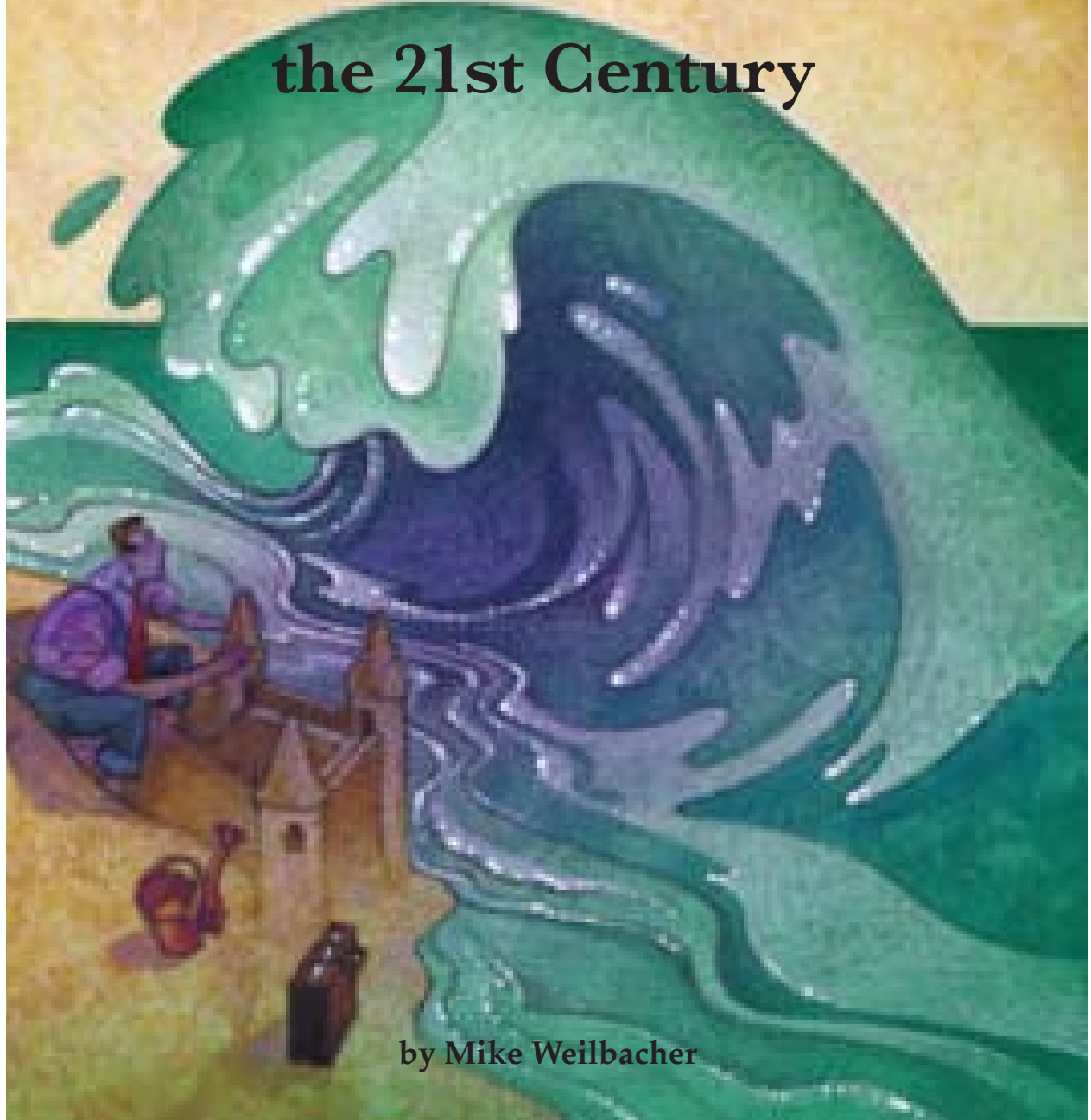


The Green Tsunami:

Environmental Education in the 21st Century



by Mike Weilbacher

The following paper was presented as the keynote address at the 2005 conference of the Association of Nature Center Administrators (ANCA) at the Chippewa Nature Center in Midland, Michigan, August 2005. Mike is a former PAEE president, newsletter editor and Outstanding Environmental Educator (1991), and directs the Lower Merion Conservancy.

