

**Some of the most artful practitioners of the 1000-voice spin now have their sights set squarely on undermining public understanding of environmental science.**

SOME FOLKS OUT there playing in the fields of public opinion would just as soon keep you ignorant and misinformed about where science stands on environmental matters. And rather than trusting apathy and television to keep your science score somewhere in the Pleistocene, they are mounting an aggressive disinformation campaign.

Efforts of this sort rest on a simple, timeless strategy: Repeat the same lie often and boldly enough and someone will believe it. Sooner or later, a journalist too busy for due diligence and sufficiently uninformed will pick it up. The first few uses will cite it as "an opposing scientific view," brought in to create an aura of balance. One or two reporters might even correctly describe the source as a representative of the Flat Earth Society or its analog.

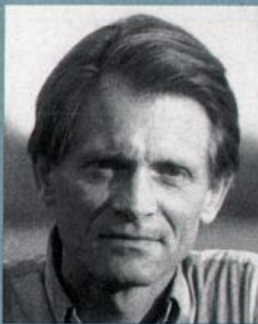
But sooner or later qualifications of source are shed and it becomes an free-standing factoid capable of self-replication in the media. Think of it as a metamorphosis from tadpole to frog. Suddenly, this thing has big legs and it can hop from pond to pond all by itself, eating flies, muddying the water, and making new tadpoles as it goes.

The evolving '90s variation on this is the "spin of a thousand voices." The goal is to get as many different messengers to carry the same factoid as possible, coming at the media from myriad directions.

Some of the most artful practition-

J. P. Myers

**FACTS,  
INFERENCES  
AND SHAMELESS  
SPECULATIONS**



**The Way  
Things  
Really Are**

ers of the 1000-voice spin now have their sights set squarely on undermining public understanding of environmental science.

They are pushing this across a wide range of environmental issues, and for each issue they develop an egregious misrepresentation of where science now stands. It might not look that way for people distant from the details. They cloak their arguments with a wisp of respectability by finding someone from the scientific community (or within shooting distance thereof) to support their position. It doesn't matter if this person's opinion is wildly at odds with scientific consensus. What does matter is that the argument thereby gains a patina of balance and respectability.

Nothing appears too far-fetched, from claims that DDT and

dioxin are not major health hazards, to arguments that CFCs can't be involved in stratospheric ozone destruction (because CFC molecules are too heavy), to assertions that global warming will be benign if it occurs—an argument that never begins to address the impacts of even modest warming on natural ecosystems or on developing countries.

Birds and biodiversity have become a favorite target. Most recently the message has been that the rate of deforestation and extinction has been grossly exaggerated and that there is nothing to worry about.

Consider the details of two mis-

representations. The first attempted to distort a new finding reported in scientific literature: In late June, Compton Tucker and David Skole published an analysis in *Science* recalculating the amount of Amazonian deforestation that had taken place over the decade spanning 1978 to 1988. Better resolution in satellite images revealed that the total area deforested was less than had been previously calculated using measurements from then-available technology.

This finding flushed out howls of outrage from those who promote bulldozers and belching smokestacks. They claimed it demonstrated that environmentalists had been exaggerating the rate of deforestation all along, and that it wasn't a problem.

What these howls failed to acknowledge (indeed, did not even mention) was that Tucker and Skole's analysis went further. Their work revealed that the total area affected by this deforestation—directly and indirectly—was actually significantly larger than the area calculated from the original measurements. The greater impact was a result of edge effects and forest fragmentation. These two factors actually extend the impact of deforestation beyond the simple physical limits of clearing into adjacent patches of forest still standing. The total area degraded, including the indirect effects, was estimated by Tucker and Skole to be 227,000 square miles, more than double the old estimate based on pure and simple deforestation. Tucker and Skole concluded that the biological impoverishment—the extinction rate—was likely to have been significantly higher as a result. And it isn't as if this is buried somewhere in the impenetrable details of the analysis. Right up front in the abstract: "Although this rate of deforestation is lower than previous estimates, *the effect on biological diversity is greater.*" (Emphasis added.)

