

## Lessons from the Snail Darter Saga

The Endangered Species Act (ESA), which was amended last year despite the protests of some environmental lobbyists who feared the act was being gutted, is still alive and well, as is now evident from the recent decisions of the cabinet-level committee set up to review requests for exemptions. On 23 January, this new body, chaired by Secretary of the Interior Cecil D. Andrus, met for the first time. It denied an exemption to the Tennessee Valley Authority's Tellico Dam project that threatened the snail darter; and, while it granted an exemption to the Grayrocks Dam project in Wyoming, the committee attached conditions (agreed to by the project sponsors) to preserve resting areas on the Platte River for the whooping crane.

The outcome in the Tellico case was all the more notable in that the motion to deny the exemption came from Charles L. Schultz, chairman of the Council of Economic Advisers. Schultz, viewing the economic justification for completing the project as dubious or worse even though about \$100 million already has been spent on it, observed: "I can't see how it would be possible to say that there are no reasonable and prudent alternatives to the project."

Last summer and fall, environmental lobbyists in Washington were deeply, even bitterly, divided over whether or not to support the amendment put forward by Senator John Culver (D-Iowa) and Senator Howard Baker (R-Tenn.) to create the exemptions review committee (*Science*, 15 September). Some of the wildlife groups, especially, were opposed to any change in the act, which flatly prohibited any federal actions that would wipe out an endangered species.

The National Audubon Society, on the other hand, had come around to endorsing the Culver-Baker amendment in the belief that the ESA, as originally written in 1973, was too rigid to be politically tenable. Audubon lobbyists had noted that lawsuits filed under the ESA produced such strong political reactions that the environmentalists themselves were shying away from bringing them for fear Congress would not extend the act. The fact that no such suit had been brought against the TVA's Columbia Dam project on the Duck River, which threatens five endangered species of freshwater mussels, was cited as a case in point.

Thus far, Audubon's judgment appears to have been vindicated. The Tellico and Grayrocks cases came out splendidly from the environmentalists' point of view, and, should other situations arise where they feel the ESA must be invoked, the environmental lawyers no longer have the same reason as in the past to pull their punches. Indeed, Michael J. Bean, an Environmental Defense Fund (EDF) attorney specializing in wildlife issues, says that if the Columbia Dam project—now at an impasse because the state of Tennessee has refused to issue an essential water quality permit—should start moving again, EDF will do whatever is necessary to bring the ESA exemption review procedures into play.

What now worries Bean is, as he sees it, a very real likelihood that other changes made in the ESA last year will make it impossible for many additional species of animals, plants, and insects to be listed as endangered. Now, before a species can be listed, the boundaries of its critical habitat must be delineated, an economic impact study must be prepared, and public hearings must be held, all within 2 years of the time the listing is proposed. No additional species have been listed since the ESA was amended, Bean says, and he points to an official memorandum indicating that only 10 species will be proposed for listing during fiscal 1979. Last July, Senator Culver believed the listing of 2000 more species was imminent.

Further changes in the ESA may eventually be perceived as needed, but none seems likely for the time being. Ironically, Senator Baker reacted to the decision in the snail darter case with such disappointment that he said he would try to have Congress abolish the review committee and exempt the Tellico project outright. But he well may have trouble getting anywhere with this, especially since neither the TVA (now under new leadership) nor the state of Tennessee opposed the Tellico decision.—LUTHER J. CARTER

them to apply to the World Health Organization for a listing in the WHO *World Directory* of medical schools (which would allow a student graduating from AUC to take the ECFMG exam). Starting on Sunday 19 March 1978, Tien placed ads in the *New York Times* and numerous other newspapers across the country. At first the applications trickled in, but by August Tien had received more than 300, each containing a \$500 application fee ("It's in order to attract serious candidates," says Tien). Required in addition were a recent photograph, a copy of the student's college transcript, and two letters of recommendation from former professors. If not accepted, the student received \$400 of the application fee back.

In April 1978, Tien started advertising for faculty in the *New York Times*. A Ph.D. or M.D. was required and one ad noted that "retired professionals are also welcome to apply."

The dream was unfolding, but problems began to loom. Tien had planned on housing his students and faculty with residents in Montserrat until AUC's dormitories were built. But in late June, the government officer in charge of finding housing told Tien that not enough homes could be found. Tien was on the spot. Students were already enrolled, but he had no place to put them. During July, Tien searched for a solution.

Calls to a Catholic college in Miami, Florida, produced what looked like a possible location. But when the Florida board of education got wind of the negotiations, they called Tien. "We told him AUC could not hold classes in Florida without a license," Sandy Knight of the Florida State Board of Independent Colleges and Universities told *Science*. "We never received an application."

The reason, apparently, was that AUC had found a better location. By 12 July 1978 Tien had signed a contract with the College of Mount St. Joseph. A lecture hall, biology laboratory, and administrative offices were rented for 1 year (August to August) for \$23,440, with an option to extend the lease until December 1979. And there were other good tidings. On 13 July Tien received a letter from WHO saying that AUC would be listed in the new *World Directory*. Tien now had a school, on paper at least. It didn't take long for the Caribbean Dream to materialize. On 14 August, just 1 month later, 107 students sat down in their rented Ohio classrooms and began studying medicine.

Though classes continue, AUC and the state of Ohio are engaged in a long-drawn court battle. The state claims that