Global surface temperatures are rising, glaciers worldwide are melting, the ocean is warming, rainforests are burning, species are vanishing at the highest rates since the end of the Mesozoic, coral reefs are bleaching and dying, old growth forests are disappearing, deserts are spreading, the world's population is rising, the future of the Arctic National Wildlife Refuge hangs by a thread, the new energy bill left no lobbyist behind, yet much of the attention of the western world is preoccupied by a question critical to the fate of humankind:

Just what is Brad Pitt's relationship to Angelina Jolie?

For the next hour or so, we'll nibble at the edge of that question to see its importance to our work, but what we'll really do is talk through the state of environmental education, looking at emerging trends and practice using our crystal balls to make predictions for the road ahead. We're going to place our fingers on the pulse of popular culture and take a reading as to where we all stand.

It feels to me like environmental education is at a crossroads—that we are on the threshold of either a new era or oblivion, and I'm not sure which. But then it feels like environmental education has always been at a crossroads, has never really grabbed onto its place in the American educational firmament. In fact, I believe my first NAAEE conference (and then it was called NAAEE) was in something like 1980—a conference that then featured a rising young political star named Bill Clinton as a keynote—was actually themed, Environmental Education at the Crossroads. We were there then; we have been there ever since.

For we are barnacles, tenacious shelled creatures glued to the rocks at the edges of the ocean, neither fully of the ocean nor of the land, kicking our legs furiously when the tide roars in hoping to capture meager nuggets of resources drifting by. It is honest work, it is necessary work, yet it is exhausting work. While I love the edge of the ocean, I really long to fully participate in the mainstream of culture—I want to swim with the dolphins.

Environmental education's history has been told and retold in many shapes and forms over the years by people better qualified to recount that history. But let's greatly simplify that history for a moment. Its roots stretch back into the nature study movement of Victorian times (a movement paralleled by the birth of the Sierra Club and Roosevelt's startling environmental presidency), then into mid-century's conservation education, with outdoor education weaving in and out of the story. But the beast we now call environmental education really began as a response to a wave of environmental concerns that captured public and media attention in a magical decade extending

from the mid-Sixties through the mid-Seventies.

My own organization began in 1974 when a high school science teacher wanted to restore native trout to our highly suburbanized streams. My own career began as a response to Earth Day in 1970; reading about DDT and Rachel Carson and egg-shell thinning and the Santa Barbara oil spill and the Cuyahoga River catching fire twice and phosphates in detergents and lead in gasoline grabbed my imagination and never let go. The phrase "environmental education" entered the lexicon at that time, and interpretive naturalists morphed, often uneasily, into environmental educators, with many nature centers undergoing name changes at about the same time. This was the first wave of environmental education, halcyon days us gray-haired barnacles look back on with misty eyes, and it did not last long enough.

The second wave erupted circa 1988 when medical waste began washing up on shorelines, hot summers shattered temperature records, severe drought gripped huge sections of the country, Yellowstone burned, and NASA scientist Jim Hansen told a Senate committee chaired by then-Senator Al Gore that the earth was warming from the burning of excessive amounts of fossil fuels. In 1988, instead of its usual Person of the Year, TIME magazine named Earth the Planet of the Year, one of its more interesting picks for the year's biggest newsmaker. The biggest selling environmental book of all time—50 Simple Things—is published at this same time, as are dozens of spin-offs and knock-offs. Al Gore pens "Earth in the Balance" and is soon elected vice president. These were also heady days: Gore wrote that the environment should be the central organizing principle for western civilization, and was soon only a heartbeat and a couple of hanging chads away from the presidency.

My life and career eerily continues to parallel these waves, as in 1989 I was asked to host a weekly radio show on Philadelphia's public radio station on environmental issues and interviewed people like Gore and Hansen, even Paul Ehrlich and Barry Commoner, my idols from the first wave. I also helped organize Philadelphia's 1990 Earth Day festival, where 120,000 people descended on the city's park for a strange hybrid of teach-in and mediocre rock concert. But my future wife was one of the volunteers for that Earth Day, so I personally owe my career to the first Earth Day and my family to the 20th anniversary edition.

