



SEJournal

Winter 2014, Vol. 23 No. 4



Telling the Tiger's Tale

Promise, Perils of Tech: Drones,
e-Books, Multimedia

Inside Story: Covering Fukushima, Climate

A quarterly publication of the

Society of Environmental Journalists

MARK YOUR CALENDAR for ENVIRONMENTAL JOURNALISM 2014
Society of Environmental Journalists 24th Annual Conference



Risk and Resilience

R&R, SEJ style...

Dozens of tours, sessions, exhibits and headliners exploring front line environmental issues of the Gulf Coast and the year ahead. Build your skills, boost your coverage.

Agenda Chair:

Mark Schleifstein

Pulitzer Prize-winning journalist for NOLA.com | The Times-Picayune

SEPTEMBER 3-7, 2014

- Restoring wetlands and barrier shorelines
- Rebuilding after disasters, insurance issues
- Storm surge risk reduction, storm water management
- BP spill aftermath, science, settlements, government and corporate response
- Marine and coastal issues, shipping, dead zones, dead dolphins
- Biodiversity and fisheries, invasive species
- Chemical corridors, environmental justice, green chemistry
- Climate change and hurricane science
- Energy, drilling, nukes, fracking, alternatives
- Religion's role in environmental issues

and, of course
Food and Music!

Society of Environmental Journalists



sej@sej.org 215-884-8174

@SEJorg #SEJ2014 www.sej.org

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

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

For inquiries regarding SEJ, please contact the SEJ office, PO Box 2492, Jenkintown, PA 19046; Ph: (215) 884-8174; Fax: (215) 884-8175; E-mail sej@sej.org

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

SEJournal editorial submission deadline for the Spring issue is Jan. 31, 2014

Advertising deadline for the Spring issue is Feb. 28, 2014

Advertising rates are available at sej.org/advertise-sejournal or email linda.knouse@sej.org

To Subscribe to *SEJournal*

Subscription information is available at sej.org/sejournal-subscription-information or email lknouse@sej.org

To Join SEJ

Membership in SEJ is open to working journalists, students and faculty. Eligibility requirements apply. Access a membership application at sej.org/get-involved/join or contact SEJ at sej@sej.org or (215) 884-8174.

From the printer of *SEJournal*:

SEJournal is printed on Ultra Digital is 50% recycled content (40% pre-consumer and 10% post-Consumer), using soy-based ink. Please recycle — or better yet, share with another journalist.



A poacher's snare cost this six-month-old cub both its right front leg — and its freedom. Its limb was amputated after the tiger had been trapped for three days in a snare in Aceh Province, Sumatra. Unable to hunt, the tiger now lives in a zoo in Bogor on the island of Java. See story, page 10. Photo: © Steve Winter

SEJournal Electronic

Winter 2014, Vol. 23 No. 4

Interactive: click on selections to navigate

SEJ President's Report	4	Don Hopey
Freelance Files: Finding Funders	5	Karen Schaefer 
The Promise of Flight: Drones and Environmental Journalism	6	Bill Allen and Sangeeta Shastry 
Reporter's Toolbox: e-Book Publishing	8	Caroline D'Angelo
Between the Lines: An Interview with Steve Winter and Sharon Guynup about the plight of tigers	10	Tom Henry 
BookShelf	14	Tom Henry, Eliza Murphy and Jennifer Weeks
Inside Story: Interview with SEJ Award winner Sam Eaton	17	Beth Daley 
Feature: Photojournalism Upheaval Heralds Multimedia's Rise	20	Roger Archibald 

Journalists, Lost in Space?

By DON HOPEY

I recently went to see the movie “Gravity,” the blockbuster Sandra Bullock-George Clooney vehicle that demonstrates in 3-D the isolation of outer space and the value of a strong tether. And it got me thinking about our organization, the Society of Environmental Journalists, and its members.

Like the astronauts in the film, it seems more and more that we reporters are out there all alone – a journalistic generation lost in space.

Some of our older brethren managed to weather corporate media retrenchments, only to be wiped out by the jagged shards of an unforgiving technology explosion. Those of us who are left face increasingly complex environmental issues and aggressive corporate and government media minders trying to spin us head over heels.

And beginning journalists must confront a future that, while exciting and full of possibilities, is also so uncertain that a recent Yahoo column based on U.S. Department of Labor statistics predicts our ranks will continue to thin, from 51,900 jobs in 2010 to 48,000 in 2020, a decline of 8 percent.

Over time, SEJ has become, more and more, an organization dominated by freelancers, a romantically descriptive term that fails to convey the isolation, work and hard-won skills needed to both report and sell environment-related stories. Even those of us still lucky enough to have full-time gigs in traditional print and electronic media must more often than not deal with editors who seem to recognize the importance of what we do only in terms of being thankful that they don't have to find someone else to do it.

And we are doing good work – both on our jobs and in our organization.

SEJ's Awards program attracted stronger-than-ever entries this year and, despite the federal government shutdown, SEJ staff and local co-chairs Anne Paine, recently retired from *The Tennessean* in Nashville; David Sachsman, West Chair in Communication and Public Affairs, University of Tennessee at Chattanooga; and Pam Sohn, environment reporter, *Chattanooga Times Free Press*; put on a great conference in Chattanooga, with rave reviews and compelling stories from many of the more than 550 attendees to prove it.

Among the dozens of workshops, field trips, plenaries, lunch table discussions and concurrent sessions offered over five days, SEJ conference-goers got to snorkel with endangered darters, drive the latest electric cars, discuss sustainability, fracking and energy development, see a demonstration of flying drones used for journalism, and visit Oak Ridge, where the Manhattan Project that yielded nuclear bombs and power was developed and where today exists a world-class research center focused on climate change.

And this year we've got another great conference set for Sept. 3-7 in New Orleans, with award-winning environment reporter Mark Schleifstein, of NOLA.com/*The Times-Picayune*, at the helm. Under the theme of risk, resilience and restoration, we'll explore environmental issues in the post-BP spill Gulf of Mexico, on the

Mississippi River and in post-Katrina New Orleans that should be a big attraction for journalists.

But Houston, we've got a problem. SEJ membership numbers have plateaued around 1,500 but are recently trending downward. We need to reverse that trend. We need to make 2014 the year we bump up our membership numbers to a higher orbit.

There are many areas and opportunities where such efforts can be successful.

A number of former members have allowed their SEJ memberships to lapse, some because they've left this journalistically inhospitable Daily Planet but others just because they forgot to renew or forgot what a lifeline SEJ can be. We will redouble efforts to pull them back in.

We can also target new media outlets where journalists are covering the environment but don't know about SEJ, and show them how the group's links, contacts, expertise and support can benefit their reporting. We know too that SEJ is an untapped resource for general assignment reporters who aren't assigned exclusively to the environment beat but regularly do stories on energy, health and science topics with major environment components.

We can push regional meetups, which have already reached a new level since SEJ members across the country have begun stepping up to lead social events in their area. SEJ board member Emily Gertz started the New York City-area meetup group almost two years ago, for instance, and has been providing valuable insights and mentoring for the program.

And we need to pursue alliances with other journalism organizations that can promote SEJ membership.

Finally, we need to redouble efforts to recruit new student members. They can benefit from our professional experience; we can gain from their vigor and inventiveness.

In the coming months, my hope is that SEJ's board will formulate plans and provide leadership on a variety of membership initiatives. Those efforts will benefit from the involvement and ingenuity of all of our members. All of us know friends and colleagues who we can introduce to SEJ. We've got a great conference site to sell this year in NOLA and timely and topical and important issues to discuss. We all know non-members who we can invite to be part of those conversations.

Now is the time to strengthen the tethers and bring everyone back home.

To paraphrase Matt Kowalski, the George Clooney character in “Gravity,” “I've got a good feeling about this mission.”

Don Hohey covers environment at the Pittsburgh Post-Gazette, and teaches at the University of Pittsburgh and the Pitt Honors College Yellowstone Field Course.



Finding Funders: A User's Guide to Foundation-Backed Journalism

By KAREN SCHAEFER

As a public radio journalist, I've worked on grant-funded projects before. But until a couple years ago, I'd never considered pursuing a grant of my own.

Like many journalists who got the pink slip, I'd started freelancing. I'd done it before and figured I could do it again. But I soon realized there weren't as many paying outlets as there were the last time I freelanced back in the 1990s.

Living from pitch to paycheck wasn't working and after a year and a half I hit a wall. I needed a big income boost – and I didn't have a clue where to look.

Fast forward to Cleveland a month later.

At a conference I stumbled across a retired environmental science professor I'd interviewed many times. He was a new board member of the Burning River Foundation, a small non-profit named after the infamous Cuyahoga River. The foundation, he said, had just started offering small grants of up to \$10,000.

My tired brain lit up.

“Has the foundation ever offered grants to journalists?” I asked.

“No,” he said, “but I don't see why we wouldn't consider a proposal. I'll send you an RFP application next month.”

A month later, fresh from the SEJ Lubbock conference, my head was filled with ideas for a grant proposal. When the request for proposals arrived in my inbox, I was ready.

Creating the proposal

I decided on a series of six radio stories I would offer free to both of the Ohio public radio stations I had worked for in the past, and to the statehouse news bureau which disseminates content to other Ohio NPR affiliates. I knew I had the good will of my former stations to air whatever I produced, provided it offered content that didn't duplicate their in-house work. Most of all, I knew good-quality free content would be welcome.

The Burning River Foundation had only two requirements about content: the proposal had to be about water quality and it had to be locally-sourced. I wrote up my proposal, enlisted three references and submitted to the foundation.

In early February 2013, I found out I had won. I was guaranteed enough money to keep me afloat for almost the first half of the year. I could do some good, useful work. I was ecstatic.

But there was a crucial first step that hadn't been discussed. While the Burning River Foundation was prepared to front me three-quarters of the money, I needed to find a fiscal agent – someone who could watchdog the money and file appropriate documents with the IRS – before they could send a check.

I mulled it over and emailed SEJ Executive Director Beth Parke. She said yes. In less than a week, I had a fiscal agent at a cost that was feasible – eight percent of my total award. I was lucky. Many fiscal agents charge a standard 15 to 20 percent.



Radio journalist Karen Schaefer on the job at a cow barn at Vander Made Farms near Sherwood, Ohio. Photo by Chris Kick, *Farm and Dairy*

Bumps in the road

So finally, I was off and running. The check arrived in early April. I had just under three months to get the work done.

I spent a week contacting state and federal agencies, only to be stalled a month later by officials who couldn't offer me the on-site interviews I needed. Then one story idea had to be switched for another.

In mid-May, with many interviews still pending, I was offered an opportunity to produce a pair of radio stories for a Michigan station. So for weeks, I juggled two jobs, traveling hundreds of miles. In the meantime, my grant-funded clock was ticking.

As June approached, I was still waiting for site visits delayed by weather and I discovered one crucial news conference wouldn't take place until July. That's when I realized I wouldn't be able to meet my June 30 deadline.

I emailed the foundation and confessed my dilemma. To my relief, the board granted me a three-week extension.

Long hours in front of the laptop, very little sleep, and I was finally done. On July 26, I took myself and my laptop to the Burning River Festival in Cleveland, where I talked with festival-goers about my project.

Within days, the series I'd produced began airing. My two target Northeast Ohio stations broadcast a selection of my stories. SEJ member Dave Poulson offered me another public media venue at Great Lakes Echo, which eventually posted the entire series. A news aggregator – the Great Lakes Information Network – picked up my work from there.

