

ment by the number of faculty in the department, thus obtaining an average citation rate for each department. This average citation rate was the basis for ranking the departments in the order of scientific quality.

Because the study also involved a confidential questionnaire (returned by 50 of the 80 department chairmen to whom it was sent), Kuhlmann-Wilsdorf's paper does not list the departments by name.

However, she says that the top of ten departments in her ranking are: Harvard (1), University of Maryland (2), Stanford (3), University of Southern California (4), Massachusetts Institute of Technology (5), University of Virginia (6), Northwestern (7), University of California at Berkeley (8), University of Kentucky (9), and the University of California at Los Angeles (10).

She then correlated the rankings of ex-

cellence with the amount of money each department had received from the M and M section in fiscal 1973 and 1974. But instead of discovering a steadily rising curve with the lowest-ranked departments getting the least and the highest-ranked departments getting the most, she found a bell-shaped curve. This was the basis of her conclusion that this section of NSF discriminates against the best schools.

"What is at issue," she testified, "is a

Slow Going on the Endangered Species Front

The Convention on International Trade in Endangered Species of Wild Fauna and Flora went into effect on 1 July, 90 days after Uruguay became the tenth nation to ratify it.* However, owing to a stunning case of bureaucratic inertia on the part of the U.S. Department of the Interior, the machinery necessary for this country's implementation of the pact is yet to be set up. Even if Interior gets moving at once, it will be months before the United States is prepared to enforce the agreement—this despite the fact that this country called for the meeting on endangered species, hosted it, drafted the treaty, and was the first to ratify it (*Science*, 23 February and 16 March 1973).

The treaty is the first all-encompassing attempt at international regulation of trade in endangered species. It sets up a complicated system of import and export permits designed to monitor and restrict the international flow of hundreds of species of animals and plants and their products.

Endangered flora and fauna, those at greatest risk, are listed in the first of the treaty's three appendices. Trade in these species—the largest categories are primates, crocodilians, and big cats—is virtually prohibited except for "non-commercial" uses such as biomedical research. Threatened species, listed in Appendix II, are subject to lesser restrictions. Appendix III is reserved for animals and plants that a nation wants to put unilaterally on the list, which means that the convention would apply to those species in trade with that nation.

Every country that ratifies the treaty is supposed to set up separate scientific and management authorities—the former to see that trade in a particular creature will not be detrimental to the survival of the species, the latter to see that everything is done in accordance with the law.

The Department of the Interior, however, has as yet failed to see that the proper authorities are designated. A draft executive order for this purpose has been floating around the department for months, but its arrival at the White House for presidential signature does not seem imminent. (That this draft has not been worked over very carefully would seem to be indicated by the fact that the President comes out as "Gerald F. [instead of R.] Ford.") There seems to be no particular explanation for Interior's failure to keep up with the requirements of the convention except that other priorities have supervened, and when it comes to wildlife, officials are more at home sorting out problems related to domestic game animals than those concerning lemurs, noisy scrub birds, and pearly mussels.

The State Department has urged Interior to get moving,

and the Fund for Animals, Inc., a private wildlife-saving organization, is also very upset. Lawyers for the latter have put the department on notice that legal action will be forthcoming if it continues to do nothing. Of related concern are uncorrected discrepancies between the treaty and the Endangered Species Act of 1973, one of whose principal purposes is to make the convention into law. The U.S. list of the world's endangered species (prepared in 1969) is shorter than that contained in the treaty, and updating of the U.S. list is long overdue.

Officials estimate it will be at least a year before the treaty has identifiable impact on world wildlife trade. Wayne King of the New York Zoological Society, who participated in the negotiations, says that factions within member nations are already pressuring the International Union for the Conservation of Natural Resources and Nature, the designated secretariat for the convention, to hold a meeting. They want to amend the treaty in order to get some commercially valuable species taken off the list (no one seems to want to put more on the list). The United States is trying to delay this until more nations have joined.

Most conspicuous for their failure to sign the treaty are the members of the European Common Market, which includes Italy and France, the world's leading traffickers in hides and pelts. Since there are no customs restrictions between Common Market countries, the idea was for them to ratify en bloc. Political pressures have prevented this, so it looks as though their entry will be piecemeal, with England, West Germany, and Belgium the closest to ratification. The other big non-joiner is Japan, a nation far more oriented to trade than conservation. Japan is expected to resist the treaty for some time, but Earl Baysinger of the Department of the Interior's Fish and Wildlife Service is optimistic that she will join. Baysinger (who is very eager to get things moving) is confident that the treaty will prove to be "a pretty damn strong document . . . most of the loopholes have pretty big plugs in them." He points out that with a few more joiners the treaty will have a self-perpetuating effect, since any nation that trades with a member of the convention is bound by its rules. The nation that stays out thus finds its trade restricted anyway, and it suffers from not having a say in future negotiations over the treaty. Furthermore, since implementation of the agreement requires systematic record-keeping and monitoring of threatened populations, the world will be able to keep better tabs on what flora and fauna are heading toward endangered status.

The treaty, at best, can only be expected to slow the accelerating rate of species extinction, by reducing incentives to snatch up or destroy rare biota. It is still helpless to prevent the shrinking of forests and habitats as they are destroyed to make way for human economic activity.—C.H.

*It has now been ratified by 13 governments: the United States, Switzerland, Tunisia, Sweden, Nigeria, the United Arab Emirates, Cyprus, Ecuador, Chile, Uruguay, Canada, Mauritius, and Costa Rica.