

2009

Environmental Journalism Issue

University of Montana--Missoula. School of Journalism

Let us know how access to this document benefits you.

Follow this and additional works at: <https://scholarworks.umt.edu/mjr>

 Part of the [Journalism Studies Commons](#)

Recommended Citation

School of Journalism, University of Montana--Missoula. (2009) "Environmental Journalism Issue," *Montana Journalism Review*: Vol. 1 : Iss. 38 , Article 1.

Available at: <https://scholarworks.umt.edu/mjr/vol1/iss38/1>

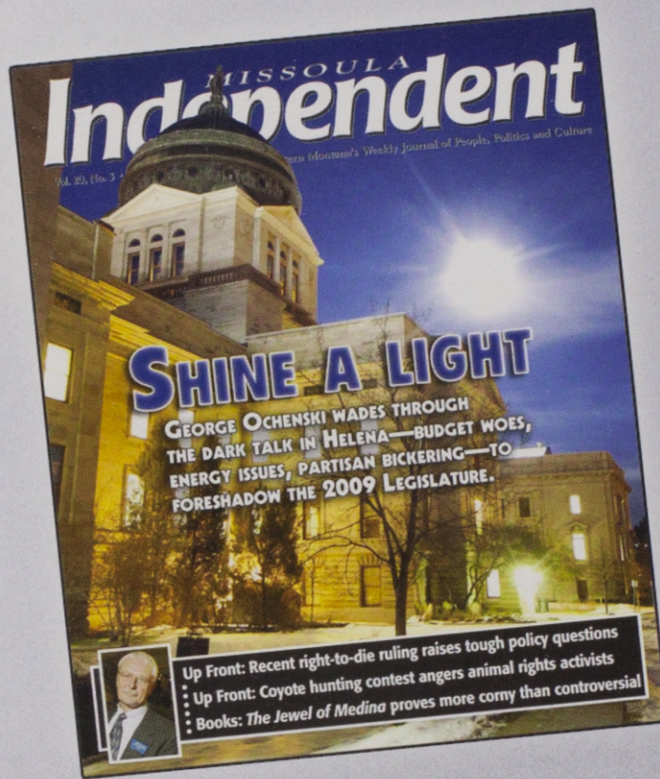
This Full Issue is brought to you for free and open access by ScholarWorks at University of Montana. It has been accepted for inclusion in Montana Journalism Review by an authorized editor of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.

The University of Montana School of Journalism
MONTANA
JOURNALISM REVIEW



Environmental Journalism Issue

MISSOULA *Independent* Free Thinking



You know that life in Montana is marvelously varied, powerfully moving, and endlessly fascinating.

You should expect the same from your local newspaper.



Proud supporter of the *Montana Journalism Review*

Editor's Note

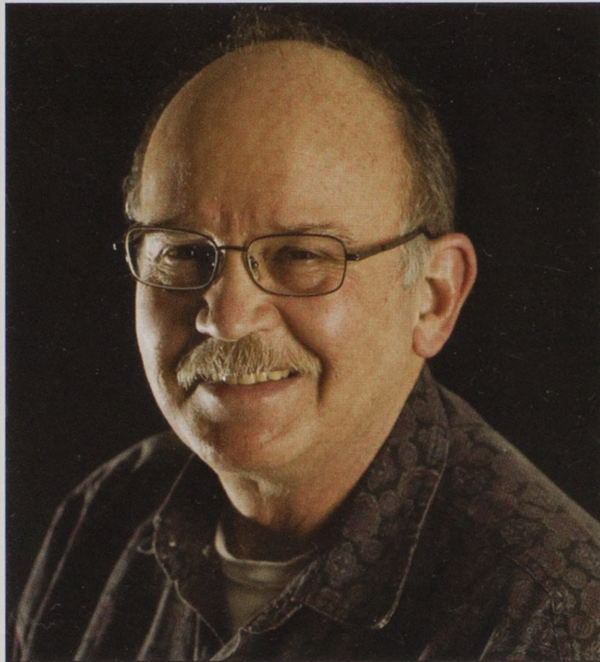
This year, the staff of MJR has focused on the state of environmental journalism, analyzing issues and trends in the practice and ethics of a complex, but fascinating area. To be effective, we learned, journalists who cover the environment need to know science, policy, politics, economics and law, but not get so mired in details that they fail to engage their readers, especially at a time when the public's attention is split by so many other concerns. And they need to hew to classic standards of objective journalism even as they are accused by partisans on all sides of being advocates (for the other sides). In the words of assistant managing editor Jennifer Kirby, environment journalists need to "present all the pertinent information in a way that makes sense, offers hope and educates the reader. It's an overwhelming proposition; *it's the weight of the world.*"

You may have noticed that we chose that last thought as our cover theme. Viewed one way, it's a metaphor for the enormous challenges outlined above, coming at a time of tremendous upheaval in the news business. But it may also be viewed as a metaphor for the pivotal role that such journalists could play in shaping the world of the future.

Surely, as we see it, journalists could do a better job of reporting the important science that comes out of our national parks, instead of pandering with sensationalism. They could look more closely at shibboleths like ecotourism; they could better shape the debate about change and growth in Western communities, including Native American communities that are often unnoticed or overlooked environmental battlegrounds. There, as elsewhere, exploitation of natural resources can offer a get-rich-quick solution with long-term consequences for the human and natural world. Media companies could do more to be eco-friendly, whether it's using post-consumer recycled paper or more responsibly recycling electronics.

Multimedia storytellers, as most journalists are learning to be, could learn a lot from wildlife filmmakers and the ethical struggles that those true to the science have

waged against the pressures wrought by profit-driven ratings. Journos could also take a few pointers from exciting reportage in an area not long ago regarded as the province of tiramisu recipes and snotty restaurant reviews. Food reporting, done right, adopts a holistic view that encompasses the energy and resources that go into producing it, notes author and freelance journalist Karen Coates.



To help them do a better job, environment journalists have some exciting new tools to work with. Beat-blogging, for example, is light years away from cat blogs. Reporters are interacting instantly with the blogosphere for feedback, story angles and credible sources. "It's a two-way street. It's not just me spouting," notes Andrew Revkin of the New York Times, who writes the popular blog Dot Earth. How about university-housed non-profit journalism centers, where seasoned journalists and committed students collaborate on path-breaking investigative work, on environmental issues? They're not exactly new, but present conditions may propel

them to greater prominence. Speaking of innovative, Jane Stevens updates us on the Great Turtle Race, which used social networking and multimedia storytelling to provide useful and engaging information about an endangered species.

Few newsrooms ever did, and even fewer today, provide the specialized training for those wishing to cover the environment. We profile a select few schools and colleges that excel in offering that necessary background. Someday, we hope, UM's fledgling graduate program in Environmental Science and Natural Resource Journalism, will make such a list. For fun, we also offer a timeline of world catastrophes and how they were first covered. We have also revived a book review section.

All of this content is also available on our website, in pdf form for the magazine itself, as well as additional video, audio and photos, at <http://mjr.jour.umt.edu>.

We hope you enjoy this issue. As always, we welcome your comments.

--Clem Work

Contents



RESERVATIONS 6



18 ECO-TOURISM

GREEN 38
PUBLICATIONS



ENVIRONMENTAL 46
JOURNALISM



SCIENCE VS SENSATIONALISM 22

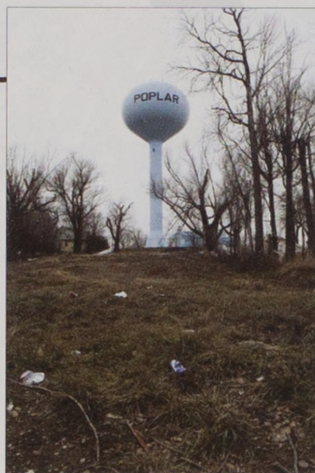
IS IT TOO LATE? 4
 NEWSROOMS 8
 CROWDSOURCING 10
 NON-PROFITS 30
 WILDLIFE FILM ETHICS 33

IGNORANCE IN THE WEST 35
 ADVOCACY IN JOURNALISM 40
 GREAT TURTLE RACE 42
 BLASTS FROM THE PAST 44
 BOOK REVIEWS 48

12 ENVIRONMENTAL PHOTOJOURNALISM

26 FOOD FOR THOUGHT

21 REPORTING THE GRACE CASE



EDITOR
Clem Work

MANAGING EDITOR
Kelsey Bernius

ASST. M.E.S
Jenn Kirby
Melissa Weaver

COPY EDITOR
Brienna Fear

ASST. COPY EDITORS
Will Grant
Ben Prez
Deb Tanner

DESIGN EDITORS
Patrick Cote
Letty Hingten

DESIGNERS
Collin Behan
Chris D'Angelo
Amy Faxon
Becky Malewitz
Cate Oliver
Jeff Osteen
Alison Smith

PHOTO EDITOR
Kip Sikora

PHOTOGRAPHERS
Elizabeth Diehl
Becky Malewitz
Cate Oliver
Tiffany Shyu
Alison Smith

ONLINE EDITORS
Collin Behan
Patrick Cote

ADVERTISING MANAGER
Jeff Osteen

ASST. AD MANAGERS
Tiffany Shyu
Deb Tanner



The Journalism School
Columbia University



IS IT TOO LATE

TO SELL THE CLIMATE CHANGE STORY?

According to a survey done by Pew Research Center in January 2009, the public is losing interest in the environment and global warming. In a telephone survey only 41 percent of respondents felt that the environment should be a top priority, down from 56 percent last year. Global warming was a priority to 30 percent, down from 35 percent in 2008.

Finding a compelling way to tell a story nobody really wants to hear is but one of the challenges facing journalists committed to educating the public about climate change. That problem is compounded by the science and economics of the story, two more topics that are hard to explain and even harder to sell. Add to the mix uncertainty and conflicting values, and the story gets even harder to tell.

Understanding is critical at a time when important policy decisions are imminent; journalists have a responsibility to inform the public so they can have a voice in the process. At the same time, there are plenty of industry and policy agents committed to further confusing the public. There are many obstacles to overcome, and there are fewer journalists

who have the time and understanding to tell the story.

Journalists are in a difficult position without much precedent. Who is the authority on the future? We are walking through this together, and it's hard to see the forest for the scientists and the economists, and the lobbyists and the debaters. There are no clear solutions, no one really knows the answers yet, and though it is a critical time for policy making and an excellent opportunity for the public to be involved in the process, the public doesn't seem that interested.

The eliminating of the entire science and environment unit at CNN seems to support those results.

Peter Dykstra, one of those to lose his job at CNN, spoke to a forum on the future of environmental journalism at the Woodrow Wilson International Center for Scholars in February about this move. He explained that Web clicks are the new Nielson ratings. Programming decisions are being made based on what news stories get viewed and e-mailed most, and people aren't clicking on the environmental stories.

Climate change is an old story, and it's a slow story. Climate change operates in cycles of centuries, and the average attention span is a bit shorter. And though we have been talking about it for some time, there's been little noticeable action.

"There's a slowness on everybody's part," said Phil Condon, who teaches writing to students in the Environmental Studies program at the University of Montana. The media has been slow to cover climate change, and journalists get sidetracked by the fake debate, not focusing on the important issues. Policy makers have been slow to react and the public isn't demanding change.

"I read Al Gore's book, 'Earth in the Balance,' in 1992 and thought we would finally begin to act," continues Condon. "It's seventeen years later and we still haven't done anything major to stop the rise in emissions."

CO2 emissions have risen 30 percent globally since 1990.

"It's hard to talk about major lifestyle changes, and that's what needs to happen," Condon said. "And it's a hard story to tell without sounding preachy. It can so easily

be a gloom and doom story, how do you not turn people off?"

Condon thinks that more focus on solutions and positive things that can be done, would help keep people involved. It is easy to get burned out with something as overwhelming as climate change. To stave off burn-out among students in the Environmental Studies program, Condon said it's important for them to be working on solutions, that having hope is important to keeping young, idealistic minds engaged.

Students in Local Solutions to Climate Change, a class offered by Robin Saha to graduate students in the EVST program at UM, work with the state legislature and local groups to find solutions to climate change concerns and encourage public involvement.

Some experts think journalists need to reconsider some of what they learned in journalism school. Issues of "false balance" plague environmental reporting because journalists want to voice both sides of the issue.

Eric Pooley, a former Shorenstein Fellow, identifies this problem in a discussion paper titled "How Much Would You Pay to Save the Planet? The American Press and the Economics of Climate Change" (http://www.hks.harvard.edu/presspol/publications/papers/discussion_papers/d49_pooley.pdf).

"With vociferous arguments of both sides during the Bush years and disinformation coming from the highest levels of the U.S. government, many news organizations restricted their climate reporting to facile balancing of opposing views on the subject, even though there was a scientific consensus that carbon emissions were warming the planet in potentially catastrophic ways," wrote Pooley.

Reporters are put in a tough position. They don't want to appear to be advocating so they offer the other side of a story that may not really have one.

Much of the available information is generated or collected by parties from one side of the issue or the other, the side that wants to take action to address climate change, and the side that wants to maintain the status quo and protect short-term profits.

Do you report on the 2009 International Conference on Climate Change sponsored by The Heartland Institute, with a promotional flyer that promises more than 70 scientists who will "confront" the subject of global warming by "calling attention to new research that contradicts claims that Earth's moderate warming during the twentieth century primarily was man-made and has reached crisis proportions."

Do you pass up a valuable tip or clarification?
Published by ScholarWorks at University of Montana, 2015

on an issue because it came from the Environmental Defense Fund?

Collecting and disseminating accurate information should always be the goal, but focusing on new science and changing forecasts may not be the best way to inform the public about climate change.

It was without hesitation that Steve Running, director of the Numerical Terrestrial Simulation Group at the University of Montana and member of the United Nations Intergovernmental Panel on Climate Change, pegged the media's biggest problem with the climate change story as "false balance," which gives voice to those that are trying to avoid the change that needs to be made.

"The media feels obligated to give equal time to the opposing side, but they are not doing due diligence by verifying facts and scrutinizing credentials," Running said. "Climate scientists are put through the wringer; the same is not true of the deniers."

Running is frustrated that the debate continues, calling it a distraction the world can't afford and a waste of valuable time. There has been a shift from challenging the reality of global warming, to questioning what actually causes it and whether we really need to worry about it yet; but the doubt raised is enough to the confuse the public. And the public is backsliding, they are losing interest and they are not pressuring law makers to deal with climate change.

The science is there, the climate is changing and it will impact the way we live. There will have to be sweeping changes to the fundamental structures of our society, he noted.

The media needs to pay attention to the credibility of its sources, said Running.

George Draffan, researcher at Endgame.org, said the way climate change is framed by the press and policymakers – and even environmental activists – just confuses the issue and does nothing to address the real problems.

"Debating whether human pollution is a deadly problem is a deliberate attempt to avoid reality," Draffan said. "And advocating little technical fixes avoids the more fundamental problem of an unsustainable way of life.

"The policy proposals currently being debated are completely inadequate to deal with the climate changes that are already underway. To paraphrase Thoreau, 'What's the use of a growing economy if you haven't got a tolerable planet to put it on?'"

"The environmental and economic problems being debated are symptoms of a deeper human problem – being unconnected with

ourselves, with the natural world, and with the human community."

"Every year that ticks away the hole gets deeper," Running warned.

James Hansen, director of the NASA Goddard Institute for Space Studies, first addressed congress with his findings on global warming in 1988. Since then carbon emissions have risen significantly and little action has been taken to curb emissions or prepare for the consequences of a warming planet.

Running seems to be joking when he talks about when he will just give up. He figures at some point, if action isn't taken soon, he will see that it's too late to do anything, and at that point he will throw in the towel. Maybe it would be at a lecture he was to deliver. He would step to the podium and say, "That's it, it's too late now, it's over, let's go have a beer, there is nothing left for us to do here."

That time might not be far off, Running added. "A year from today, if we don't have a plan in place, it may be too late."

This next year holds a lot of potential for climate change action. The Obama administration is promising to push for some progressive climate change policy. The upcoming United Nations Framework Convention on Climate Change in Copenhagen this December will draw global attention to what we do.

"This is show time," Running said. "This will be a hell of a year to watch – I don't know what will happen. Will the American and world public commit to getting on the right trajectory? We will see."

Climate change is not an environmental issue. It is pervasive, and will touch all aspects of our lives. It doesn't really matter what causes it. The climate of our planet is changing and we need to adapt our systems to the changes that occur. It is the responsibility of the media to keep the public informed about the changes we face, and what can be done to help us prepare. To do this there will need to be coverage that looks at climate change from all angles, the science, the politics, the economics and the sociology. Journalists will have to understand value judgments and risk management and be able to sort through projections. Then, they will need to present all the pertinent information in a way that makes sense, offers hope and educates the reader. It's an overwhelming proposition; it's the weight of the world.



Ignored Issues:

Untold Environmental Stories on Reservations

STORY BY Ben Prez

PHOTO BY Adrienne Barnett



A toxic oil flume is creeping towards the town of Poplar, Mont., which could contaminate its entire reservoir of drinking water. With almost 1,000 people affected by the growing problem that resulted from an old oil well's leakage, one would think this to be a fairly pertinent news story. After all, it's been a known issue for over 10 years.

During that time, the Fort Peck Journal, a tribal publication, was the only newspaper in Montana to significantly report on the contaminated oil leakage.

In the relatively new field of environmental journalism, coverage has been inconsistent on reservations. Issues on reservations in Montana and other states sometimes receive little or no coverage by either the mainstream or tribal papers.

"We're just far enough away from the (Billings) Gazette and the (Great Falls) Tribune that they cover political issues, but not long term stuff like water contamination," Fort Peck Journal reporter Richard Peterson said. "We've covered it locally a lot but not as heavy as we should, and we need to just dive in more."

The Poplar drinking water issue is the result of a Mesa Petroleum oil well that

leaked brine. City residents are still dealing with cleanup and proposing a pipeline that would pump water from the Missouri River. The pipeline hasn't come because the necessary funding by Congress hasn't come to fruition yet. Affected residents are receiving emergency drinking water from the Environmental Protection Agency, according to a report from the Poplar office of the Environmental Protection Agency.

"A lot of people are worried about it and what's going to happen," Peterson said. "A lot of people are pretty mad because of the lack of funding for a solution and the amount of time it's taken."

Reservation anecdotes such as this have formed a common chorus throughout history, and when coverage has been there, these insular issues have reached and outraged an increasingly empathetic mainstream population. These environmental stories are popping up all over Montana's reservations.

The Crow reservation, located about 200 miles south of the Fort Peck Reservation, is trying to create a potential coal-to-liquids program that would bring in a large amount of money to a very impoverished area. The tribe's efforts have received some national coverage as have issues on the reservation such as the hunting rights on bison who wander outside of Yellowstone National Park, the contamination of the Landusky mine and the cleanup that has followed.

Although under-reported environmental issues such as these plague reservations across America, the Navajo Times in Window Rock, Ariz. is serving as one of the more noteworthy and successful examples of environmental journalism on the reservation.

As the leading voice on the biggest reservation in the United States, The Navajo Times has finished at or near the top of the list for the Native American Journalist Association's general excellence award. Editor Tom Arviso Jr. has made environmental journalism a major part of his publication, and he sees improvements in the field.

"Tribal media is by far doing a much better job when it comes to reporting on the environment, because they have the right idea about how to do it and they report on the specifics," Arviso said. "The mainstream coverage is touch and go and usually there has to be either a tragedy or something bizarre."

The Navajo weekly newspaper writes about what affects people in the whole area of coverage, not just the reservation. One recent instance features a new ski resort in Flagstaff, Ariz., that uses chemically treated water to make snow, which the city sees as a good tac-

tic. But the Hopi and Navajo tribes see as just the opposite, Arviso said.

Arviso said issues such as air and water quality, mining, emission standards and problems associated with logging are a huge topics missed by both reservation and mainstream media.

Although mainstream journalism is struggling with the lagging economy and jobs for environmental reporters are the first to be cut, Arviso thinks newspapers should be doing more.

"The mainstream should be doing a better job and not just waiting for a major catastrophe to cover it," he said. "It's almost as if they don't care as much about native problems."

Back in Montana, a state with eight reservations, environmental journalism is struggling to cover these areas. Aside from The Fort Peck Journal, the coverage of environmental issues remains thin. In Great Falls, Mont., The Great Falls Tribune has an energy and environment beat written by Pulitzer Prize winner Eric Newhouse, who has written articles on such issues as the natural resource development on the Blackfeet reservation. He doesn't see the reservations receiving enough coverage on the environmental front.

"I don't think there is enough coverage, but there are so many issues on the reservation that don't get covered too, so it's not just about the environment, it's about a bigger overall problem," Newhouse said. "There are so many problems on the reservation like alcohol and drug abuse, poverty and child abuse, so in that context it's hard to focus on just environmental issues."

Newhouse said he's beginning to pick up on a trend of tribes facing a clear conflict between impacts of resource development on the environment and a quick, but short lived, economic boost from the companies coming in to exploit these resources. In some tribes there are tribal elders and traditionalists who feel drilling, logging or mining is a terrible offence against the earth, and to let such activity take place would be a compromise on the tribes' values. Then there are those who see dire poverty and want the cash that these companies can provide from the start, Newhouse said.

The Northern Cheyenne in eastern Montana face a similar dilemma. An Australian coal company is trying to put in a mine on the nearby Crow reservation. Leroy Spang, the newly-elected tribal president and a retired coal miner, is pushing for the mine because of the revenue it could generate for his community. There are those in the community who don't want it coming in, for fear of the tribe being exploited and because of the way tribal

values are often centered around the importance and protection of the land.