All good things must come to an end, so this wave crested only a couple of years later. My radio show was cancelled in 1994 after a 5-year run, replaced by a call-in show on money, of all things, and the Internet bubble and Monica Lewinsky were much more interesting than any environmental issue of the moment. After the wave crested, for example, there was little hope for the passage of the Kyoto accord on global warming, which failed miserably in the now Gore-less Senate.

Careful listeners might have already picked up that I'm not telling the history of environmental education at all; rather, I am describing the history of the environmental movement itself. But EE has always piggybacked on the

environmental movement, and the histories are very closely connected. Funding for EE appeared during and immediately after these waves, and that funding dried up as the waves peaked. This is an overly simplistic analysis for sure, but works, I believe in broad brush strokes—in the modern era, we have seen two waves of both environmentalism and environmental education.

Now, some 40 years after the first wave began, we have crossed a generational divide. Bill Stapp, the gentlemanly Michigan professor who drafted the definition of environmental education that has been referenced on page 1 of perhaps thousands of EE theses ever since, has passed away, as has Gaylord Nelson, the former Wisconsin Senator credited with starting 1970's Earth Day as a national teach-in. The torch is being passed to the next generation-- us barnacles-- whether we like it or not, and the question for us to consider is how the terrain ahead of us looks.

Let's cycle back to the opening: I do believe that global surface temperatures are rising, glaciers are melting, the ocean is warming, rainforests are burning, species are vanishing at the highest rates since the end of the Mesozoic, coral reefs are bleaching and dying, old growth forests are disappearing, and so on. But I also believe that environmentalists like Ehrlich have been frighteningly, maddeningly wrong in their doomsday scenarios for life on Earth.

Ehrlich's population bomb, for example, never went off the way he predicted. This has left the environmental movement, which has cried wolf perhaps one time too often, vulnerable to dismissal by critics currently in cultural ascendancy, critics like Rush Limbaugh and Robert Novak. I've come to believe that the earth is simultaneously fragile and resilient, and in our zealous sincerity we have over-emphasized the fragility while, as our president might say, "misunderestimated" its resilience.

Nonetheless, the four horsemen of the coming global apocalypse are bearing down upon us, and I feel like the entire environmental landscape will be radically transformed in the coming decade or so. Global warming, species extinction, water scarcity and that long overdue but inexorably ticking population time bomb will at some point soon converge—and all hell will break loose. I believe that Al Gore will be right—at some point, the environment will become the central organizing principle for civilization, and April 22's Earth Day will become the first international nonreligious holiday.

Like 1970 needed endangered eagles and the Cuyahoga River catching fire, like 1990 needed Yellowstone's fire and beached dolphins washing up with used needles, there will at some point be a large, mediagenic event that will trigger the third wave: the calving of a huge iceberg off Antarctica, perhaps, or the poaching death of the last mountain gorilla or black rhino or orangutan, or a new Exxon Valdez, or a massive Amazonian wildfire pointing its plume at both global warning and species loss. Crystal balls are notoriously cantankerous objects to fine tune and I could easily be off by a year or two, but I'm looking at the early 2010s for the resurgence, for the third wave. Remember,

the wave we are discussing is the public response to huge environmental issues—so people are poised for an outpouring of support when the telegenic moment hits. Of course, it might be too late to actually do much about global warming in 2012, but we are talking about positioning ourselves for when the wave of public opinion and interest in action crests.

Consider the tsunami earlier this year. When January's tidal wave hit South Asia, there was a corresponding tsunami of saturating press coverage, the media descending on these beaten countries to cover the story live. Our media-driven culture thrives on crisis, needing crisis to glue us to the electronic town square inside that little box. In fact, media routinely manufactures crisis to lure us into the tube. But remember what also happened with the tsunami: as with 9/11, billions of dollars poured into relief organizations, giving them the resources they needed to make sure the health crisis that might have been was not. There was no outbreak of malaria or typhoid, as widely predicted, because the resources were there to address human health needs.

For America is a counter-puncher. We have a very hard time taking the precautions needed to prevent chronic, long-term issues like global warming from occurring, and the media has a devil of a time covering a story like global warming that takes decades to unfold and has no one compelling image. But when we are struck by a large disaster, we respond in an extraordinary way. Now, for example, that gas prices push towards \$3 a gallon, we are finally discussing energy policy in an energetic way-- we are counterpunchers.

