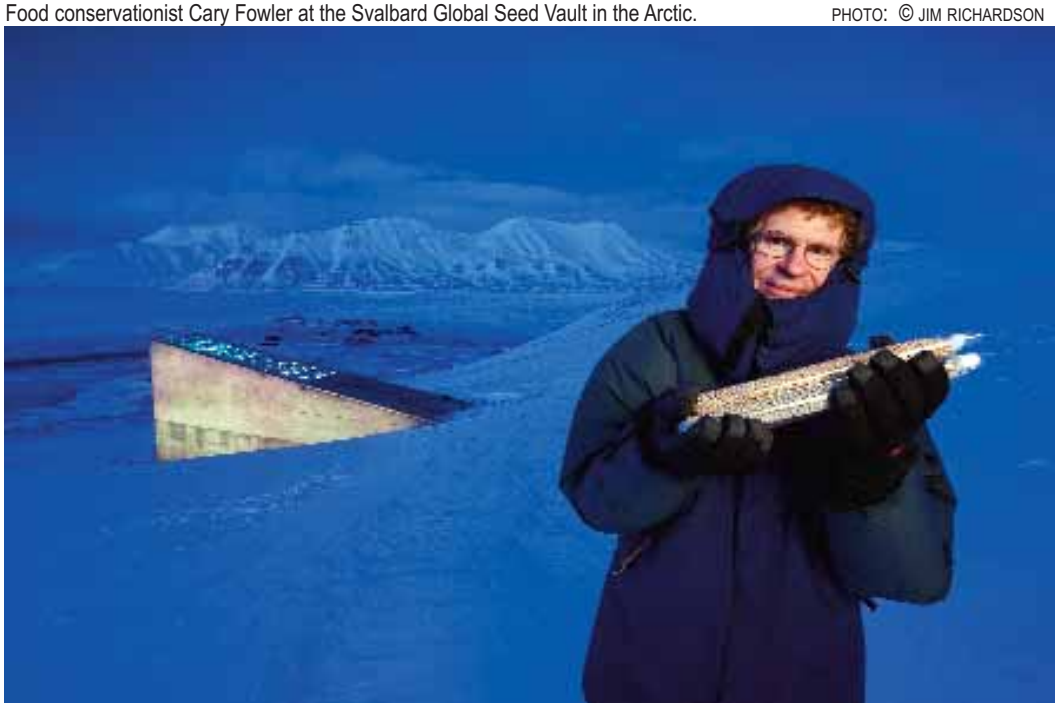
The awards will be given out at SEJ's 22nd annual conference, hosted by Texas Tech University in Lubbock, Texas, Oct. 17-21. SEJ is also continuing its attention to photojournalism with a session — "Using Imagery to Tell Environmental Stories" — planned for the conference on the Friday afternoon, and moderated by author and photojournalist Michael Kodas.