USA Today reporter Judy Keen decided to look into the story and wrote a piece examining this issue. "Given the economic realities on these nations, the lack of jobs and poverty, there's a real division about the appropriate paths to take," Keen said.

Keen, who's done a handful of stories on reservations, thinks one of the major issues with lack of coverage is that it's so tough for outsiders to gain the trust of key sources who are at the heart of the issues they're reporting on.

Associated Press reporter Matt Brown has written about the coal project and agrees with Keen, but thinks there are other contributing factors. Brown says there would be more noise made in opposition if the project was not located on tribal lands, and he feels the coverage of the issue would be greater.

As a writer, Brown said he can note issues that might arise or bring attention to them, but he can't comment on them. If there was strong vocal opposition and opinion he could quote them, but with no such material, it's hard to write a story, he said.

As coverage shrinks both on and off the reservation due to the country's economic downfall and subsequent loss of journalism jobs, the number of stories underreported or missed entirely will grow on the reservations, Brown said.

"Anybody who says reservations do receive enough coverage, I would argue that they don't because things are falling by the wayside all over the map, not just on reservations," Brown said.

Another reason Brown cites for the difficulty of covering American Indian environmental stories is the rural poverty factor. The extreme poverty is holding back the tribes from covering environmental issues enough with their papers, says Brown.

Environmental problems and disasters on the reservation aren't the only stories being missed. There are positive stories to be written, including the movement of several tribes to focus on developing natural resources and the development of environmental groups on the reservations who actively protest resource exploitation by outside companies.

Tyson Running Wolf, the assistant wild land fire management officer for the Blackfeet Nations, said that a story could be done on a recent self-governance law that allows tribal nations to oversee their resources and how tribes are responding to this new responsibility.

Continue Reading On Page 12



STORY BY Chris D'Angelo
PHOTO ILLUSTRATION BY Becky Malewitz

SITTING IN LIMBO

As the sinking economy continues to affect newsrooms,
environmental reporters see fog and uncertainty in the crystal ball of their future.

At a time when climate change and global warming are beginning to sink in as scientific fact rather than speculation, one might assume that media coverage of environmental issues would be swelling. Much like the rest of the field however, environmental and science journalism seems to be in troubled state.

Ultimately, this drift has left environmental journalists wondering what this means for their future, and leaving journalists everywhere questioning the importance of having designated environmental reporters on staff.

Recently, these beats have seen some of their finest journalists fall by the wayside through corporate buyouts and layoffs. In December, CNN cut its entire seven-person science, technology, and environment news staff. Robert McClure, who covered environmental news for the Seattle Post-Intelligencer since 1999, lost his job in March when the paper ended its print edition and moved to a smaller online-only version. Later that month, Chris Bowman, the environmental reporter at the Sacramento Bee, lost his job when the paper laid off 128 employees.

The Weather Channel's Environmental Unit was fired in November 2008, in the middle of NBC's "Green Week." In early December, *Fortune* magazine gave layoff notices to both Marc Gunther, a leading thinker, writer and speaker on corporate environmental practices and sustainability, and Todd Woody, who covered both green energy and clean technology. This is just the tip of the iceberg when it comes to woes in the world of environmental journalism. So, what on earth is happening here?

According to a 2008 study of 50 newspapers in 20 countries by Maxwell Boykoff and Maria Mansfield at Oxford University, the quantity of climate coverage has steadily declined since the release of the fourth Intergovernmental Panel on Climate Change (IPCC) report in 2007 and of Al Gore's documentary, "An Inconvenient Truth," in 2006. Despite media coverage of climate change increasing substantially in recent decades – with natural disasters such as Hurricane Katrina in the U.S. and the 2006 droughts and wildfires in Australia – Boykoff and Mansfield's findings show environmental coverage has since had a major falling off.

This past February, the Woodrow Wilson International Center for Scholars hosted a panel discussion entitled "The Future of Science and Environmental Journalism." Speakers at the event included a handful of well-known and experienced environmental and science correspondents, including Seth

Borenstein, a science writer at the Associated Press; Elizabeth Shogren, an environment correspondent for National Public Radio; Jan Schaffer, the executive director of J-Lab; and Peter Dykstra, the former executive producer of CNN and one of those laid off in December 2008.

During the discussion, Dykstra, who now writes for Mother News Network (mnn.com), an environmental news and information website, discussed a number of reasons for science and environment being marginalized as a beat. One reason, he said, is factionalism.

"Environment coverage and even science coverage are often viewed as polarizing issues, either in the sense that it drives audiences away because they don't care, or because issues like creation versus evolution," Dykstra said. "About 20 percent of the American public – it varies in polls – still believes that global warming either just doesn't exist or is a hoax."

Throughout the talk, all the panelists acknowledged, for better or worse, the dramatic changes taking place in the world of journalism. "If you think about what's happening to the economy in general, the journalism business is like Detroit...we're getting it worse and we're getting it faster," said Seth Borenstein, an AP science writer.

Dykstra also pointed toward the shifting pattern in the popularity of environmental journalism, which, he said, fluctuates depending on factors like legislation and natural disasters. In the midst of today's declining economy, it seems environmental journalism has hit yet another downward spiral.

"What we're dealing with on this beat is sort of this manic-depressive mode of public attention...where attention rises and wanes," Dykstra said during the discussion. "That's a challenge for coverage...but the issues certainly are not going away."

One thing that seems to ring clear in the minds of journalists, however, is the value in having a designated environmental reporter on staff rather than a newsroom collectively covering environmental issues.

Although Borenstein said he isn't sure whether the environment beat is taking harder hits than other beats, he is convinced something is truly lost when news outlets don't have experienced environmental reporters on staff.

"The difference is expertise," said Borenstein, who believes general assignment reporters can easily be spun by either side of an issue. "If you know the environment, you know what's important and what's not."

Robert McClure, a former environmental reporter for the Seattle Post-Intelligencer, agrees. "What you lose [without an environ-

mental reporter] is sort of the background understanding," he said. "You get a much more thorough understanding from someone who's been doing it for a long time."

McClure said it wasn't long before he realized that, as an environmental reporter, he had to get behind those opaque processes and understand them. And that isn't easy, he said. It requires simplifying the complicated issues for readers, which he says is his ultimate job – or rather "was."

For more than 20 years, Joel Makower has been a well-respected writer, speaker and strategist on corporate environmental practices, clean technology, and green marketing. In a recent post on his blog, he discussed how the recent wave of downsizing journalists covering environmental issues ultimately relegates coverage to reporters with less knowledge, context and historical perspective.

"I hear from such reporters every week: general-assignment reporters from newspapers and broadcast stations around the U.S., niche trade magazines, and others seeking comment or context on a story they're covering," Makower writes in his blog post. "I can tell you unequivocally that the nature of their questions reveals the high degree of ignorance. I'm happy to bring them up to speed, but it's a slog."

Close to home, it's people like Sherry Devlin who understand the important role the beat plays for western cities. Today, Devlin is the editor of the *Missoulian*, where she was the environmental reporter for roughly 20 years. Devlin knows what it takes to cover the environment and the significance of having an environmental reporter at her paper.

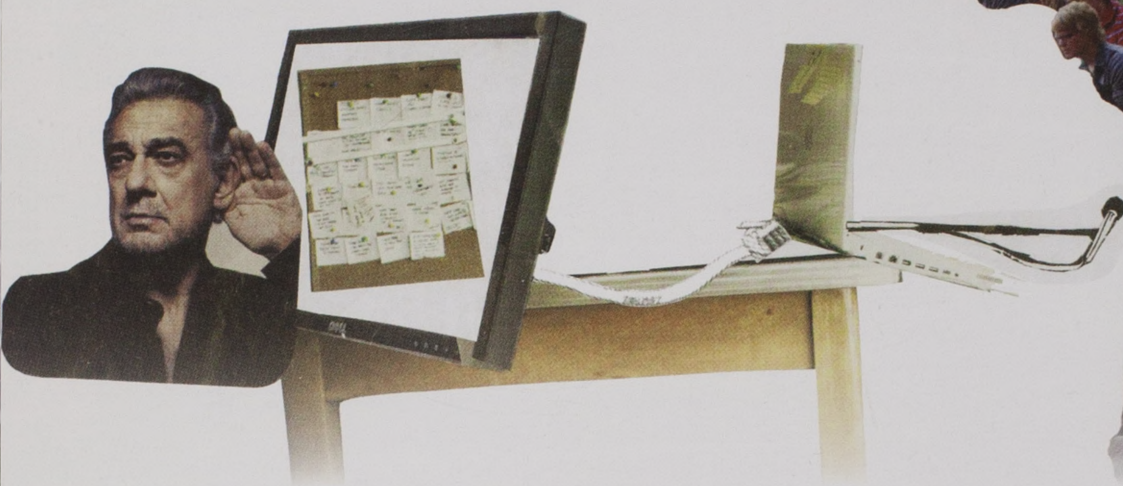
"We never would eliminate that beat," she said. "I think that really the key for newspapers is to keep up the most significant and important journalism that we do, and certainly in the West that means having a full time environmental beat reporter. We've always had an environmental reporter and will always continue to have one."

Ultimately, the future of environmental journalism is in limbo. And for those in the field, it's a scary reality to wake up to.

When asked where he felt the environment beat was headed, Borenstein hesitantly responded, "If I knew that, I'd feel a lot more comfortable these days...I'm not even sure where it's at. All I know is, it doesn't look good."

If people like Borenstein are worried about the future of their jobs, what's ahead for the up-and-coming environmental journalists?





From hunting down sources on foot to sifting through the blogosphere, print journalism is changing quickly, but are reporters ready to catch up?

STORY AND ILLUSTRATION BY Melissa Weaver

Having blogged and reported on science and the environment for the Houston Chronicle since 2005, Eric Berger is one of many 'beat bloggers' who use an innovative model to generate story ideas and get reader feedback. The model is simple. Have an idea, but don't know if you're on the right track? Throw it on a blog and let readers weigh in.

At first glance, one of Berger's blog post headlines in 2006 read more like an ironic joke: "Coming to a church near you: 'An Inconvenient Truth.'" But the science reporter was fishing for a truth some Houston-area Christians found inconvenient. Namely, trying to gauge whether local evangelical Christians were jumping on a recent national trend, a union between Christians and scientists on the global warming debate. More than 20 Houston-area churches were slated to show Al Gore's film, and Berger wanted to know which of the churches on the list were more conservative. On a comment board on his Houston Chronicle-based blog, SciGuy, many conservative Christians were trying to distance themselves from the film by pointing out the Baptist churches slated to show the film also accepted members of the gay community, and so couldn't be considered conservative. As Berger read more and more of the comments posted below his innocent inquiry, he began to see the bones of a story on the debate. His article ran on the Chronicle's front page two weeks later.

Beat blogging is the 21st century version of crowd-sourcing. Literally meaning using the crowd as a source, the term is used to describe a method journalists sometimes use of yelling a question into a crowd to get more information for a story. Beat blogging is a way to get feedback, potential sources, and story angles almost instantly; and the blogosphere has been doing it for years.

This is no longer the blogosphere of the 1990s, when blogs existed primarily as venues on which to vent opinions, share household tips or post photos from a family reunion. The news industry is starting to grasp the value of the blog's ability to reach hundreds of thousands of people in an instant, and it is using this tool to its advantage.

"The two mediums are totally interwoven," said Andrew Revkin, who writes the blog Dot Earth as an environmental reporter for the New York Times. "It's a two way street. It's not just me spouting... Pieces originate from some idea from a blog. You can explore extra elements that don't exist in print."

While reader reaction to a published piece in the pre-online-comments era might have led reporters such as Revkin and Berger in the same direction eventually, the instant feedback and wider scope of online news and blogs today have made this process more efficient for reporters and more timely for readers.

There are a variety of ways in which the pro-

cess can occur. The most common method is for reporters to use their blog to generate ideas for their beat. In most cases, the reporter is in charge, deciding what questions to ask readers, which tips to follow up and what angle they will take on the final story, ultimately writing it for publication in a traditional print or online newspaper. "It's a sounding board for what people are interested in," Berger said. "It really fleshes out the various viewpoints readers have."

And environmentalists and scientists can be tough critics.

"For every story I write, there are people who know more than I do," Berger said, explaining how, depending on the issue, scientists or various other knowledgeable sources will weigh in on the comment board, pointing out an overlooked concept or an inaccuracy. Berger will call the commenter-turned-source and glean information he never would have gotten otherwise. "The human element is so valuable," he said. "It's an incredibly useful way to bring readers into coverage...and it's very helpful to help build a better connection with readers." That, he added, yields a deeper, better-informed story.

Matt Neznanski, who writes Green City, a blog on sustainable living in conjunction with the Corvallis Gazette-Times, agreed. "When you're reporting, it's easy to get the official sources," he said. "You know, the ones whose job it is to talk to you. But those don't necessar-

ily make better stories. [With blogs] you get the voice of the people, their perspective, and you wouldn't have gotten that earlier.

"Blogs are fast and interactive. With print, you write a story and the most you hear is maybe a phone call or a letter to the editor the next day. When you make a mistake in an online forum, people provide the correction with a link. It's nice, you can get all the bugs out before you write the actual story."

However, Neznanski stressed that comments from the general public should be used to inform the reporting, not as sources for a story. "I'm not going to see a blog post and write it into a story for print," he said. "I'll use it as a way to shape the direction of the reporting."

But for Patriot-News reporter David Victor, the readers run the show. On March 3 of this year, he wrote on the home page of his blog, "Pitch your stories. Vote on them. I'll write them. I'm all yours."

[See: http://blog.pennlive.com/news-vote/2009/03/pitch_your_stories_vote_on_the.html.]

His model is simple: readers pitch story ideas via the comment section of each post, Victor takes the best ideas and puts them in poll form, and readers vote for the story they would most like him to cover, both for the blog and for the print edition of the Patriot-News. Whichever story gets the most votes is the one he does. "Just like that," he writes. "You're my new assignment editor."

"It's not completely an open thing," Victor admitted. "I'm not looking for investigative stories. I'm not looking for muckraking. I am looking for community news, feature stories you wouldn't ordinarily find." After a recent buyout, he debated how to best generate story ideas for his new position as a mobile journalist or "mojo" and decided to ask the readers.

So far, he said, some of the pitches have not been so good, and some have been incredibly great. The first story, winning the majority of the 231 votes cast, deals with kids who have to walk to school on possibly unsafe roads. Victor is optimistic about the project, which he refers to as an experiment. He said he hopes to build a solid base of people who, when they see something noteworthy in the community, will think to post it and promote awareness of the blog.

"There is the issue of people with pet projects wanting to self-promote, or that they [the

public] will pitch stories I won't be interested in writing, but so far it's going well," Victor said. He aims to write one story per day.

"I'm hopeful, but not blindly so," he said of the project in the long-term. "But we [the news media] have to keep experimenting to find a model that works best."

In the meantime, Victor said he is working on thickening his skin to the occasional cutting comments the blogosphere generates. "You really do open yourself up to a lot of criticism," he said, "but when the public has a legitimate complaint, you've got to be able to own up."

Revkin agreed. "You have to be able to insulate yourself from criticism," he said. "There are a couple of environmentalists out there who think I'm a step away from being a climate denier... It wears you down."

"It [the blog] is a ridiculous amount of work, but I think it's unavoidable," Revkin said, noting he writes the blog on top of attending his day job. Since Dot Earth's inception in October 2007, Revkin said, he has written more than 500 posts to his blog, which boasts a readership of 300,000 per month, according to Revkin. "I sleep when I can," laughed the environment reporter.

Berger calls his blog a "time suck." In addition to the daily stories he writes for the Chronicle, he also spends time every day trying to find a topic to blog about. "It's always in the back of your mind," he said, adding that he

cept called 'crowd-funding.' The model borrows largely from the crowd-sourcing idea, in that the public pitches story ideas and weighs in on the pitches they would like to see in print. The difference is the public directly pays for the investigative news it wants to see.

Spot.Us is a San Francisco Bay area site launched in November 2008 by 26-year-old Web journalist David Cohn. The site employs a posse of freelance writers who either pitch their own story ideas or wait for the public's. After the writers decide which stories are worth pursuing, they post the ideas on the site and include the amount of money needed to bring the story to life. A bar beside each pitch keeps track of the amount of funding each story lacks, and next to it people can click on an icon, pledging to donate up to 20 percent of the total projected cost of the story. The site, via a video on its homepage entitled "What is Spot Us?," explains that the blog's mission is "to make sure that important, but untold stories are finally told." The video added that all donations are tax deductible for the non-profit site.

If a news organization wants exclusive rights to a story, it must refund the original donors. Otherwise, all finished stories are available for free to whichever newspaper wants it. So far, sixteen stories have been fully funded, nine have been published and seven are in the process of receiving funding.

While giving the public the opportunity to commission the journalism they want to see sounds like a good idea, crowd-funding has the potential to only do stories the highest bidder wants. Critics argue that stories that don't require many donors can be pushed through by people with agendas and deep pockets, thus beating out smaller stories.

But Cohn isn't worried about this. He said if that problem arose, the site would increase the number of different people required to donate on a story. "All donations are public, so people would recognize this bias [multiple people from a single organization paying for a story] and it wouldn't fly," he said. "And, if a neighborhood came together and they all shared an agenda for an issue, that would probably be an issue worth looking into."

"I think that crowd-funding could help alleviate and fill some gaps [in mainstream news coverage], but it will not replace news organizations," he added. Cohn said the site hopes to cover issues, such as the environment, that are getting less coverage by traditional media.

"The human element is so valuable. It's an incredibly useful way to bring readers into coverage...and it's very helpful to help build a better connection with readers."

Eric Berger, beat blogger

tries to post something daily to avoid the risk of losing readers. He also responds daily to comments and e-mails generated by the blog. With reporting resources spread thin at newspapers, this model is unlikely to take off soon because of the time and effort required for success. "It [beat-blogging] has potential, but hasn't come close to reaching it," Berger said.

But crowds might be willing to fund the ideas they want to see in print. Enter another form in-depth reporting is turning to, a con-

While the site has been able to come up with several environment-tinged stories, two of which have already been fully funded, the fact that the site is based in the San Francisco Bay area has limited the coverage and range of story pitches to that area of the country. "We want to expand our coverage, but we're still figuring this out," Cohn said. And as far as he knows, his website is the only one to use this concept for journalism.

Keeping tabs on all these new forms of reporting is Web site BeatBlogging.org. Its homepage states that the site, "Looks at how journalists can use social networks and other Web tools to improve beat reporting." In 2007, the site recruited 13 professional reporters from newspapers across the country to each write a

beat blog. SciGuy's Berger, Dot Earth's Revkin, and Green City's Neznanski were among them. While the blog's mission has changed a bit in recent years due to staff cuts at the various publications, BeatBlogging.org's editor and lead writer, Patrick Thornton, said the blog looks at the latest trends and follows innovations with beat reporting. "I cover people who beat blog, whether they are independent or part of a traditional news organization," he said.

Thornton said the model is especially useful for environmental issues. "A traditional reporter can't look at every single company, for example, or check the air quality in an entire state. But an aggregate can. One news organization can't do the work of 100,000 people," he said, adding that its "watchdog" potential is enormous.

Every day, the site posts new examples of successful integrations of new and old media.

Traditional journalism's future may seem gloomy, but Green City's Neznanski remains upbeat. "The industry is tanking, but journalism is stronger than ever," he said. "What I realize now, much of anything worth reading in a publication is in the journalists who do the hard work." He said he knows environmental journalism will always be around, but just in a different form. For today's hardworking journalists, getting closer to the community through beat blogging might just be the golden ticket the industry is searching for.



Continued from page 7

He thinks mainstream papers should look into these issues, but his main criticism lies with the tribal papers.

"I wish we had Indian papers that would take the forefront on environmental issues," Running Wolf said. "There are more deeply-rooted environmental stories out there that just aren't being covered enough, and I think we should do a better job."

On the western side of Montana, the reservations are dealing with environmental problems and coverage has been spotty as well. Rob McDonald, spokesman for the Salish and Kootenai tribes and former reporter for The Spokesman Review, has seen many issues come and go with inconsistent coverage.

In regards to water rights, McDonald said

there is rarely an agreement that the tribes are satisfied with. He also mentions bison and the recent issue of hunting rights associated with their wandering out of Yellowstone National Park as issues not properly covered.

"Mainstream papers over-cover the outrage of hunters," McDonald said. He remembers the time tribes around the park announced they were going to harvest stray buffalos like their ancestors. The state was trying to impose regulations on this and non-native hunters were angry because they couldn't hunt the bison too. McDonald said the media covered the non-native side rather than the American Indian perspective.

"It's basically an abundance of ignorance because Indian country is incredibly complex

and it's hard to find those 101 issues," McDonald said.

McDonald said when he started to cover Indian issues from his perspective, his editors at the Spokesman Review weren't pleased and wanted a neat and tidy package that wouldn't offend anyone with the raw anger he felt. The native perspective often isn't palatable to mainstream readers, McDonald said.

There are so many factors involved in coverage and lack of coverage, but McDonald has another theory.

"It's an issue where what they don't know won't hurt them," he said. "An editor for a mainstream paper will be hurt if he misses mainstream issues, but if he misses Indian issues, he won't be in trouble at all."



The University of Montana School of Journalism MONTANA JOURNALISM REVIEW

Special Thanks to UM Journalism Alumni...

Anonymous '59

Nancy Nelson Coffee '61

Rolf Olson '61 and '64

Jack Counihan '62

Douglas Kienitz '62

Daniel J. Foley '65

Milo Moucha '66

Berma Saxton '66

Kay Morton Ellerhoff '67

Ted & Kristy Sullivan '01

Jessie McQuillan '03

Nick Lockridge '04

Environmental Photojournalism

The Misfit of the Journalism World

INTRODUCTION BY Josh Wolfe

Photojournalism has its heroes. The James Nachtweys, the Robert Capas, the Eddie Adamses, those photographers who risk life and limb to bring the true horror of war to the eyes of the world. The lone photographer venturing into conflict and coming back with jaw-dropping images and a few dents in their camera is what we are told to aspire to.