We did that the first wave, inventing environmental education, establishing numerous nonprofits to deliver that education, and passing a raft of environmental legislation. The second wave of environmental concern created an outpouring of books, magazines like E and Garbage, TV specials, the Earth Summit, and a renewed Earth Day. This will happen again: the third wave will be a tsunami of popular outpouring for environmental issues and concerns. My guess is this tsunami will be larger than the first two waves, as the issues are larger, and the tsunami will be global. Here in the states, the environment at some point will become a key issue in a presidential election, something it has failed to do thus far—it has always been the economy, stupid. But someday soon it will be the ecology: 2016 looks good, and tips that election to the first woman president, who, incidentally, will not be surnamed Clinton. There will be a resurgent interest in not just environmentalism, but environmental education.

And when that third wave hits, where will you and your center be? Will you bob along and let it pass you by, will you drown in the undertow as it crashes over you, or will you surf the coming green wave to a whole new place? That's the question you should be asking yourself, your staff, your board, your volunteers, your membership. How can you and your center surf the wave to take environmental education to a whole new plateau in public consciousness—ironically, of course, after nature has taken that first, hardest punch? Another way of looking at this

is, can this old barnacle ever swim with dolphins—or am I doomed to perish in the surf? A more interesting question: preemptively, how can your environmental education work lay the foundation for the green wave to come even sooner than it might, as people will be looking for it?

So here's only the beginning of a shopping list of actions we need to take to take to surf the coming green wave, subtitled, the Seven Habits of Highly Effective Surfers, or perhaps, how to swim with dolphins:

- One, become culturally fluent
- Two, tell better stories
- Three, know one big thing
- Four, offer authentic experiences
- Five, deepen your programming
- Six, use the media
- Seven, embrace technology

There are certainly other actions to take, too, and I've spent the last month arguing with myself over whether or not this really is the list. Remember, I am test-driving this conversation with you. With that as a caveat, let's dive in.

1. Become culturally fluent

People who do environmental work tend to have anti-cultural biases. After all, popular culture is a relentless juggernaut dedicated specifically and solely to the marketing of product. Since the juggernaut is anti-environmental, we reject it, or try to. But EE exists within the culture, as culture is the air we breathe and water we drink. We cannot surgically remove environmental education from education or from culture.

During the first wave of environmentalism, several environmentalists became embedded in mainstream culture. Paul Ehrlich made innumerable appearances on Johnny Carson—he was fluent, passionate, urbane, interesting, had a distinct point of view, and as he lived in California, it was easy for him to get to Carson's Burbank studios. Rachel Carson cracked the culture barrier, but her legacy was cut short as she died of cancer, of all things, soon after *Silent Spring* was published.

The closest thing we have to an Ehrlich these days is Bill McKibben, who's most important book was his first, *The End of Nature*. But while you'll see McKibben's byline in magazines like *Audubon* or *Atlantic*, you'll not see him on TV talk shows. He's a writer, and doesn't seem interested in becoming spokesperson for the environment. Fine. But that's the role you need to play. You are the local spokesperson for the environment—you speak for the trees for the trees have no tongues, and I'm telling you folks, at the top of my lungs, that when the wave hits, local media will be desperately seeking angles—see, there's a cultural reference—and you want them to easily find you, and you have to have a compelling message you can state in direct, digestible elements.

We have to be able to use the shared language of culture

to talk to the mainstream. If we are unable or unwilling to embrace—and even exploit—the culture in which we live, the wave will pass you by.

2. Tell better stories

People are storytellers—we like the complex world broken down into digestible storylines. Currently, there are two competing environmental stories in the global psyche jockeying for attention, and since there are only a small handful of storylines to lean on, both are ancient, even biblical, and both are familiar.

The first is the go forth and multiply story, the have-dominion-over-the-earth story. The second, the worldview most of this room likely adheres to, is the one of perfect creation, the first sin, and the fall from grace. The natural world is an Eden that humankind is screwing up, and our job in protecting the environment is to restore paradise. Or as the song goes, “we've got to get ourselves back to the garden.” This is a powerful story that enjoys a strong toehold in public imagination. A significant group of people have always wanted to do the right thing, and so we have nationwide curbside recycling, dolphin-safe cat food, ecotourism, hybrid cars, and on and on. But Woodstock nation grew up into adults buying gas-swilling SUVs and building some of the largest homes in the history of humankind. So guess which storyline ultimately won?

