Bald Eagles on the Rise

This year as the bald eagle marks its 200th year as the emblem of the United States, the majestic raptor is showing encouraging signs of making a comeback from its endangered status.

Bald eagles once made their nests in tall trees and crags throughout all North America, but by the 1960's the population had come close to extinction. The main culprit was habitat destruction, but DDT was also implicated; its consumption through contaminated fish was dooming eagles' eggs by making their shells dangerously thin. DDT was banned in 1972. There are now about 5000 bald eagles resident in the United States, including 1400 nesting pairs. In the winter, the population swells to almost 14,000 when the birds migrate down from Canada and Alaska.

Bald eagles are the most protected species—animal or plant—in the country according to Daniel James of the Department of the Interior's Office of Endangered Species. They are protected by three laws—the Bald Eagle Act of 1940, the Migratory Bird Treaty Act, and the Endangered Species Act. Five recovery teams around the country now monitor the progress of bald eagles. They oversee several translocation projects in which young birds are taken from nests and put in other areas to aid relic populations, and pioneering eagle couples are established in suitable but unused habitats. Eagle movements are monitored by a radio tagging program.

Six years after efforts to create a national seal began, Charles Thomson, secretary to the Congress, came up with this design. The shield was subsequently revised to contain vertical stripes, and a blue rectangle to denote Congress.
(National Archives)

Despite strict laws—shooting an eagle may draw a 1-year prison sentence and a $5000 fine—eagles are still jeopardized by, in addition to habitat loss, traps and poisons laid out for predators, and by trigger-happy gun toters. Some farmers also see them as a threat to sheep although eagles generally prey only on carrion, small mammals, disabled waterfowl, and fish.

Anyone who finds a dead eagle is legally required to turn it over to the government which ships the bodies to a Fish and Wildlife Service laboratory in Madison, Wisconsin, to be autopsied. The remains then go to museums to be stuffed or are shipped to a national repository in Pocatello, Idaho.

Having virtually disappeared from the Great Lakes area and the eastern United States by the late 1960's, bald eagles can now be found in significant concentrations in the Northwest, the Great Lakes region, the Chesapeake Bay, Maine, and Florida. During the winter thousands find congenial habitat below dams on the Mississippi River where fish and waterfowl are plentiful.

Science's cover eagle was photographed at Lower McDonald Creek in Glacier National Park, Montana, which is the preeminent spa for bald eagles south of Canada. It seems that in the 1920's, wildlife managers established a major eagle support system when they stocked Flathead Lake with kokanee salmon. In the fall, the salmon migrate 60 miles up to shallow, slow-running McDonald Creek to spawn. Over the past 50 years practically every bald eagle in North America has found out about it, and during October through December thousands of migrating eagles pass through the area to wolf up salmon.—CONSTANCE HOLDEN

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in Washington, D.C., where the librarian drew up a "hit list" of 75 biomedical journals whose prices had risen more than $50 between annual subscriptions. She is now in the process of interviewing faculty and students to see which ones might get the ax.

The indignation of scientists also may be growing, at least according to one, who, as an editor, has witnessed the growth of the literature over the years. "Our library," says James E. Heath, a physiologist at the University of Illinois at Urbana-Champaign, "recently came up with a fund-raising scheme whereby alums, faculty, and students would donate dollars to help maintain the journal subscriptions. It seems a sign that this thing has gone too far." Heath, as editor of *Ecology*, *Physiological Zoology*, and a number of other journals, has had not a little experience in the area of publication. "Do we really need all these journals?" he asks. "I think there has been a dilution of quality, and that's inevitable when there are more outlets than quality work."

Another concern, touched off by traditional journals and possibly open to solution by computerized retrieval, is the question of omitting tabular data. Traditional publishers, pressed for space and often with an eye to profit, leave long tables of data out of articles and keep them on file, where individuals must write for them and pay charges. Because of the lengthy process and the cost, not a few scientists decide not to take the time, with the effect that the data are lost to the scientific community. Computerized journals, with their ability to store vast amounts of information until it is called for over the phone lines, might be a solution.

The stage is set for an interesting competition between publishers of paper journals and the entrepreneurs of the electronic future. Not a few paper journals have fallen into the trap of obeying the dictates of publishers and authors, rather than trying to serve the needs of the reader. Librarians, who often pay for the dislocation out of increasingly tight budgets, are starting to vigorously fight the trend. The electronic rivals, meanwhile, promise to obey market forces, to pamper the reader, and to offer a wide range of new services. All this will be accomplished, they say, while dramatically reducing the time it takes to get a manuscript into print—not an insignificant promise in a profession where discovery without priority is almost as bad as no discovery at all.

—WILLIAM J. BROAD

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