Environmental photographers? Nobody has any clue where they fit in. In many photojournalism circles there is a sense that they aren't even photojournalists at all, just nature and wildlife photographers. The exception to the rule is National Geographic, which has been a long-standing supporter of environmental photojournalism.

The events photojournalists cover, like climate change, can take decades to unfold. Photojournalists don't know how to handle that. This can be evidenced in the visual language of climate change in photojournalism. Just call it all extreme weather, all the time, and some charismatic polar megafauna (polar bears and penguins). Climate change is horribly complex and involves a plethora of related issues from population to land use, resource consumption to infrastructure. It takes study and a good dialogue with the scientific community to fully understand the fundamentals of climate change. You can count the number of photo editors that have put in the time on one hand.

There should be a series of questions that every editor and photojournalist should ask when dealing with weather events and climate change.

- Is there a link between climate change and the type of weather event?
- Was this event representative of a greater trend in terms of weather events?
- Was the damage inflicted attributable to the weather event or to another factor like land use?
- When presenting images how does one best differentiate between a single event and a change in that type of weather event based on climate?
- What is the scientific community saying?

This is why, more than ever there needs to be a new generation of photo editors and photojournalists well versed in environmental issues. If photojournalists are going to properly cover what Sir Nicholas Stern called "the greatest market failure the world has seen," they need people who understand it. The problem of course is that no publications are hiring environmental photojournalists and editors because there is no background in journalism to deal with something that happens gradually. Photojournalism is a profession that likes an event and right now the field isn't equipped for the complexity of environmental issues.



When I took this photo, the whole valley was filled with smoke from the fire. As I walked closer to the scene, a deer, frothing at the mouth, ran erratically through the street in front of me, looking for safety. Climate change causes longer, and drier warm seasons which creates an ideal environment for forest fires. As I shot this photo, I was thinking how lucky we are that more of Missoula wasn't on fire.

<https://scholarworks.umt.edu/mjr/vol1/iss38/1>

The theme of the Montana Journalism Review this semester is “Environmental Journalism - How the Media Covers the Environment,” and as part of this theme, we decided to include a story on how photojournalists are covering the environment.

Photography packs a visceral wallop that reaches people on an intuitive level, often opening doors of understanding inaccessible through the written word.

What makes a solid environmental photograph? Technical issues like quality of light and composition are critical, but the image must depict a situation that is affecting or being affected by climate change. Images help to put a face to otherwise abstract issues. Even those who ac-

knowledge glacial melting as a reality, for example, may have a difficult time visualizing the upshot of such a process.

Photography can help people better understand the tangible effects of humanity on our planet. Look at Elizabeth Diehl’s shot of the waste left behind from a single Montana Grizzly football game. Some 25,000 people created that much trash over the course of three hours. Where does all of it go? What are the long-term repercussions of storing an exponentially growing amount of waste, not only here in Montana, but also on a global scale?

But that is not to say that environmental photography must deal solely with problems and dire situations. Photojournalists covering the environ-

ment must also cover potential solutions for those problems. Alternative energy technology, for example. Sure, we can read about a wind farm or solar panels, but putting a face to the technology perhaps makes it more accessible to those not directly involved with it on a day-to-day basis.

Finally, while a good environmental photograph educates and inspires thought; a great one inspires action. With this in mind, we hope you enjoy the following selection of photographs submitted by the MJR staff.

-Kip Sikora
Photo Editor



This photo was shot after a University of Montana football game in the Fall of 2008. The amount of trash accumulated in the stands over such a short time period really struck me. If 25,000 people leave that much waste behind over the course of a few hours, how much waste is produced by the United States in just a day?



I saw this carton while walking along Indian Beach in Ecola State Park in Oregon. I went to pick it up and throw it away when I noticed the barnacles on the handle. This made me stop and think about all of the pollution produced everyday. It was disheartening to realize that our waste is unknowingly being integrated into the cycles of nature.

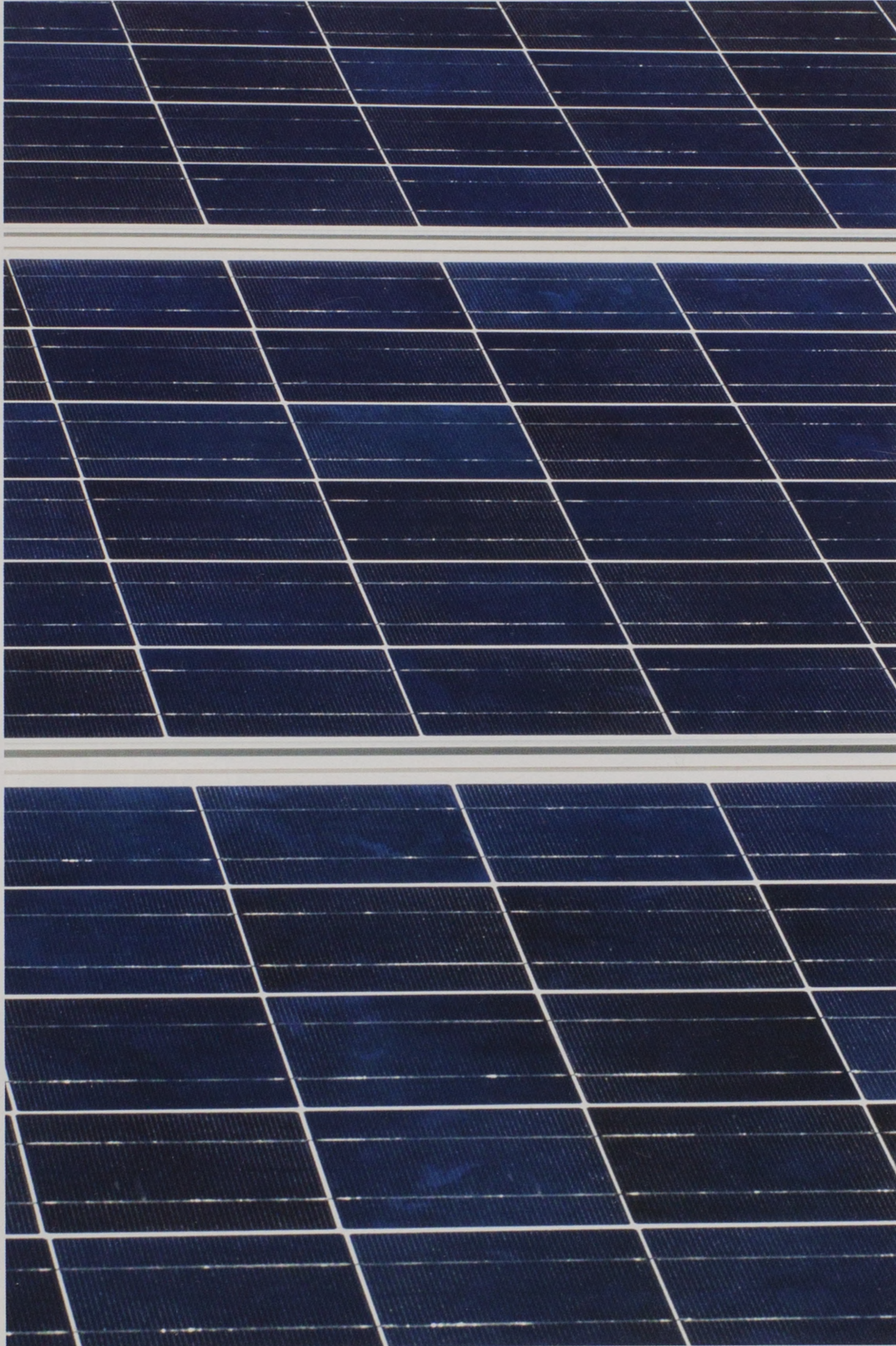
CATE OLIVER

Always flammable and often costly, gasoline affords us great mobility, but that mobility comes at a great cost. Aside from the economic and political tension it creates, the emissions belched from exhaust pipes of the vehicles it powers accelerate climate change, further threatening the already fragile and stressed balance of our environment. Why, when there are alternative, far more sustainable automotive technologies ready to power many cars, do we still rely on a costly and harmful source of fuel?



Harnessing natural sources of energy, the sun in this case, seems a practical and sustainable strategy in the campaign against climate change. I like the graphic elements in this shot, which depicts the face of a 6 panel Passive Solar Tracker, made by Zomeworks. Solar panels like the one pictured here produce approximately 3,500 kilowatt hours of electricity annually, which would power an energy-conscious home for the entire year. That may not be enough to leave the lights on at all hours, but widespread application of sustainable energy technologies would help to reduce the toxic emissions slowly suffocating our planet.

KIP SIKORA



Nature as Merchandise

Ecotourism? Or just tourism behind a green figleaf?

STORY BY Mark Dowie

Editor's note: It's one of those buzzwords describing an activity that's been going on for decades but never had a name—or a price tag. Ecotourism, defined by Martha Honey, co-founder of the Center for Responsible Travel as, "The practice of low-impact, educational, ecologically and culturally sensitive travel that benefits local communities and host countries," has become an industry, even an economic lifeline for some indigenous communities. But the term has also been widely abused by those eager to make a buck off travelers, by those who merely slap green labels on a nature-based activity, locale or operation. These people are actually behaving in ecologically irresponsible ways.

Environmental author and journalist Mark Dowie takes a look at some of the ecological downsides of ecotourism. While most ecotourism mentioned in the news media still can be found in the travel pages, Dowie's take is perhaps evidence of growing awareness of some of the negative consequences that unthinking ecotourism can have on the natural world and the indigenous people who live in it.

Given his record, it seems certain that a notorious kleptocrat like Gabon's President Omar Bongo would not have agreed to create 13 new national parks in his country.

He did agree, at the behest of eco-adventurer Michael Fay, and he must have predicted an extraordinary economic payoff.

Something had to offset the enormous losses that would occur from the denial of logging and mining concessions in those huge tracts of land. Forest products alone accounted for seven percent of Gabon's GDP. Add manganese mining and oil extraction and Gabon has an industrial base that makes it one of the wealthiest of all African economies.

So tourism became the selling point, and to conservationist organizations like Michael Fay's Wildlife Conservation Society (WCS), the only acceptable tourism for national parks and wildlife reserves is environmentally friendly and thoroughly green tourism; known in the travel marketplace as "nature tourism" or by that term's more recent offspring: "ecotourism."

So what is ecotourism? And which of its many forms and manifestations is truly eco-friendly? Is it really different in impact from ordinary tourism, or is *eco* simply a convenient prefix for a new, slightly greener form of travel? And either way, does ecotourism assure a continued livelihood to people displaced or inconvenienced by its business practices and infrastructure?

The common standard set for ecotourism by conservationists is that a project's "distinguishing feature should be that it benefits biodiversity." However, there are many in the field, like wildlife biologist John Terborgh and anthropologist John Oates, who tend to believe that any human disturbance has a negative effect on biodiversity. They both wonder whether that goal is possible to meet through any form of tourism.

There is no question that ecotourism is booming. Before the current recession took hold, it was in fact the fastest-growing sector of the fastest-growing industry in the world. Of the 842 million international tourist arrivals in 2006, about 20 percent or 168 million described themselves as "ecotourists." By the turn of the millennium this new travel sector was so large and influential that the United Nations declared 2002 to be the International Year of Ecotourism; while the World Bank, Asia Development Bank and a host of other international lending agencies added ecotourism to their lists of development strategies. The Overseas Private Investment Corporation (OPIC) also launched a global curriculum for ecotourism entrepreneurs.

But the economic advantages of ecotourism are not what they seem or purport to be. Take Nepal for example, a country where virtually all tourism is "eco." Sixty-nine percent of the money spent by tourists traveling to Nepal never reaches the country. It is spent on airline tickets, travel planners, and foreign outfitters based outside Nepal who arrange treks and climbs for adventurous travelers.

Of the 31 percent of the money that does reach Nepal, most is paid to domestic outfitters, transportation companies, and porters and guides stationed in Katmandu. A mere 1.2 percent finds its way into the villages and communities through which tourists pass on their way to Chitwan National Park, Mount Everest and the Annapurna Sanctuary.

A similar situation exists around Kenya's Maasai Mara Reserve, the most popular wildlife-viewing area in East Africa. There are about four thousand tourist beds in the immediate vicinity of the reserve in which cattle grazing is allowed. But, it's on an extremely limited, emergency basis because tour operators insist that tourists do not want to see anything that spoils the idea of "pristine wilderness."

Throughout the Mara reserve's 90-day high season, about 75 percent or 3,000 of those beds are occupied by people, almost all of them paying \$40 per day to enter the reserve.

That's \$120,000 in revenue per day, or close to \$11 million for the three peak months of business. Twenty percent of that money is supposed to go directly to the Maasai villages and communities in the immediate area; virtually none of it ever arrives. Again, anonymous ecotourism entrepreneurs get rich, while people who were on the land long before the Maasai Mara Reserve was created, and whose livelihoods are ruined by restricted grazing and scarce water, are the ones who suffer.

Furthermore, despite claims to the contrary, the overall environmental impact of ecotourism is little better than that of ordinary tourism.

Yes, ecotourism saves some water and energy if sheets and towels aren't laundered every day (it also saves costs), but flying to Nepal for a trek leaves the same monstrous carbon footprint as flying to Greece to board a Mediterranean cruise ship. And barreling around the Serengeti in a four-wheel-drive Land Rover to photograph elephants is about as earth friendly as taking a stretch limo from JFK International Airport into Manhattan.

As ecotourism has gained a major foothold on every continent, conservationists and cultural survivalists alike have begun to raise serious questions about individual ecotourism projects and about the industry itself. Ecotourism for whom, they ask: for tourists, investors, outfitters, lodge

managers, locals? Or: for wildlife or biodiversity?

Ecotourism entrepreneurs would likely say yes to all the above, and they would do what they could to meet the standards put forth by a growing number of rating services that travel the world inspecting ecotourism facilities and granting green stars to each venture based on its overall greenness.

Unfortunately, the treatment of indigenous communities absorbed or overwhelmed by ecotourism projects is rarely a factor in the rating process. As a consequence, tourists seeking socially just resorts and treks rarely are made aware when local people have been displaced to make room for their lodge or tour. For example:

- In Prainha do Canto Verde village, near the Brazilian city of Fortaleza, 1,100 fishermen and subsistence farmers in 12 coastal communities are in conflict with a massive ecotourism project funded by the Inter-American Bank that will overrun their villages and end their traditional way of life. Not far from Canto Verde, in Tatajuba village, the massive Conadado Ecologico hotel complex, which, when finished, will cater to 15,000 guests. This behemoth threatens the residence and livelihood of 150 more nomadic fishing and farming families. Ironically, both Prainha do Canto Verde and Tatajuba have long been regarded as "unspoiled" tourist destinations.



Photo by Kip Sikora

Cayambe, Ecuador: Eco-tourism sounds like a great idea, but who does it and who should it benefit? Certainly it must benefit the traveler, for without the traveler there is no tourism. However, the local population should be included in the equation of benefits. Ecuador's dramatic biological and geographic diversity ranges from beaches, jungles and cloud forests to snow-capped volcanic mountains, making it a popular destination for international travelers. What do they take from the places they visit? What do they leave behind? Eco-tour companies and their customers could actively work to include and better the communities in which they take their customers.

- Tanzania's national government is threatening to evict more Maasai from the Ngorongoro Crater to promote luxury safari ecotourism. Local Maasai who were evicted from the crater in the 1950s to make a park are calling for a shift to community-based and culturally oriented ecotourism.

- Although Bedouins in the desert-based mountain Wadi Rum

region of Jordan hold prior land rights in the area, conservationists and ecotourism developers are calling for their removal to establish a "special regulations area" with financial support from the World Bank.

- In India, another World Bank "eco-development plan" calls for the eventual eviction of the Adivasis people from their forest homeland.

While awaiting eviction they are forbidden to plant fruit trees or restrict the trespass of destructive elephants on their farmland. India's government is offering resettlement and financial assistance, but is harassing and intimidating those who decline the offers.

- In Thailand, Padaung Hill tribe people are being forced from their homelands into fake villages (human zoos) for tourists to visit. A \$1.2 billion economic development scheme funded by a massive Asia Development Bank development program, with a strong ecotourism component, threatens the homelands and livelihoods of other ethnic highlanders throughout the Greater Mekong Region.

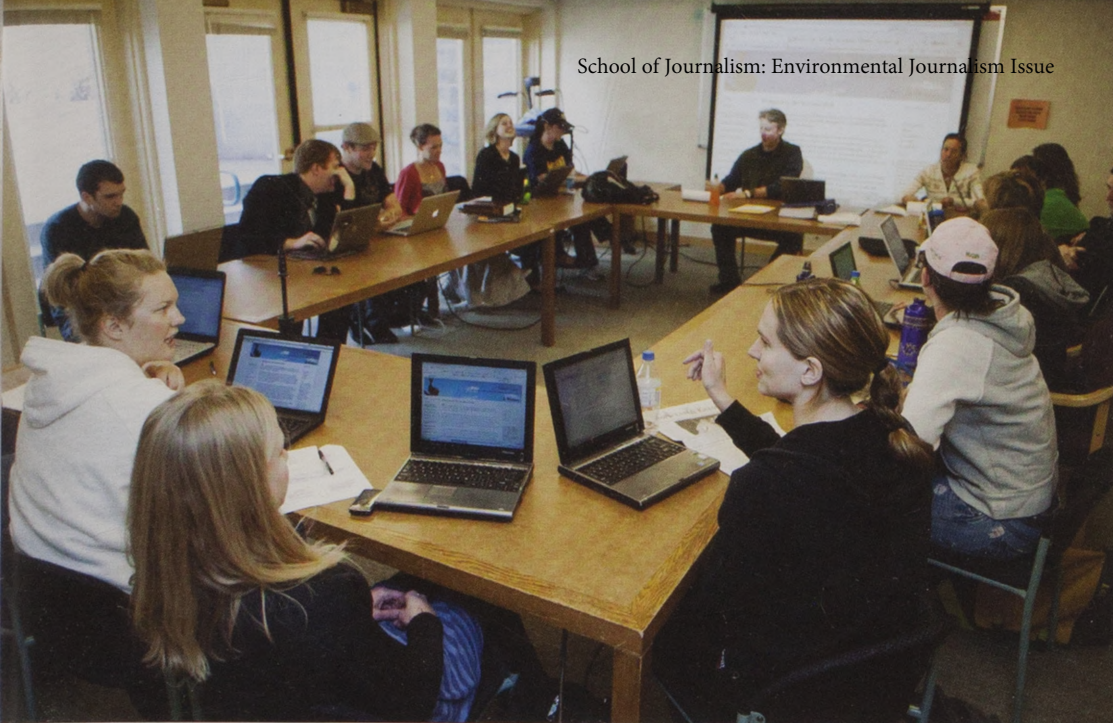
- In the Philippines, where there is widespread conversion of public to private lands, there is a plan to convert the entire Taal Lake area into an ecotourist haven. On March 14, 2003, 250 people were violently evicted. Dozens of homes were demolished and 17 people were injured.

- In Bangladesh, the Madhapar Eco Park in Tangail was inaugurated in April 2001 with plans to cut 1,500 acres of forest, build a concrete boundary wall 22,000 feet long, and remove seven villages (a thousand families). When the indigenous people of Madhapar protested, police fired on the gathering, killing 20-year-old Piren Slan and injuring 25 men, women and children. A massive hunger strike and a recent change of government may reduce the threat of outright eviction. However, armed forest guards continue to provide full-time security for the wall construction crew. And to keep conservationists happy, the government reiterated that its primary goal for the project was to, "Save the forest and its biodiversity."

To be sure, some indigenous communities have welcomed ecotourism into their homelands, particularly when comparing it to the almost inevitable alternatives: logging, cattle ranching, mining, or fossil fuel extraction. One example is the Kainamaro people of Guyana, a small community happy to share its culture and handicrafts with a strictly limited number of visitors who are briefed beforehand on the cultural sensitivities of the tribe.



A long neck is a mark of beauty among women in the Karen tribe in Thailand's northern hill country. The women are often used as a tourist attraction, and the tribe makes money from them, but how different is this from a circus sideshow?



Students from the University of Montana Schools of Journalism and Law covered the W.R. Grace trial using blogs and Twitter to keep an up-to-the minute account of goings on inside the federal courthouse in Missoula, Mont.

Blogging, Twittering & Analyzing:

A new style of trial coverage

STORY BY Tristan Scott

PHOTO BY Kip Sikora

In mid-February, University of Montana students converged on the Russell Smith Federal Courthouse in Missoula to cover the criminal trial proceedings of W.R. Grace & Co., an epic affair 10 years in the making, which in the first week drew reporters from a dozen national media outlets.

But before any news story could appear in print to chronicle the long-awaited trial, the UM faction had unleashed a real-time blitz of news bulletins, saturating the digital ether with gavel-to-gavel updates on everything from jury selection to opening statements, and even providing colorful vignettes depicting the courtroom's special atmosphere.

Over the next several months, the academic admixture of 30 law and journalism students worked in two-hour shifts, with a member of each discipline covering separate aspects of the daily goings-on. In most instances, the journalism students provided an overview of the proceedings, while law students composed in-depth analyses on the finer points of the law. This tag-team approach meant the students weren't always on the same page, and the out-of-sync accounts sometimes overlapped, intruding on the general readability, of the reports.