Then a station in Columbus, Ohio, asked about airing the series. But first, the station needed to know about the transparency of my journalism. That was when I realized I had missed an important step.

Continued on page 23

The Promise of Flight: Drones and Environmental Journalism

By BILL ALLEN and SANGEETA SHASTRY

As a light April sleet driven by a 25-mph wind pinpricked his face, Brendan Gibbons guided a quadcopter drone into the sky near an oil rig along the Missouri River in western North Dakota. He was standing on a dirt road in the Little Missouri National Grassland, one of several areas where industry is using hydraulic fracturing techniques to pump oil from the Bakken Shale.

Gibbons, then a senior in the Science and Agricultural Journalism Program at the University of Missouri, had seen satellite photos showing what he described as “like a new city” that had sprouted in North Dakota’s oil patch. He wanted to get a closer view from above, so we drove the 1,100 miles from Columbia as part of a drone journalism class.

What happened next was an exercise in the trials and possibilities of environmental journalism using small, relatively low-cost drones equipped with tiny video cameras and other imaging devices.

A gust nearly swept the drone away when it climbed to 50 feet, but Gibbons pushed forward on one of the two joysticks on the radio-control box in his hands, leaning the aircraft into the wind and back toward the rig. He pushed the other joystick to move the drone higher: 100 feet, 200, perhaps 300. The attached GoPro HD



University of Missouri Senior Brendan Gibbons downloads a digital video file after a journalism drone flight in April. He was at the confluence of the Gallatin, Jefferson and Madison Rivers, where they form the Missouri River, near Three Forks, Mont. The video became part of an online story explaining the workings of the Missouri headwaters. On the table are the aircraft, a radio controller, iPad for weather reports and directions, small digital audio recorder, and Mac laptop.

Photo by Bill Allen / University of Missouri

video camera continued to run.

A few minutes later, with the drone batteries drained and the quadcopter grounded, he walked back to the frigid car, loaded the video file onto a laptop and viewed the result. He had gotten an airborne image of the well, with its bright flare of burning “waste” methane and the river in the background.

But the fish-eye lens of the camera, hampered by the haze of storm cloud and dusk, wasn’t up to the task of recording the other piece of the scene he had wanted to capture — the flares from dozens of other wells on the opposite shore.

Still, the wobbly image of the well and the river became part of a story package Gibbons produced for the website of KBIA, the National Public Radio station run by the Missouri School of Journalism (<http://bit.ly/1bBxdUs>)

The package, including a 1,100-word story and three-minute video, documented potential environmental threats and the political pressure put on the Army Corps of Engineers to let the industry use Missouri River water for free to feed the Bakken oil boom. The video, although rudimentary by professional broadcast journalism standards, shows how close the leaky oil operations are to the river.

He didn’t get the shot he’d hoped for, but “the drone was never meant to replace a reporter’s most effective tools — interviews and documents,” said Gibbons, who now covers the environment for the *Scranton* (Pa.) *Times-Tribune*. Later in the trip, he flew the drone in the Montana Rockies for a story on the Missouri River watershed. (<http://bit.ly/1b2wb41>)

Rising interest, little expense

Today, what Gibbons did would be illegal. But let’s get to that in a minute. First, some basics: These are not your military’s drones.

A typical quadcopter drone like the ones most SEJ members might use is a radio-controlled “model” aircraft weighing roughly three to four pounds, about the diameter of a garbage-can lid and generally no more than a foot high, including landing skids. The other general type is a single-engine fixed-wing aircraft not much bigger, except for length and wingspan. An excellent drone and video camera combo costs about \$1,000, although cheaper models would work, too.

“They’re a cheap replacement for a news helicopter, and they go places that are unsafe to fly or difficult to get to,” said Matthew Schroyer of the University of Illinois who founded the Professional Society of Drone Journalists in 2011 (www.dronejournalism.org). Schroyer was a panelist in the drone journalism session at the October SEJ meeting.

“Drones are all about providing perspectives, whether aerial images to support a story or to obtain data that would otherwise be available only to governments,” he said.

The term “drone” is the subject of much debate, since it is emo-

tionally charged and often taken to mean a war-fighting aircraft by the public and photo editors. Hobbyists call it a UAV, or unmanned aerial vehicle, and government and industry call it a UAS, or unmanned aircraft system. A UAS is a small one, weighing under 55 pounds, according to the Federal Aviation Administration. Trust me, the list continues, but those are the ones most in vogue.

The expectation of most of us who’ve dabbled in drone journalism is that the term drone, now so widespread in public use, will follow “Kleenex,” “Star Wars” and perhaps “pink slime.” That is, it’s here to stay.

For a good discussion of the attempts by various stakeholders to substitute other names and acronyms for the emotionally charged term “drone,” see Australian journalist Mark Corcoran’s “Drone Wars: The Definition Dogfight” (<http://bit.ly/dogfite>).

Already, whatever their moniker, they’re being studied or used for a wide range of practical civilian applications, including precision agriculture, emergency response, disaster relief, geological surveying, anti-poaching enforcement, and delivering vaccines and medicines to inaccessible areas. In December, Amazon announced plans to deliver packages to customer doorsteps with octocopters, perhaps within a decade.

Word of advice? Everybody crashes

Leading news outlets in the United States say their newsrooms are ready to begin incorporating drone technology. Journalists at overseas media companies such as the BBC World Service and the Australian Broadcasting Corporation have already incorporated drones into their reporting. The images and other information drones can collect, and their capability for getting to high-risk or low-accessibility areas, make them powerful reporting tools.

Because of their multimedia potential and relatively low cost (helicopters generally run \$1,000 an hour), drones can even the playing field and lower barriers to entry for smaller news organizations looking to develop new technologies and sustain their competitiveness. Local news coverage in particular could benefit greatly.

They’re also easily obtained. You could finish this article, go to amazon.com and have a fully-equipped, almost-ready-to-fly DJI Phantom quadcopter delivered to your door tomorrow.

Word of advice: Practice for a few days before trying anything fancy. A newbie hobbyist in New York City in October got too fancy when his drone took off from a high-rise terrace, bounced off a few skyscrapers and crashed on the street near Grand Central Station at rush hour, nearly hitting a man. The near-victim gave the drone’s video card to a TV station. New York police found the pilot and charged him with reckless endangerment.

That’s just one example.

Find a grassy, open field. And go easy. Find a teacher. No one learns without crashing. As one of my students said in his post-class evaluation:

“The laws of physics apply to our work with drones in a way they never have for journalists before. And velocity has a lusty appetite for money. If I were to write a flight-training manual for drone journalists, I’d call it ‘Everybody Crashes’ and cross my fingers and hope the guy who wrote ‘Everybody Poops’ doesn’t sue me.” (Name withheld to avoid lawsuit.)

Red tape slowing innovation in drone journalism

One more word of advice to would-be drone journalists: don’t do journalism yet.

Until 2007, the only guidelines the FAA had for model aircraft



In a light April snow in the mountains south of Bozeman, Mont., Brendan Gibbons prepares the journalism drone for a flight high in the Missouri River watershed, along the Gallatin River. His story traced the fate of snowflakes and other precipitation, some of which goes into the Gallatin, then the Missouri, then the Mississippi River north of St. Louis and ultimately the Gulf of Mexico. A GoPro video camera is mounted near the front propeller.

Photo by Bill Allen / University of Missouri

users were voluntary. A 1981 advisory circular encouraged hobbyists to fly below 400 feet in altitude, in rural areas, in daylight and within sight of the (ground-based) pilot. That circular left out any form of profit-making using a drone, including traditional news outlets. It also left out “public” entities, somewhat ambiguously defined later as government agencies, law enforcement organizations and universities.

A 2007 FAA policy statement, however, mandated that anyone other than a hobbyist had to get FAA permission via a maze of paperwork that, at best, took months. This Certificate of Authorization, or COA, for public unmanned aerial systems involves detailed questions about device safety, safety precaution plans while flying, pilot qualifications, procedures for reporting accidents, devices such as sensors or cameras attached to the drone, and flight plans and maps, among others.

What appears to be the first legal action involving civilian drone use resulted from a \$10,000 fine levied by the agency against Team Blacksheep, a group of drone hobbyists who shot footage of the University of Virginia’s medical campus in October 2011. The group was approached by advertising representatives who wanted to use the footage.

After the FAA saw the video, the agency cited Team Blacksheep, which did not have a COA. The group’s attorney, Brendan Schulman, filed a motion to dismiss, arguing that the FAA does not have jurisdiction over the low altitudes at which civilian drones fly. But the agency recently responded to the contrary, arguing that it has control over all airspace, primarily to protect other aircraft and people on the ground.

Schulman also noted that the regulations governing the fine

Your Guide to e-Book Publishing

By CAROLINE D'ANGELO

In many ways, international journalism and environmental journalism are in the same rickety boat: readers think the subjects are too far removed from their own lives, and there's a high time cost for producing excellent articles.

How do we get people interested in complex issues like water and sanitation, climate change and public health? How do we maximize the impact and reach of our reporting on these complex issues?

At the Pulitzer Center on Crisis Reporting (<http://pulitzer-center.org/>), a nonprofit journalism organization that supports in-depth international reporting, we've been experimenting with e-books and different HTML formats to increase ways readers can find and interact with our content.

We use free and open-source software and web-based tools to build our award-winning e-books. In this *Reporter's Toolbox*, we'll share some of what we've learned about the industry so you can put it to work in repurposing your older, evergreen content and think about new ways to present future work.



Eighth grade students at Buck Lodge Middle School in Adelphi, Maryland reading the e-book "In Search of Home," a study of stateless persons in three different countries, on their iPads.

Photo by Meghan Dhaliwal, Pulitzer Center on Crisis Reporting

Ten rules of e-books:

1. Hire an editor. Nothing turns people off of a book faster than typos or errors.
2. Marketing an e-book requires hustle, hard work and a large time investment.
3. Don't expect to make tons of money.
4. Have specific goals in mind. Is your goal to get noticed by a big publisher? Make \$10,000? Have your work read by as wide an audience as possible? Your goals will drive your outreach and pricing plans.
5. Your cover and title matter. A lot. Don't try to be cute or cryptic. Think about your target market and design to attract that audience.
6. Don't use multimedia or photos unless you have good stuff;

the internet is already littered with blurry, poorly lit photos and videos with bad sound quality. Instead, think about infographics, maps or pull quotes that can help readers understand your story.

7. Know thy "Fixed Layout" versus "Flowing Layout." You don't? Read on.
8. E-book pricing is an art, not a science.
9. Think about which new media tools will help you tell your story in the best way possible.
10. The time to get on social media is way before you want to write or sell a book.

To e-book or not to e-book

As with every innovation, there's a temptation to hop on the bandwagon just "because." Instead, think of new and social media as a toolkit: which tool will help you best tell your story?

As outlet-created pieces like "Snow Fall" and "Sea Change" show, the web is increasingly home to excellent reading experiences that are free, interactive and responsive. Responsive web design automatically optimizes the page to the particular device you are using, whether that's a phone, tablet or 24-inch screen.

So why create an e-book instead of a responsive long-form piece?

Simply put, right now there's a market for e-books. The Pulitzer Center covers issues that are hard to draw attention to, so we need to go where the readers are. When we started our e-book experiment, we thought it could be an extra revenue stream for journalists. That goal has not been realized yet, though we remain hopeful, especially as more classrooms are using tablets.