The second factoid used by the "what, me worry?" folks is based

upon what has happened in the eastern United States, where almost all of the original forest has been cut over the past four centuries. The argument goes like this: If the environmental wackos are right, then this massive deforestation should have led to widespread extinctions in eastern forest birds. But in fact, only three have gone extinct out of the 200-odd species that live in these habitats. Therefore we don't have to worry about current deforestation in the tropics or anywhere else because as bad as it might appear to be, it doesn't begin to approach the virtually complete destruction of primary forest in

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## **Why do these people apply such energy to distortion? The answer is simple. The truth hurts.**

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the eastern U.S.

Stuart Pimm and Robert Askins effectively demolish this distortion, as could virtually anyone with a passing familiarity of the relevant biology, a modicum of skill in dispassionate scientific analysis, and an interest in the truth. Deforestation in the eastern U.S. took place over several centuries, and at no time did it eliminate all the habitat of most of the birds involved. Instead it was patchy in space and transitory in time, commensurate with the logging technologies, economy, and human population size over that time span. What this means is that at any given time during that several centuries of deforestation, significant habitat was available in a diversity of types and a variety of age-classes. While there was less than the original coverage, there was enough to ensure the persistence of most species.

Habitat destruction today—in the tropics, in the boreal forest, in the Pacific Northwest, and elsewhere—is far more devastating because it is so

much more rapid. It gallops across the landscape. Technology empowers its pace and scale. Not only that, in the tropics the ecology of affected species makes them far more vulnerable to destruction. Compared to temperate species, tropical birds have more constrained patterns of habitat choice and smaller geographic ranges. The amount of deforestation necessary to completely eliminate a species' entire distribution is much smaller, well within the spatial scale of destruction that is taking place in a decade or two, or less.

The efforts to dissemble on these and related issues is truly impressive. The same messages get carried on talk-show radio, in far-out books (revealingly titled "*The Way Things Ought to Be*" instead of "*The Way Things Really Are*"), by editorials and op-ed pieces in the *Wall Street Journal*, in the *Washington Times*, radical right lobbyists' newsletters, and a host of similar outlets. Each repetition ratchets up the exposure and adds to the appearance of credibility. "But, gee, if it appeared in 'x' someone must have determined that it had some veracity." Finally, the factoid starts to appear in the mainstream press, despite the reality that the basic facts are no more supportive of the opinion than they were when the idea first began to be whispered in the dark crevices of an "ought-to-be's" self-serving delusion.

Why do these people apply such energy to distortion? The answer is simple. The truth hurts. More truth threatens even more. Science has time and again forced policy-makers to make tough decision to advance environmental protection. Absent the science, these decisions would have been avoided.

Here the gamble takes on deep roots. Not only do they deny and ignore facts of issues well-known, they mount even more desperate campaigns against new scientific information.

This last tactic has taken life in ef-

forts to squelch the National Biological Survey. This program is a long-overdue effort spearheaded by Secretary of the Interior Bruce Babbitt to measure and understand the biological resources of America.

It is hardly rocket—or even radio—science to realize that good decisions about resource management rest ultimately on what you know about what you've got. Making policy decisions about natural resources in this country without modern science is like trying to launch the Mars Observer without a computer to calculate trajectories (maybe that's what happened?).

And avoiding modern science is exactly what the what-me-worry types would prefer. They mounted a vigorous campaign to kill the Survey when it came to Congressional consideration during the fall. They failed to kill it, but were successful in the first volley of an effort to increase what it will cost the American taxpayer to carry out the work. They did this by lobbying to prohibit volunteer participation in any gathering of information. They claimed that this was necessary to protect property owners from undesirable intrusions by birders, botanists, and other dangerous elements of the citizenry participating in breeding bird surveys and the like. But their real logic probably read: "If we can make it cost too much, we can probably kill it."

The bottom line here is that time and again during the last several decades, new science has revealed problems requiring strong action and new approaches. Without that science, we would be in a fog bank of ignorance, perhaps suspecting there was a mountain in the way, but without the instruments to know if it was real. The "ought-to-be's" would have us plunge ahead, testing the reality of the

mountain with the front-end of the airplane.

One ultimate irony is that these same people—bent on pushing radical policies that would have us consume resources in ignorance now and let the future take care of itself—would call themselves "conservative."

If we let this effort to squelch and distort environmental science stand, our chances to confront a host of looming environmental challenges

will be diminished. And instead of looking forward to an era of environmental enlightenment and economic prosperity, we will find ourselves back to "the way things used to be." ▶

—J. P. Myers is Director of the W. Alton Jones Foundation.

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