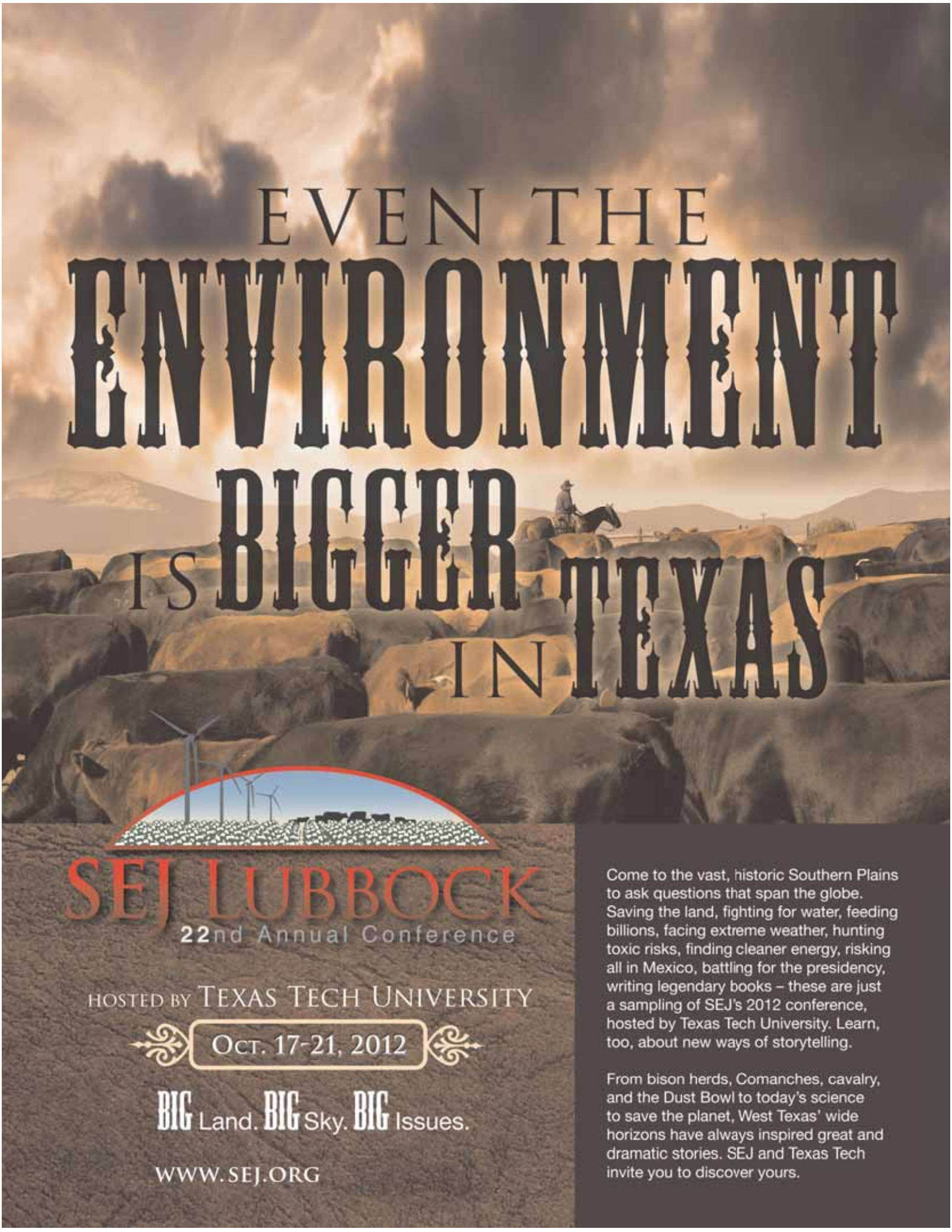
Meanwhile, as SEJ's annual gathering shapes up, national and world headlines have turned the agenda from relevant to crucial. Mass ignorance on climate? We're discussing communicating climate science. Epic drought, killing heat, water shortages? You'll understand extreme weather, how we'll provide food and water to a warming world, and how global trends in deserts directly affect your audience. Plus, there'll be dozens of other topics in the news.

"Nowhere else can journalists, educators and scientists gain so much knowledge and so many story ideas in so short a time," contends Conference Chair Randy Loftis of *The Dallas Morning News*. "Knowledge, of course, is power. Power to tell the stories. Power we can pass on to people who need it." Register for the conference at www.sej.org.

Roger Archibald is the photo editor of SEJournal.

Food conservationist Cary Fowler at the Svalbard Global Seed Vault in the Arctic. PHOTO: © JIM RICHARDSON





SEJ LUBBOCK

22nd Annual Conference

HOSTED BY TEXAS TECH UNIVERSITY

OCT. 17-21, 2012

BIG Land. BIG Sky. BIG Issues.

WWW.SEJ.ORG

Come to the vast, historic Southern Plains to ask questions that span the globe. Saving the land, fighting for water, feeding billions, facing extreme weather, hunting toxic risks, finding cleaner energy, risking all in Mexico, battling for the presidency, writing legendary books – these are just a sampling of SEJ's 2012 conference, hosted by Texas Tech University. Learn, too, about new ways of storytelling.

From bison herds, Comanches, cavalry, and the Dust Bowl to today's science to save the planet, West Texas' wide horizons have always inspired great and dramatic stories. SEJ and Texas Tech invite you to discover yours.

The Scent of Scandal:
Greed, Betrayal, and the World's Most Beautiful Orchid

By Craig Pittman

University Press of Florida, $24.95

Reviewed by: JoAnn M. Valenti

After documenting tales in his first two books of his home state's endangered wetlands (*Paving Paradise: Florida's Vanishing Wetlands and the Failure of No Net Loss*) and its threatened, iconic manatees (*Manatee Insanity: Inside the War over Florida's Most Famous Endangered Species*), Craig Pittman of the *Tampa Bay Times* (formerly known as the *St. Petersburg Times*) turned his attention to a flower.

Not one of Florida's native flowers, mind you. *Phragmipedium kovachii*, more commonly known as p.k., is a recently discovered, endangered orchid from Peru.