Part of publishing has always been accepting that each book or project is a gamble – some do very well, and some languish on shelves, virtual or real.

Putting the book together

OK, you have your materials, and you're ready to design your book. The first thing to think about is whether you want complete control over how it looks across all platforms. Now laugh at yourself because, of course, that is impossible.

Most e-readers use "flowing layout" electronic publications (aka EPUBs). If you have a Kindle or Nook, think about how you can change text size, line spacing and margins to suit your desired reading experience. All of that flexibility means less control for the designer.

This should not concern you if you have a text-only or text-heavy e-book. Readers are used to and accepting of small layout flaws as the price they pay for the ease and flexibility of using an e-reader.

If you have photos or videos, however, what this means is that sometimes those multimedia assets will move to different areas than you intend, or sometimes there may be awkward spaces.

We cope with this in our photo-heavy books by inserting a line above and below our photos and captions to help orient the reader. You may decide that is a price you are unwilling to pay, and so choose only to do "fixed layout". Fixed layout means that you retain total control of layout, but that you are limited in where you can publish.

For example, Mac users have iBooks Author, a free app that allows you to create interactive fixed layout e-books for the iBook

store. The program is easy to learn and has design templates you can choose to follow. The iPad, and hence, the iBook, are both great platforms to showcase photography – you can control exactly how it looks, add pop-up captions, and the screen resolution is high enough to do justice to the work.

Journalists can also embed video, photos, sound, presentations and third party apps in the e-book through iBook Author's existing "widgets" and through the ability to create your own. For example, we used Mapbox, an open-source mapping platform, to embed custom HTML interactive maps in "Meltdown: China's Environment Crisis" (<http://bit.ly/1d9YfoI>).

Third-party sites like Bookry allow you to create downloadable widgets which embed YouTube or Vimeo videos that play on WiFi-only (thus reducing book download size and time), quizzes and more into the book.

Design with markets in mind

The unfortunate part is that iBook Author creates files that can only be uploaded to the iBookstore and nowhere else. Since our e-books are photo-heavy, we originally only designed them for the iBookstore but soon realized that we were missing out on the largest e-book market in the world – Amazon.

To address that gap, we used Creatavist, a freemium online site, to create web and Kindle versions of our e-books. In effect, this means that you have to design your e-book two or more times to be optimized to each e-reader.

As a publisher, it is worth the time investment for us to optimize to each store, but unless you are a photographer or designer, it probably is better to go with a flowing layout EPUB that can easily be converted and uploaded to each store.

We were pleasantly surprised with how our photos looked in black and white on the Kindle Paperwhite, as well as on the Fire, but the overall reading experience is clunkier than the iPad.

Pricing as a "value" signal

As a still-formulating market, e-book pricing is far from cut and dried. Major publishers tend to sell their e-book versions of print books at a slight discount to the print price. If you are doing e-book only, you have a choice to make. Price is a value signal for most consumers – if the book is low-priced or free, consumers may not think it is good. However, if the price is too high, some consumers will not take a chance on an unknown author.

E-book sellers use "dynamic pricing" to try to lock onto news and sales trends that could help bump sales. It is easy to change prices on the e-bookstores; simply login and edit your data. The Pulitzer Center, for example, has done several free giveaway weeks to target educators (a key market for us) and conference attendees.

As a serial publisher, our main hurdle is to get a reader to purchase or download one e-book – from there, the reader will start seeing our other titles. For this reason, we made "Meltdown" free, to help call attention to our other, paid titles.

When you think about what you would like to do, this serial versus one-off publishing is an important question to consider. Generally, if you can reasonably do a series, do. If you have a text-only, never-before-published manuscript, consider pitching to Kindle Singles. Kindle will then market your work. For unknown authors, free up to \$2.99 is a good place to start on e-book pricing on Amazon. If you designed more of a textbook or photobook, you could charge more on the iBookstore.

You'll notice that some e-book writers chose to sell their product through their site, in addition to or instead of the bookstores. The reason is that major book sellers take a large commission on each sale, so you can make a higher profit margin on each book by selling directly to readers.

The tradeoffs are that you lose the discoverability of being on the large e-bookstore markets, and you have to then work out

Continued on page 22

Sites You Need to Know for e-Publishing

- **Bookbaby.com:** A distributor that for a flat \$100 fee will take care of getting ISBNs and distributing your EPUB file to the different bookstores. This is a good way to go if you don't want to deal with setting up different accounts for each bookstore.

- **Apple iBookstore and Appfigures.com:** The iBookstore's analytics are only held for a short time, so you have to download or lose them. Instead, use the nice freemium app Appfigures to track your sales.

- **Kdp.amazon.com:** Amazon's e-book interface is very user-friendly. Its analytics can be hard to follow, especially with the different currencies on its world stores. The Amazon store accepts ".mobi" files, which are essentially EPUB files. To upload your book, you create an account at kdp.amazon.com. The previewer interface shows you what your book will look like on different Kindles and Kindle apps and scans your book for spelling errors.

- **Myidentifiers.com:** This site allows you to buy a bundle of ISBNs and register your book. Register for an ISBN as soon as you have a set title and description. You don't technically need an ISBN for Amazon, but you do for iBookstore.

Tools for e-Publishing

- **Creatavist:** A beta freemium web-based platform created by Atavist, Creatavist allows you to create your own multimedia long-form journalism pieces for web, Kindle, iBookstore, Nook and the Creatavist app. You do not need to know coding – it is a "What You See Is What You Get" editor – but some knowledge of HTML and CSS is helpful.

- **iBooks Author:** iBooks Author is a free app for Macs which allows you to create interactive books for the iBookstore. Originally designed to create textbooks for the iPad, the new Maverick OS allows Macs to also read iBooks, so anticipate some extra design features to come. Using iBooks Author is relatively simple – less complex than InDesign, but more powerful than Powerpoint. If you get stuck, there are online forums and classes to help you learn more.

- **Calibre:** Calibre is an open-source, free software which helps you create, convert and preview EPUB files for the different e-bookstores.

- **Keynote and Word:** You can create simple EPUBs on Keynote and Word by making use of the "Style" and "Table of Contents" options.

Telling the Tiger's Story

Famed big cat photographer Steve Winter and longtime SEJ freelance writer-photographer Sharon Guynup spoke with SEJournal about their book collaboration for National Geographic, "Tigers Forever," for the second installment of our new feature, Between the Lines, an author Q&A that debuted in the magazine's Fall 2013 issue. BookShelf Editor Tom Henry reviewed the book (see page 14) and interviewed the couple before their latest trip to India in December, an 18-day adventure that, among other things, was to generate more video footage for multimedia presentations of their book. Only 3,200 tigers were known to exist in the wild when they began the book in 2012. Now, fewer than 3,000 are left. Said Guynup of the world's tigers: "They're disappearing before our eyes."

SEJournal: "Tigers Forever" was obviously an enormous project, one in which the mysterious big cats were painstakingly photographed over a decade. How did it all come together and what advice do you have for other journalists contemplating a project that involves years of dedication and travel to numerous countries?

Winter: One of the funders said we have to change the way we think about conservation. He said, "Let's start with tigers and change how we approach it." It was Sharon's idea to put all of these stories together. This was all a learning experience for me.



Although usually found in tropical areas, tigers have a low tolerance for high temperatures and direct sun and seek refuge from midday heat. Here, 14-month-old sibling cubs cool off in the Patpara Nala watering hole in Bandhavgarh National Park, India. Photo: © Steve Winter

[The project] was extremely difficult, but easy in terms of having a lot of habitat destruction and human-tiger conflict to photograph.

Guynup: Let me add that it's really important to find people on the ground who are working with the experts. Steve has incredible persistence. If I was going to describe Steve in one word, it would be 'relentless.'

SEJournal: Sharon, how did your role as writer-collaborator differ or complement other major projects you've done? What did you find most challenging from a writer's standpoint when it came to organizing, distilling and packaging the information in a way that tells a story and inspires readers?

Guynup: National Geographic wanted me to write the story in Steve's voice. In addition to 60-plus tiger experts, I interviewed Steve on numerous occasions. It was a challenge to tell the story in his voice, but also to select some of the key things that happened to him as jumping-off points for the broader discussion about conservation. I had a challenging deadline. I wrote the book in four months and that includes all of the research. I wrote 45,000 words, which includes the profiles and captions. I'm not a crier. But there were so many deeply, deeply disturbing things I heard. I cried a bunch of times writing this book. I was depressed when I finished it. It has made me want to stand up more for the tigers. It has fueled my resolve to get the word out there.



These men were apprehended in January 2011 while trying to sell a tiger skin near Chandrapur, India. The illegal trade in tiger bone, eyes, whiskers, teeth and other parts for traditional Chinese medicine is run by international crime syndicates that also traffic drugs and guns — a \$20-million-a-year business. These men were captured by local informants in a program set up by The Wildlife Protection Society of India that pays local people for information when they see someone poaching wildlife or cutting trees. Photo: © Steve Winter.

SEJournal: Steve, you pulled out all stops to get the photos, from riding on an elephant to installing camera traps at fixed locations to using mobile, remote-controlled devices. I'll bet it was, at times, an adrenaline rush — such as when you saw tigers in the wild atop an elephant — and, at times, incredibly tedious — such as when you spent hours installing cameras at a fixed location and not knowing what you'd get. Tell us a little about those highs and lows, how you coped with them mentally and what led to the strategies you used.

Winter: You've got to tell the story visually. Just doing a bunch of cute tiger photos isn't good enough. A perfect example of that is the book cover photo. I convinced National Geographic to let me go back [and try for a better shot]. When I'm on the elephant, I'm mostly reading books because nothing's happening. Day after day, I'm getting nothing. I had to believe I would never come back until I got what I had gone out to get. It [the cover photo, of a tigress with her cub, taken in the wild from atop an elephant] happened within 10 seconds. Five frames. I used a 600-millimeter (long distance) lens. The cover photo of the book was one frame when there was no movement. The tripod was tied to the box on top of the elephant. Being on the ground in Kaziranga [the national park in Assam, India] was the most stressful thing. It wasn't just the tigers. I was worried about being attacked by rhinos all the time. We got great photos, but it's very stressful and very dangerous. I trust the people I'm with. If I don't trust them, I don't go with them. You only get to do the elephant from dawn to 10 a.m. or 11 a.m. (in the summer), because it gets too hot for the elephant, like 120 degrees. It's not a dry heat, either. It's an oven.

Guynup: You can't walk through tiger territory or you'll get killed. You have to either have a Jeep or be on elephants.

SEJournal: Hurricane Sandy struck your New Jersey home as you two began this project. How did that complicate things?

Winter: I had 22 years of field gear downstairs, along with

family stuff. I was downstairs moving stuff. I ran up the stairs as the water came in. We lost tons of stuff. Water was spurting in like an old submarine movie and (the door) just exploded.

