Where the Wild Things Are

"Atlantic Salmon, Endangered Species, and the Failure of Environmental Policies" by David Jenkins, in *Comparative Studies in Society and History* (Oct. 2003), Univ. of Michigan, 102 Rackham Bldg., Ann Arbor, Mich. 48109–1070.

The wild Atlantic salmon has been on the decline for close to a century and a half, despite state and federal efforts to reverse the trend, and the species' long-term prospects look poor. But how close to extinction the fish has become depends on the meaning of *wild*, among other things, according to Jenkins, executive director of the Roundhouse Institute for Field Studies, in Auburn, Maine.

Once native to most major East Coast river systems, wild salmon, by almost any definition, can be found today only in a handful of rivers in northeastern Maine. For some researchers and environmental advocates, Jenkins says, "wild" salmon are those that "live their lives-from natal stream to ocean and back to their natal stream to spawnoutside of human influence," have characteristics specific to particular rivers, and are genetically linked to similar, wild native ancestors. By this definition, only an estimated 100 wild salmon returned to seven Maine rivers in 2000. But by less restrictive definitions, a "wild" salmon can simply be one whose parents lived a natural life cycle, regardless of their genetic origins. That lets descendants of non-native stocked fish or fish that have escaped from salmon farms qualify as "wild," potentially in large numbers.

In the 1990s, seeking to avoid having the species listed under the federal Endangered

Species Act, with all the burdens on agriculture, salmon farming, and timber that would involve, Maine governor Angus King forged a five-year plan to improve salmon habitats. Environmental groups and affected industries signed on in 1995, as did federal officials. By 1999, Maine had spent \$1 million to implement the plan, with another \$1 million earmarked for future spending.

But a lawsuit by two environmental groups led to a ruling in 2000 by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service that the Maine Atlantic salmon was "endangered" after all. Under the services' somewhat relaxed definition, a salmon does not need to be a genetically pure descendant of wild ancestors to qualify as *wild*. But the state government, using the most restrictive definition of *wild*, argued in the suit that the Maine wild salmon was *already* extinct. The remaining salmon were not in danger of extinction, so the Endangered Species Act would not apply.

The genetic tangle results in part from largely unsuccessful salmon recovery programs that have been underway in Maine since the late 19th century. It wasn't until the late 1930s that biologists recognized that salmon returned to their home streams to spawn. By then, notes Jenkins, "many millions of fish had been stocked in rivers foreign to them."



Atlantic Salmon, by Johan Friedrich August Krueger and Johan Friedrich Henning (1785)

Science alone can't really answer the question, What's a wild salmon? It's a pity, in Jenkins's view, that the debate over the future of Maine's salmon has to be conducted under the terms of the Endangered Species Act, which excludes consideration of anything but science. As the Maine case shows, other concerns—about economic impact, local autonomy, and environmentalism—have a way of being covertly inserted into "scientific" arguments and further muddying the waters. Better to consider them openly.

Reproductive Tourism

"Reproductive Tourism in Europe: Infertility and Human Rights" by Ruth Deech, in *Global Governance* (Oct. 2003), William S. Hein & Co., 1285 Main St., Buffalo, N.Y. 14209.

To the long list of conundrums caused by the rise of new biological technologies, add another: "reproductive tourism." People who find their home country's rules on infertility treatments inconvenient, for example, are shopping around elsewhere for what they want. Does your national government bar you from choosing the sex of your baby? Maybe it's time for a little getaway to Rome, where the law won't stand in your way.

More serious problems are posed by the international trade in sperm. To reduce the risk of unknowing incest by offspring, for example, France allows sperm donors to "father" only five children. But Denmark allows 25 offspring from a single donor. If they import Danish sperm, the French must therefore accept the Danish risk level. Britain's sperm donors are anonymous, but women who conceive a child with donated Swedish sperm are told the biological father's identity.

Such problems are especially ticklish in Europe, where national laws and the emerging European Union law are full of potential conflicts, writes Deech, principal of St. Anne's College at Oxford University.

In Britain, for example, a young woman named Diane Blood, planning to conceive a child through artificial insemination, persuaded doctors to extract sperm from her comatose husband before he died. Under British law, the husband's lack of consent rendered her plan illegal. But Belgian law posed no such obstacle, and Mrs. Blood sought to export the sperm there. In the tangle of court cases that followed, British laws were weighed against European statutes limiting restrictions on trade among member nations and protecting the human rights of people such as the late Mr. Blood. In the end, the case was decided against Mrs. Blood on the narrow ground that exporting sperm merely to avoid national law was impermissible.

But the bigger issues won't go away, Deech warns, nor will the pressure driving "national standards toward the regional lowest common denominator." International treaties setting standards in Europe and other regions could help, but "if regional arrangements are deemed unduly constraining, people can simply go farther afield."

The High Price of Knowledge

"The Promise and Peril of 'Open Access'" by Lila Guterman, in *The Chronicle of Higher Education* (Jan. 30, 2004), 1255 23rd St., N.W., Washington, D.C. 20037.

Think you spend a lot on magazines? Imagine if subscriptions cost you as much as some scientific journals cost university libraries. *Brain Research*, which is among the most expensive, costs more than \$21,000 per year; at least 19 journals are priced at more than \$10,000 yearly. Rising fees and budget cuts have caused some libraries to drop as many as one-third of their subscriptions. But many journals are indispensable to scientists a fact, some librarians complain, that corporate publishers often exploit in setting subscription rates.

Last fall, librarians spotted a potential savior: "open-access" journals that publish original, full-text academic articles at no cost on the