And there's the catch: What's this gorgeous, humongous orchid doing in the United States, by way of Miami's notorious international airport inspection, and why is it named after some hippie from Virginia?

In *The Scent of Scandal: Greed, Betrayal, and the World's Most Beautiful Orchid*, Pittman tackles the mystery of how a single flower (or was it only one?) brought an elite Sarasota-based botanical garden to near ruin, a scientist to federal prison, and a cast of some 45 characters plus renowned *Miami Herald* garden reporter Georgia Tasker (along with journalists at *The New York Times*, *People* magazine, PBS's NOVA and other media) into a lengthy battle to discover truth.

I am not normally a mystery story reader. But I do like the board game *Clue*, and that's about the closest I can come to preparing you for this complex, incredibly detailed read. Be advised to dog-ear, or gross out book lovers and rip out the "cast of characters" page, a single two-sided page of names and identifications, as you try to follow this whodunit. Much to his credit, Pittman provides 43 pages of sources. That's right, 43 pages from individuals to government and court reports, FOIA documents, media and beyond. The source list alone is worth the purchase for students trying to learn how to research a story.

The perpetrators come from Wisconsin, New York, Vermont, Virginia, California, Hawaii, Texas, Canada, Ecuador, Peru, Sweden and, of course, Florida, including a staff of orchid specialists at the now scandalized Marie Selby Botanical Garden in Sarasota. Even the country-club boys have a hard time playing through this mess.

Pittman is a master of capturing personalities in visual descriptions and self-revealing quotes. The book includes black & white photos of most of the prime suspects. But the only real picture one gets of the star is on the book's cover, thankfully, in color.

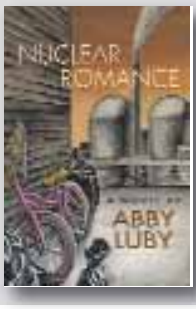
This is a story that screams for more photos of this amazing flower that's driven some to suicide (or was it murder?) and others to abandon their passion for orchids entirely. Clearly, not everyone knows or cares much about the intricacies of the Convention on International Trade in Endangered Species (CITES). Indeed, some orchid aficionados would like to see the demise of CITES, arguing that orchids, like recreational drugs, have been forced into the black market.

Having worked for more than a decade with botanists at the National Tropical Botanical Garden in Hawaii and Florida, I've seen the pride and esteem that come to those who discover new species and have a plant carry one's name forever. Most are dedicated researchers, hard at work to protect the planet. Yet, conflicts between ego and expertise, science and the law are not new in the botanical world.

Pittman manages to capture this real case history where others have tried and not yet succeeded.

JoAnn Valenti, emerita professor and SEJournal *Editorial Board member, loves a spot-on exposé, especially when it nurtures Mother Nature and nips greed in the bud.*

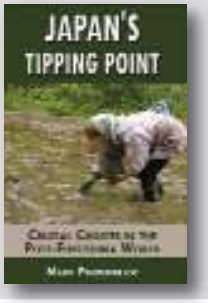
Read These New Books from SEJ Members



Nuclear Romance

by Abby Luby

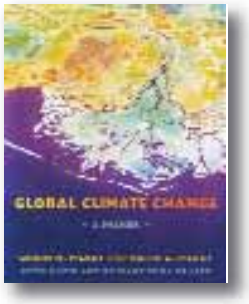
A newsman grapples with reporting about an aging nuclear power plant while becoming involved with a woman from the anti-nuclear movement. *Armory New Media*



Japan's Tipping Point: Crucial Choices in the Post-Fukushima World

by Mark Pendergrast

Can Japan radically shift its energy policy, become greener, more self-sufficient, and avoid catastrophic impacts on the climate? An eye-opening first-person investigation and call to action. *Nature's Face Publications*



Global Climate Change
A Primer
By Orrin H. Pilkey and Keith C. Pilkey
With batik art by Mary Edna Fraser
Duke University Press, $19.95
paperback or $69.95 library cloth
Reviewed by: Tom Henry

Orrin Pilkey, a Duke University geology professor who is one of America's top coastline scientists, has put out a nifty overview of what's at stake with the climate change debate.

It walks readers through the origins and complexities of the issue with no-nonsense candor, then ends with some thoughts about far-reaching geoengineering techniques that scientists are already investigating as radical — but potentially viable — last-ditch solutions if mankind's current generation continues to fail to address the problem enough on a global scale.