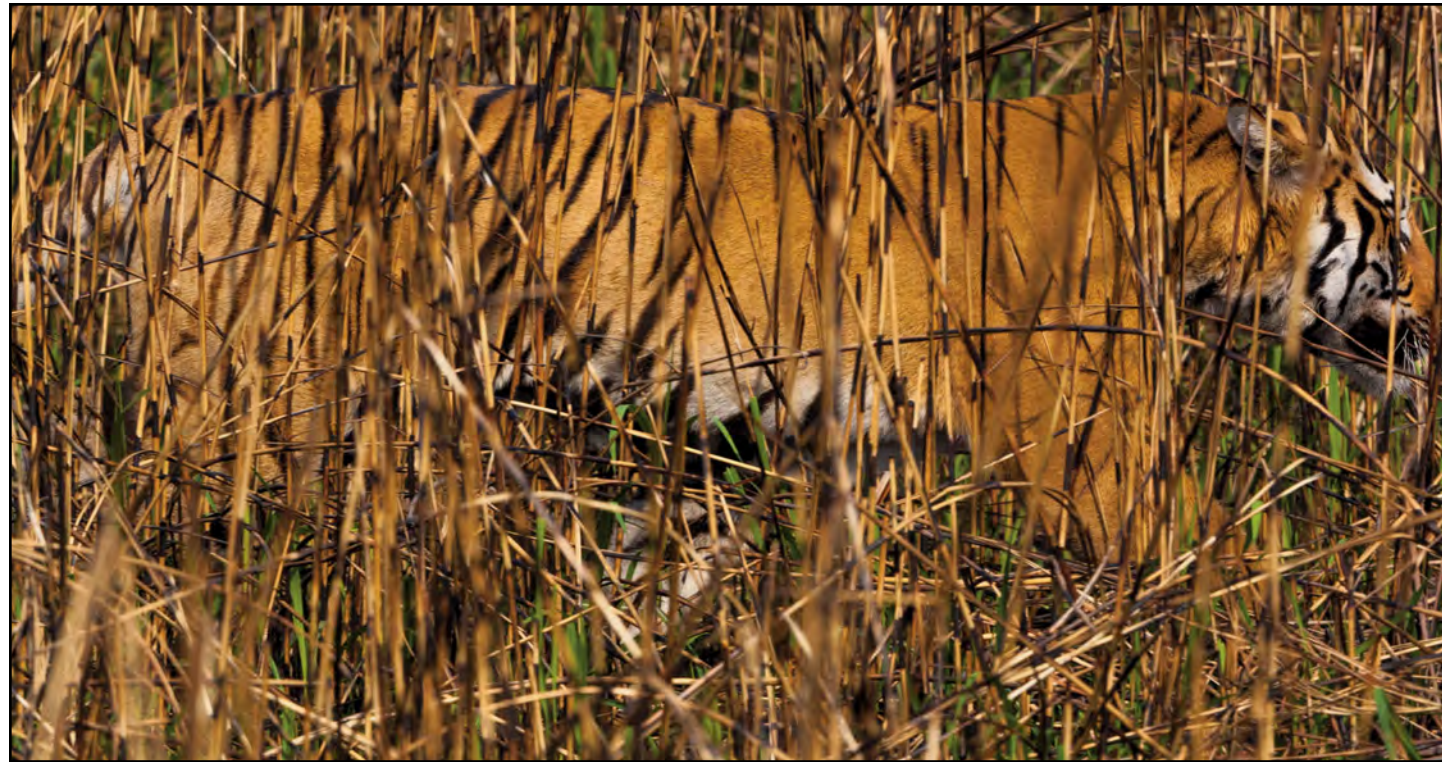
Guynup: I literally remember doing my first interview (with a source in Asia) on Skype from a motel room, in a Super 8. We were lucky to get a room.

SEJournal: Sharon, "Tigers Forever" is a book that goes beyond identifying a problem. It explains why tigers matter and is a clarion call for action. As a writer, though, you know that readers can get turned off by books that are too sentimental, preachy or agenda-driven. What was going through your mind as you wrote



Poachers killed an 18-year-old Sumatran tiger, Sheila, in her cage at the zoo in Jambi, Indonesia the night before this photo was made. Tigers are worth more dead than alive; even a cage in a zoo does not provide safe haven for a tiger when nearly all parts of the cat — eyes, whiskers, genitals, bone, and more — are worth their weight in gold on the black market for use in traditional Chinese medicine. Here, Dara Arista, 8, who came to the zoo to see Sheila, holds a photo of her in front of her cage. The poacher was captured on a bus carrying the tiger parts; he admitted to the crime, for which he was paid \$100.

Photo: © Steve Winter



Amid tall grass, the coat of a tiger becomes a cloak of invisibility, the camouflage raising the odds for a successful kill. Tigers in Kaziranga National Park hunt, with no competition, millions of pounds of deer, buffalo, and wild hog. Photo: © Steve Winter

the book, knowing you needed to push the envelope yet strike the right balance?

Guynup: Telling Steve's field stories – he was in a very remote, very beautiful, but very challenging place. There's a lot of glamour around *National Geographic* photographers, but there's a lot of coming back with parasites. He's away for long chunks of time. He worked seven days a week, dawn to dusk. Steve is a guy who has really worked hard to tell stories. I'm fascinated by people and culture and history. I tried to weave in all of those aspects as well. You can't hammer people with an environmental problem (like climate change) without laying out what is being done, what can be done and why it matters. If you're saving forests, you're protecting other things (water, air, and wildlife habitat, for example) and it means you're protecting everything that lives. We're always saving ourselves [through wildlife conservation]. Tigers are majestic animals that deserve to walk the Earth, but there are wider reasons to save them.

SEJournal: Steve, did you ever feel your life was in danger during this project, not only if you got too close to a tiger in the wild but also because of how much you researched and pho-

tographed well-armed poachers and others who may not have wanted you exposing them?

Winter: You could always be in danger of poachers but never know it, because they're as silent as animals in most cases. One day we came in to check a camera trap and there's a tiger in a cave and he's the biggest one in the park. Somebody yells, "Run!" The rules are that if somebody yells run, you don't question it. You just run. What did that tiger do? He ran in the other direction. They don't like conflict. But it was stressful. The bottom line is we started getting pictures on the first day. That's not how it normally happens. That gives you the incentive to go on. It's like a Crack-jack prize. You never know what you'll get. You just never know. It's absolutely incredible when you're out there. You can't ever feel too comfortable out there, though. They're wild animals. You can't forget that.

SEJournal: What life lessons did both of you get from this project? How did it change you as people and as journalists? How much more did it get you to appreciate the role of conservation officers and the role of the conservation movement in general?

Guynup: There are a couple of people I regard as my heroes.

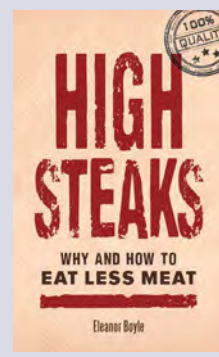


"How to Raise Chickens"

Everything You Need to Know
by Christine Heinrichs

Voyageur Press
<http://bit.ly/HowToRaiseChickens>

Whichever comes first for you, the chicken or the egg, this book will show you what to do next with longtime chicken breeder Christine Heinrichs explaining all the helpful DOs and important DON'Ts.



"High Steaks: Why and How to Eat Less Meat"

by Eleanor Boyle

New Society Publishers
www.newsociety.com/Books/H/High-Steaks

Timely and compelling, "High Steaks" offers powerful environmental evidence for producing livestock more sustainably and compassionately, and for eating less and better meat.

One is [world-renowned wildlife biologist] George Schaller. Belinda Wright [a noted wildlife crime investigator in India] is one of them. So is Debbie Banks, who works for the Environmental Investigation Agency in London [Banks heads EIA's tiger campaign]. These women are ninjas. They've put themselves in danger to get poachers. It's really amazing. I've found it hugely inspiring, personally. This has pushed me into areas I wasn't comfortable with. I've never been a public speaker. It was really, really hard for me to get up on the stage and do that. Since then, I've been in a number of other speaking engagements. In my mind, I signed a contract to speak up for tigers.

Winter: With this scientific project, finally, I got the whole package. We have a real body of work here and can talk to the world, as much as we're allowed to do that – about why we should save their [the tigers'] land so we can save ourselves. This is something we're going to be doing for a long time to come, talking about saving tigers.

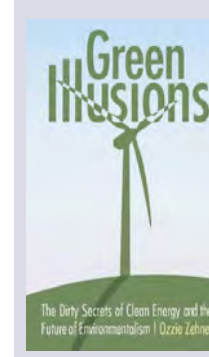
Guynup: Too often as journalists, we go from one story to the next. [With "Tigers Forever"] we have the opportunity to work on a bigger project that can have more impact, one that is intensely satisfying.

Winter: When you do a body of work like this, it doesn't die in a week or even a month.

SEJournal: What parallels, on a smaller scale, can be made



Steve Winter photographing from an elephant's back in Bandhavgarh Tiger Reserve, India. Photo: courtesy Steve Winter



"Green Illusions: The Dirty Secrets of Clean Energy and the Future of Environmentalism"

by Ozzie Zehner

University of Nebraska Press
www.greenillusions.org

Green Illusions delivers a backstage tour of solar, wind, hydrogen and electric cars. Are these technologies the solution to growth and productivism, or the problem?



Two boys in a Pulikali performance show off their body paint in Umaria, India. Pulikali or "play of the tigers" is a performance that revolves around the theme of tiger hunting and is usually performed during Muslim New Year celebrations. Photo: © Steve Winter

between your ambitious, lengthy project and what many environmental writers do on a daily basis while covering the beat for their hometown publication or broadcast outlet, or when pitching freelance stories?

Winter: There's something everywhere that's environmentally relevant. It makes it easy if it's in your own backyard to make it a long-term project. I know there are environment- or wildlife-oriented stories. We just have to ignite or find the people. You just have to show your editors there's some meat on the bone and sell them on the stories.

Guynup: Local stories are hugely important.

SEJournal: You said you'll be expanding this project with more video and multimedia packages. Why is that important?

Guynup: I used to be a photographer. It just seems our profession has become so multimedia, people have become moved by the whole package. I feel blessed to have that strong visual background.

Winter: We have to bring the next generation in, we have no choice. They need video. At the time, we were looking at a book and now need to expand it more with video. [On this latest trip to India], we will get more tiger video and it will go up on the book's web site.

Guynup: We're going to keep using whatever medium we can to stick up for the tiger.

For more, see Steve Winter's interview on CBS News in November (<http://bit.ly/winterinterview>) or Sharon Guynup's speech at TEDx Hoboken last summer (<http://bit.ly/Guynup>).



"Opportunity, Montana: Big Copper, Bad Water and the Burial of an American Landscape"

by Brad Tyer

Beacon Press
<http://bit.ly/1156OvB>

A memoir exposé examining our fraught relationship with the West and our attempts to redeem a toxic environmental legacy.

BookShelf



Tigers Forever: Saving the World's Most Endangered Big Cat

By Steve Winter, with Sharon Guynup

National Geographic, \$40

Reviewed by TOM HENRY

If you don't hate wildlife poachers by the end of this book, you never will.

Yes, photographer Steve Winter captures the sheer awe, beauty and power of one of Earth's most majestic creatures in "Tigers Forever: Saving the World's Most Endangered Big Cat." That's an understatement.

But what adds to the book's obvious visual appeal is how Winter and freelance writer Sharon Guynup, a longtime SEJ member, get to the heart of what all great journalism's about: Why it matters.

Tigers matter. As Winter and Guynup point out, the collective actions to destroy tiger habitat and prey – but especially tigers themselves when people are motivated by black-market profiteers – say a lot about the human race and what it is willing to overlook or condone.