Environmental educators have never fully taken advantage of the power of storytelling. Take global warming. Without expressing an opinion about global warming, we can say that historically the earth's atmosphere contained 300 ppm of carbon dioxide, that through the use of fossil fuels we are now approaching 400 ppm. Many computer models indicate the following effects from a rising of the amount of atmospheric carbon: rising oceans, loss of farmland—and so it goes. Take the issue, and turn it into a story. Interpret it. The culture needs someone to hold its hand and walk it through large, complex issues—until now, it has always been environmentalists like the Sierra Club to which the culture has turned, but it naturally should be the job of educators, not activists. We not only need better stories, we need bigger stories.

Speaking of stories, I mentioned Brad Pitt at the top of the talk. The culture also hates talking about serious issues for too long—it's too exhausting. So we need an Angelina Jolie story to distract us from the Iraqi War, and we need to know Brad Pitt's good looks can't save his marriage, making our own seem stronger by comparison. We can't end the cult of celebrity, but we can, I think, exploit the cult of celebrity by weaving pop cultural references into the work that we do, adding humor and softening the difficulty of the larger environmental story.

3. Know one big thing

There is an Aesop's fable about a very sly fox who runs into a very dull hedgehog and winds up with a face full of quills—the fox knows many things, sums the fable, but the

hedgehog knows one big thing. I think often of that story and of the importance of knowing one big thing.

Go back to the idea of becoming better storytellers. To tell the story of global warming, for example, you have to first know the story of global warming, and know it so well that you can tell it from multiple angles and offer the highlights reel of most important information. Why, for example, did global temperatures drop between 1940 and 1970, not increase as you'd expect during an era of no pollution controls? Critics of global warming wield that question as a bludgeon to crush global warming models, but you can simply present it as a wonderful question that needs further understanding. Another question: do clouds reflect sunlight and lessen global warming, or do clouds, comprised of water vapor, which is another greenhouse gas, exacerbate the warming trend? Even experts aren't sure—and that enlivens the story. But to tell the story, we need to know some information.

All environmental educators I've met over the years are graduates of degree programs, and many possess advanced degrees. Yet as the decades progress, I've never been sure what environmental educators know. 20, 30 years ago, they could take you for a walk through the forest and recite an encyclopedia's worth of knowledge—names, lifespans, economic uses, folk histories. When conservation education morphed into environmental education, we became confused as a field as to what information was now important, and hired very young people with little hands-on experience to lead our programming. So many of our programs teach that the environment is good, is important, and we all should do some subset of things to protect, preserve, even save the earth. Certainly environmental education agrees that students should understand large-scale processes—cycles, say, and energy flow—but beyond that, we seem to lose interest. We even seem anti-intellectual sometimes. We want people to love the earth, but is that enough? What do we want them to know about the earth? What is your one big thing?

In short, the knowledge we possess as a field has diminished greatly. We need to beef up our knowledge base, and one possible way is for a region's environmental educators to specialize in issues. This educator here understands the global water crisis, while that one there studies species loss. When the press needs a comment on one issue, they know who to call—and each refers the press to the other.

We all can't know all of this. But we can all master one big thing.

And environmental educators need to be inviting professional scientists to their conferences to get the latest info on the science aspects of these issues to enrich our storytelling.

4. Offer authentic experiences

"Think of our life in nature," wrote a passionate Thoreau in his posthumously published *The Maine Woods*, "daily to be shown matter, to come in contact with it—rocks, trees,

wind on our cheeks! The solid earth! The actual world! The common sense! Contact! Contact! Who are we? Where are we?" More than a century later, we still need to answer that question, now even more so.

Environmental education offers an increasingly rare commodity: real connection to the real world, the world of dirt and trees and bugs and birds and clouds and flowers, things many parents understand their children desperately miss. Sell that connection. I understand you've been talking a lot about the extinction of experience, and I've just finished Richard Louv's intriguing new book, *Last Child in the Woods*, wherein he coins the phrase "nature deficit disorder" to explain what he sees as the impact of the extinction of experience on children's psychological, emotional and physical health. It's an important read, but most interesting for me was his disinterest in using the phrase "environmental education," substituting instead the phrase "environment-based education" or even "experiential education." Nonetheless, he's onto something.