The 142-page book is co-authored by his son, Keith C. Pilkey, an attorney with a longstanding interest in geoengineering and corporate influence on science policy. It is illustrated with dreamy batik art by Mary Edna Fraser. Batik art is a centuries-old art form on fabric. Fraser creates hers from a hybrid of maps, satellite images and photographs, with wax used to manipulate her placement of dyes.

The writing offers a strong mix of science and policy, with a heavier emphasis more appropriately on the science. It is impassioned, yet well-grounded and devoid of sentimentalism. Regional pockets of North America and the rest of the world are explored. It makes a convincing argument why people should care more about Miami, Boston, New Orleans and other low-lying areas on this continent, but also what developing news in Greenland, Antarctica, and the South Pacific means.

The book has a strong, yet rational indictment of the political processes that have been distorted. It acknowledges some of the scientific community's communication gaffes and missed opportunities.

It examines the undercurrent of a disinformation campaign pushed by a small-but-vocal opposition, including a good analysis of the spin behind the 2009 controversy over emails that deniers used to suggest dissension among the ranks of the Intergovernmental Panel on Climate Change, the United Nations group of climatologists that won a Nobel Prize for its work on climate change. That alleged scandal, which Pilkey claims was grossly exaggerated for political gain, broke — no coincidence — as negotiations for a landmark global accord on climate change were about to begin in Copenhagen.

The illustrations are beautiful and the writing, while perhaps not as tailored to the layman as Al Gore's books and a few others, is pretty darned solid. It certainly is at a level fit for most journalists, especially those who specialize in environmental writing.

The range of subject matter covered is impressive. It includes overviews on sea level rise, ocean acidification, glacier and sea ice melting, changing habitats, desertification, and impacts to people, animals, coral reefs, marshes, and mangroves.

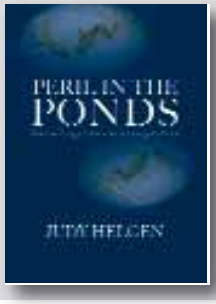
The Pilkeys move from one to another in logical sequence and tie them neatly together to help the reader better understand how one issue affects another.

This shouldn't be your only climate change primer, but it deserves to be on your short list.

Tom Henry is an editorial writer-columnist for The (*Toledo*) Blade. *He is a member of SEJ's board of directors and* SEJournal's *editorial board and is* SEJournal's *book editor.*

Raising Elijah
Protecting our children in an age of environmental crisis
By Sandra Steingraber
Merloyd Lawrence/Da Capo, $26
Reviewed by: Sue Smith-Heavenrich

The environmental crisis is actually two crises, writes Sandra Steingraber. One is what's happening to our planet, the atmospheric accumulation of heat-trapping gasses. The other is the accumulation of toxic pollutants in our bodies. At the core is



Peril in the Ponds
Deformed Frogs, Politics, and a Biologist's Quest

by Judy Helgen
A government biologist gives an insider's view of the highly charged, controversial issue - deformed frogs - that aroused the public, politicians, media, and scientists. *University of Massachusetts Press*

Carry the Flame

by James Jaros
A thriller set after climate change has triggered a worldwide collapse of natural systems. "Gutsy," Publishers Weekly. "Stunning," The Big Chill, International Thrill Writers Magazine. *Harper Voyager*

our dependency on fossil fuels.

Steingraber — ecologist, mother, cancer survivor — has been compared to Rachel Carson, both as a scientist and essayist. So it is fitting that her most recent book, *Raising Elijah*, was released on Earth Day.

As in her previous books, Steingraber writes on a personal level, blending science and memoir. But this time Steingraber speaks as a warrior, a parent determined to protect her children — and all children — from the polluted and climate-challenged world they have inherited.

From pizza to playgrounds, she shows how compounds developed for chemical warfare ended up in our kitchens, our gardens and our schoolyards. Take "pressure treated" wood, the chromated copper arsenate (CCA)-treated beams used to build decks, picnic tables and playground equipment. Great stuff; won't rot. But there was a small problem, Steingraber explained: arsenic started showing up in soil, leaching out of the wood, and getting into children.

How did a chemical deemed too carcinogenic to be handled by adults end up in an industry selling products for children? And what can we as parents do about it?

I'll admit right now that, as an organic gardener, the real reason I picked up this book is the pair of chapters on farming and food. Steingraber opens Chapter 3 with a description of her CSA — a community-supported agriculture farm where she picks up weekly boxes full of fresh berries, vegetables, honey, eggs and even flowers. She writes about organic and conventional farming, cites the National Research Council report highlighting the special vulnerabilities of children to pesticides and asks why the U.S. EPA review on reducing children's exposure to pesticides — due in 1999 — has yet to be completed.