Still, the "Grace Case" blog consistently had the most up-to-date updates and, to the chagrin of some members of the press corps who expected a sloppy production, the posts

featured an abundance of smart writing rich in detail and analysis.

Perhaps most groundbreaking was the students' resolve to fire off constant tweets, or Twitter updates - 140-character news flashes ranging from the banal to the truly inspired - sometimes at an astounding rate of eight posts per minute. Whether the dispatches merely conveyed information about an infirm juror, or broke compelling news about major developments at trial, the Twitter feed always left Grace Case followers confident that they wouldn't miss a beat.

Courtroom protocol was part of the learning experience. Early on, one journalism student very nearly caused a mistrial by approaching one of the jurors and attempting an interview. The breach of conduct prompted a stern rebuke from U.S. District Judge Donald Molloy.

Molloy admonished jurors thrice daily to eschew blogs, Google searches, Wikipedia, Facebook, and any other conceivable form of Internet news consumption, in addition to more traditional media, like newspapers, television and radio reports.

At one point the government's star witness, Robert Locke, a corporate insider from Boston, admitted to following the blog posts prior to giving testimony. The following day, defense lawyers were accusing the man of fabricating his testimony based on statements from other witnesses, which

the lawyers argued he must have read about on the Grace Case blog. Weeks later, a similar situation arose during a high-profile bankruptcy trial one floor below the Grace trial, prompting the judge to ban tweets from his courtroom altogether.

The ample defense team cast a wary eye on the stable of reporters seated at the rear of the courtroom, obviating any hopes of anonymity, and making eavesdropping a near impossibility. But aside from an overburdened power strip that bristled with all manner of laptop charger and probably created a fire hazard, it was a smooth operation.

The Grace Case bloggers received a crash course in covering the courts as they observed and recounted the most significant environmental crimes prosecution ever brought by the federal government. Oddly, none of those reports would ever be published, at least not in the traditional sense.

Most student journalists possess a ravenous, single-minded desire to garner a portfolio of "clips" that can be socked away for future employment opportunities. As the landscape of traditional media is rapidly transformed, however, the innovation of "Grace Case" coverage will surely do more to impress future employers than a yellowed paper clipping.





Much like bubbling geothermic activity, there is a brewing tension between media coverage of science and the facts of the field. Media outlets have declared the caldera in Yellowstone National Park as the potential epicenter for a massive, doomsday explosion, but does scientific data support such a scenario?

Science

School of Journalism: Environmental Journalism Issue

VS

sensationalism

Coverage of scientific studies in
Yellowstone and Glacier national parks
reveals how journalists can sometimes
focus more on the sensational
and less on the science

STORY BY Deborah Brae Tanner
PHOTOS BY Tiffany Shyu

If you believed the news reports, you wouldn't go near Yellowstone National Park. Yellowstone's caldera was labeled a "supervolcano" by the press, bloggers and other media outlets. The facts were not as sensational as the reports that said a civilization-ending eruption, described as "a geological doomsday" or "Armageddon," was imminent. In fact, scientists first discovered Yellowstone's history of titanic eruptions in the 1960s, with the last one being estimated at 640,000 years ago. "Sometimes the media bends the realities to make for better entertainment rather than better science," said Jake Lowenstern, the scientist-in-charge at the Yellowstone Volcano Observatory. He said he spent time evaluating everything from fictional movies about Yellowstone to dispelling myths on Internet chat rooms.

In a June 2005 issue of *Geotimes*, Lowenstern decided to address the media miscoverage in his article, "Truth, Fiction and Everything in Between at Yellowstone." He discussed the discrepancies between the information he gave in interviews and the stories the press crafted for the public.

America's national parks, including Yellowstone and Glacier, are test tubes for ongoing scientific research. How work in the parks is covered provides a snapshot of how journalists cover science as a whole, where the truth is sometimes sensationalized.

Public interest often determines the depth and amount of coverage a topic receives from news outlets, and today's online technology gives publishers and broadcasters instant feedback.

"More and more, what you see on television is driven by how many clicks on a Web site are given to a specific story," said Peter Dykstra, a former CNN executive producer, in "Science Journalism's Hope and Despair," published in the *Columbia Journalism Review*.

If people aren't interested in a topic, it won't show up in the news. For instance, the topic of climate change is waning in the news. Half as many peo-

ple Googled "climate change" last year as the year before, but the United States ranked ninth among countries worldwide. Whether it's the slumping economy, the new president or overseas wars, Americans aren't as concerned with the changing climate as they have been in the past.

Familiar with worldwide media coverage on this topic, Joel Harper, a glaciologist at the University of Montana, knows that the inland glaciers, like those he studies in Glacier National Park, are responsible for 60 percent of sea level rise.

Harper and his team studied sea level rise in Greenland in 2008 and returned to publish an article in *Science*. Their research concluded sea-level rise could be as high as two meters, which refuted a prediction of previous studies that said 18 to 60 centimeters would be likely.

He said sociologists have predicted a one-meter rise could displace as many as 148,000,000 people. Although Harper was inundated with phone calls from journalists around the world requesting interviews, his work was largely ignored by the U.S. press.

Public interest is sometimes motivated by compelling images. As some research can be hard to depict, important science is sometimes underreported. "Scientific Images: More Than Pretty Pictures," an article on the New York Academy of Sciences' Web site, explains the value of visualizing scientific study:

"The visualization of science has become increasingly important as science becomes more interdisciplinary. Photographs, diagrams and other visualizations are an excellent way to engage students in science. But perhaps the most important role for visualization in science is as a way to expand the public's understanding of science."

Microbial fermentation, for example, is an important process that's not at all photogenic. Yet some important research on compounds used in anti-cancer drugs is being done in the parks with what is better known as fungus.

In 1993, Gary Strobel published his research in Glacier National Park with a compound he isolated from the yew tree, which provided a natural source of the anti-cancer drug taxol. "Microbial fermentation is the mainstay for economic production of most antibiotics and other important drugs," he said.

The political controversy that emerges from scientific research can sometimes cause the media to shift coverage away from the science to the politics.

Research done in Yellowstone National Park concluded that more than half of the bison roaming the park have been exposed to brucellosis, a bacterial ungulate disease. In the U.S. the disease has been eradicated in cattle and only remains in the bison and elk roaming the greater Yellowstone area, according to the U.S. Department of Agriculture.

Most articles confronting the brucellosis problem focus, not on the science, but on the political controversy surrounding the disease and the strategies of officials in dealing with the problem.

Cattle ranchers who graze their herds on public lands just outside the park, fear bison will transmit the disease to their herds as the bison roam outside the park during the winter, migrating into the lower elevations searching for food. Entire herds would have to be destroyed if they tested positive for the disease, and the state could lose its brucellosis-free status, creating economic disaster for Montana cattlemen.

Officials haze and slaughter bison each year in an effort to manage the bison coming out of the park. This prompts citizen groups, like the Buffalo Field Campaign, to fuel media coverage on the scientific facts wrapped in the bloody roundup and slaughter, as well as the political drama.

The public profile of the parks themselves can determine coverage. Some parks, like Yellowstone and Yosemite, have a higher national profile, according to Amy Vanderbilt, public relations director at Glacier National Park.

She points out the recurring natural event that happens every summer in the West – wild land fires. Vanderbilt, who handled public relations in Yellowstone during the 1988 fires, said the parks are not exempt from these fires, but the press coverage received varies with the notoriety of the park itself.

"Working in Yellowstone was like working in a fishbowl," she said of the notice it received by the media. According to Vanderbilt, Yellowstone is only twice as large as Glacier, but Yellowstone enjoys 5 times the budget, which she attributes to its higher public profile and subsequent media coverage.

A former reporter for the Great Falls Tribune, Sonja Lee Nowakowski, is no stranger to research done in Glacier National Park. Over time, she wrote several articles on the groundbreaking DNA work with grizzly bears. Her knowledge prompted a call from her former editor asking her to write a summary article on the study, which appeared on the cover of *Montana* magazine.

"A park like Glacier is more remote and

difficult to explore. Visiting Glacier is more of a wilderness experience,” Nowakowski said. Although Glacier National Park has two million visitors each year, Yellowstone has almost a million more.

Nowakowski believes the press coverage Glacier receives is more local than that of a more well-known, well-visited park like Yellowstone, as Glacier is harder to reach and has fewer roads passing through it.

Relevance is also a problem in determining news coverage. Probably the biggest reason Americans have difficulty relating to scientific research coming out of the parks is they don't relate to wilderness, wildlife and nature in general. As the population shifts from a rural to an urban focus, personal experience with the outdoor environment decreases.

According to “A National Study of Outdoor Wilderness Experience” at Yale University, “Our reliance on indoor experience and print and visual media offer

little physical and direct stimulation on an everyday basis. A highly urban and populated society provides fewer opportunities for young people to encounter unpolluted and undeveloped natural settings.”


Scientific research, in general, can be irrelevant to many Americans for three reasons. Some of the research is too technical and hard to understand. Some lacks a sense of urgency, as it is a prediction of what might or will probably occur. Some research is not conclusive, so it isn't taken seriously.

Lowenstern's article on the volcanoes in Yellowstone was an effort to correct misinformation by the media, dispel myths perpetuated by the Internet and accurately describe the facts about his work.

The prediction about a catastrophic eruption of the park's caldera (volcano) was based on studies describing three previous eruptions, one that was dated more than two million years ago, and work is ongoing. Scientists have known about the pos-

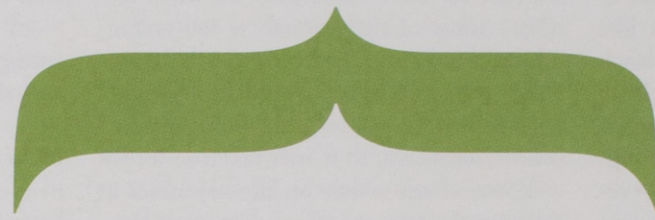
sibility of an eruption for almost 40 years, but a series of tremors in the park generated from an earthquake in Alaska prompted the inquiring minds of reporters to explore. The technical data wasn't communicated in most reports, only the drama, perpetuated by two inaccurate documentary films.

In his article in *Geotimes*, Lowenstern used graphics to explain the technical details and show the scale of the predicted eruption. “Smaller eruptions, however, are far more likely, and no eruption seems imminent on the timescale that most people truly care about – their lifetime or perhaps even the next few hundred or thousands of years.”

“When the science is ignored, or misunderstood, everyone loses,” Lowenstern continued in his article. “The challenge for us scientists is to rely both the details and the context of our work, so that society understands that science is ultimately a human endeavor – sometimes uncertain, often complex, but always exciting.” 



A geyser is a geologic phenomenon, a vent in the earth's surface that periodically spews water and steam into the air. Due to the volcanic conditions needed for a geyser to form, they are somewhat rare, and roughly half of the known geysers in the world are found in Yellowstone National Park.



F o o d

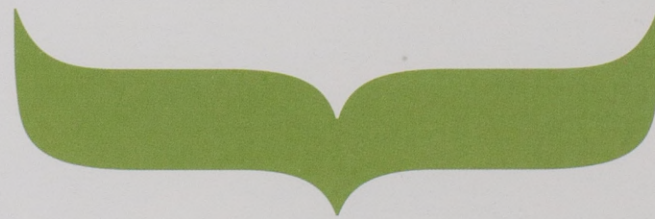
for the new

m e d i a

The changing role

of journalism is

in what we eat



STORY BY Will Grant



Photo Courtesy David Snow

Published by ScholarWorks at the University of Montana, 2015
Although much of Snow's produce ends up on tables of fine restaurants, he also provides for the local Community Supported Agriculture program.

Like the five generations before him, David Snow farms bottom-land along the Black Warrior River outside Tuscaloosa, Ala. For 167 years, Snow family agriculture has helped feed the community. But as farming methods have changed from row crops by the acre to small beds of organic vegetables, something else has changed.

What David Snow is growing, and how he's growing it, is now news.

Reporters from the Tuscaloosa News and Birmingham Magazine drove out to Snow's Bend Farm to tell the story of where some local food comes from and how it is produced. And this is the first time in the farm's history of nearly continuous operation that anyone has ever found their process to be newsworthy.

"First time the farm's been in the news," Snow said. There might have been a photograph in the newspaper of the farm during a flood in the 1950s, Snow said, but nobody ever came out to write a news story on the farming operation. Not until he took over seven years ago.

Snow's Bend Farm is the kind of place you would want your food to come from. The gardens sit at the base of clay and silt bluffs. The soil is dark and fertile. Snow pulls bright scarlet radishes from the black dirt and harvests broccoli heads as big as basketballs. There are no chemicals or pesticides on this farm.

The Black Warrior River, a wide, slow southern river, makes a perfect U around three sides of the farm. Native Americans built a ceremonial mound smack in the center of the U, now the center of the farm. Corn was first grown on the farm 700 years ago, Snow said, and that is when the farm's story began.

The story of Snow's vegetables helps people understand where their food comes from. Learning the history of what we eat is easy and crucial to our health and the health of our communities, Snow said.

"The best way for people to learn about where their food comes from is to go visit a farm," he said. If a visit isn't possible there are plenty of ways to learn from home. "There's a ton of literature out there. More ways than ever to find out about what you're eating."

In Birmingham and Tuscaloosa, people are seeing Snow's name a lot these days, mostly on restaurant menus. He also sells his produce at farmers' markets and runs the Community Supported Agriculture program, which is a contract between producers and consumers

where the farmer supplies seasonal vegetables on a regular basis for an up-front fee.

The farm is getting attention like never before, and "if it's happening here, it's happening everywhere," Snow said.

People are paying more attention to what they eat, how it is produced and where it comes from. And the media is responding. From contaminated food investigations to reports on seasonal vegetables to background stories on farms like Snow's Bend, food journalism is taking on new forms and entering new territory.

"I think it's amazing how so much of the country has embraced this," said Jennifer Maiser, editor of LifeBeginsat30.com and EatLocalChallenge.com. "We're really lucky this is happening during the Internet age because it's a lot easier to find out where our food is coming from. You can have an instant community of people that care about what they eat."

Maiser started the blog LifeBeginsat30.com in 2003 and believes she was on the front edge of the food blogosphere. People wanted to know more about their food and were starting to use the Internet as a source of information, Maiser said. "I had the right message at the right time."

Maiser is part of a group credited with coining the term "locavore" which started the Eat Local Challenge in 2005. The event, which challenges people to eat food produced within 100 miles of their house, was featured in an AP story that went to 50 newspapers and was covered by Time magazine along with various food and nutrition publications across the country.

Coverage like this was unprecedented,

"We're really lucky this is happening during the Internet age because it's a lot easier to find out where our food is coming from."

Jennifer Maiser, Editor of LifeBeginsat30.com

said Maiser. She and her locavores weren't the first to encourage a local diet, but they were the first to get this kind of attention for it. People are caring more and more about what they eat, which means the media is covering food more and more, said Maiser.

"I don't see it slowing down any time soon," she said. "No way. It's not just a trend at all."

Michael Bauer, food and wine editor of the San Francisco Chronicle, recognizes that food is showing up more often in the media, but said his newspaper is no stranger to the beat.

"We've always done in-depth stories on food," he said. "We had reporters at nutrition conferences back in the 80s. The biggest change isn't that all of a sudden food writers are covering food, it's that people are paying attention to it."

People are paying attention to food stories for a variety of reasons, Bauer said. When spinach from California's Central Valley killed one person and made dozens others sick, people wanted to know if they could ever eat spinach again.

Bauer's top reporter Stacy Finz, who came to the food section from the crime beat in 2006, investigated the contaminated spinach and wrote a series of articles that appeared on the front page of the Chronicle. People's health, which is directly related to what they eat, Bauer said, has always been a focus of the Chronicle and has always gotten the respect it deserves.

In 2002, two of Bauer's reporters wrote a series of articles on childhood obesity. These articles appeared on the front page and drew national attention. The reporters won awards for their investigation, and although the article never ran in the food section, it came off the food beat, which was not a surprise to Bauer.

"People like to think these food sections are filled with nothing but recipes," he said. "The food section was discounted, or it wasn't even read. There was a preconception that food writers and editors weren't journalists."

That changed with articles on the childhood obesity epidemic and reports about contaminated spinach. People are taking food more seriously and reading more about it, Bauer said.

"The whole interest in food, from a societal and cultural point of view, has become much more important to people," he said. "There is more interest and there is more coverage of food."

The increased interest in food, and its increased coverage, has done more than just bring articles from the food section to the front page. It has spawned a global network of blogs and Web sites dedicated to providing information on what we eat.

Karen Coates, a writer living in Thailand, is the Asia correspondent for Gourmet Magazine. She also maintains the blog Rambling-Spoon.com, where she writes about "food, drink, travel, politics, history and all the other

avenues that converge in life.”

Coates, like Bauer, recognizes how society and culture overlap with what we eat.

“When I started reporting in Asia a dozen years ago,” she said in an email, “I quickly realized food was a segue into everything else in life. I enter people’s homes or offices for an interview and they immediately offer me tea or treats... Food is always on the mind because it is the basis for life.”

Coates’ experience with people throughout Asia has led her to believe they have a clear idea of the story behind their food. Americans are just becoming interested in learning what many people in Asia already know, Coates said.

“These people know their food, and they know precisely the costs—financial, physical, environmental—of growing it,” she said. “In many ways, I think, we in the Western world are getting back to that knowledge now.”

Knowing where our food comes from

and what it costs entails more than knowing which farm it came from and how it was produced. The story behind what we eat includes the energy and resources that go into producing it and is long and complex, Coates said.

“A food page based on apple pie recipes no longer suffices,” she said. “We need to know who’s picking our apples, how much they’re paid, whether they get health insurance, how our flour is processed, what chemicals are used in the ingredients, how those chemicals affect our health, how much energy it takes to bake a pie, and the carbon footprint a single slice of apple pie leaves on the planet.”

By these standards, the story of a slice of apple pie is long and its cost is difficult to determine. But understanding what food costs and what goes into producing it, is critical to our health, Coates said. And like the reporters who went out to Snow’s Bend Farm in Alabama, it’s up to the media to tell the story.

“Amid all of the economic hullabaloo, with journalists losing jobs left and right, east and west, I’m still finding interest in food stories and publications dedicating more space to food,” Coates said. “It says something about the importance of the issue, beyond flavor and fun.”



Check out what’s growing at Snow’s Bend Farm at www.snowsbendfarm.com.

Learn more about eating locally and Jennifer Maiser’s Eat Local Challenge at www.eatlocalchallenge.com

Follow Karen Coates on her culinary adventures throughout Asia at www.ramblingspoon.com



STORY BY Benjamin Shors
PHOTO BY Kip Sikora

Nonprofits

Lacking ad revenue, journalists must find another way to get their work to the public.

As American newsrooms have imploded in recent years, a new model has risen from the ashes: the nonprofit journalism center.

Boston University has one. So does the University of Wisconsin, where a former political reporter used his severance check to start an investigative journalism center. Independent nonprofits such as ProPublica, MinnPost and Voice of San Diego have found millions in funding from donors, readers and foundations worried about the loss of watchdog journalism.

In Seattle, Denver and other cities across the West, the nonprofit model has captured the imagination of displaced journalists, community activists and university faculty – as well as student journalists.

“Journalists and members of the public are thrilled that in the midst of all this journalism darkness, there’s a ray of light,” said Andy Hall, the 49-year-old founder of the nonprofit Wisconsin Center for Investigative Journalism. “People are incredibly anxious for a sign of hope in this long winter. This is an emerging idea for finding ways to improve the quality and increase the amount of investigative journalism.”

Nearly 40 nonprofit journalism centers now exist worldwide, including some established decades ago amid mounting concerns about the influence of advertisers and powerful publishing companies. The once-niche economic model has gained traction in recent months, as shrinking ad revenue, falling circulation and growing online competition have crippled newspapers.

The centers provide something rapidly disappearing in American newsrooms: Probing, in-depth investigative journalism.

But how green is their coverage?

What might that model mean for environmental journalism?

Can nonprofit centers stanch the loss of in-depth environmental reporting at major dailies?

An Exercise in Collaboration

Eight years ago, the Spokesman-Review of Spokane, Wash., housed three environmental reporters, including this writer.

It was heady company: Karen Dorn Steele, a Polk Award winner and former Knight Fellow at Stanford University, led the paper’s investigations of hazardous waste and environmental degradation. Dan Hansen, author of a popular guidebook on the Inland Northwest, covered land use and natural resources. Based in Coeur d’Alene, I covered the sparsely populated counties of northern Idaho, including the country’s largest Superfund site.

Now a single reporter covers one of the most complicated, controversial and economically vital beats in the region. In today’s economic climate, investigative and explanatory projects at metropolitan newspapers have become a luxury rather than a necessity.

When my environmental reporting class at Washington State University embarked on a project, we decided to seek out a partnership.

Our plan was simple: The Spokesman would provide oversight from an experienced team of professionals led by City Editor Addy Hatch. In return, the students at the Edward R. Murrow College of Communication would produce a multi-part series on the effects of climate change in the Pacific Northwest.

Always open to innovative approaches, then-editor Steven Smith readily agreed to

partner with our students.

“In the science departments at most universities, non-teaching research faculty rely heavily on students, fellows and graduate assistants as they conduct original research ...” Smith later wrote in his media blog, *Still a Newspaperman*. “Why can’t that model work for journalism?”

The benefit lay largely with the students: Hands-on training from professionals. Publication with a metropolitan newspaper and the chance to move beyond the ‘inverted pyramid’ exercises of typical reporting courses.