Readers learn that the battle is not so much being waged over an occasional killing of a nuisance tiger that has encroached upon a livestock farm, or because of cultural and religious traditions (including one infamous tourist attraction, Thailand's Tiger Temple).

The biggest battle is being waged with a strong, organized, and brazen militia engaged in ongoing jungle warfare with conservation officers. The authors take readers into the middle of that. They highlight the extreme dedication of many conservation officers willing to put their lives on the line, often for much lower salaries than what poachers get from their crime bosses.

Fewer than 3,200 tigers remain in the wild, down from 100,000 a century ago. They are coveted for their skin and bones, the latter of which is used in some reputed healthcare products. Tigers face threats from climate change and other environmental issues just like other iconic species, such as the polar bear.

The plight of tigers, though, is not nearly as complex. With a stronger crackdown on poaching, the authors claim, most of the problem could be solved. It's mostly a matter of political will.

Winter, an award-winning *National Geographic* photographer who has focused on telling the stories of big cats for much of his

career, offers a nearly groundbreaking look at tigers with close-ups in the wild.

Many images were taken remotely from cameras set up at fixed locations, some with infrared light and some with mobile robotic devices. On several occasions, Winter photographed from atop an elephant taxi. In India, he was granted access to off-limit sites under guarded escort by government officials. His photographs come from Myanmar, Kaziranga, Sumatra, Thailand and India.

Vignettes are included of prominent tiger conservationists, including biologist George Schaller, but also a number of on-the-ground conservation officers, activists and others who make a difference daily in those parts of the world.

The book was done in partnership with Panthera, a global group striving to save big cats. A portion of the proceeds goes to that group's Tigers Forever program. Alan Rabinowitz, Panthera chief executive officer, wrote one of the introductions.

While a lot of thought and commitment obviously went into the book's physical characteristics – it's a big, wide, and heavy book readers can spread across their laps, and the paper stock is among the thickest and most impressive they'll find – to call "Tigers Forever" a coffee-table book would be wrong. It is a clarion call for justice with striking photographs – some truly mesmerizing – that serve the *National Geographic* brand proud.

Tom Henry is The (Toledo) Blade's environmental writer, SEJournal's book editor, a member of the magazine's editorial board, and a former member of SEJ's board of directors.



The Bet: Paul Ehrlich, Julian Simon, and Our Gamble over Earth's Future

By Paul Sabin
Yale University Press, \$28.50

Reviewed by JENNIFER WEEKS

In the fall of 1990, economist Julian Simon received a check for \$576.07 in the mail, along with a sheet of metal prices. The check was from Stanford University biologist Paul Ehrlich. There was no note enclosed.

A decade earlier, Simon and Ehrlich had made a bet on whether the prices of five metals (chromium, copper, nickel, tin, and tungsten) would rise or fall in 10 years.

Ehrlich, who believed that human population growth would soon exhaust Earth's resources, predicted that the metals would cost more as they became scarcer.

Simon, who argued that human ingenuity would lead to the

discovery of new sources and new production methods, predicted that the metals would become cheaper.

Simon won the bet. Ehrlich's check represented the drop in prices of a \$1,000 bundle of the five metals between 1980 and 1990.

In "The Bet," Yale historian Paul Sabin recounts the story of Ehrlich and Simon's wager, which pitted Ehrlich's belief that humans were exhausting the planet's resources against Simon's view that markets, technological innovation and human ingenuity were creating a better future.

As Sabin sees it, both men had valid points. But, he wrote, their winner-take-all approach "shows how intelligent people are drawn to vilify their opponents and to reduce the issues that they care about to stark and divisive terms."

Much of "The Bet" traces Ehrlich's and Simon's career paths to place their standoff in context.

Ehrlich is a distinguished scientist, famous for his controversial, yet wildly popular 1968 book about spiraling human growth, "The Population Bomb", which he co-authored with his wife, Anne. In that book and others since, Ehrlich argued that human societies were pushing up against biological and physical limits, and called for aggressive government action to limit population growth.

Ehrlich's views were firmly rooted in the tradition of Thomas Malthus, the 18th Century English scholar who warned that population growth would outstrip food supplies and lead to starvation.

Ehrlich also worried about traditional environmental issues such as fossil fuel consumption, industrial pollution and toxic wastes. He served on the steering committee for the first Earth Day in 1970, and warned in Congressional testimony and media appearances that over-consumption was ushering in an "age of scarcity."

Simon saw things differently: He was an advocate of free markets, trained at the University of Chicago, who believed that population growth could strengthen economies rather than weakening them. When resources grew scarce, he argued, people would innovate and find new solutions.

In the late 1970s, Simon started publicly criticizing Ehrlich and his colleagues. Ehrlich struck back and took up Simon's bet. When Simon won, many commentators argued that apocalyptic environmental warnings were wrong.

Ehrlich refused to concede, saying that newer problems such as ozone depletion and climate change made a crash inevitable at some point, while Simon launched ever-broader attacks on "doomsaying environmentalists."

They each proposed new bets on the future – Ehrlich wanted to focus on environmental indicators; Simon countered with measurements of human health and quality of life – but they never found common ground.

Simon died in 1998.



"For God, Country & Coca-Cola"

by Mark Pendergrast

Basic Books

<http://markpendergrast.com/coca-cola>

"Behind the glitz and fanfare, the bubbly brown beverage has had a tortured and controversy-filled history, meticulously chronicled in For God, Country and Coca-Cola." — *The Wall Street Journal* (fully updated 3rd edition)

Ehrlich, now 81, is still a professor at Stanford and chair of the university's Center for Conservation Biology.

This book shows how Simon and Ehrlich's bet embodied ongoing debates about conservation and environmental regulation in America. Sabin tells the story fairly, without taking sides, and points out valuable insights that each perspective offers.

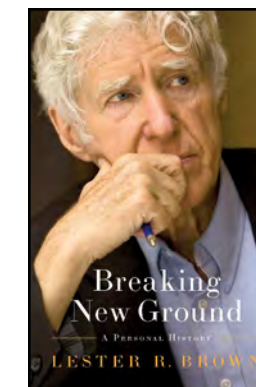
Ehrlich and other environmental scientists "helped avert genuine ecological disasters, and [showed] the risks of dangerous new technologies," laying the groundwork for landmark environmental laws enacted in the 1970s, Sabin wrote. Simon and other economists showed that regulation imposed economic costs and that scarcity could trigger innovation.

Sabin also points out areas where each thinker got it wrong. Ehrlich's apocalyptic predictions of famine helped tag environmentalists as gloom-and-doom prophets, while Simon put too much faith in free markets to solve humanity's problems. Both men pushed their ideas too far, Sabin argues.

"The Bet" puts today's climate change debates into context and connects many dots in the past 50 years of environmental thinking. It also shows the risks of framing these issues as either/or choices.

As Sabin puts it, "Our task is not to choose between these two competing perspectives but rather to find ways to wrestle with their tensions and uncertainties, and to take what each offers that is of value. . . . Neither biology nor economics can substitute for the deeper ethical question: What kind of world do we desire?"

Jennifer Weeks is a Boston-based freelance writer and a former member of SEJ's board of directors.



Breaking New Ground: A Personal History

By Lester Brown
Norton, \$24.95

Reviewed by TOM HENRY

Praised by the *Washington Post* as "one of the world's most influential thinkers," Lester Brown has had a rags-to-riches life in environmental activism – a rare feat, especially because activism is hardly a lucrative field.

Brown's story is an intriguing one, in part because of his humble New Jersey farming roots.

He came from a family in which nobody else even graduated from elementary school. He went on to create the Earth Policy and Worldwatch institutes and write or co-author 51 books. Some have been translated into as many as 42 languages.

Brown has won numerous awards, including a MacArthur Fellowship, the 1987 United Nations Environment Prize, and the 1994 Blue Planet Prize, the latter for his "exceptional contributions to solving global environmental problems." He has received 25 honorary degrees. Renowned figures such as Ted Turner, David Suzuki, Edward O. Wilson and Carl Safina are among his fans.

Much of his enormous success has come from Worldwatch's annual "State of the World" books and a 1995 book, "Who Will Feed China?" which has been credited for bettering China's agricultural policy.

His travels abroad to India early in his career were highly influential in developing his view of the world from an agricultural-



"Fracking Pennsylvania:

Flirting with Disaster"
by Walter M. Brasch

Greeley and Stone, Publishers
<http://www.walterbrasch.com>

Dr. Brasch combines scientific evidence, extensive interviews with those affected by fracking throughout America, and an investigation into the collusion between politicians and Big Energy.



"The Melting World: A Journey Across America's Vanishing Glaciers"

by Christopher White

St. Martin's Press

<http://bit.ly/MeltingWorld>

"An urgent wake-up call to nations across the globe that share responsibility for climate change and a heartbreaking elegy to a vital component of ecology." — BOOKLIST

BookShelf

environmental standpoint. Brown said he has made a commitment to living comfortably, not lavishly, re-channeling millions of dollars he has earned and raised into efforts to improve the planet, not to simply pad his personal bank account.

He gives us a taste of his eccentric, if not slightly obsessive, personality by saying how the denim-colored blue shirts he likes have become such a trademark he is no longer interested in dressing in other colors or styles.

He doesn't own a car. He lives in a one-bedroom condo and jogs in addition to his walking. For 25 years, he played touch football on Saturdays between Memorial Day and Labor Day.

The tone of his book wavers between being too self-congratulatory at times and incredibly down to Earth at others. It's a good read for the most part, especially the beginning when he writes about growing up in the 1930s and the hard life he scabbled out while his father was a sharecropper. He lived in a home with no running water, no electricity, no indoor plumbing and no refrigerator.

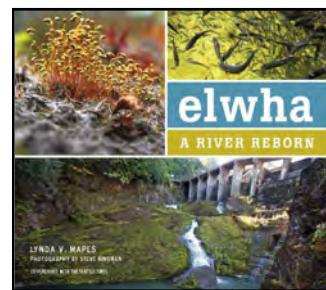
Brown showed keen entrepreneurial skills at an early age: He launched a tomato-growing operation with his younger brother that by 1958 was producing more than 1.5 million tomatoes.

While working toward an agricultural science degree at Rutgers University and later employed by the U.S. Department of Agriculture, he developed a vision of sustainability – what it would take to feed the world as its population continued to swell.

That ag component of his life, coupled with his intense passion for the environment, opens a new window – or at least a much wider one – for environmental writers seeking the convergence between agriculture and natural systems.

Brown is a great resource, not only for his writings on how food supplies can be strained by population growth – but also how water can be, too, and how climate change affects both.

“The yardstick by which I judge myself,” he writes near the end of his autobiography, “is not in terms of how many books I've written, though that has been rewarding, or how many talks I've given, much as I've enjoyed them, but rather whether we are reversing the trends that are undermining our future.”



Elwha: A River Reborn

By Lynda V. Mapes
Photography by Steve Ringman
The Mountaineers Books & The
Seattle Times, \$29.95

Reviewed by ELIZA MURPHY

After recognizing the industrial potential of the Elwha River rushing off the Olympic Mountains in Washington State, one dam visionary abandoned his post as managing editor at a local newspaper to harness that river.

A century later, recently freed from a wall of native rock and cement, the river is once again nearly free to run its wild course to the Strait of Juan de Fuca.

Times have changed since “swashbuckling pioneer” Thomas Aldwell controlled the river through questionable means. His enthusiasm was infectious, spreading to his contemporaries who shared his view that the river possessed great potential to supply energy and serve the needs of manufacturing.

