

Briefings

edited by CONSTANCE HOLDEN

NSF Bombs in Ice Capade

On 30 December, scientists working for the National Science Foundation (NSF) enraged environmental groups by blowing up several containers of chemicals on the open ice near the U.S. McMurdo Station in Antarctica—without benefit of an environmental impact statement.

News of the explosion was relayed to the world by Green-

peace, a group that has been highly critical of NSF's environmental activities in Antarctica. "Just months after signing the Environmental Protocol for Antarctica, the U.S. is found skulking about, blowing up dangerous chemicals, and hoping no one would notice," said Dana K. Harmon in a statement from Greenpeace's base in Antarctica.

Greenpeace was not alone in its indignation. Environmental Protection Agency (EPA) insiders have told *Science* that EPA officials were also aghast at the apparent lack of concern NSF showed for following the new protocols.

NSF officials in Washington

claim they had few, if any options. The chemicals that were blown up were extremely explosive peroxide-forming compounds that, according to Lawrence Rudolf of the NSF general counsel's office, could not be safely transported out of McMurdo. Rudolf says NSF did perform an environmental assessment, concluding that safety concerns outweighed any potential environmental impact, which was thought in any case to be minimal. But he admits the assessment was never formally written up. Says Rudolf: "We need to do a better job in future to get a formal report prepared." With federal policy regarding environ-

mental protection in Antarctica currently under review, it's likely that the EPA will try to see to it that they do.

Viral Tall Tale?

Eugene Spafford is a computer scientist at Purdue University whose big memory isn't only in his machines. Last week, Spafford one-upped the Associated Press, which had tried the week before to one-up *US News and World Report* over the authenticity of the newsweekly's Case of the Secret Software.

The tale begins with the 20 January issue of *US News*, which reported that several deepthroats—aka "very senior defense officials"—had revealed that a key Iraq computer system had been cleverly disabled during the Gulf War by the U.S. National Security Agency (NSA). According to the magazine, NSA planted a devastating microchip into a French computer printer that was then smuggled into Iraq. Software written on the chip bypassed Iraqi electronic security measures and played havoc with the computer network for the country's air defense system, wiping out screens of information as they were called up.

One whale of a scoop except that the Associated Press subsequently reported that the story closely paralleled last year's April Fool's column in the computer trade journal *Infoworld*. Had a virus hopped from *Infoworld* into the *US News* word processing system? Enter Eugene Spafford, who can carry the suspicions yet further back in time. Spafford told *Science* that a 1984 sci-fi book, *SoftWars*, contained a plot device in which the Soviets buy U.S. computers through the French. Unknown to the Soviets, U.S. intelligence agents have placed "logic bombs" in the software that would crash the computers if used for military purposes.

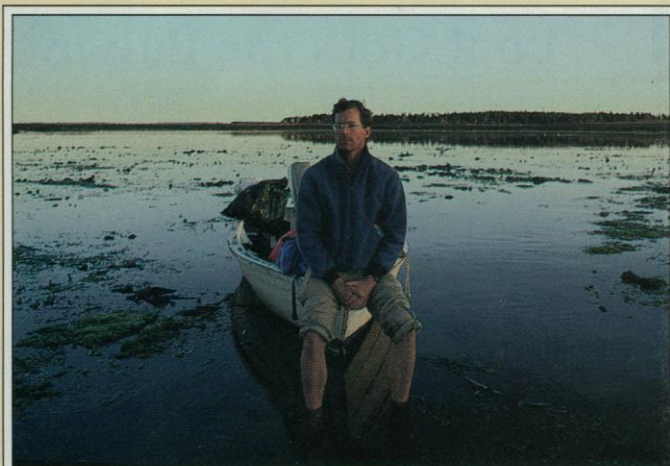
Then again, could fiction have become fact? Despite the story's questionable origins, Spafford argues that the idea is not completely crazy. If the NSA had

FWS Ruffles Ornithologist's Feathers

Strict laws designed to curb imports of birds—mainly those brought in from Latin America for the pet trade—are proving increasingly onerous for U.S. ornithologists. Now, some say, a scientist can hardly carry a feather across a border without becoming ensnared in the unforgiving bureaucracy of the U.S. Fish and Wildlife Service (FWS).

A recent case in point concerns ornithologist Nathaniel Wheelwright of Bowdoin College in Brunswick, Maine. Last spring, he obtained an FWS permit to pick up samples of a few dead (and unendangered) birds in Canada and bring them back to Bowdoin for study. But after he declared them on his return, the FWS confiscated the birds and charged him with three violations of the Migratory Bird Treaty Act. Among his crimes: Because of an error on the permit, bird skins had not been listed. And although Wheelwright had been assured by FWS over the phone that he could report the skins on his return, he says, he was told that the oral assurance was not valid.

After protesting to the FWS and mustering colleagues to do likewise, Wheelwright was eventually told that the FWS would let him off for a \$50 fine. But by then he had his principles to consider. He chose to stand trial—the case is now scheduled for March in federal district court. "The FWS law enforcement service has us hamstrung," he says. Wheelwright says he can't get those in authority to explain their stance. He wrote FWS acting director Richard Smith but was told that, "In view of the fact that you are contesting the issuance [of the] violation notice, it would be inappropriate for me to



Beleaguered biologist waits for specimens to be returned.

comment on this matter."

FWS ornithologist Richard Banks (who urged the enforcement people to take it easy on Wheelwright and other biologists) explained to *Science* that the Migratory Bird Treaty Act, which covers almost all the birds in North America, originally exempted science and education from its coverage. But as its provisions have become tighter, they have become tougher on scientists, too.

Ornithologist Scott Lanyon of Chicago's Field Museum says it's not uncommon for the FWS to go after scientists—who after all are far more visible than smugglers—for petty violations of laws designed to control commercial activity. He says a couple of years back, the FWS threatened to confiscate some decades-old stuffed birds on loan to Chicago from a Brazilian museum. He thinks the enforcement people tend to be cop types who don't know anything about science. Says Lanyon: "Scientists end up being the ones most affected by laws intended to curb wildlife trade."