Sparked by the Hatch’s leadership, the students responded. They trampled across wheat farms to see new climate-friendly agricultural practices; talked with enologists about new varieties of grapes that could now be grown in once-inhospitable climates; Tracked the impact of higher water temperatures on salmon in the Snake River. In the end, they produced an eight-story online package, one of the longest projects published by the Spokesman last year.

The work could never approach the efforts of veteran journalists unleashed for months on a topic. But now, imagine a team of professional journalists, working not with students but also on their own projects, backed by donors and foundations. Housed within a university, the centers would hire journalists – both to produce top-flight environmental journalism and to partner with students on investigative projects.

It is the sort of collaboration that may emerge with greater frequency in the coming years as major news organizations look to nonprofits – and the universities they associate with – to pursue in-depth investigative work.

At Boston University's new investigative center, leaders view that nexus – nonprofit, traditional media and the university setting – as central to its program.

"Just as medical schools serve the dual purpose of training physicians while serving the health needs of patients, we believe that Boston University's journalism program can train reporters while serving the community's civic health," Tom Fiedler, dean of the College of Communication, said in announcing the project.

But is this what it has come to? Are we ready to swap experienced journalists churning out daily news stories for eager college students and a small team of professionals?

We may not have a choice.

The Public-Private Partnership

In 1999, the Seattle Post-Intelligencer broke one of the biggest environmental stories in Montana history.

Investigative reporter Andrew Schneider,

School of Journalism: Environmental Journalism Issue winner of two Pulitzer Prizes, traced the deaths of more than 150 people to a vermiculite mine in Libby, Mont. Schneider later tracked the ore, which contained asbestos, to towns across the U.S., following a deadly map of exposure.

But in March, the scrappy Post-Intelligencer, which lost \$14 million in 2008, issued its final print edition. Schneider and dozens of talented reporters were out of work. The PI's longtime rival, The Seattle Times, has struggled to right its finances as the newspaper market has crumbled.

"We've reached that critical moment where people realize that you could actually live in a town without newspapers," said Brant Houston, executive director of Investigative Reporters and Editors and board president of the Wisconsin center.

In Denver, the closure of the 149-year-old Rocky Mountain News led journalists, donors and citizens to rally for public-interest journalism. There, as in Seattle, Boston and else-

where, many are looking to nonprofit centers to produce professional journalism.

To some, universities appear to be natural partners: They house experts across disciplines. They have mandates for public good. And they have a continuous crop of young journalists. Among others, American University, the University of California-Berkeley and Brandeis University have formed associations with nonprofit journalism centers.

"It enriches the centers, and it can bring a practical and relevant element to the university," Houston said. "For schools, it's very exciting. For the nonprofit, you exchange that experience for cheap, energetic workers."

Until recently, such centers had been viewed as anomalies in the once-wildly profitable world of journalism, complementing but never threatening to replace traditional models. Now Pro-Publica, MinnPost and the Voice of San Diego are viewed as leaders in a tiny but growing market.



With traditional print newspapers going the way of dinosaurs and the pay phone, journalism's professional landscape has entered a period defined by change. Jonathan Weber, CEO and publisher of New West Publishing, (newwest.net) has led the way into the unfolding of new media structures.

"The bad news is, we need a thousand of those," said William F. Baker, a senior research fellow at the Kennedy School's Hauser Center for Nonprofit Organizations, during a discussion at Harvard University last year. "In the scheme of what America needs, that's nice. But it's not enough."

Others have suggested more sweeping changes.

In the New York Times earlier this year, two financial analysts at Yale University proposed establishing endowments for the Times and the Washington Post. With a \$5 billion endowment, they wrote that The Times could maintain a \$200-million annual budget.

"As long as newspapers remain for-profit enterprises, they will find no refuge from their financial problems," wrote David Swenson and Michael Schmidt. "The advertising revenues that newspaper Web sites generate are not enough to sustain robust news coverage.

"Enlightened philanthropists must act now or watch a vital component of American democracy fade into irrelevance."

Flaws in the nonprofit model?

At the Seattle headquarters of Crosscut.com, Editor David Brewster has swapped a for-profit model for nonprofit status.

Launched two years ago with investors, Crosscut relies on a handful of part-time editors, one contract writer, and dozens of freelancers. The Web site has a broad focus, but environmental reporting has quickly become a hallmark.

As advertising dollars disappeared in 2008, Brewster mulled his options. Venture capitalists had grown wary of online news models, but donors seemed eager to back public-interest journalism.

But to make the switch to a nonprofit, Brewster had to convince his original investors to become donors instead.

The vote was unanimous.

"These were investors very concerned

about the loss of good journalism," said Brewster, who co-founded Seattle Weekly in 1976. "There was a strong mission component to it."

Seattle appears awash in what Brewster calls "severance capitalism," as a diaspora of highly trained but displaced journalists search for outlets for their work.

"I think we will have a year of chaos and experimentation and probably a pretty high rate of fatalities," Brewster said. "It's hard to know what emerges from that."

At first glance, the nonprofit model has a slew of advantages: It removes "profit margin" from the industry lexicon. It may shelter journalists from direct advertising pressure. It frees them from the dynastic clans and avaricious corporations that dominated the press in the 20th century.

And it allows reporters to pursue journalism in the public interest rather than tailing car wrecks, freeway chases or Hollywood starlets.

But the transition can be bumpy. As a 501(c)(3), news outlets are prohibited from influencing legislation or supporting candidates, meaning an instant end to the long-standing newspaper endorsement.

"Nonprofits bring some challenges and burdens that people may not realize yet," Houston said. "As a nonprofit, with the tax-exempt status, you really have some deep, deep responsibilities to the public."

Advertising may be needed to supplement grants and donations. And wealthy donors can be fickle, as well as ethically perilous. Donations must be carefully vetted to avoid conflicts. And with other media outlets struggling, businesses are likely to express interest in journalism that advances their ends.

Does that mean it's only a matter of time before a university establishes the "Big Oil Center for Environmental Journalism"?

Probably not. But other smaller, trickier conflicts will likely litter the path of nonprofits.

The Coming Structure of Media

It remains to be seen whether social responsibilities and nonprofit status will improve American journalism, or whether it will distance journalists from the wants of their readers. After all, if competition spurs creativity, what becomes of reporters and editors sheltered from the harsh realities of the marketplace?

"I think that sometimes nonprofits can be quite disconnected, to be very honest," said Jonathan Weber, chief executive of New West Publishing LLC, which is based in Missoula. "What nonprofit journalism will never be able to solve properly is deciding what is worthy. In a business, the customers ultimately decide what is worthy, for better and for worse."

Weber's for-profit venture supports five full-time employees, four part-timers and a network of contract writers, stringers and bloggers. Among other prominent stories, the New West team catalogued the spectacular collapse of the Yellowstone Club, a resort community for the mega-rich where the bank account dwindled to \$40,000 last year.

Across its varied Web pages, New West now attracts 500,000 page views a month, Weber said, and the site's journalism is backed by advertising and a thriving conference business.

In a column earlier this year, Weber criticized those who equate "the current fiscal problems of debt-laden newspaper companies" with the end of journalism.

"I think there is a distinction between the future of traditional print newspapers and the future of journalism," Weber said in a phone interview. "I think that's an issue that has gotten confused in the conversation.

"Change is here and change is necessary," he said. "It's difficult for entrenched institutions to respond to technological change in a way that will allow them to be leaders in the next generation."

Smaller and more flexible, the online startups – both for-profit and nonprofit – may change the traditional structure of journalism.

Weber and Brewster have already partnered to share some content. Houston, who works with several nonprofit journalism groups, imagines a network of local news sites sharing stories and research as the idea spreads from city to city.

"This isn't theoretical," he said. "We're already moving to how you preserve this and grow it, how do you connect all these groups, and then allow them to interact."

Benjamin Shors, M.A. '00, is an assistant professor at Washington State University's Edward R. Murrow College of Communication. He can be reached at bshors@wsu.edu.



Missoula Community Access Television

500 N. Higgins, Suite 105
P.O. Box 8749

(406) 542-6228
FAX (406) 721-6014

E-mail: mcata@mcata.org

Endangering Wildlife:

WILDLIFE FILMS ARE IMPORTANT,

BUT IS THE MEDIA DOING MORE HARM THAN GOOD?

STORY BY Chuck Jonkel

Problems with the media and wildlife coverage began as wildlife science developed in the first half of the 20th century.

In response to massive losses of both wild species and habitats, legislation enacted in the late 1930s taxed hunting and fishing equipment to raise funds for wildlife protection. Returning World War II soldiers became a wave of students eager to become game wardens, biologists, and wildlife scientists.

About that same time, Disney, especially, created a market for wildlife media. The main styles were “the great white hunter” posing with foot on shot animal, and the Bambi, momma/baby, and Tarzan syndromes. This market grew as demand rose and photographic equipment became better and cheaper.

As wildlife management agencies and law

enforcement matured and developed, wildlife education began to move from “pickled-shark-in-a-lab” zoology, to “lets go outdoors” hands-on programs.

The print and TV media, like certain “bad” hunters or fishermen, sometimes hurt both wildlife and wild habitats. In the worst cases, poachers exploited animals and bad film makers/photographers exploited wildlife for money, entertainment, or ego and status.

Unfortunately, the most repugnant and harmful aspects of mainstream TV sometimes make their way into wildlife TV. Profits, not sportsmanship or science, have become the media’s driving force. Many media forces simply do not strive to create good wildlife media, and most wildlife scientists do not have much involvement with the creation of wildlife media.

My early efforts to increase communication and interaction between scientists and the media were not well received by either side. Today, wildlife media, literature, and TV entertainment are still at the mercy of the marketplace, while wildlife science has moved away from the marketplace and more deeply into research, management, and law enforcement.

The situation has been almost impossible to identify and change. The harmful aspects of poaching for meat, trophies or misguided sport have long been recognized and dealt with through professional wildlife management, research, and law enforcement. Specially earmarked federal taxes on guns, ammo, tackle, baits, etc. provide massive levels of wildlife-related funding annually. Thanks to these taxes, species are recover-

ing, habitats are being saved, and massive herds of ungulates are back on the land.

However, wildlife science, education, research and law enforcement have tragically neglected the interests, and responsibilities of wildlife media. Media programmers, distributors and marketers have all too often totally replaced wildlife teachers, researchers, managers, and wardens as the voice of wildlife.

This voice, all too often a mix of humor, sentimentalism, horror stories, opinions and phony authority, motivated by greed and profits, only creates gross distortions of wildlife. Ultimately, it is the cacophony of entertainment values, excessive humanism and profit motivations that too often cause the greatest human impacts on wildlife habitat.

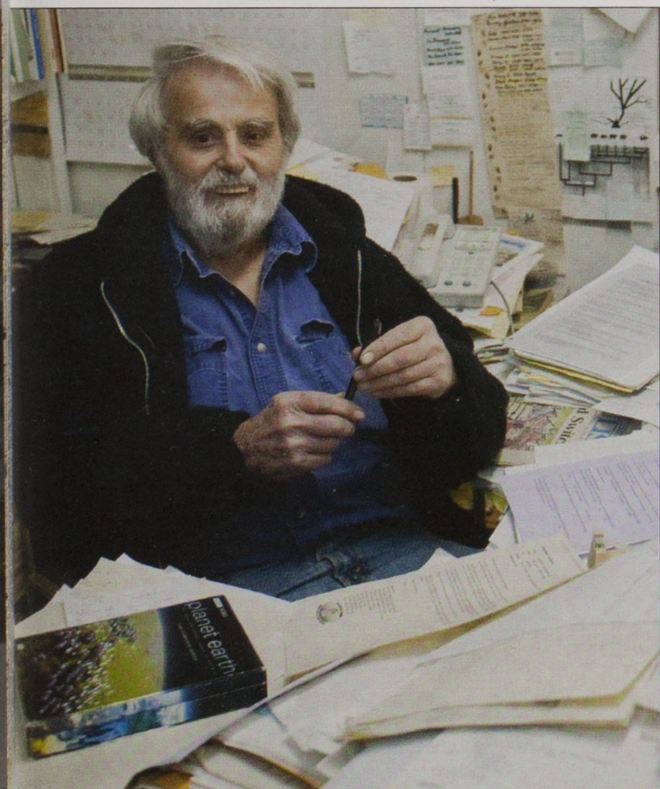
Compounding the problem is the notion that biologists, scientists, teachers, managers, wardens and the wildlife and natural resource agencies still don’t recognize that their roles have been taken over by the media. The media exploit wildlife with nary a complaint or challenge from wildlife professionals.

Even now, most local wildlife specialists have not learned from our International Wildlife Film Festival. They complain about media distortions and untruths, but do not act.

As a typical shortsighted, narrow-minded biologist, I began the study of bears with a “numbers” and a “how to hunt them” approach. Management, research and education about bears back then was essentially a big fat zero in Montana, yet state biologist Fletcher Newby hired me to do Montana bear research.

I quickly learned about the depth and nature of public interest in bears. I found that bears are an iconic animal to the public, but of little concern to biologists and wildlife agencies. Fletch was the sole support for my work, and my research, never having been done before, was day-to-day. I was astounded to find that, suddenly, I was a celebrity.

I found that I needed to constantly deal



Montana Bear Biologist Chuck Jonkel

with the public and the press. Bears were hot.

Time and again, though, as I learned new things about bears, the media would leap on and distort the story. That made difficult work even harder. Concerned more with profits than biology, entertainment more than science, the media and Hollywood nullified the teaching progress I had made.

I had to do something, so I helped the Canadian Broadcasting Corp. (CBC) make an honest film on polar bears.

In long discussions with Jim Murray of the CBC's *The Nature of Things* in Toronto, we refined the idea of how to improve things—a wildlife film festival that would judge films based on scientific, management and educational values, as well as on photo and entertainment quality.

Funding, however, posed a dilemma.

By 1977, I

had moved back to Montana to do grizzly research for the state, and became faculty advisor to the UM student chapter of The Wildlife Society. One late October night I talked to the students about the problem and the need, but I also spoke of the difficulty funding a juried wildlife film festival based on scientific accuracy and education value. I figured it would cost around \$200,000. Forty kids leapt up saying “We will do it,” and the funding crisis was averted.

Our first festival, held in the winter of 1978, was a success. Considering we didn't know how to create a festival, needed to raise lots of money and had to develop scientific values and guidelines, awards, judging rules, categories, judging panels, etc., we were as surprised as anyone by our success.

Now in its 32nd year, and having long since moved off campus, the International Wildlife Film Festival is the largest and oldest festival of its kind worldwide. But our work is far from done.

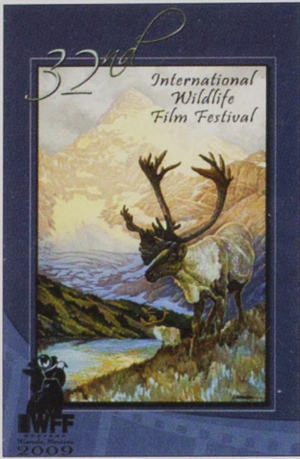
One constant problem for the IWFF has been staying free of influence from financial sources. The industry would gladly fund and control the festival, changing it into a trade show, like many other film festivals around the world. Science, educational quality, manage-

ment needs, even wildlife law would all suffer again.

There are wildlife scientists, teachers, filmmakers and photographers who honor and employ truth and good science. IWFF celebrates their efforts and contributes to their successes, yet problems continue to evolve. Vast sums of money go to what can only be called “wildlife pornography,” and most wildlife professionals pay it little mind, considering it “entertainment.” Well, it is not entertaining to the bears, the birds, or the orphaned young in their ruined habitats.

Furthermore, people in less-developed countries too often see only the poorest of wildlife films. They cannot afford to buy or make good wildlife films, yet these same countries have most of the extremely endangered wildlife and habitats. The very people, habitats and wild creatures that need help the most, get the least.

Many members of the news media and wildlife professionals still do not understand the need for communicating and for working together. Much more needs to be done, for with the advent of each new media format, new patches of habitat and species are threatened or destroyed.



THANK YOU, UM

Great Falls Tribune newsroom employees thank the University of Montana School of Journalism:



Make your writing tight and bright, ask the tough questions, never use a prepositional phrase to end a sentence with. These are just a few of the lessons drilled into me during my days in J-School. And a few of them actually stuck.

I owe a ton to my journalism professors for their sometimes gentle — sometimes not-so-gentle — guidance during my days at UM. And I owe probably just as much to the Montana Kaimin, a 24-hour-a-day classroom with the toughest teachers you'll ever find — your daily readers.

—Matt Ochsner



Built to last. The foundation formed during my years at UM's School of Journalism has proven solid through three decades of work in the newspaper business.

While the industry has changed, many J-School tools are ingrained, and I still use them constantly. They are the skills that matter most and improve with constant use.

Good editing never goes out of style. Having the desire and ability to design an appealing page, write a snappy headline or catch an error before the press runs are what make copy desk work challenging and rewarding.

—Jackie (Galt) Rice

The University of Montana also played a key role in these Great Falls Tribune newsroom employees' careers:

Michael Babcock
Stacy Byrne
Kristen Cates
Rich Ecke
Zachary Franz
Cathy (Kauffman) Gretch
Liz Hahn
Dan Hollow
Peter Johnson

Leon Lenz
Erin Madison
Gary Moseman
Kim Skornogoski
Allison Squires
Amie (Rambo) Thompson
Scott Thompson
Také Uda



Oscar Wilde complained that newspapers “disseminate the opinions of the uninformed, thereby keeping us in touch with the ignorance of the community.” In his heyday in the late 1880s, many people may have shared Wilde’s low regard for reporters and their news organizations. If Wilde were alive today and living in Montana or some other part of the American West, he surely would encounter other residents of the region who embrace his point of view. Many citizens are dissatisfied with how the West’s newsrooms cover the rapid and often unwanted changes that have become pervasive. As a result, the public often has an inadequate understanding of the causes and consequences of what is happening to Western communities—to their cultures, their economies and to the landscapes they care about so deeply.

But the public’s current problem with journalism may reflect shrinking newsrooms more than lazy reporting.

The recent demise of the 149-year-old Rocky Mountain News saddened plenty of Denver’s citizens, including many who had counted on the newspaper to keep them abreast of local and regional environment issues. In its youth, the Rocky’s unabashed mission was to help the boom town grow and prosper, sometimes at the expense of accuracy. Since 2000, as Colorado’s oldest and second largest daily, the Rocky has won four Pulitzer Prizes for its service to the public. In the current decade, it also has produced some of the most insightful coverage anywhere in the West on complex and contentious issues of water conservation and population growth.

Could the Rocky’s death portend a larger and more harmful unraveling? The recent deaths of the Albuquerque Tribune and the Tucson Citizen reflect the same basic economic trouble: being extremely unprofitable. For the same reason, the San Francisco Chronicle faces the prospect of extinction, while The Salt Lake Tribune, The Arizona Republic and The Oregonian struggle,

along with scores of other Western dailies, to stanch their own financial hemorrhaging.

The dominant business model for newspapers is badly broken. In many American cities, the dailies swaggered through the 1980s and 1990s, engorging themselves with profits. The publisher of the Billings Gazette, Wayne Schile told me he adored his job back then because it was like “being licensed to print money.” But in this decade, with the strong commercial surge of the Internet, the newspapers’ longstanding local monopolies in classified advertising have vanished. Year after year, the base of paid subscriptions keeps shrinking. At many papers, revenue from big display advertisers erodes at a shocking pace. Under these transformative conditions, the incoming cash is rarely adequate to support payrolls and the hefty costs of printing and delivery. The industry’s current trajectory is a downward spiral. In the West, newspaper owners saddled with heavy debts now face heightened risks of bankruptcy and breakup.

These struggling owners include the McClatchy Company and Lee Enterprises. Stocks of both companies have been trading recently for less than \$1 a share, an indication of extremely low investor confidence. McClatchy, the owner of 30 dailies, including 11 in the West, eliminated about 1,200 jobs last September and renegotiated its \$1.2 billion debt agreement to ease pressures caused by its advertising woes and reduced cash flow. In exchange for some relaxed loan-agreement provisions, the company has put up more collateral and now pays higher interest rates. Lee, the owner of 49 dailies, including 22 in the West, carries debts totaling about \$1.3 billion. Because of a recent increase in the interest rates that Lee must pay its lenders, the company cannot restore its dividend or repurchase any of its own stock for at least three years.

Among the best of McClatchy’s Western papers are The Sacramento Bee, the Idaho Statesman and the Anchorage Daily News. Since 2000, all three consistently have done an excellent job of covering major issues of growth, development, natural resources and the environment. The abrupt demise of any McClatchy dailies in the West could pose civic hardships for the communities they serve. Public awareness and understanding of complex issues could be diminished severely.

The quality of the Lee papers is generally inferior to the McClatchy group. Nonetheless, since Lee has little or no competition in the geographies where it operates, news coverage by Lee dailies receives a lot of readership in many communities of the region.

Troubled Newsrooms and Community Ignorance:

Journalism’s Duty to the American West

STORY BY Frank Edward Allen

In Montana, for example, Lee owns the Missoulian and four other dailies that together control 60 percent of total statewide circulation. Lee also owns prominent dailies in Oregon, Arizona, Idaho and Wyoming. In most of Lee's Western papers, routine coverage of news about the environment, the economy, politics and government is often less thorough, less explanatory and less analytical than that of McClatchy papers. A shining exception is the work of the Missoulian's Michael Jamison. He shows commendable initiative, persistence and storytelling flair in his coverage of a broad range of topics—from issues about Plum Creek Timber's vast land holdings to climate research, wildfire management, endangered and invasive species, rural economic growth and Glacier National Park.

Within the next several years, the economic evidence suggests, many medium-sized and larger cities in the West risk losing the print versions of their dailies. Scores of these papers are likely to perish online as well. As they disappear, so will the best-prepared watchdogs of government, the economy and the environment. Communities across the West will forfeit the most reliable local sources of information about changes as they happen—and about why these changes are important.