Since that era of phenomenal development, dams have become

publicly damned as scientists deliver bad news about the cascade of ecological problems caused by these behemoths that stand in the way of natural cycles.

What better species to illustrate the need of a river to flow than the iconic salmon? Although they have a considerable obstacle impeding their ability to reach their traditional spawning grounds on the Elwha River, that has not stopped them from trying. Author and *Seattle Times* reporter Lynda V. Mapes shines brilliantly when she provides sensory details, especially at moments like watching a biologist handle a captured Chinook, or tyee, the king of salmon.

Here, the page recedes and the fish rises into three dimensions as if jumping up a waterfall, with “silver drops clinging to its massive body...jaws as long as an ear of corn, snaggly teeth...A ripe and feisty hen, she squeezed an egg out of her vent; vivid red and glowing, the egg seemed to contain its own light.”

Mapes got to know this river intimately during the 16 years she has covered this beat for the *Seattle Times*.

She tagged along with scientists to wade deep into frigid, treacherous water; traipsed through mossy forest populated with salamanders, nettles, sword ferns, elk, water ouzels and Swainson's thrushes; conducted hours of interviews with tribal members, bureaucrats, engineers, laborers and scientists; pored over documents and leafed through archives that rustled with the “death rattle of onion skin typing paper” to offer the story of the river in its complexity.

The narrative never gets bogged down. This is a lively account of the end of an era and the liberation of a river that was not universally celebrated. It reads like a good story, with opinion reserved for characters to express; each offers a different slant on this expensive, elaborate project.

Ringman's photographs do more than enrich the narrative. No detail is too small or grand for him to miss with his lens. He captures the tension inherent in this feat – walls of sediment, the expression on the face of the power station manager as he pulls the switch to off for the final time, a wildlife biologist inside a river otter trap ensuring that the door closes quickly, Klallam tribal members preparing a ceremonial cedar raft for Chinook.

His images, combined with rare historical photographs, heighten the inescapable truth that people are part of a river's natural history.

Damming the river, although fraught with tragedy and considerable technological glitches and setbacks, was a cakewalk compared to busting the dams. One dam is gone, and the salmon get to swim further upstream. Next year, the remainder of the second dam, farther upriver, will be removed.

Readers will have to wait a few years for the sequel to find out how the river behaves once it regains the freedom we took from it.

Eliza Murphy is a freelance writer and SEJ member who lives in Oregon's Willamette Valley.

Media on the Move
Coming soon to your inbox

We've been tracking the comings and goings of SEJ members since 2004. And now we're moving online with an easy-to-use e-newsletter form.

Stay tuned!  **MEDIA ON THE MOVE**

Inside Story

Top Beat Reporter Looks for “Window into Story”

When it comes to reporting on complex environmental issues around the world, few do the job justice like Sam Eaton. A New York-based radio and television journalist, Eaton was recently named first-place winner of the SEJ's 12th annual award for outstanding beat reporting for large markets for his work on Public Radio International's The World. Judges praised his work, saying Eaton “brought his listeners not just the world but the way it is changing at the hand of man.” SEJournal's Beth Daley, who co-chaired the awards committee, recently asked Eaton about his prize-winning work about Japan's Fukushima nuclear plant and climate research in the Arctic.

SEJournal: How did the stories on Fukushima and the Arctic come about and tell us how long they took to put together?

Eaton: Both of these projects came about quickly. For Japan, Peter Thomson, The World's environment editor, first approached me in mid-January 2012 about doing some stories for the tsunami-earthquake anniversary. Three weeks later I was on plane to Tokyo with assignments for five radio stories for The World, a TV segment for PBS NewsHour, and a hard deadline of the March 11th anniversary. We knew going in what themes we wanted to explore, such as the environmental tradeoffs of making the Fukushima hot zone habitable again. But all the work of bringing the stories to life happened during my two weeks on the ground. I had an amazing fixer, Winnie Bird, a talented environmental journalist who had a very old and very tiny minivan. So we turned it into a road trip of sorts, driving the entire stretch of the tsunami-damaged coastline while gathering interviews, crashing on fishermen's floors at night, and adjusting our itinerary along the way as each story took shape.

The climate stories presented a different set of challenges since my task was to connect the dots between Hurricane Sandy and the latest science on Arctic warming. People on the East Coast were still digging out from the wreckage, so I knew I needed to hit the right tone. I had covered the aftermath of Hurricane Katrina in New Orleans for Marketplace and experienced how that story evolved over time from the immediacy of the storm and flooding to coverage with much more context. It's a balance between the traumatic experience of the people who've lived through these disasters and want to rebuild their lives exactly as they were before and the scientific evidence that things will never be the same.

SEJournal: Your stories are notable for wonderful detail that helps listeners absorb lots of substance. The examples of the starving animal chewing on the wood and the economic fallout from Fukushima were incredibly evocative. How do you go looking for those details?

Eaton: These details are usually the images and quotes that stick with me after the interviews. The things I tell my wife about at the end of the day. In many ways it's about luck. But more often it's about patience. The farmers in Japan showed me that photo of the chewed-through wood beam in their barn after the interview had officially ended. We were talking about how much they loved each of their animals and how hard it was for them to abandon them. They had left after the disaster thinking they would be back in a few days. But the days turned to months and that photo captured the horror of what had happened in their absence.



Reporter Sam Eaton tasting raw scallops in Ogatsu, Japan, with tsunami survivor and aquaculture fisherman Hiromitsu Ito. Rather than waiting for government aid, Ito innovated a new Community Supported Agriculture model for aquaculture fishing. Photo by Yuma Hamayoshi

I also came to journalism from fiction writing so I'm always looking for the small details that evoke a much larger meaning. And in broadcast, where a six-minute story is a luxury, they can be used to add more context or to convey a sense of place when economy of language is a requirement.

SEJournal: How long were you in Japan's contaminated zone, where you needed special equipment to breathe, etc.?

Eaton: We were in and out in a day. A small group of international journalists shared a small van. We all had those white Tyvek radiation suits and booties, full-face respirators, etc. I even wrapped my recording equipment and microphone in saran wrap and tape so that it wouldn't collect radioactive dust during my visit.

SEJournal: Was there any particularly nerve-wracking time and if so, how did you resolve it?

Eaton: I will never forget the moment shortly after crossing into the hot zone when everyone's Geiger counters started going off at the same time. Up to that point we had all been casually talking. And once the alarms went off we all went silent. I think it's safe to say that the reality of what we were doing hit everyone at that moment.

Outside we were passing these abandoned towns. Everything had the look of a place that was evacuated in a hurry. And after a year there were already signs of nature slowly reclaiming the area. The most eerie experience by far was walking through a forest less than a mile from the reactor in my radiation suit, listening to the sound of the wind in the trees and the haunting calls of Japanese crows. The radiation levels here were the hottest we had seen, yet crows and other wildlife were completely oblivious to this invisible contaminant that was now in everything. It was the moment for me when it really sunk in how difficult, if not impossible, it is to clean up after a nuclear disaster.

SEJournal: What has been the most challenging part of telling stories about climate change?

Eaton: Most of the time climate change stories are about new research or scientific publications. In broadcast it's really hard to

Continued on page 22

Drones...continued

did not allow for proper public notice and comment. That, he argued, meant stakeholders were not given a chance to propose amendments to the regulations. Because some other countries do not have the same kinds of restrictions and red tape that the United States does, drone innovation — in journalism and other fields — was being slowed, he said.

Universities poised to lead the field

Meanwhile, over the past couple of years, some journalism professors began to prepare students in drone journalism, feeling that the FAA ban for universities only included researchers. No one would make any money if student journalists did drone journalism and posted it on non-profit websites. Rather, their students fell into the hobbyist category.

The University of Nebraska in 2012 and University of Missouri in 2013 began to produce stories containing drone footage. It's no coincidence that they focused mainly on environmental reporting since they had to fly in unpopulated areas to abide by FAA restrictions.

At Nebraska, students led by Matt Waite, professor of journalism, produced a pioneering story on the Platte River in drought that included stunning images of the all-but-parched river and a few braids of shallow water (Links to the story <http://bit.ly/19FerMm> and to a video on how the Nebraska team produced it <http://bit.ly/1bz7Dzz>). The story was posted on a university website and was picked up by news media around the world.

At Missouri, in collaboration with public radio web content manager Scott Pham, our class produced six stories: on a prescribed prairie burn, snow geese migration, wheat research, the Cahokia Mounds archaeological site, the headwaters of the Missouri River, and Gibbons' package on North Dakota oil.

In July, the FAA sent registered letters to our programs telling us to stop. In short, officials said, university-based, non-commercial journalists were not hobbyists. Since we were based at a "public" institution, we needed a COA.

Our universities, and a few others that now study drone journalism, await action by the FAA. In 2012 Congress ordered the agency to write new regulations by September 2015 that would open drones to commercial use and other civilian use.

The FAA 'roadmap'

On Nov. 7, 2013, the FAA released what it called a "Roadmap" for integrating civilian drones into the national airspace. The document showed the agency intended to integrate small UAS (the ones under 55 pounds) sooner than larger ones and hinted that some sort of pilot certification would be required, possibly including a training course and exam.

The roadmap indicated that "public" drone use would be approved before commercial use, according to Schulman, the Team Blacksheep lawyer. A proposed plan for such use may be released for public comment in early 2014.

Since public drone use would include state universities, college students may be back at the leading edge of U.S. drone journalism again, if only for a relatively short time.

"The document really just gives hints as to what's to come for legal drone journalism in the U.S.," Waite said on his website, www.dronejournalism.org. "But that's more than we've had up to now. In short: Heads up in the New Year."

Also in 2014, state legislatures are likely to see a rise in the in-



Cade Cleavelin, a senior in science and agricultural journalism at the University of Missouri, demonstrates a DJY Phantom quadcopter at the SEJ Conference in Chattanooga, TN last October. Photo: © Roger Archibald

tensity of the anti-drone campaign. In 2013, legislative action emphasizing privacy rights flourished, creating some strange bedfellows. In Missouri, for example, the Farm Bureau and the American Civil Liberties Union joined in January to support House Bill 46. The bill, which passed the House but died in the Senate, would have curtailed the use of drones to collect information. In September, a Texas law went into effect that outlaws publishing data, images or any other information collected by a drone.

"To date there have been 42 bills introduced into state legislatures that we consider to be anti-UAS legislation," Mario Mairena, government relations manager for the Association for Unmanned Vehicle Systems International, said at the SEJ meeting. "All of them are focused around the area of privacy."

The AUUSI has 7,500 members from government organizations, industry and academia, Mairena said. The group advocates for unmanned systems and robotic technologies in the defense, civil and commercial sectors, including journalism.

Waite and others expect a new wave of legislation in 2014 and have led conversations on how to make journalism's case. At a Drones and Aerial Robotics Conference at New York University Law School in October, speakers called for journalists to develop a unified plan, and to work with the FAA and state and national legislators to implement policies that both protect privacy rights under the Fourth Amendment and allow reporters to use this tool to inform the public under the First Amendment.

Let the brainstorm begin

Any journalist who saw the January 2012 story about pig blood flowing into the Trinity River in Dallas can understand the great potential for drones in environmental reporting.

An unidentified drone hobbyist flew along the river and noticed in his aerial images a red stream flowing near a slaughterhouse and into the Trinity. Government officials shut down the plant and fined its owners.