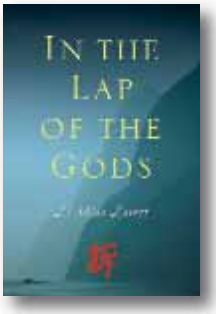
Is organic food healthier for our kids? "Accumulating evidence does seem to point in that direction," Steingraber writes. Researchers have found that children with higher levels of pesticides in their bodies were more likely to display symptoms of attention-deficit/hyperactivity disorder. An ongoing study measures pesticides in umbilical cord blood and promises to follow children throughout their development. But those results are twenty years away and our job, as parents, is to protect our children now. For that reason Steingraber sticks to food grown without poisons.

Those who argue that not everyone can afford organic food need to continue reading into the next chapter, an essay on pizza and ecosystem services. Organic farmers need the same things conventional farmers need: access to credit and markets, crop insurance, infrastructure (processing plants and mills) and university research dollars. The institutional neglect of organic farming means that even when consumers create a demand for pesticide-free food, systemic bottlenecks prevent supply from catching up.

To assuage her insatiable curiosity, Steingraber calculates the cost of baking a pizza from locally sourced organic food. Her pizza for four totals up to nearly $10; a similar pizza concocted from conventionally raised ingredients would cost only $6.25. Still, Steingraber argues that organic agriculture can feed the world and brings the advantages of pollinator services and diversified cropping systems. In 2009, she notes, small farms in New York produced 65 bushels per acre compared to the national average of 44.4 bushels.

For the most part, this is a hopeful book, one that left me leafing through seed catalogs and dreaming about a greener future.

Sue Smith-Heavenrich is an upstate New York writer who specializes in science and agriculture.



In the Lap of the Gods

By Li Miao Lovett
Leapfrog Press, $15.95
Reviewed by: Karen Schaefer

The waters of the Yangtse River are rising rapidly, swallowing the unharvested fields, and lapping at the door of a small, deserted house.

Illiterate scavenger Liu Renfu knows he has little time left if he wants to find anything of value the owners may have left behind in their haste to escape the flooding. But before he can begin his search, Liu hears the cries of a baby. Scooping up the child, Liu rescues the abandoned infant, setting himself on a path that will lead him to try to reclaim his life in the new, industrial China.

In the Lap of the Gods is San Francisco writer and debut novelist Li Miao Lovett's fictionalized account of the human story behind the physical and cultural displacement of more than a million Chinese people by the creation of the Three Gorges Dam

on the Yangtse River.

Touted as the largest engineering feat since the construction of the Great Wall, the dam is the biggest hydroelectric project ever built, with 26 turbines, each capable of producing 700 megawatts of electricity. The Chinese government regards the project — completed in 2008 — as a historic, social and economic success.

But both inside China and abroad, the Three Gorges Dam has sparked major controversy. The dam's reservoir flooded archaeological and cultural sites, swallowed millions of acres of some of China's most arable land, and caused massive environmental changes, including frequent landslides and significant erosion and sedimentation. It also displaced more than 1.3 million people, many whose ancestors had lived in their riverside villages for hundreds, if not thousands, of years.

It's this mass migration of villages, towns and farms — and the cultural and economic upheaval it engenders — on which Lovett focuses her story.

Liu Renfu, desperate for cash, reluctantly tries to sell the baby girl he rescued from the flood, but is foiled by a vehicle breakdown. A former day laborer who hauled coal to ships docked at the small port of Fengjie, Liu is forced to scavenge for a living.

Old Fengjie is now underwater and Liu has moved to nearby Wushan, a new city built above the rising floods. With only a fourth-grade education, Liu's job options are limited and caring for the baby — whom he names Rose — takes much of his time. His only friends are the owner of a local noodle shop, an elderly woman with Alzheimer's who babysits Rose with disastrous results, and a wily old merchant and Cultural Revolution survivor, Fang Shuping, who fences the salvaged goods Liu finds.

In her lucid and sometimes damning narrative, Lovett explores the ways in which people try to adapt to the changing physical, political, and economic landscape that is the new Yangtse.

Liu, who lost his first wife and unborn child to a river accident, marries again, this time to Chang Mei Ling, a young woman whose farmer parents have been forced by government officials to move to less productive land.