Certainly most, if not all, the region's daily newspapers could do a better job of informing the public, especially about the big, difficult stories. Yet it is the newsrooms of the dailies—not those of the West's local television stations, public-radio affiliates, lifestyle magazines or online forums—that possess the most capacity and will to do original reporting. Except in a few of the region's largest cities, only the dailies have the more-experienced and better-trained staffs required for the competent gathering, verifying, evaluating and disseminating of news.

As the news staffs of more Western papers continue to shrink and even disappear, who and what will make up for the deficits? How will citizens and communities keep up with the pace and scale of change underway throughout

the West? Should freelance writers and bloggers be entrusted to carry the load? What will happen when the last remaining daily newspapers in the West no longer have the workers, expertise or institutional memory necessary to challenge abuses of power or authority? What will happen when the news beats have been thinned to such

neider has won two Pulitzer Prizes, one in public service and one for specialized reporting. He has also received the National Headliner Award, the Society of Professional Journalists' Public Service Award, the George Polk Award and the John B. Oakes Award for Distinguished Environmental Journalism.

Papers are likely to perish online as well. As they disappear, so will the best-prepared watchdogs of government, the economy and the environment.

a point that nobody checks anymore to see if a government or industry official's statement is even accurate?

The Seattle Post-Intelligencer, which published its last edition in print on March 17, hopes to demonstrate that life after print can be worth living. The P-I had been consistently unprofitable since 2000. It lost \$14 million in 2008. To survive online, the P-I will have to make do with a relatively young and inexperienced news staff of 20 (compared with about 250 during 2008)

and a virtually untested ad-sales team.

When the Post-Intelligencer dismissed about 90 percent of its news staff, the communities of metropolitan Seattle lost forever the benefit of coordinated, disciplined coverage by such outstanding journalists as managing editor David McCumber and award-winning reporters Andrew Schneider, Robert McClure, Lisa Stiffler and

Jennifer Langston. All of them brought distinction to the paper's environment-news coverage.

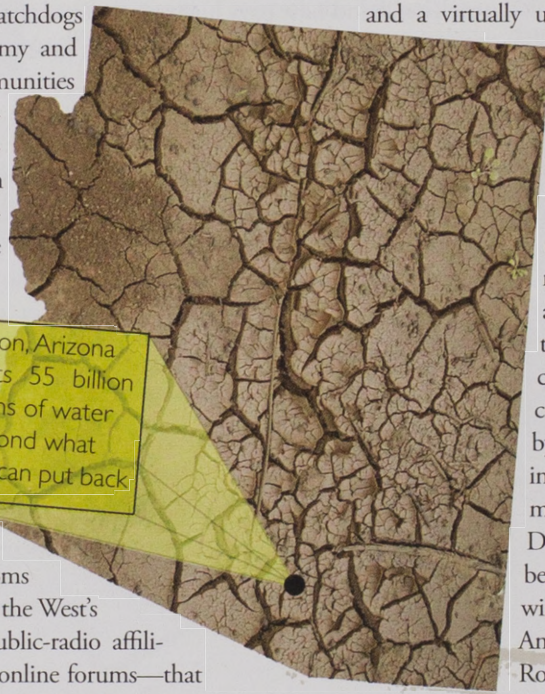
McClure and Stiffler rank among the best environment reporters in the country. They have received repeated regional and national recognition for their extensive reporting on the ecological challenges confronting Puget Sound. Langston earned praise during the past five years for her thoughtful coverage of issues of urban growth, traffic, air pollution and sprawl. Sch-

About six years ago, as an investigative reporter for the P-I, he poured through thousands of documents and conducted hundreds of interviews to break a major public-health story about deadly asbestos pollution from the vermiculite-mining operations of W.R. Grace & Co. in Libby, Mont. In 2004, Schneider and McCumber wrote a compelling book about the case entitled, "An Air That Kills." The newspaper's extensive coverage triggered an investigation by the U.S. Environmental Protection Agency, resulting in the designation of Libby as a toxic Superfund site, a civil trial against Grace and criminal indictments of the company and several of its executives.

Although groundbreaking environmental reporting has flourished over the years in high profile daily newspapers from time to time, the troubling trend of downsizing publications has taken a toll on the quality and feasibility of coverage.

The small nonprofit that I manage has been studying the environment-news coverage by daily newspapers in the North American West since 2000. Our research team of independent journalists started by traveling all over the West, across 14 states and two provinces, from El Paso to Anchorage, from Calgary and Casper to Santa Fe, Sacramento and San Diego. To organize this initial effort, we used the John Wesley Powell approach. We divided the work along the most natural and logical of the West's internal boundaries—its watersheds. We looked at coverage in the context of the West's sub-regions, by drainage—from the tributaries and the main stem of Columbia to those of the Missouri and the Great Basin, and from those of the Platte, the Arkansas and the Rio Grande to those of the Colorado.

As we traveled, we talked with managing editors, city editors and other newsroom supervisors as well as with reporters. For added perspective, we talked with former reporters and editors. We read all 285 English-language dailies in the



Tucson, Arizona extracts 55 billion gallons of water beyond what nature can put back.

North American West, including those in Alberta and British Columbia. We read week after week and month after month, starting in 2001, throughout 2002 and about the first half of 2003. Between 2005 and 2008, we did substantial follow-up research using the original 2001 data for a baseline. We have counted stories. We have counted words. We have studied how often the stories appeared and how they were displayed. We have examined how the stories were framed and how much, or how little, explanatory context they provided. All of the working conditions we found to be prevalent in 2001, 2003 and 2005 have since become even more pronounced.

Managing editors at 80 percent of the West's dailies still say their newsrooms have a significant shortage of reporters.

At three-fourths of the West's dailies, reporters constantly face severe time constraints, mostly because of pressures to produce an acceptable quantity of stories every week, if not every day.

At more than half of the West's dailies, no reporters are assigned to cover the community's natural resources or environment more than one-third of the time.

Senior news executives at more than three-fourths of Western dailies acknowledge that their organizations provide no training whatsoever in how to cover natural resources, the environment, science, public health, government, business or economics.

At most Western dailies, the lack of opportunity for training and professional development is a much more prevalent source of news-staff discontent than either salary levels or chances for promotion.

In journalism, shallowness should be the enemy. And the worthiest adversary of shallowness is context.

Reporters who have left the natural resources beat at Western dailies since the mid-1990s most often cite job dissatisfaction or disillusionment as the primary reason for their departure. In particular, they express frustration about having been allowed too little time and space to do justice to complicated, issue-based stories. Most reporters currently assigned to cover this beat for Western dailies express the same frustration.

Although more than 80 percent of the water in the West is used for agriculture, supervising editors at about one-fourth of the West's dailies think farming doesn't warrant coverage because

the subject is simply "not applicable" to their readers.

While more than half of America's toxic-chemical releases into bodies of water and into the atmosphere by metal-mining operations occur in Western states, half of the managing editors in the West believe that mining is not an issue for their readers.

Most Western news organizations could and should be making a better effort to reduce ignorance in their communities. Ignorance is a strong word. It can be mistaken for a scornful word. But being ignorant simply means being uninformed. Ignorance is different from stupidity. There isn't much that even the best news organization in the world can do to reduce stupidity. But there is much that all news organizations, regardless of size or wealth, can do to reduce ignorance. A large majority of the West's daily newspapers and other news outlets neglect the whole. Instead, most Western news organizations cover just the parts, narrowly and sporadically, in response to specific events, as if these events were isolated and unrelated. What's missing so often is the needed sense of context, significance and relevance.

In the past half century, metropolitan Tucson has grown from nine square miles to 309 square miles. The city's footprint is still spreading. Much of the once-stunning, saguaro-covered desert is now platted and paved. The city still gets almost all of its drinking water from wells and they are steadily sucking down the aquifer. Lately, they have been extracting about 55 billion gallons a year *beyond* what nature can put back to sustain the aquifer. In parts of Tucson, the ground is sinking. Aggressive water consumption without sufficient recharging has caused the ground to

subside.

The foundations of buildings are cracking. As water tables have

dropped, pumping costs have increased, while production has fallen, water quality has declined and riparian areas have suffered. Tucson wants to keep growing. Its boosters are betting heavily on a 300-mile pipeline to bring water from the Colorado River at Parker Dam. But if the Colorado River runs low for several consecutive decades, then what? Some Westerners have expressed serious interest in piping water from Lake Superior.

Tucson makes a worthy surrogate for much of the American West's natural landscape—and for how much that landscape has changed just since World War II. Tucson is a surrogate for the

big story of the West's growth. But few dailies in the West know how to frame and tell the big story in ways that reduce community ignorance.

In journalism, shallowness should be the enemy. And the worthiest adversary of shallowness is context. Reporters for *The Pueblo Chieftain* in Colorado and *The Desert Sun* in Palm Springs, Calif., often fail to raise questions about how proposed housing subdivisions and golf courses could affect local groundwater. At the *Arizona Daily Sun* in Flagstaff, reporter Cyndy Cole cannot travel to the adjacent Navajo Reservation to pursue stories about the environment or public health unless she can demonstrate in advance to her editor that the stories will have a "Flagstaff angle." Editors at the *Statesman Journal* in Salem, Ore., recently discouraged their environment and science beat reporters from quoting researchers at Oregon State University in nearby Corvallis because these people live and work outside the paper's circulation area.

Throughout the Western states, the opportunity to reduce ignorance is substantial. In Colorado, for example, more than one-third of the *current* residents of the Boulder-Longmont metropolitan area didn't live in that area just five years ago. One-fifth of these current residents lived *outside Colorado* five years ago. The same pattern holds true for Denver, Colorado Springs, Fort Collins, Loveland, Durango and Aspen, according to U.S. Census Bureau data.

That's a lot of newcomers. But in order to function as informed citizens, these newcomers need help from news organizations. They need to get brought up to speed on the context in the places where they have resettled. They need to learn some relevant history. They need to understand the fundamental trends of local growth and local development and local water consumption. Western newcomers and long-timers alike will continue to depend on newsrooms for more than just a description of what is happening. They also need and want the benefit of first-hand observations of how it is happening, trustworthy explanations of why, and independent evaluations of the significance, the implications and the known and potential consequences.

When these journalistic duties are fulfilled, communities will be better off. All across the West, journalists can and should do better. In this harsh era, with more and more shrinking and sinking of newsrooms, the question is how journalists can be expected to get better as their dissipating ranks and resources prevent them from doing more.

Frank Edward Allen is president and executive director of the Institutes for Journalism & Natural Resources. He and his wife Maggie live in Missoula.

How Green the 'zine?

Is printing on recycled paper feasible in this time of growing environmental awareness?

STORY BY Amy Faxon

PHOTO ILLUSTRATION BY Elizabeth Diehl

When you're finished with the latest issue of *The Economist*, you probably toss it in the nearest recycling bin. After all, there is a symbol at the bottom of the table of contents encouraging readers to recycle it. Then, hopefully, it will be reused in future magazine issues. But, recycled material from the magazine won't be reused for other *Economist* issues, nor will it be used in *People*, *TIME*, *US Weekly*, or many other magazines with a circulation of at least 600,000.

The only way a lot of magazine publishers are involved in recycling is by encouraging readers to recycle their magazine, and the cycle ends there for them. Why not complete the cycle by printing their magazines on post-consumer recycled paper (paper previously used in publications) instead of virgin-fiber paper?

According to a Seybold Report published on Nov. 2, 2007, if all magazines in North America were printed on 30 percent post-consumer recycled paper, 10,027,984 trees would be saved; enough energy to power 68,960 homes for a year would be conserved; the amount of greenhouse gases emitted by 153,894 cars in a year would not be released into the atmosphere; waste-water equal to the amount of water in 5,113 Olympic-sized swimming pools would not be produced; and 27,149 garbage trucks wouldn't have full loads of solid waste to dump. There are currently about 17,000 magazines in the U.S. alone, and less than 2 percent of them regularly print on recycled paper, according to Green America's Better Paper Project, dedicated to reducing harmful effects of paper consumption on the environment.

Magazines that print on post-consumer recycled paper include *Audubon*, *Body and Soul*, *Clamor*, *Cooking for Two*, *Craft*, *E Magazine*, *The Ecologist*, *Every Day with Rachel Ray*, *Inc.*, *Montana*, *National Parks*, *Nickelodeon Magazine*, *Organic Life*, *Sierra*, *Washington Gardener*, and *Yes!*.

The idea of printing on recycled paper will really start to have an impact when the large magazines do it, said Doug Moss, publisher of *E Magazine*, an environmental publication.

“What really needs to happen is for the big magazines like Vogue to do it,” he said, adding that if more magazines with larger circulations printed on recycled paper, the market for it would grow quickly.

“If there is a high demand for things like 100 percent recycled paper, the costs will go down,” said Kristen Harding, assistant publisher of *The Ecologist*.

Currently, the magazines with some of the largest circulations, including *Elle*, *Marie Claire*, *US Weekly*, *TIME*, *People* and *National Geographic*, do not print on post-consumer recycled paper.

National Geographic's cover is currently printed on paper that contains recycled materials, and it is testing different recycled content papers for the rest of the magazine, said Julie Crain of the *National Geographic Society*. “One problem that we will have is the availability of clean recovered fiber in the quantities we need, and that will only get worse as the demand for recycled fiber goes up,” she said. “A lot of our waste paper goes offshore for reuse, so clean fiber will not always be available unless more people recycle more paper products.”

David McDonald, advertising production manager for *Marie Claire*, a Hearst publication, said the magazine has never printed on 100 percent post-consumer recycled paper.

According to “Being Green,” a report published by the Hearst Corporation, the corpo-

ration currently uses more than 15 percent post-consumer recycled paper in its publications, especially in the newsprint it purchases.

“I think the gap in the system is that people aren't recycling enough paper for it to be used as recycled paper,” McDonald said. “(The recycled paper) wouldn't be white enough for the quality of our magazine.”

He explained that the recycled paper would have to be bleached and then it wouldn't be environmentally friendly anymore, and it's also more expensive.

Green America said there is enough recycled paper for people to buy, it's now at a competitive price to virgin-fiber paper and the quality is just as good as virgin-fiber papers. Its Web site, betterpaper.ning.com, states that “enough recycled paper is produced to supply an industry-wide switch to 10 percent post-consumer recycled paper as early as tomorrow,” and post-consumer

recycled paper is available in variations of smoothness and brightness. It goes on to say, “Magazines on the market today with recycled content range from 30- and 40- percent post-consumer recycled content to as much as 100 percent post-consumer recycled content and look great.”

“There is very little choice when it comes to recycled papers if you are looking at a content of 75 percent or more,” said Harding of *The Ecologist*. “And often these appear grey and not white. This is an effect that some people relish, but other more mainstream magazines want something that is clean and crisp.”

Some lifestyle magazines such as *Marie Claire*, *Elle* and *Vanity Fair* have published green issues. The only difference between the green issue and every other issue they publish are the articles inside, which are geared toward eco-friendly or “green” living. For example, you can find “The Get Green Guide to Eco-Chic Living” inside *Marie Claire*'s green issue. This guide includes articles on the greenest celebrities, organic foods and cocktails, easy ways to save money and the planet, eco workout clothes, and green grooming products.

“I think the gap in the system is that people aren't recycling enough paper for it to be used as recycled paper.”

David McDonald, advertising production manager for *Marie Claire*

“The print industry is not an eco-friendly one,” Harding said. “We all need to make as many changes in the right direction as we can so that we have as little impact environmentally as possible.”

The Ecologist prints on 100 percent post-consumer recycled paper and uses vegetable inks. “We need to demonstrate that what we talk about is possible,” Harding said.

Doug Pibel, managing editor of *Yes!*, said the magazine prints on 100 percent post-consumer recycled paper and uses soy-based ink. The largest impact on the environment is the use of paper and we use a lot of it, he said.

The environmental magazine promotes eco-friendly living. “We offer people practical solutions for changing the way we live and we want to demonstrate to people that it's not a hardship to make the changes we need to make,” Pibel said.

In printing on post-consumer recycled paper, *Yes!* has struggled with its color repro-

duction quality because the recycled paper has a larger dot gain than its printer is used to, Pibel said. He assumes magazines probably print on the least expensive paper that gives them the quality they need.

“The stock we use is very expensive,” he said. “Much more expensive than standard stock.”

John Karst, an account representative for the RR Donnelley branch in Great Falls, Mont, said the full-service paper printing company offers two paper options for magazines that want to buy post-consumer recycled paper: paper with 10 percent post-consumer recycled paper and paper with 30 percent post-consumer recycled paper.

Karst said the paper with 10 percent post-consumer recycled paper is about 5 percent more expensive than virgin-fiber paper. He estimates that about 5 percent of its jobs for magazines are printed on 10 percent post-consumer recycled paper. The 30 percent post-consumer recycled paper is about 10 percent more expensive than virgin fiber paper. Very few of RR Donnelley's clients are willing to pay that much more for the recycled product. Karst said customers call and inquire about prices of the post-consumer

recycled paper, but aren't interested once they hear the price.

For magazines that want to buy 30 percent post-consumer recycled specialty paper and will be printing multiple issues throughout the year with RR Donnelley, the

company can accommodate them, but “even then there is a really low demand for the 30 percent post-consumer recycled paper,” Karst said.

E Magazine, also a magazine focused on the environment, prints on 100 percent recycled paper, of which 30 percent is post-consumer recycled. They currently don't use soy-based ink. “We haven't made that move yet, but we will once the industry is up to speed,” said Moss of *E Magazine*.

He thinks larger magazines such as *Vogue* and *TIME* will wait until recycled paper is cheaper to start investing in it. “Paper companies need to be told to use recycled paper,” Moss said, adding that it will only happen if environmental laws are passed.

“We believe that if you are going to print a magazine on paper you have the responsibility to do so in a least damaging way,” said Pibel of *Yes!*



Advocacy or Reporting:

The line between writing about the environment and writing on behalf of the environment

STORY BY Elizabeth Diehl

PHOTO ILLUSTRATION BY Becky Malewitz

JIMMY CARTER once said, “We must adjust to changing times and still hold to unchanging principles.”

Today, journalists fight to be objective, an unchanging principle that lies at the heart of all journalism ethics. The controversy over objectivity frequently presents itself in stories written by environmental reporters. According to many discussions held by the Society of Environmental Journalists (SEJ), present-day environmental journalists are attempting to answer whether it would be more effective to abide by classic standards of objective journalism or to write about what they think is scientific truth after interpreting the facts that are presented, a tactic regarded by some as advocacy rather than journalism.

Environmental reporters are frustrated by public censure, are accused of misleading readers to the point of advocacy and reporting with anti-corporate biases. Due to the fact that environmental stories can unravel over a long period of time, environmental reporters have been criticized for becoming invested to the point of bias.

In the past decade, environmental journalists, especially those who have written stories on climate change, have faced a considerable amount of backlash from environmental advocates, global-warming skeptics and large businesses. And as news organizations are cutting their budgets they are also cutting back on environmental reporters.

In the transition from print to the Web and with heightened job insecurity, is it still important for environmental journalists to stick to objective storytelling, even if that's not what everyone wants to hear?

“My work has never been so scrutinized as it has as an environmental reporter,” said SEJ President Christy George. “I have been attacked by environmentalists for having skeptics on the air and I have been attacked by skeptics for having environmentalists.”

Though SEJ members may care about the environment, they are <https://scholarworks.umt.edu/mjr/vol1/iss38/1>

not to be confused with environmental advocates.

“At the SEJ we are constantly reminding people that we are not environmentalists but that we are environmental journalists,” said George, a former advocacy journalist.

For some skeptics, the efforts of environmental reporters to separate themselves from advocacy create the problem with environmental journalism today.

The dilemma is caused by a strain between the traditional school of thought, which is complete objectivity on the part of journalists, and the responsibility to communicate a more subjective idea of truth, especially when it comes to covering pressing environmental issues.

In a talk at the University of North Texas's Nature Writing Symposium, environmental writer Wendee Holtcamp discussed her grievances with objectivity in environmental journalism.

“Is it okay for journalists to get involved in advocacy of any type or write advocacy journalism, or does this compromise their journalistic integrity?” Holtcamp asked. “I believe what we need is not necessarily objectivity but rather to consistently uphold the rest of the code of ethics – maintaining integrity and accuracy in your writing, and to be clear about your perspective upfront.”

Striving for objectivity fails to serve the best interests of society, Holtcamp said. Traditional objective journalism “leads to reader apathy, which in turn results in social and environmental problems persisting far longer than they really need to,” she added.

For Holtcamp, writing without objectivity does not mean one should stop searching for the truth or give up other journalistic standards.

“Every piece of writing should still seek to find the unvarnished



truth to the best of your ability,” she said. “I just don’t agree that truth is as simple as objective journalism makes it out to be. I think that everyone has their own perspective on what truth is, and so long as the writer is clear about their own perspective and seeks to present the facts and the entire picture of truth, then it’s up to the reader to draw his or her own conclusions.”

On the other side of the spectrum is an argument made by business leaders who denigrate environment reporters for being Mother Nature-crusaders regardless of their efforts to remain unbiased.

In a study called “Wrestling with Objectivity and Fairness: U.S. Environment Reporters and Business Community,” authors David Sachsman, James Simon and JoAnn Myer Valenti, write, “Representatives from business groups and business-related institutions have complained that reporters have taken a pro-environment viewpoint on a number of issues that could affect business, including global warming and the proposed Kyoto treaty; pesticide usage on produce; air pollution standards; the health of the national economy; and such issues such as overpopulation, species extinction and air and water pollution.”