In November of that year, when public radio's Scott Pham walked into the office of one of the authors (Allen), said he had a drone and asked if Allen wanted to teach a course on drone journalism, Allen had two questions:

- What do you mean, "drone?"
- When do we start?

Somewhere in between those two questions the image of a stream flowing with pig blood popped into Allen's mind.

That shudder of excitement can be yours. While we wait for — or help guide — drone journalism policy to be set, let the fun of

story-idea generation begin. To fuel your brainstorming (suggestion: get together with environmental journalism friends at a pub), here are a few recent stories or story ideas showing the possibilities for using the low-altitude angle. They were gleaned from the SEJ panelists, the NYU conference and news reports.

• Waite said he was working with computer science and engineering colleagues at Nebraska to develop a drone-based water-sampling device for investigative reporting on water quality. He suggested SEJ members think about how they might use the device in their areas.

• Schroyer suggested using drones to obtain high-resolution images of landscapes to measure changes in the environment.

• CNN and a British photographer used drones to show video of the widespread destruction caused by Typhoon Haiyan in the Philippines. (<http://cnn.it/19NR96Y>) (<http://bit.ly/1gC3vXt>)

• Conservation groups and others have deployed drones in Africa and Asia to combat poaching of endangered animals. (<http://conservationdrones.org>)

• Cameron Hickey, a producer with the PBS programs NOVA and NewsHour, said he had captured images and video of the aftermath of Hurricane Sandy in New York City. (Hickey said he received no payment for that footage in particular, although the footage was ultimately broadcast on PBS.)

• Employees of Falcon UAV, a Colorado-based company, used a mapping drone to gauge risk and damage during that state's flooding crisis in September. They provided footage and data to first responders until the Federal Emergency Management Agency grounded the company's drones.

• Corcoran, the Australian journalist, suggested that using

drones to report on the aftermath of the 2011 Japanese earthquake, including the disaster at the Fukushima Daiichi nuclear power plant, could have reduced the risk of radiation exposure and injury.

• Schroyer flew a drone over the small town of Gifford, Ill., two days after an EF-3 tornado ripped apart 200 houses there during a tornado outbreak that killed six people in Illinois and two in Michigan.

What would Brendan Gibbons do?

After all, he is arguably among the most experienced drone journalists in the country, and he's working for an excellent newspaper in Scranton, in the middle of Marcellus Shale region. As he waits for the FAA, he's thinking of ways to use a drone.

"For breaking news, I could see a drone's-eye view being useful for a pipeline explosion or major spill event," Gibbons said. "Another possibility would be hovering over public lands to determine the extent of deforestation necessary to build roads and well pads."

Unrelated to the Marcellus Shale, he's trying to determine how to use the technology to report on another story he's following — the cleanup of the Old Forge borehole, which spews orange-tinted acid mine drainage water into the Lackawanna River. A company just got \$1 million from Pennsylvania to clean it up.

"The drone could be a useful way to verify whether their work was effective," he said.

How fun — and important — is that?

Bill Allen is an assistant professor of science journalism at the University of Missouri at Columbia. Sangeeta Shastry is a graduate student at the Missouri School of Journalism specializing in journalism and law.

Advertisement

GO DEEPER

NEW! WATER LAW & POLICY MONITOR™

Know your water rights and stay ahead of water management issues across the U.S. and abroad.

- > News coverage
- > Regulatory guidance and analysis
- > Key primary source materials

////////////////////
**TO START YOUR FREE TRIAL
CALL 800.372.1033 OR VISIT
www.bna.com/water-sej**
////////////////////

Photojournalism Upheaval Heralds Multimedia's Rise

By ROGER ARCHIBALD

Newspaper photographers these days feel like the last defenders of the Alamo, grimly holding out against yet another assault of layoffs, while still shooting. And the attrition is starting to indirectly impact environmental journalists, a number of whom shared with *SEJournal* their experiences in the shifting world of multimedia news production.

Job cuts for professional photojournalists are starting to approach epidemic proportions. The most audacious came last spring and took out the entire staff of the *Chicago Sun-Times*, twenty-eight photojournalists whose cumulative experience picturing the world for that paper in America's "Second City" exceeded 600 years. Seven had served over 30 years each, and two since 1969, including 1982 Pulitzer Prize winner John H. White. All that abruptly came to an end in May, after a brief statement that reporters would now be producing multimedia content for the paper's "rapidly changing platforms."

At press time, the Chicago Newspaper Guild reported it had reached agreement with the *Sun-Times* to rehire four of the laid-off photographers, requiring them to produce multimedia content, and pay \$2,000 in severance to the others.

But the job losses continue. This past fall alone, GateHouse Media eliminated the last four photographers at the *Middletown (NY) Times Herald-Record*, while Cox Media Group announced plans to cut its photography staff of ten in half at the *Atlanta Constitution*, and eliminate other photo jobs at the *Austin American-Statesman* and the *Palm Beach Post*. Even *National Geographic*, which once supported a staff of photographers upwards of twenty or more, now lists only a few on its masthead.

The trend was quantified in the recent annual newsroom census by the American Society of News Editors, which confirmed that full-time photographers, artists and videographers on newspaper staffs are taking the biggest hit. Between 2000 and 2012, their numbers fell 43%, compared to a 32% decline in reporters and writers, and a 27% decrease in copy editors, layout and production staff. And during the last two years of that period, the disparity accelerated, with the visual journalists suffering an 18% reduction in full-time jobs compared to a 6% loss for reporters and writers, and only a negligible reduction in copy editors, layout and production staff.

Job cuts in wake of years of change

The decline is the final result of a trifecta of body blows that photographers have suffered in rapid succession over the last 10 to 15 years.

First, digital technology eliminated the necessity of darkroom chemistry and ultimately hooked up cameras with mobile phones. Then, the downturn in the economy not only slashed demand for published photography, but also led to plummeting prices in a market saturated by the overabundant supply of images made available by broad distribution of affordable, easy-to-understand, digital point



Exactly two months after the massive layoff of photographers at the *Chicago Sun-Times*, a number of the departed photojournalists returned with some of their classic images to hold a silent protest outside their former workplace. They were accompanied by reporter Kathy Routliffe (2nd from left, front).

Photo: © Rob Hart, RobHartPhoto.com

& shoot cameras. Finally, the blending of still photography with video and sound formed an internet-compatible amalgam – known in the journalism business as multimedia – that fed the voracious appetite of publications newly embarked upon an online presence.

Somewhere in the midst of all that, editors, owners and publishers had an epiphany of their own: If technology had eased the complexity of multimedia to the point where it can be easily understood and accomplished by the masses, then what are we keeping all these photographers around for? Let's just have reporters do their jobs.

If the new paradigm does succeed, it will owe a huge debt to the creation of the smart phone – that easily portable device that can record photos, video and sound at minimal publishable resolution and broadcast-quality fidelity, then effectively transmit multiple wireless streams of content to a distant internet terminus. In today's ongoing 24/7 news cycle, a journalist is considerably handicapped without one.

But by jettisoning the photojournalism specialist, publishers are heaping responsibility for the continued creation of most of that media content on the backs of reporters for whom the move into multimedia means heavier workloads under tighter deadlines for no additional compensation.

Can anyone do it all well?

Over the last six months, a number of different environmental journalists – both within SEJ's ranks and beyond – have shared their experiences with multimedia as it has encroached and enveloped their personal workspaces and work lives, portending significant challenges for journalism's future.

One common conclusion from virtually everyone who's tried the new approach: Nobody can do it all well. Upon commencing a multimedia assignment, the prevailing tendency is to go with one's strongest suit.

Environment freelancer Karen Schaefer, a reporter from northern Ohio with a background in both public radio and television, has been dealing with the challenges of multimedia since 2003. "No one excels at doing all the parts," she argued. "However, I have

learned how to shoot photos one-handed while holding a mic in front of someone's face. . . . With new cameras and smart phones, anyone can learn the basics of taking a good, if not signature, photo. But doing good video is a lot more time-consuming than doing audio, which in turn is a lot more time-consuming than print."

Concluded Shaefer: "Doing all three on deadline is an impossibility, if you want to do them all well. But I generally manage at least two media for most of my reports."

Environmental reporter Mark Schleifstein was once strictly print at *The Times-Picayune* in New Orleans. Now employed by that paper's NoLa.com, he explains a typical assignment: "When I cover a meeting, I'll set up my laptop, using my cell phone as the hot spot, and sometimes I'll be tweeting, basically using that as my note-taking process, keeping my notes to 140 characters, and also taking general notes, while at the same time trying to get up and take a picture of the speaker, or I may actually do some video."

Constant mental leaps required

Many come to realize that multimedia requires them to keep juggling roles in a clumsy sort of multi-tasking, time-sharing choreography that always leaves one or another of the functions (or more) up in the air. Thus, if a subject says something worth noting while you're taking photos of them, it's hard to drop the camera and pick up the notebook. Conversely, if you're conducting an interview and the light on your subject suddenly turns ideal, dropping your notebook to grab your camera completely interrupts the interview.

"I have yet to figure out how to report a story all three ways (video, audio, print) at once,"

—Stephanie Paige Ogburn, Climatewire

The challenges of multimedia can be quite daunting, leading some to limit their participation. "I have yet to figure out how to report a story all three ways (video, audio, print) at once," says Stephanie Paige Ogburn of ClimateWire. "I have basically dealt with the multimedia challenges I encountered by deciding not to report video while also reporting written pieces. I did do some photography for stories, but shooting video, at least at my low skill level, became obviously impractical when trying to report for a long-form written journalism piece."

Like Ogburn, many journalists reach a similar conclusion after giving multimedia a try: depending upon which medium you're engaged in, it requires you to make constant mental leaps. Erik Olsen, a Berlin-based video journalist with the *New York Times* who frequently reports on nature and environment, describes it this way, "There is a definite right brain vs. left brain dynamic going on. That said, . . . both sides of your brain are often feverishly at work, since you are constantly trying to see through the camera, and listen for interview material for your story" at the same time.

Nevertheless, Olsen relishes the opportunity to be a "one man band," a term used by many multimedia journalists to describe what they do. "It's just a different dynamic in dealing with a subject to be one guy versus a whole bunch of people," he says, in contrasting his approach to that of a film crew. "It's harder, and maybe something on certain occasions is lost. But something is gained too, in greater intimacy with the subject and control of the work."

Journalism educators see higher expectations

Journalism education is also responding to the demands of the

industry to produce more multimedia journalists. Former SEJ academic board member Bill Kovarik teaches an introductory reporting course at Radford University in southwest Virginia which requires students not only to immediately start posting stories to a WordPress website, but also to upload photos and videos to illustrate their work, then promote it on Twitter and Facebook.

But Kovarik is concerned about the stress graduates of his program will almost immediately encounter on the job. "The expectations are higher, there's no doubt about it," he says. "A lot of people tell me, if they're working, they're working like crazy. It's so hard. It's like you're in, or you're out of the pool. There's no shallow end anymore. It's all the deep end."

The possibility of burnout is something "we need to deal with more in journalism education," he observes. "That's going to be part of what we need to give students as they cope with these new demands for multiple technical skills."

Navigating differing skill sets

Perhaps the biggest challenge of weaving multimedia into the fabric of journalism is history itself. Like human development, organizational growth always proceeds toward greater complexity and specialization. As new tools and technologies evolved to serve journalism's needs – photography, radio, television – practitioners especially skilled in those media evolved with them, and along the way, became substantially different people with altogether different behaviors.