My family just finished a three-week vacation on Deer Isle off the coast of Maine just west of Acadia. We whalewatched out of Bar Harbor, kayaked a cove, ventured aboard a lobster boat to participate in a marine education program, threw lobsters back into the ocean, watched barnacles feed, and I personally took a pelagic birding cruise to see two life birds, puffins and razorbills. We paid a lot for these experiences, and we were never alone on any of them. People want contact with nature.

This is not news. The difference is that I think we need to increase the sophistication with which we both choose and market our authentic experiences. The nature walk is not enough. If I lead a group to see, say, the annual red knot migration on the Delaware Bay, I need to know something about that migration, introduce the program's participants with researchers, let the participants perhaps participate in some piece of the research, deepen the complexity of the experience. That's the authenticity we need. And can sell. And they will buy.

5. Deepen your programming

Directly related to offering authentic experiences is deepening our programming. As I just mentioned, we've leaned too heavily on standard tricks like the nature walk and the nature craft. Looking at the calendars of a variety of nature centers, there is a similarity to them that is almost startlingly bland, almost cookie cutter in approach.

We need to break the old tired mold. Try new things. Look at what zoos, science museums, art museums, and other cultural institutions offer—and adapt generously. Invite a chamber music ensemble to play a nature-inspired piece of classical music outside at the peak of fall colors while local celebrities read selections from Thoreau and Emerson. Discuss lobster ecology over a fundraising lobster dinner, noting the adaptations of the various body parts while actually devouring them. Have Philadelphia Eagles co-lead a trip to visit bald eagle nesting sites. On Earth Day get a thousand kids to stand together and recite the

Declaration of Interdependence. This fall, my organization is teaming up with the nonprofit Living Beyond Breast Cancer to offer Hiking Beyond Breast Cancer, a vigorous outdoor walk cross-promoted by both organizations that hopes to attract new people while advocating outdoor exercise as an antidote and balm to cancer. Here's a controversial idea: team up with a church or synagogue to offer a nature walk discussing Noah—measure the ark as you walk, discuss biodiversity.

We have to work harder to find programming that captures the imagination of the community and attracts larger, different segments of the community, creating a buzz around your center and what you are up to. You are the place people want to go to because everything you do is so interesting—relevant, up-to-date, hip even, impossible to miss in the incredibly cluttered landscape of nonprofit educational opportunities. When the wave hits, people will come to you automatically.

6. Understand and use the media

One day circa 1991 I received a phone call by the host of a Philadelphia TV talk show—I was talking to a local TV celebrity. I was very excited, and thought I had finally arrived. Turns out he was doing a show on global warming, and wanted a guest with a strong environmental viewpoint, someone to say unequivocally the world was heating, we were all going to die soon, the other side is fiddling while Rome burns. Biting my tongue, I told him that wasn't what I would say—I'd say here's what we know so far, here's what we haven't figured out yet, here's even some interesting anomalies that we just don't understand. I built up to my big point—this is arguably the largest experiment in world history. Needless to say, I didn't make the cut. The media wants two viewpoints, Strong A and Strong B, and the two have to be directly contradictory—As Dan Akroyd's character would yell, "Jane, you ignorant slut." That's why TV talk shows has been left to the activists, to the Paul Ehrlichs and Barry Commoners, because this is just not how education operates.

Still, this is a media-centric culture obsessed with image, and environmental educators are routinely left out of this culture, except for the occasional Earth Day story or maybe the occasional photo-op of kids collecting in ponds or holding a snake. One of my educators was assigned the responsibility of being our public relations person as well, and I only realized this year I'd been doing it all wrong. She learned from me that that responsibility entailed simply writing weekly press releases about what was new—not establishing regular, routine, ongoing contact with local press officials to court them and cultivate their interest in possibly bigger stories.

We don't work the press the way we should. Maybe we occasionally hire consultants to do our public relations with us, and maybe that experience isn't successful. But when the wave hits, the media will be looking for stories and local angles. And you want them to find you—you the center, and you the director.

The media covers people far more than it covers issues, so we discuss the war in Iraq when we have a Cindy Sheehan camped out on the president's doorstep. You want the media to know who you are, to know that you have strong opinions about things, and to seek you out when the wave hits and they want the local story. There are up sides and down sides to becoming the story yourself—after all, your center, its mission and the land you preserve is the larger story. But often the person is the gateway to the larger story, the access point, the portal.