In the study, which included 364 U.S. environment reporters, they discovered that journalists are more likely to use a business or economics fabric for their stories than an environmental one.

“The reporters used some business organizations as sources more often than some environmental groups. They acknowledged the need to be fair to both corporations and environmental activists,” the study said.

Environmental reporters are not willing to give up objectivity quite yet, regardless of chastisement from both sides.

Published by ScholarWorks at University of Montana, 2015

Jim Bruggers, former SEJ president and reporter for the Courier-Journal in Louisville, Ky., has covered the environment full-time since 1992.

“One of the reasons why we get [criticized] is that experienced environmental journalists know the questions that need to be asked,” Bruggers said. “If you ask tough questions you can be perceived as being biased.”

Objectivity is pertinent to Bruggers. He avoids criticism through self-censorship. “I think that every reporter, no matter what the beat, needs to understand what an issue or a conflict makes them feel personally before they go about their reporting,” he said.

The same elements in an environmental story that lead to criticism also lead to monetary repercussions.

“Environmental stories become economic stories,” said Don Hopey, professor of environmental issues and policy at the University of Pittsburg and an environmental reporter at the Pittsburg Post-Gazette.

“Environmental stories and folks have to fight for a piece of the pie,” Hopey said. “Criticism comes from folks who have to give up a piece of that pie.”

Despite the challenges, Hopey is committed to the environment. “It is not a beat for the faint of heart, for people who don’t like controversy or to get criticized,” he said.

It is important to keep journalistic integrity, SEJ president George said. “When you write things for the public, people react.”

New journalists to the environment beat need to remain objective, fair and accurate, she said.



The Great Turtle Race:

How to get readers engaged in environmental journalism



Galapagos
Islands

FINISH
ZONE

STORY BY Jane Ellen Stevens

Eleven leatherback turtles competed in the The Great Turtle Race from April 16 - 19, 2007. The race was organized to raise awareness of the plight of these amazing animals.

Colombia

Ecuador

April 2007. Day nine of The Great Turtle Race. Hundreds of thousands of children, women and men check an interactive map on the Web to watch two table-sized leatherback turtles – Stephanie Colburtle and Billie – stroke toward the Galapagos Islands. For days, Stephanie Colburtle was in the lead. But late on day eight, with just 80 miles to go, Billie passes her.

During the two-week race, eleven leatherback turtles outfitted with satellite transmitters swam from nesting beaches in Costa Rica to the Galapagos Islands. Their progress was updated more than 100 times a day on the interactive map. Other sections of the site featured turtle “trading cards,” multimedia stories, and educational modules. The project was a collaborative effort of Tagging of Pacific Predators, of which I was editor, the Leatherback Trust, Conservation International and Costa Rica’s environmental agency.

The race was about as real as a swimming contest between leatherback turtles could get. Researchers put satellite tags on the female leatherbacks in Costa Rica, as they have for several years in their efforts to find out where leatherbacks migrate. Computer programmers zeroed-out their departure times from the beaches (a la Tour de France). They updated their progress on the site every ten minutes.

The site, TOPP.org, which received 3 million page views from more than 750,000 unique visitors, provided historical background on each turtle via a three-sided baseball trading card. One section featured in-depth multimedia stories about satellite tagging, leatherback physiology, nesting, researchers

and the practices that were killing the turtles. The site also provided educational modules for teachers to use during the race and links to researchers and students who were blogging about the race. The turtles had MySpace pages.

We named one of the turtles Stephanie Colburtle, with the hope that Stephen Colbert would notice. He did three comedy bits during the race. Conservation International interested enough radio, TV and news organizations to reach 137 million pairs of eyes worldwide with the story. In the blogosphere, the race went viral. One week into the race, when we Googled “Great Turtle Race,” 97,000 results popped up.

Why was this site so engaging? It embraced everything Web: it was interactive, participatory, solution-oriented, immediately accessible and updatable, visual (videos, photos, charts, maps) and animated. It seeded and linked social networking, and had lots of context and continuity. It was entertaining and useful.

It even had a business model: companies paid \$25,000 each to sponsor a turtle. The money paid for the satellite tags and went into a fund to preserve parts of the turtles’ nesting beach from development.

After the Great Turtle Race was finished – Billie “streaked” across the finish line on the

morning of day eleven – we applied what we learned to the development of TOPP.org, a site for Tagging of Pacific Predators, the Census of Marine Life (COML.org) research project that led the Great Turtle Race. TOPP.org has an interactive, animated map that's updated nightly, animal widgets with an RSS feed updated nightly with the animal's speed and distance traveled, a photo of the day, researchers' blogs, ocean news, an ask-a-researcher feature and a feature story.

TOPP also uses social networking to tell the stories of the satellite-tagged animals. Omoo, the white shark, and Penelope, the elephant seal, have Facebook pages. When I checked last, Penelope had nearly 4,000 friends. Omoo is a member of several anti-shark-finning groups that are springing up on campuses.

We realized how events can engage people, many of whom stay connected with TOPP and its researchers' activities. So, we also kicked off Elephant Seals Homecoming Days in 2008, as a way of educating people in the world's longest mammal migration. We followed 20 satellite-tagged female elephant seals as they swam from their feeding grounds in the cold Pacific waters off Alaska, back to Año Nuevo State Park. There, they gave birth to their pups. Penelope was last year's star.

This year, in Elephant Seals Homecoming Days 2009, she shared the limelight with Jon Sealwart and Stelephant Colbert, who made his debut, yes, on the Colbert Report.

Was the Great Turtle Race journalism? Fifteen years ago, I would've sputtered an indignant, "No!" Now, I see how journalism can use games and, in this case, a race, social networking, and multimedia storytelling to provide useful and engaging information. But the same journalistic rules apply. My contract with TOPP specified that I had editorial control of content, not scientists or the institutions they worked for. And, if a scandal erupted in the Great Turtle Race, e.g., if it were revealed that a TOPP researcher substituted a loggerhead for a leatherback, would I want people to

rely on me for the story? Of course not.

It's clear that environmental and science journalism can -- and must -- migrate to the Web and use all it has to offer. As traditional news organizations shrink their staffs and lay off their science and environmental writers, those topics have become less and less a part of the general conversation. These days, that's not a good thing. Scientific institutions have an opportunity to hire journalists to build communities and to provide them with information that educates and informs by using all the tricks that the Web has up its sleeves.

In fact, that's happening. NASA.gov, which hired journalist Brian Dunbar several years ago, stepped into the vacuum that traditional news organizations created when most stopped regularly reporting space science. NASA changed its site from one whose main community was businesses that contracted with NASA, to those members of the general public who love anything to do with space, ranging from the space shuttle to the Mars landers. NASA.gov is now the go-to site for space science, and has more than half a billion page views a year.

Discovery Channel and National Geographic have long had a presence on the Web. Although most of their content is video or text that promotes their TV programs or, in the case of National Geographic, also their magazine, they often do special projects in which original interactive content is produced for the Web -- such as Discovery's "Shark Week" -- and which engages people in a more interactive way.

This year, NationalGeographic.com hosted Great Turtle Race 2009. between April 15 - 29, eleven leatherbacks raced 6,000 miles from foraging grounds off Canada to nesting beaches in the Caribbean. The leatherbacks had a head start on viewership: NationalGeographic.com had 13.8 million unique viewers and 138 million page views per month before the race started. This year's winner: Estéban.

Q&A



with Jane Ellen Stevens

Your story seemed part educational and part journalistic. Do you think this is a way of engaging people's interest and can it work for a variety of environmental stories?

Yes, I do I think that the Great Turtle Race was essentially a game, and I think that games work very well to engage people. As I said in that story, I think that if I had done this story 15 years ago it would have been a 4000 word magazine piece, and I don't think it would have had near the engagement that this project did. It engages people, it intrigues their interest, it pushes them along to learn more about the animals and the situation, and it also helped them take action on trying to become involved in environmental protection.

It also seemed as if a lot of the research was done in collaboration with scientists. Do you think that journalists and scientists working together can benefit environmental reporting?

I think that journalists can...I mean, they've always worked with scientists in the sense that they translate what the scientists do into a language that the public can understand, and I think this takes it to the next step which is actually working on an event or project and engaging people in something that takes place over time so that people become more involved rather than just read a one "off" story.

The general public doesn't seem to be too terribly engaged with the climate change story and some of the reporting that is going on. What journalistic strategies would you use to draw the general public's attention?

Well, I think you have to figure out all different ways you can possibly engage the public, and there are a number of ways to do that. One, obviously, is gaming. O; one is to make it local and personal; and another is to make sure that you're engaging people across a wide variety of media. So, for example, with the Great Turtle Race, not only did we have that game, but then we also had what I call a "slave site" to the game, where people could download widgets of each of the turtles and put them on their MySpace pages.

Continued on page 47



How environmental events in history have been covered

BLASTS FROM THE PAST

13,000 years ago: As the ice sheets covering North America melt, one glacial finger west of present-day Missoula surges and dams the Clark Fork River. Behind the ice, Glacial Lake Missoula forms. When the lake displaces the ice dam, 500 cubic miles of water and ice flood to the Pacific. Geologist J Harlen Bretz finds clues to these floods, but is ridiculed for his outlandish theories. Aerial and satellite photography prove him right 30 years later, and at 96 years old, he is awarded geology's highest honor.

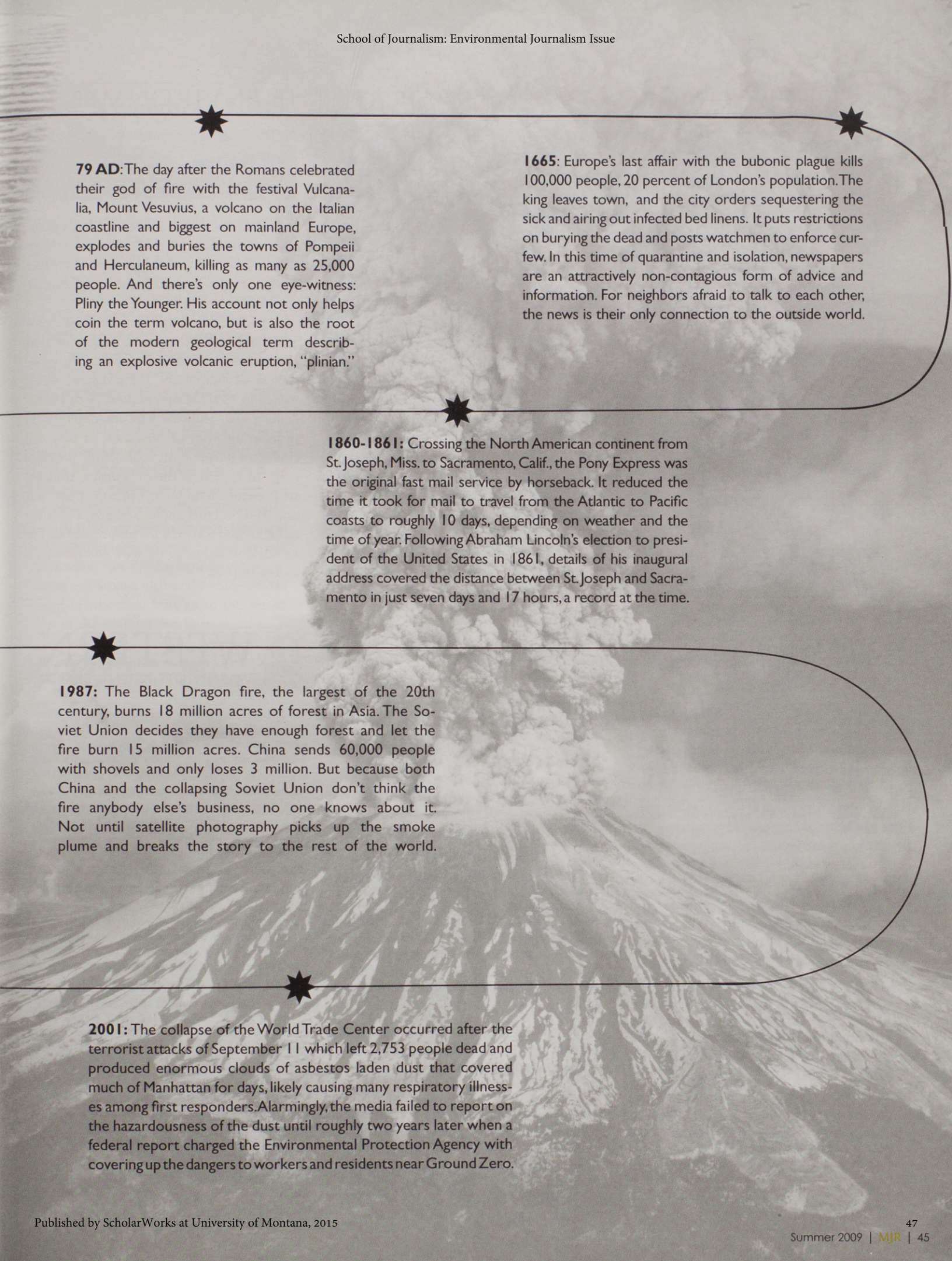
1925: The last ship sails south from Nome, Alaska before the seaport ices over and the town shuts down for the winter. Two days later, diphtheria starts turning children's tonsils black, and then kills them. Twenty mushers race carefully packed serum for the epidemic day and night over the 674-mile Iditarod trail. Short, cryptic telegrams over the wire make it into headlines of newspapers across the country, telling the story of the heroic dogs.

1931: Generally considered the deadliest natural disaster ever recorded, human casualties during the Central China floods of 1931 are estimated from lows of 400,000, to highs of 4 million. The majority of major rivers in China all flooded, including the Yellow, Yangtze and Huai rivers.

1980: Mt. St. Helens slightly rumbles before blowing itself in half. Mud, ice and magma race off the mountain at up to 670 miles per hour, some postulating that these flows may have reached speeds greater than the speed of sound. The explosion issues a column of ash 12 miles high 10 minutes after the eruption. Photojournalist Neil Blackburn is covering the event for National Geographic and is trapped and killed in a campground at the foot the mountain. The National Press Photographers Association honors Blackburn with a scholarship.

1986: Considered to be the worst nuclear power plant disaster in history, the Chernobyl disaster was a nuclear reactor accident in Ukraine that resulted in a severe release of radioactivity into the environment; nearly 400 times more fallout than was released by the atomic bombing of Hiroshima. Early coverage of the disaster is often thought to be speculation and misleading since only two people were killed in the actual explosion. One example of such irresponsibility was a New York Post front page with the headline, 'MASS GRAVE - 15,000 Reported Buried in Nuke Disposal Site.' <http://www.waccglobal.org/en/20064-communications-and-disaster/601-Chernobyl.html>.

2004: An earthquake in the Indian Oceans causes tsunamis 100 feet tall to wash ashore, killing more than 225,000 people. The waves destroy beachside resorts, sweep tourists out to sea and rearrange coastlines. Much of the destruction occurs in remote areas not easily accessed by responding media. In what has been called the seminal tipping point in citizen journalism, survivors relay news and footage of the event worldwide faster than ever.



79 AD: The day after the Romans celebrated their god of fire with the festival Vulcanalia, Mount Vesuvius, a volcano on the Italian coastline and biggest on mainland Europe, explodes and buries the towns of Pompeii and Herculaneum, killing as many as 25,000 people. And there's only one eye-witness: Pliny the Younger. His account not only helps coin the term volcano, but is also the root of the modern geological term describing an explosive volcanic eruption, "plinian."

1665: Europe's last affair with the bubonic plague kills 100,000 people, 20 percent of London's population. The king leaves town, and the city orders sequestering the sick and airing out infected bed linens. It puts restrictions on burying the dead and posts watchmen to enforce curfew. In this time of quarantine and isolation, newspapers are an attractively non-contagious form of advice and information. For neighbors afraid to talk to each other, the news is their only connection to the outside world.

1860-1861: Crossing the North American continent from St. Joseph, Miss. to Sacramento, Calif., the Pony Express was the original fast mail service by horseback. It reduced the time it took for mail to travel from the Atlantic to Pacific coasts to roughly 10 days, depending on weather and the time of year. Following Abraham Lincoln's election to president of the United States in 1861, details of his inaugural address covered the distance between St. Joseph and Sacramento in just seven days and 17 hours, a record at the time.

1987: The Black Dragon fire, the largest of the 20th century, burns 18 million acres of forest in Asia. The Soviet Union decides they have enough forest and let the fire burn 15 million acres. China sends 60,000 people with shovels and only loses 3 million. But because both China and the collapsing Soviet Union don't think the fire anybody else's business, no one knows about it. Not until satellite photography picks up the smoke plume and breaks the story to the rest of the world.

2001: The collapse of the World Trade Center occurred after the terrorist attacks of September 11 which left 2,753 people dead and produced enormous clouds of asbestos laden dust that covered much of Manhattan for days, likely causing many respiratory illnesses among first responders. Alarming, the media failed to report on the hazardousness of the dust until roughly two years later when a federal report charged the Environmental Protection Agency with covering up the dangers to workers and residents near Ground Zero.

I F YOU WANT TO REPORT ABOUT THE ENVIRONMENT,

whether you're looking for a bachelor's degree or want to earn a master's or doctorate, there are many diverse programs available. Some schools focus on writing, others focus on acquainting their students with a range of different media. Whatever the school's degree, focus or teaching style, there is one thing they all agree on: the environment is a vital topic and the public needs reporters who know enough about it to ask the right questions, find the important stories and sort through the jargon to make it understandable.

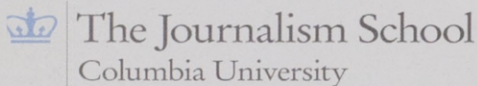
The schools listed below are just a few of the schools offering environmental journalism programs in the United States. Each school presents something unique and each is listed on the Society of Environmental Journalists' Web site.

STORY BY Brienna Fear

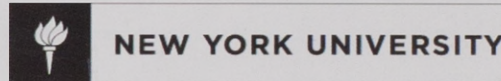


"We are located in an area that has a greater concentration of environmental science and policy experts than perhaps any other single area in the world," said Tom Yulsman, co-director of CEJ.

It takes about two years to finish the program and graduates earn a Master of Arts in journalism, with an emphasis in environmental journalism. The program, which started in 1992, accepts around 10 to 18 students a year. Students have the opportunity to focus on print or broadcast, or they can choose to pursue both fields. With the wide range of experts at their fingertips, students are presented with many fieldtrip opportunities. Tuition costs about \$20,824 a year for residents and \$51,624 for non-residents. For more information go to: www.colorado.edu/journalism/cej.



In the mid-1990's, Columbia University started a dual master's program allowing students to earn both a Master of Science in journalism and a Master of Art in earth and environmental science journalism in two years. The first two semesters focus on science to get students prepared for their summer research project; a project that has sent many Columbia University students around the globe. The next two semesters focus on journalism and the classes acquaint students with a range of media. Applicants must apply to both the Graduate School of Journalism and the Graduate School of Arts and Sciences. The program is very competitive and the Graduate School of Arts and Sciences lists many requirements applicants must meet. The program will set you back around \$77,891, but that doesn't include possible financial aid or a stipend students receive in the summer for research costs. For more information go to: www.ldeo.columbia.edu/edu/eesj.



According to Dan Fagin, director of the Science, Health and Environmental Reporting Program (SHERP), "(SHERP) is one of the oldest, if not the oldest, environmental journalism program in the world and also one of the largest."

Graduates of the 16-month program earn a Master of Arts in journalism with an advanced certificate in science, health and environmental reporting. The program, established in 1982, educates students in a wide range of media so they can write, go into broadcast, or work on a Web site. In fact, SHERP has its own award winning, student-run online magazine, Scienceline, that gets around 2,500 hits a day. Students also get the chance to go on a number of field trips to science labs all over New York. The program is highly competitive and accepts about 15 students a year. The ideal applicant is someone who has a strong science background (usually a degree in science) and demonstrates a flair for writing. Tuition is about \$42,000 a year, but Fagin said the school has a good financial aid budget. For more information go to: <http://journalism.nyu.edu>.



The undergraduate environmental journalism program was started in the early 1980s after students at Huxley College began to publish a quarterly magazine, *The Planet*, to raise awareness about environmental issues. The writing led to an interest in environmental journalism, and the program took off from there. Students who want to pursue this program must gain acceptance to Western Washington University, as well as Huxley College. Students apply for the program at the end of their sophomore year, and around 12 applicants are accepted. Environmental journalism majors earn half their credits in science classes and half in journalism classes. Students are also required to work on *The Planet* and are encouraged to write for the university's other publications as well. The cost of tuition is about \$6,384 a year for residents and \$21,892 for non-residents. For more information go to: <http://www.wvu.edu/advising/MajorGuides/environmental-journalism-ba.pdf>



Knight Center

for Environmental Journalism

The program at Michigan State University offers degrees at the undergraduate, graduate and doctorate levels. The program has courses in radio, television, new media, newspaper, magazine and even wildlife documentaries. The undergraduate and doctoral programs began in the beginning of 1995 and the graduate program started in 2007. The Knight Center was set up in 1999 and houses the Meeman Archives, an archive preserving over a thousand of the best newspaper articles about the environment from the past 20 years.

The university also offers a program called Residential Initiative for the Study of the Environment (RISE) where students interested in environmental careers can opt to live with each other. Those who participate in RISE are privy to special classes and lectures. Students are encouraged to join the student run EJ Magazine or other programs on campus such as the study abroad program where students go to the British Isles in the summer and learn about environmental and journalism issues. As Jim Detjen, director of the Knight Center, said, "Students actually learn to do these things

by doing them." Out of state tuition, without room and board, is around \$12,860 for undergraduates and \$3,929 for graduate students per semester. For undergraduate residents it is around \$5,131 and \$7,599 for resident graduate students. For more information go to: <http://jrn.msu.edu>.