"There are very few instances where writers have also been effective image makers – different skill sets are required," Fred Ritchin, NYU professor and author of "Bending the Frame: Photojournalism, Documentary and the Citizen," told Jeremy Lybarger of *Mother Jones* magazine. "I do not expect this experiment to be very successful, unless these reporters can be trained to evolve into multimedia journalists; word, image, and sound all must have primacy in the development of the narrative."

For example, at a press conference, a reporter seeks to be noticed, to engage, interact, probe, ask follow-ups, generally get the subject's attention and have specific inquiries addressed. In contrast, a photographer (or videographer or sound recordist) remains completely unseen and unheard, intent only on recording the event to the best extent possible in their particular medium.

Thus, one of the toughest nuts for a single individual to crack when attempting to do quality multimedia is the need to switch personalities and behaviors when transitioning from one medium to another. Can you imagine any reporter successfully doing his or her job without ever being seen or heard? Conversely, have you ever seen or heard a news video camera operator at work? They're both journalists, but coming from entirely different places, taking entirely different approaches and practicing completely different skills.

Various media specialties long ago diverged to become substantially different professions. Yet, the implementation of the multimedia model in contemporary journalism would somehow manage to bring all these divergent branches back together again.

Whether or not journalism's bold, but risky, new experiment with this new multimedia strategy succeeds may well be central to determining if it can make the news pay for itself again. Meanwhile, a door is closing on the traditional practice of newspaper journalism. How well will what takes its place work?

Roger Archibald is photo editor of the SEJournal.

Reporter's Toolbox...continued

some sort of order fulfillment system. Direct sales could work if you have a large, loyal online following, an engaging topic for your target market, and a solid grasp on marketing.

Marketing – DIY or professional help?

You should be thinking about marketing before you even start your book. Who would read this? Why would they read it? What should a reader get out of it?

As a somewhat skeptical and cheap person, I think “How could someone get me to purchase this book?” You might want to identify a person you know who represents your target market, or make a composite person out of many people you know. Find out everything about what makes that person tick and what makes her buy.

With your market research, create an outreach plan. How will you tell your target market about your e-book? What are you willing to spend on marketing – time and money-wise? What outlets might be interested in running an interview with you or an excerpt or review of the e-book?

If you are totally uninterested in marketing, you will need to accept that your book will probably not sell well. Or, you will need to use an independent publisher that does e-book marketing and distribution, like Diversion Books. You will pay an upfront “set up” fee, and forfeit a percentage of the earnings to the distributor, but you will get professional help with the cover, title, editing and marketing.

Caroline D'Angelo is the social media editor and e-books director at the Pulitzer Center. Follow her on Twitter: @carolineoutside.

Inside Story...continued

make a compelling story out of that. So I try to get scientists to talk about the experience of doing research in these remote and wild places, what keeps them up at night, what they're most excited about. I look for anything that offers a window into the story behind the hard numbers and formal reports. I think a lot of coverage loses sight of just how quickly things are changing and how weird things are getting. These scientists have the rare privilege of observing climate change in some of the most rapidly changing places on the planet. The sense of wonder they feel is rarely conveyed in the official reports. But it offers a point of connection for listeners and viewers to relate to these abstract stories.

SEJournal: What is the most difficult part of your job?

Eaton: Staying positive. It can be a real challenge not getting totally depressed when you live and breathe these stories for so long. I have days where I feel like the world my five-year-old daughter will live in will be nothing short of apocalyptic. I see her respond with such excitement to the diversity of life that still exists knowing that much of it may be gone by the time she's my age. For

Calling all SEJ academics!

SEJournal plans a new column targeting environmental journalism educators and students. We will explore current research on environmental journalism, best practices and models for teaching, and insights into the state of EJ education. Please send your ideas to academic member and column editor Sara Shipley Hiles at saraship@gmail.com.

Advertisement

MBL The MBL Logan Science Journalism Program

Step Into the Shoes of the Scientists You Cover!

May 28-June 6, 2014
Marine Biological Laboratory • Woods Hole, MA

Science journalists are invited to apply for one of two fellowships:

Hands-On Biomedical Course
Discover the laboratory techniques and concepts essential to basic biomedical research

Hands-On Environmental Course
Conduct field work on ecological change in Baltimore, MD, and in Woods Hole

APPLICATION DEADLINE: March 1, 2014
Fellowships cover room, board, lab fees and U.S. travel. Extended fellowship opportunities in Woods Hole and Alaska also available.

mbl.edu/sjp

this reason it's so important to try to focus on stories that offer solutions. That was the experience I had with the final round of “Food for 9 Billion” stories we did for NewsHour and The World. I was inspired by the people I interviewed for these stories and how deeply they believed that they could alter the course of humanity and the world.

SEJournal: What is the best advice you can give to a freelance journalist?

Eaton: I've found that producing stories as packages and as special projects is a much more effective model for freelancing. Any way you can cluster multiple stories into single trips saves time on the front and back end that, as a freelancer, you're never really paid for. Another advantage is to be able to produce stories for multiple venues. Funders love cross-platform projects. So learn how to juggle it all! If you can shoot photos and video, get audio for radio stories, and write print pieces, you're going to be much more marketable and the income from each project will hopefully increase as well.

Eaton is currently working on a new year-long environmental reporting project for radio, television and the web. His work can be seen and heard on American Public Media's Marketplace, PRI's The World, and PBS' NOVA and NewsHour. Follow him on Twitter: @eatonsam. Links to his SEJ award-winning work can be found at <http://www.sej.org/initiatives/winners-sej-12th-annual-awards-reporting-environment#BeatLarge>. Daley, until recently the environment reporter at The Boston Globe, is now reporter and director of partnerships at the New England Center for Investigative Reporting, a nonprofit newsroom.

Freelance Files...continued

Lessons learned

I quickly reviewed my process and realized I had a lot to say about how my stories had been produced and could demonstrate that they were fair, balanced – and totally un-influenced by the funders. I wrote a detailed transparency statement – and the Columbus station went ahead with the broadcasts.

By early August my project should have been finished. But I found myself keeping daily track of where stories were airing and reporting back to the foundation. The board members expressed themselves delighted with the exposure. But I was exhausted.

I hadn't anticipated the many unscheduled hours of paperwork, the delays, the time-eating presentation for the festival. I hadn't planned on fiscal agent fees. So when I completed my final grant report, I was over-budget. On the plus side, I'd gotten paid for work I wanted to do; but I wound up working hard for a lower rate of pay than I'd anticipated.

Looking back, I can see some pitfalls to avoid.

First, timing. My grant had a deadline that, given the seasonality of news on Great Lakes issues, wasn't realistic. Next time I'll set deadlines that better fit the news cycle – and anticipate delays.

Second, budgeting expenses. I can estimate how many hours it will take me to do interviews, log tape, write stories and produce them. But I'll need to better estimate time spent communicating with potential vendors, getting edits, and sharing content on all the various platforms journalists are now expected to employ. And I'll include the cost of a fiscal agent.

Third, journalistic transparency. I realize now that editors may be leery of grant-funded journalism, so I'll build in transparency from the start.

Unearthing potential funders

I started with folks I knew and who knew my work. If you don't have those connections, you'll have to start from scratch. Try small foundations in your region. Acquaint them with your work, give them a broad outline of what you'd like to do and urge them to think outside their usual funding box. It will be your job to convince them that funding your journalism provides a big benefit – having their name on your good work.

Here's one place to get started: <http://bit.ly/1fq2P4u>. Check the SEJ website for more grant-funding opportunities. And then go wider. Maybe a health foundation would fund an environmental health series. Or a national foundation might underwrite stories for a national publication that can't afford to hire you – but would take your work for a reduced rate.

So would I do it again? The short answer is yes. In fact, I'm already at work on next year's grant applications – and this time I know what I'm doing.

Karen Schaefer is a freelance journalist and independent radio producer based in Northeast Ohio. A veteran of two Ohio public radio newsrooms, she has won more than 65 awards for her work, more than half for her coverage of environmental issues. These days she focuses on Great Lakes issues, with recent work appearing on public radio stations and public media outlets in Pennsylvania, Michigan and Ohio, including the six-part grant-funded radio project she completed last year.



© 2014 by the Society of Environmental Journalists.

Editor: A. Adam Glenn

Photo Editor: Roger Archibald

Production and Design Editor: Chris Bruggers

Section Editors

BookShelf and Between the Lines: Tom Henry

Freelance Files: Sharon Oosthoek

Reporter's Toolbox: Robert McClure

Editorial Board

Robert McClure (chair), Tom Henry, A. Adam Glenn,

David Sachsman, JoAnn M. Valenti

SEJ Board of Directors

President, Don Hopey

Pittsburgh Post-Gazette

First Vice President/Programs Chair, Jeff Burnside

KOMO 4 News, Seattle

Second Vice President/Membership Chair, Ashley Ahearn

KUOW - NPR, Seattle

Secretary, Christy George

Independent Radio and Television Producer

Treasurer/Finance Chair, Carolyn Whetzel

Bloomberg BNA

Future Conference Sites Chair, Douglas Fischer

DailyClimate.org

Imelda Abano

Independent Journalist and President, PNEJ

Jennifer Bogo

Popular Science

Emily Gertz

Independent Journalist

Robert McClure

InvestigateWest

Mark Schleifstein

NOLA.com|The Times-Picayune

Kate Sheppard

Huffington Post

Roger Witherspoon

Freelance Journalist

Representative for Academic Members, David Poulson

Michigan State University

Representative for Associate Members, Meaghan Parker

Woodrow Wilson International Center for Scholars

Founding President, Jim Detjen

Knight Center for Environmental Journalism, Michigan State University

Executive Director, Beth Parke

Visit www.sej.org

SEJournal (ISSN: 1053-7082) is published quarterly by the Society of Environmental Journalists, P.O. Box 2492, Jenkintown, PA 19046. Ph: 215-884-8174. Fax: 215-884-8175. Send story ideas, articles, news briefs, tips and letters to SEJournal Editor Adam Glenn at aadamglenn@hotmail.com. The Society of Environmental Journalists (SEJ) is a non-profit, tax exempt, 501(c)(3) organization funded by foundation grants in response to SEJ proposals, media company contributions, earned income, university sponsorship of the annual conference, occasional regional events, individual donations and unrestricted contributions of general support from diverse sources. Its membership is limited to journalists, educators and students who do not lobby or do public relations work on environmental issues. For non-member subscription information go to www.sej.org and click “Publications.”



Society of Environmental Journalists
P.O. Box 2492
Jenkintown, PA 19046
U.S.A.

NON PROFIT ORG
US POSTAGE PAID
PERMIT NO. 1105
HORSHAM, PA
19044



Describing himself as a “one-man band” of journalism, *New York Times* video journalist Erik Olsen shoots footage for a story about shipwreck exploration off eastern Long Island’s Montauk Point by researchers from the New York Aquarium. His work later appeared as both a video and blog on nytimes.com, as well as in the paper’s print edition. Multimedia journalists such as Olsen, who combine the skills of a number of different specialties within the profession, may represent the future of the news business, while long-established practitioners like photojournalists are in decline. For an examination of this significant paradigm shift within journalism, see story beginning on page 20.

Photo by Susan A. Chin, Wildlife Conservation Society