Mei Ling has stayed behind to work as a waitress at Liu's favorite noodle shop, sending most of her paycheck back to her parents. But Mei Ling has difficulty adjusting to life as a wife and mother of young Rose.

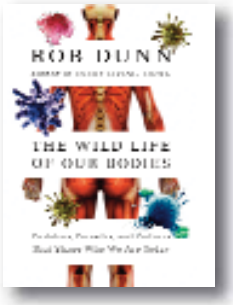
When Liu is laid up with a broken leg after finding steadier work on one of the new tourist boats plying the Yangtse, Mei Ling moves away to a better paid job in a larger city, leaving the young family broken and bereft.

The climax comes as Fang Shuping, the wily businessman, discovers that Liu's orphaned Rose is the granddaughter of the lost love of his youth. He agrees to assist his former lover's village leaders as they move to higher, less fertile ground while the waters of the Yangtse continue to rise. The villagers stage a mass protest, hoping to gain media attention to their plight. But in the turmoil, lives are lost that might have been reunited. And the rising flood of the Three Gorges Dam reclaims its own.

Li Miao Lovett's *In the Lap of the Gods* doesn't approach what John Steinbeck might have accomplished with this classic tale of environmental and human catastrophe. But it doesn't need to. Her sparse prose and almost journalistic approach sharply characterize the lives of Chinese people in the ongoing human drama that is the ever-changing landscape of globalized China today.

Stamped in red letters on the book's cover — and on every chapter page — is the Chinese character written on every building along the Yangtse destined for demolition. That subtle symbol alone is enough to convey the message that China's past and present are still in constant flux.

Karen Schaefer is an Ohio-based freelance journalist with a background in both broadcast and print.



The Wild Life of Our Bodies

Predators, Parasites, and Partners That Shape Who We Are Today

By Rob Dunn

HarperCollins, $26.99

Reviewed by: Muriel Strand

Do we really have that much in common with Ardi, the proto-human who lived in Africa 4.4 million years ago? More than you might think, according to North Carolina state biology professor Rob Dunn.

To explain why and how this matters, he serves up plenty of intriguing science stories about natural ecology, along with some speculations about various human traits such as smooth skin, and scary stories, all in supple prose that keeps the pages turning.

Dunn describes how biological and human cultural

evolution have led us out of Eden, away from Ardi's hunter-gatherer lifestyle, and into domestication and various modern health problems.

Some notable maladies are side effects of living rather differently than we originally evolved to live, and apparently did live until perhaps 10,000 years ago when agriculture appeared worldwide. As a result, if Ardi came to visit she would probably ask, "Where are all the plants and animals?"

First up is the rather creepy probability that parasite animals can be good for you. There is growing evidence that certain intestinal worms that have co-evolved with humans can help certain people, notably sufferers of Crohn's disease, which can get bad enough that 'worming' yourself can feel less creepy. And some cases of diabetes, heart disease, and asthma may apparently benefit from this therapy.

But how can this be? Well, not all parasites are pathogens, where the host suffers as the parasite thrives. Some are mutualists (both parties benefit) and others are commensals (the parasite benefits but the host is unaffected). Our immune systems evolved to interact usefully with all three kinds.

It turns out that our immune systems can respond both peacefully and aggressively toward tiny immigrants. If a parasite survives initial antibody defenses, other 'peacekeeper' bodies arise to balance the body's response and "reserve the body's energy to fight another day against a more beatable or virulent foe." Unfortunately the modern war on germs idles the peacekeepers, leaving them too weak to keep our aggressive antibodies in balance, opening the door to various auto-immune diseases.

But what about Ardi? What's the essential difference between proto and human? Dunn suggests that when "we decided to kill a species not for food or in self-defense, but instead in order to control what lived and did not live around us, when we did that, we were then fully human."

In other words, Ardi was wild and we're not (although some of us are more domesticated than others.) Now there are definite advantages to a little domestication, like not being eaten by bears.

But people don't always know when or how to stop. Agriculture has wandered far from wildness and shows few signs of returning. Though farming is usually seen as progress, the paleo-archaeological record presents skeletons rather more stunted than those of previous hunter-gatherers. Another unintended consequence of agriculture is permanent settlements where pests such as rats and fleas become permanent too.

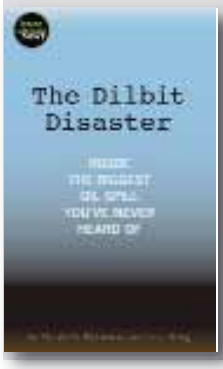
So how wild should we be, optimally? Individual survival is favored by expedient solutions that are marginal and small but may be cumulatively negative for the species and the ecosystem.