University of Nevada, Reno

The Interactive Environmental Journalism Master of Arts Program focuses on online media and takes three semesters to complete plus a 150-hour summer internship. The school created this specialized program in 2006 and accepts eight to ten students a year. "We have three core beliefs that animate the program: journalism is essentially a democratic act and should be practiced with that knowledge; interactivity provides new opportunities for re-thinking the role of a journalist in a democracy; [and] the environment is a critical issue and provides an opportunity for experimenting with new forms of journalism," said Donica Mensing, director of graduate studies. To enter the program applicants need a journalism degree or professional journalism experience.

Tuition is about \$7,000 for residents and about \$12,500 for non-residents. For more information go to: <http://journalism.unr.edu/graduateprogram>.



LEHIGH UNIVERSITY

Lehigh University established its undergraduate program in 1978 and offers print, online and multimedia courses. The program provides students many opportunities to obtain practical journalism experience and requires students to work for at least two semesters on the school's newspaper. The class sizes are usually small with an average of about 13 students to a class.

"All classes are cross-listed (double-listed) either with the Environmental Studies program or the Science, Technology and Society program," said Sharon Friedman, director of the Science and Environmental Writing Program. "A few are cross-listed with the Health, Medicine and Society program. We require 16 hours of science and statistics in addition to science and environmental writing and general journalism courses."

The cost of tuition is roughly \$37,550 a year, but Friedman said there is a lot of financial aid available. For more information go to: <http://cas.lehigh.edu/sciencewriting>.

Jane Stevens Q&A continued form page 43

If I were doing it now, I would also make sure that widget could be put on people's cell phones so that you could get an update every ten minutes of what was happening to the animal you're engaging with. Then groups of people, essentially, had little bets among themselves about how the animals were doing and so that engaged people in that way. But I think that there are also other ways in terms of localizing it. You know, what does this mean for your wife, or what does it mean in your community and how can you take action in your community. How can you take action collaboratively?

The only thing we've been able to do so far is, you know, you individually ... can make a difference. Well, people know that that's such a tiny little difference that it almost makes no sense to do it, but if you're doing it as a group, you can actually get some steps going. So that's where the social networking aspects of this come in and we had MySpace pages for all of the turtles. So we encouraged people to keep tabs on them afterwards and get involved in the project that was going on in Costa Rica, and we had some success with that. So I think that by personalizing it, by localizing it by making sure that you're

reaching people in all the ways that they communicate and I think that you can have a better shot at getting people involved.

You've talked about the transition to web-centric news and information, can you tell me about the role journalists can play with that in the context of the environment?

Journalists have different roles in the web medium and some of those are traditional like watchdog, fact checker, investigative reporter. But then there is also the new role of community information manager that you actually create a place for the whole community to interact.

There aren't very many sites like this in environmental reporting, but if you look at business and sports they do that pretty well. For example on MarketWatch you can get all the news of the day, and then there is a social network where people can share information and have a conversation with each other, and there is a lot happening in that community, on MarketWatch.

In the CBS family of Web sites there is MaxPreps, a which is user-generated high school sports information, which is fast becoming the place to get anything about high school sports in the country. That's part of a family of their fantasy sites which are the

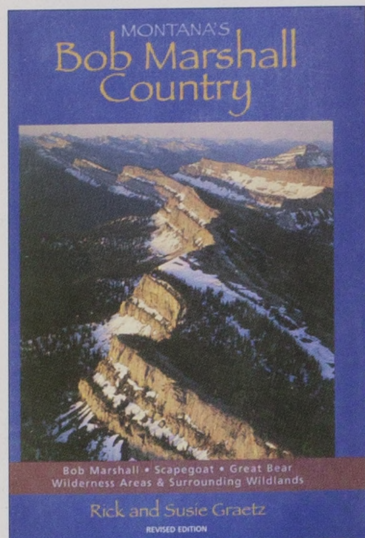
social networking aspect of it. Then their more traditional news sites but all together it's news, information, social networking, everybody having a conversation and CBS is essentially creating a place for that to happen.

Another example is Disboom. That is a network for people who have disabilities and they bring together news information social networking and business so that people who have disabilities have a direct link to businesses and vice versa which just makes finding products and services easier. So that's the kind of thing that journalists need to create in any topic. So, for example, I'm putting together a local health site now. It's part social network, part traditional news, beat blogging and story telling, and also a place for people to find out about health products and services, and for people to help and to rate them; and people will have those products and services to have a conversation with a community. If journalists don't create that somebody else will, and in fact a lot of people are.

But most of the people that are, don't have the journalism part of that, and I think that that journalism part is really important to the need of the community. Because they need to have a trusted source, and we can be that for them.



MJR book review



“MONTANA’S BOB MARSHALL COUNTRY” (REVISED EDITION)

BY RICK AND SUSIE GRAETZ

Missoula’s husband-and-wife team, Rick and Susie Graetz, pair up once again for this in-depth look at one of America’s last best places in the revised “Montana’s Bob Marshall Country” (Northern Rockies Publishing, 2004). Portraying the area’s history, creation, geography, geology, weather and wildlife, as well as dividing this vast land into geographic regions – the Bob Marshall, Scapegoat and Great Bear wilderness areas – the book guarantees its readers get the very most out of their time spent in this astonishing backcountry wilderness.

Originally published in 1985, the first edition of the book was assembled from Rick Graetz’s experience of more than 15 years hiking and skiing in Bob Marshall country as a younger man. Nearly 20 years later, in 2004, the couple presented this revised edition, which includes much of the original writing, some new photography and additional chapters and thoughts.

Along with the couple’s own writing and beautiful photography, the book is full of words penned by those who saw the early days of this wilderness first hand and those who have written about it since, including Charlie Shaw, Bob Cooney, Clyde Fickes and more.

As Rick Graetz writes in his introduction, “Read this missive, and then head out into the landscape on foot or by ‘wilderness sport’s car’ – the four-legged model, namely horseback. Montana’s Bob Marshall country is your place...you own it...go explore it.”

-- CHRIS D’ANGELO

“YELLOWSTONE WOLVES: A CHRONICLE OF THE ANIMAL, THE PEOPLE, AND THE POLITICS”

BY CAT URBIGKIT

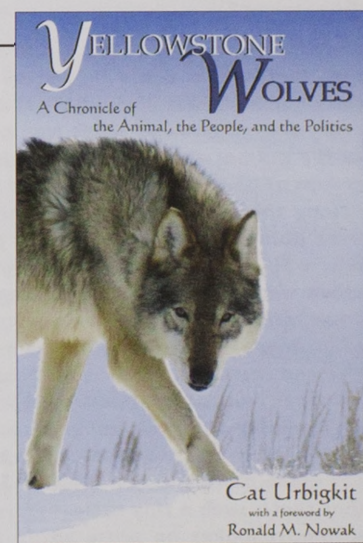
Cat Urbigkit, a journalist and rancher from Pinedale, Wyo., has had about as much experience with Wyoming wolves as anyone. Her new book, “Yellowstone Wolves: A Chronicle of the Animal, the People, and the Politics” (McDonald and Woodward Publishing Co., 2008), gives a historical account of wolves in the West, covers the arguments and efforts of the federal wolf reintroduction into Yellowstone National Park in the 1990s, and follows the reintroduced wolves as they disperse from the park and encounter people.

Many people felt a remnant population of wolves escaped 20th century eradication by hiding in the wilderness of northwest Wyoming. These people argued reintroduced Canadian wolves would adulterate the existing wolf species and be a violation of the Endangered Species Act. Urbigkit was one of these people and thoroughly argues her case in the book.

She succeeds in conveying the complexity of the issues surrounding wolf reintroduction and the problems facing reintroduced wolves. However, she neglects discussing the positive ecological effects of wolves and gives little space to successful wolf management stories. From her perspective, reintroduced wolves have been far more problematic for the citizens than for the government.

The interactions between wolves and livestock get a lot of Urbigkit’s attention. She tells stories of ranchers roping wolves, wolves killing calves and her own stories involving wolves and her sheep. The book is a well-supported, cleanly written account of wolves from a Wyoming perspective, and is one of the most recent and in-depth books available on the subject.

-- WILL GRANT



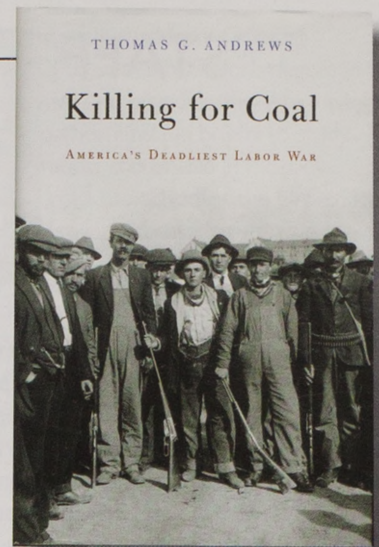
“Killing for Coal: America’s Deadliest Labor War”

By Thomas G. Andrews

When Mother Jones addressed a hall full of angry Colorado coal miners in September 1913, and urged the men to “rise up and strike—strike until the last one of you drops into your graves,” few appreciated the prophetic irony in her words. Seven months later, in the Ludlow Massacre of April 20, 1914, eighteen strikers and family members, including young children, would be killed by state militia and guards for the Rockefeller family, the owner of the coal mines.

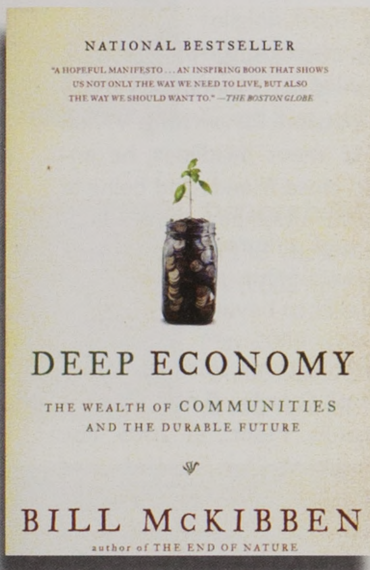
The causes and consequences of this searing tragedy—and the equally deadly miners’ reaction—have been told in terms of labor and politics. But Thomas G. Andrews, author of “Killing for Coal” (Harvard University Press, 2008) attempts to place it in the much wider context. Coal (and later oil) powered the industrial development of “this dry, biologically unproductive land.” The inescapable conclusion: We who live in the American West are not only the beneficiaries of decades of exploitation of fossil fuels (and of the backbreaking labor that harvested them), we are also the owners of the environmental mortgage placed upon the land by our ancestors’ all-too-human drive to “progress.” This excellent, holistic approach to our Western history reminds us of this terrible truism.

--CLEM WORK



“DEEP ECONOMY”

By Bill McKibben



Bill McKibben spent a year eating only locally produced food. He used that experience to shed light on some of the high environmental costs of our current transportation-dependent food distribution system. He is upfront about the drawbacks, writing about the additional time and attention it took to feed his family and the more limited food choices, such as lots of root vegetables and no bananas. He also delves into the benefits, direct and collateral, including good food, new friends and a closer connection to his community, all at a reduced cost to the environment.

McKibben eases the reader into a simpler life, gently selling the “less is more” approach and the rich rewards of deeper connections and stronger communities.

He opines that co-operative farms, farmers’ markets and neighborhood gathering spots are the little steps we can begin to take to form local networks and a more sustainable existence.

If you subscribe to the idea of deep ecology, that we are a part, but a no more significant part, of a living environment and our goal should be the nurturing of that whole system, than “Deep Economy: The Wealth of Communities and the Durable Future” (Times Books, 2007) makes beautiful sense. McKibben offers hopeful examples of how we could better nurture ourselves while reducing our impact on the environment.

— JENNIFER KIRBY

“PEAK EVERYTHING: WAKING UP TO THE CENTURY OF DECLINES”

By Richard Heinberg

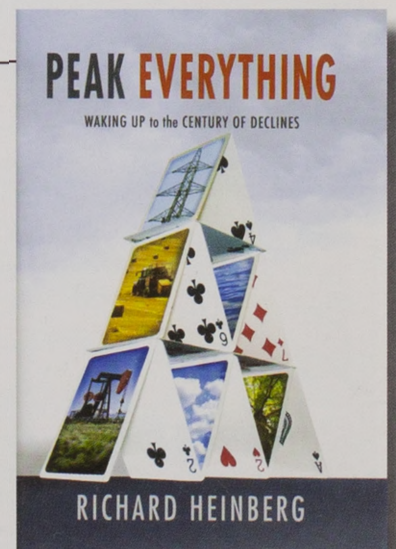
Richard Heinberg makes the case that the world’s natural resources have, or soon will be, reaching their peak and declining in his book “Peak Everything: Waking Up to the Century of Declines” (New Society Publishers, 2007). Heinberg asks and answers the questions that arise from studying the scientific data. However, he also explores the historical and cultural context of this information and offers practical suggestions as to a reasonable response to these problems.

“Peak Everything” is written as a collection of essays, each inspired by a lecture or experience Heinberg has had. This is a good book for those who like to skip around in their reading or take small bites of a serious topic because it’s topical and not written in a specific order.

In one volume, readers can see connections between resources that have peaked, like: population, grain production, wild fish harvests, fresh water availability per capita, arable land in agricultural production, climate stability, etc.

Heinberg, a fellow at the Post Carbon Institute, has lectured widely on the topic of world energy consumption and its implications. He has also written books on the subject of peak oil.

— DEBORAH BRAE TANNER



STAFF BIOS



Collin Behan is a junior at the University of Montana, planning to graduate in 2010 and vie for a spot in the wide-open journalism job market. When he manages to break away from school, Collin hikes, bikes and canoes around Missoula's mountains.



Patrick Cote is a senior in photojournalism at the University of Montana. He plans to graduate in the fall of 2009. With no plans for a job yet, he hopes he can find a way to stay in Montana and continue hunting and fishing.



Elizabeth Diehl is a junior in the journalism program and plans to graduate in the spring of 2010. She loves to write and likes photography and design.



Brienna Fear believes ignorance breeds prejudice and aims to help eliminate discrimination of minority groups and peoples by getting their unheard stories to the public. She is currently working on two young-adult books and graduated with a bachelor's degree in print journalism from the University of Montana in May.



Letty Hingtgen graduated in May with a bachelor's degree photojournalism from the University of Montana with a minor in media arts. She moved back to Seattle with hopes of pursuing her career as a photographer and getting a dog of her own.



Becky Malewitz received her bachelor's degree from Valparaiso University in 2007. She is currently a graduate student in the photojournalism program at the University of Montana and will graduate in spring of 2010. She hopes to someday live in a warm, sunny place and work as a photographer.



Kelsey Bernius is a 2009 print journalism graduate from The University of Montana. She grew up in Missoula and decided there's just not a better place to live and study journalism. When not writing or studying, she can be found running up the beautiful hills around Missoula or enjoying espresso.



Originally from St. Louis, Mo., **Chris D'Angelo** moved to Montana in 2005 to pursue his passion for writing. When not struggling to meet deadlines, he enjoys good music, close friends and being in Montana's beautiful mountains. He graduated from the University of Montana School of Journalism in May 2009.



Originally from Arlington, a small city about an hour north of Seattle, **Amy Faxon** moved to Missoula, Mont., in 2005. For the past four years she has studied print journalism and music performance. After graduating in May 2009, she moved back to the Seattle area for work.



Will Grant is a graduate student in print journalism at the University of Montana. Originally from Littleton, Colo., he received a bachelor's degree in natural resources from Sewanee: The University of the South. He said he'll be damned if he's going to live anywhere other than the Rocky Mountains.



Jennifer Kirby owned a bar & grill in Jackson, Mont. until, in hopes of saving herself from a life in front of a grill and behind a bar, she sold her liquor license to fund her graduate education in journalism, which she will complete in the fall of 2009.



Jeff Osteen was raised in Casa Grande, Ariz. and graduated from the University of Montana School of Journalism in 2009. He hopes to find gainful employment in journalism, but also plans on pursuing a number of entrepreneurial efforts that he hopes will bring him great fortune.



Ben Prez is a graduating senior in print journalism. He is fascinated by the human condition and uses journalism to find nuance in the profound and everyday aspects of life. A mandolin player and music connoisseur, Prez hopes to write for a sports or music publication.



Kip Sikora is a photojournalism graduate student at the University of Montana. He graduated with a bachelor's degree in religion from Sewanee: The University of the South in 2001, and spent the subsequent years living, traveling and working in Costa Rica and Ecuador. Dog is his co-pilot.



Deborah Brae Tanner, originally from Memphis, Tenn., pursued her dream of living out West and going back to school. She moved to Missoula, Mont. and graduated in May 2009 with a masters' in print journalism from the University of Montana School of Journalism.



Cate Oliver graduated from Gonzaga University in 2007 with a bachelor's degree in media journalism and broadcasting. After living in Armagh, Northern Ireland briefly to study international media, she landed in Missoula. She is now in graduate school at the University of Montana studying photojournalism.



Tiffany Shyu is a photo journalism graduate student at the University of Montana who plans to get out of school as soon as she can. After she graduates, she wants to move back to the coast and find a job that will make her life fulfilling and happy.



Alison Gene Smith graduated in May with a Bachelor of Arts in journalism with a photojournalism option and a minor in women and gender studies. She is passionate about photography and also loves cooking, making jewelry, and riding her bicycle around Missoula on sunny days.



Melissa Weaver carried a steno notebook during recess in elementary school so she could interview and write funny stories about her classmates. The Billings native graduated in May from the University of Montana School of Journalism with a second major in psychology through the Department of Psychology.



MJR Staff in Pattee Canyon, Missoula, Mont.

Photo credit Russel Daniels

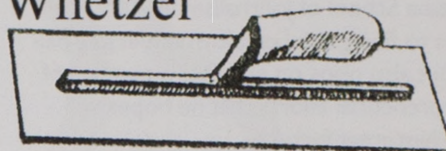


**GOOD
FOOD**
STORE

One Of Missoula's
Natural Wonders.

1600 S. 3rd St. West
Missoula, MT 59801
406.541.FOOD
www.goodfoodstore.com

Whetzel



**CONCRETE
CONSTRUCTION CO**

Slabs
Steps
Patios
Sidewalks
Foundations

Matt Whetzel 240-3444

Public Service Broadcasting
from The University of Montana

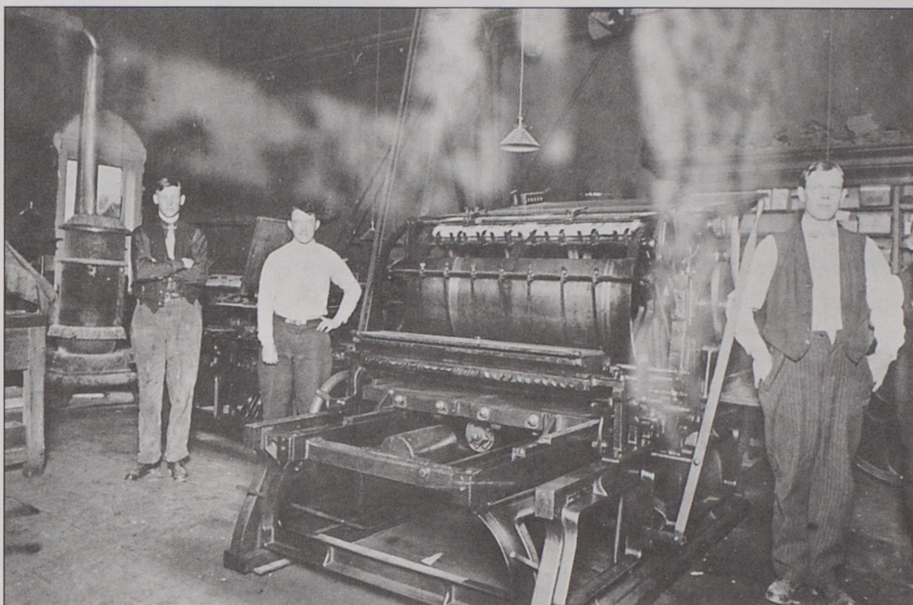


89.1 Missoula
89.9 Kalispell and Great Falls
91.3 Butte
91.7 Helena and Whitefish and Dillon
91.9 Hamilton
www.mtpr.org



**MONTANA
PBS**

Montana's Largest Classroom
KUFM-TV, channel 11
www.montanapbs.org



Fort Benton River Press – 1912

From the days of hot type and
freezing cold backshops...

To the days of IT and the Web...

The Montana Newspaper Association has
been there, helping Montana's newspapers
meet the challenges of their time.



825 Great Northern Blvd., Ste. 202 • Helena, MT 59601
1-800-325-8276 • (406) 443-2850 • mtnewspapers.com

NewWest.Net

A Refreshing New Kind of Journalism

- An award-winning regional online magazine, featuring in-depth reporting and colorful commentary on the culture, politics and economy of the Rocky Mountain West
- Community news and information sites and market-leading event calendars in Missoula, Flathead, Bozeman and Boise
- The latest in online media tools and technologies, including lively discussion threads, community blogs, Twitter and Facebook groups, photo and video, and much more...
- Next-generation marketing solutions, delivering the most desirable business-to-business and general consumer audiences

"By just about every measure New West, the online magazine, is a success: It features great writing and reporting, presented via a smart blend of magazine and bloglike articles covering the Rocky Mountain states. Traffic is growing. Critics are raving."

- *The New York Times*

Join the Conversation at www.NewWest.net

MONTANA

The University of Montana School of Journalism

JOURNALISM REVIEW

School of Journalism

The University of Montana

Missoula, Montana 59812



Non-Profit Org.

U.S. Postage

PAID

Missoula, MT

59812

Permit No. 100