Your center is the antidote to global warming and species loss; you are the yin to the dark story's yang. Positive media coverage can only result in stronger program response, larger membership, more volunteers, perhaps even stronger foundation support.

7. The hardest one of all to promote-- Embrace technology

The average American child spends something like 30 hours per week staring at a screen of some kind, screens usually loaded with commercial content. Given that we are now putting TV screens into the back seats of SUVs, it seems that number is only going to go up. Technology is a powerful force, its own tidal wave that has already altered the cultural landscape—we have become a global village as technology flattens the world and enables China and India to become the new economic powerhouses.

Environmental educators share a neo-Luddite bent, interested in getting kids away from computers and into nature, away from the virtual world and into the real one, out of the web and into the web of life. Fine.

But the public is technologically sophisticated, possesses very high visual literacy, expects technology everywhere, and not only knows how to use technology to understand the world, but wants to use technology for that purpose. We need to practice a very delicate balancing act, wielding technology as a tool to educate, illuminate, and perhaps entice. It also makes us relevant. The era of the lift flap and the touch table is not over—these tools are timeless—but certainly need to be heavily, radically supplemented. The buzz board simply cannot be the nature center's most advanced technology. Failure to use technology renders us quaint and obsolete while overuse of technology renders us shallow. The middle ground is hard to find, and astonishingly expensive, but increasingly necessary because of what it can do.

The technological near-future includes voice-activated systems approaching Star Trek, where an entire house might be controlled by a central box that is the TV, the computer, the telephone, the rolodex, the recipe box. Appliances will respond to voice activated requests-- the house will start the coffee at 7 a.m. In Bill Gates's house, flat screens even show changing artwork. This will all be trickling down to the middle class soon. This technology is seductive, but is increasingly the norm in what the public expects, especially as larger museums and cultural institutions develop the capacity to weave this technology into their exhibitry. The technology wave has already come, and we need to

stand with our feet firmly planted in the real world while embracing cutting-edge technology as we can.

That's the seven action items. Let's make sure these are the right ones, for too much is riding on the outcome.

In 1970, the stated goal of the newly emergent field of environmental education was to create an enlightened citizenry who understood the environmental implications of their actions. Almost 40 years later, while there have been notable successes, while we have won a few battles, we have essentially lost the war: our citizenry is as ecologically illiterate as ever, maybe even more so, given the decline in our relationship to land and the bewildering complexity of environmental issues. In EE circles, we often talk about access to schools and students, forgetting that perhaps the larger, more important, more difficult issue is access to culture: how can we get environmental concerns into mainstream pop culture.

I do believe that global environmental issues are coalescing and will soon break, and I do believe the wave is coming. Waves crest and disappear—last January's tsunami we've referenced throughout the talk already seems a lifetime ago. The media's oversaturated coverage of breaking news tires stories out way too soon.

What we really need is a sustained period of interest in the environment—a plateau—a permanent paradigm shift. I also believe that when the wave hits, this time it will last, because the issues are not going to go away, the science is only going to tell us harder realities, we will finally get a White House able to say the word greenhouse with a straight face, and there will be a resurgent interest in action.

To circle back to the beginning, two questions remain: will you be ready? And will the cultural counter punch be enough—or is it too late already?

H. G. Wells, better known for classics like *War of the Worlds* and *The Time Machine*, wrote several nonfiction books, including *The Outline of History* in 1920. "Human history," he wrote in a widely quoted remark, "becomes more and more a race between education and catastrophe..." But we rarely quote the next sentence that follows: "Yet, clumsily or smoothly, the world, it seems, progresses and will progress."

The world progresses, perhaps clumsily, and I want environmental education to be an integral part of that world and that progress. When the environment becomes the central organizing principle for civilization, I want to be there, and I want us in this room to be there, standing shoulder to shoulder and ready to offer the world the kinds of opportunities it not only deserves, but will be craving.

So let's transform from barnacles into dolphins, and start getting ready to surf that very large and very scary wave bearing down on us even as we speak. Thank you.

Mike Weilbacher is the former director of the Lower Merion Conservancy in Pennsylvania and has written many insightful and entertaining articles for CLEARING.