A big problem with marginal solutions such as germicides or pesticides is they kill the weak or slow but always leave some which are strong or weedy or otherwise wild and obviously go on to reproduce. Disturbances create the vacuum nature abhors, and opportunists are favored.

Finally, Dunn asks, "What can we realistically do to restore the good elements of nature to our lives?" Observing that other farming species such as ants live near their crops for control and hygiene, he tells the story of pessimistic Professor Despommier, whose students insisted on hope, on ideas and solutions rather than the predictable ecological gloom and doom. When, skeptical, he invites them to look for possibilities, their learning path draws him in despite himself and one day inspires him to say "What if we turned whole buildings into farms?"

Dunn explains how this concept really isn't crazy, even if you plan to convert office towers. It offers rational hope for the survival of the seven billion of us who are here now. But it doesn't tell us how much wildness is optimal. More undomesticated research and development is in order.

Muriel Strand is a Sacramento-based blogger and engineer.



The Dilbit Disaster:
Inside the Biggest Oil Spill You've Never Heard of

by Elizabeth McGowan & Lisa Song

This narrative page-turner on the million gallon spill of Canadian tar sands oil into the Kalamazoo River explains why and how the U.S. is not prepared for the flood of coming imports. *InsideClimate News*

Frequently asked questions
to the SEJ office

Q. What can SEJ do for me now that I'm freelancing?

A. Naturally, it's a good idea to get subscribed to the SEJ-Freelance Listserv. Join this active discussion group of other freelancers.

Get your profile information in the Freelance Directory on www.sej.org where editors & publishers can find you.

Review the back issues of *SEJournal* on www.sej.org for great articles for freelancers.

Q. Can I find jobs listed on the SEJ website?

A. This page — http://www.sej.org/library/jobs/overview — contains links to Internet sites listing job openings in journalism. Some may include *environmental* journalism jobs. The sites listed here do not pay SEJ for being listed. SEJ members may also receive notices of environmental journalism job openings as they occur via the SEJ-Mail Listserv. (Organizations pay a fee for this service, so your subscription to SEJ-Mail creates income for SEJ — a unique and painless way to financially support SEJ.)

E-Biz Reporting — continued from page 10

Controversy! Now you can write, 'Scientists continue to argue whether the Earth is round.'"

To be sure, not all science writers saw only humor in some of those remarks. Responding to Ruben's pokes, radiolab senior producer and blogger Soren Wheeler **fired back** (http://tinyurl.com/7ugda4u): "Tell a story, be visual and concrete, connect to the reader's everyday life, use clear, simple language … all things that good science writers do," Wheeler wrote.

Then there's the cultural cognition work being pioneered by social scientists such as Nobel Laureate Daniel Kahneman at Princeton and Dan Kahan at Yale. Their work is raising serious questions in the climate science community — and should be doing the same in the journalism community — about how the public at large accesses and understands (and more important fails to) environmental and, in particular, climate science.

"Cultural cognition" may not be a term that routinely flows off the lips in many news rooms. But understanding and appreciating its significance may be crucial to effective journalism on climate change and a wide range of environmental risk issues. It can be daunting for some perhaps, but a great way for environmental journalists to begin to come to grips with it lies in reviewing Kahan's May 27 post in *Nature Climate Change* (http://tinyurl.com/cg7ncxg).

In that piece, Kahan writes that public divisions over climate change are the result not of scientific illiteracy, but rather are driven by "a distinctive conflict of interest." People's needs to form beliefs "in line with those held by others with whom they share close ties," Kahan wrote, runs afoul of "making use of the best available science to promote common welfare."

No wonder climate change is often seen as a "perfect storm" of a communications challenge — one that some researchers label an especially "wicked" public policy challenge.

Bud Ward, one of the co-founders of SEJ, is editor of The Yale Forum on Climate Change & The Media*, published by Yale University's School of Forestry & Environmental Studies and its Yale Project on Climate Change Communication.*

Media on the Move — continued from page 13

Public Service in Radio Journalism for his KUOW-FM series, "Danger at Work." http://www.kuow.org/specials/danger-at-work.php

Canadian freelancer **Stephen Leahy** wrote the chapter on covering the environment for "*A Reporter's Guide to Covering Millennium Development Goals*" published by the International Press Institute in Vienna. He also finished an assignment with *National Geographic* in Australia and covered the Earth Summit (RIO+20) in Rio de Janeiro for the Inter Press News Service (IPS), a global newswire based in Rome. (Where's Stephen now? http://stephenleahy.net/wheres-stephen/)

John Moir received the first-place award for the 2012 Outstanding Profile Article from the American Society of Journalists and Authors. Moir's article, "The Chameleon," appeared in the *Washington Post's* Sunday magazine and tells the story of a US Fish & Wildlife Service undercover agent who works to save endangered species. The award was presented at the ASJA conference in New York City in April.

Jeffrey L. Frischkorn, staff writer for *The News-Herald* in Lake County, Ohio, recently captured seven Craft Improvement Awards from the Outdoor Writers of Ohio, the country's oldest state outdoors journalism group. Frischkorn earned three first-place awards, including the group's prestigious Atzenhoefer Award for Environmental Writing for his story on how a high school teacher and a team of his students are using trails to track the activities of black bears in Geauga County, Ohio.

Honolulu freelancer **Carolyn Lee** was awarded a grant to defray expenses to go to the UNITY convention in August in Las Vegas, where she hopes to learn about setting up and funding an online news start-up, and obtaining freelance work for national publications.

Elizabeth Grossman and **Valerie Brown** received media fellowships to attend the Third International Symposium on the Ocean in a High-CO2 World in Monterey, California Sept. 23-27 (http://www.highco2-iii.org/main.cfm?cid=2259). Much of the program is designed to increase connections between scientists and journalists.

In addition to her part-time position with Environmental Health Sciences, **Miranda Spencer** is a paid blogger for a new news website called "Shale Reporter" (www.shalereporter.com). She writes on community/human impacts of Marcellus shale development and natural gas "fracking."

Emily Gertz's book *Environmental Monitoring with Arduino*, coauthored with *Wired Magazine's* Patrick Di Justo, has been published by O'Reilly Media's Maker Press imprint, which offers both print and e-book options to readers. The book features instructions for building and programming gadgets that measure and collect data on different environmental conditions, including background radiation, noise pollution, and dissolved solids in water.

Silver Donald Cameron was appointed to the Order of Canada, the country's highest civilian honor. "I am astonished, thrilled and humbled — and entirely in the dark about how all this came about and who might have nominated me," said Cameron, who was noted for his work as journalist, writer, educator and community activist. Just 2,000 Canadians hold the honor.

Judy Fahys is environment reporter at The Salt Lake Tribune. *Send an email about your latest accomplishment or career shift to fahys@sltrib.com*

COVANTA™ ENERGY

CELEBRATING FIVE YEARS OF SUSTAINABLE PROGRESS

Covanta Energy is the leading Energy-from-Waste (EfW) company in North America and we are not resting on our laurels. In 2007, we launched the **Clean World Initiative,** our corporate commitment to continuously improving our environmental, health and safety performance through community partnerships, research & development and recycling. Here are some of our achievements:

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Since 2010, our Prescription for Safety (Rx4Safety) program has provided safe, free disposal of unwanted medications collected at community and law enforcement-sponsored events to help prevent abuse & water contamination.

Through our Mercury Bounty initiative, we partner with municipalities to divert mercury-containing devices from the waste stream via free community collection events. We also issue gift cards to help offset the cost of purchasing new digital thermometers.

These programs have removed over 241,000 pounds of toxins from the waste stream.

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In 2008, Covanta began focusing on reducing nitrogen oxide (NOx) emissions at both existing and new EfW facilities. Since then, we have reduced NOx to the lowest concentration in the North American EfW industry.

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Covanta partnered to form Fishing for Energy, a program that reduces the amount of fishing gear and marine debris that inadvertently ends up in U.S. coastal waters by providing free gear collections at ports near our operating communities. Materials that cannot be recycled are recovered for energy at our nearby EfW facility. To date, over 1 million pounds of derelict or unwanted fishing gear has been collected.

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Traveling Florida's Lost Wildlife Highways

Like gladesmen in the past, conservation photographer Carlton Ward, Jr. and wildlife biologist Joe Guthrie (right) pole their kayaks through the sawgrass of the lower Everglades at the start of the Florida Wildlife Corridor Expedition last January. Over the next three months, their team followed a convoluted course linking wildlife habitats from one end of the Florida peninsula to the other in an effort to prove that natural migratory routes could still be maintained in the highly developed state. For more about their journey, which culminated with arrival at southeast Georgia's Okefenokee Swamp on Earth Day, see Page 16.

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