Endangered U.S. Plants to Be Collected, Conserved

The seeds have been planted, figuratively, for a major private effort to collect and preserve the more than 3000 endangered varieties of plants in the United States. The program, which has been developed by scientists from 14 leading U.S. botanical gardens and arboretums, calls for the establishment of a national Center for Plant Conservation.

The size and diversity of the planned collection require that it be divided up into regional centers, where climate and scientific expertise will be most closely suited to particular plant varieties. Thus, the center will actually be a consortium of botanical gardens, with headquarters at Harvard University's Arnold Arboretum. Backers of the center are currently seeking foundation support.

The desirability of such a collection has been talked about for many years and was strongly recommended 6 years ago in a National Academy of Sciences report, "Conservation of germplasm resources, an imperative." Until now, however, there has been no real effort to build such a collection despite its imminent feasibility, according to Francis Thibodeau of Arnold Arboretum, the acting scientific director of the center. Although federal laws lay down a theoretical structure for preserving such species, conservation efforts are "hampered . . . by institutional impediments," he notes.

There are few parallels to the center, Thibodeau says. The closest one is the comparatively informal program directed by Kew Botanical Gardens in London for tracking rare European species. He says the U.S. Department of Agriculture maintains an extensive, well-organized collection of agriculturally useful plant varieties, but its goals are "much more utilitarian" than are those of the new center.

The collection of plants to be gathered for the new center represents from 10 to 15 percent of wild species in this country that are either "seriously endangered or threatened," Thibodeau says. "That's a very shocking number." Though the intricacies of why any particular species is threatened may vary, virtually all are faced with "human-induced problems," he says. "Botanists don't find that plants are going under for no apparent reason."

Besides its immediate goal of finding and saving endangered plants from extinction, the center is expected to serve several needs of the plant research community. First, it will offer plentiful opportunities to study rare plants about which little is known beyond their structural features. By growing them in botanical gardens, researchers will be able to study their growth and ecological requirements. And eventually, as the collection grows and its diversity becomes more widely appreciated, researchers may comb through it looking for sources of unrecognized medicinals or other potentially useful chemicals.

The center expects to secure grants that will allow it to begin implementing plans soon. The early stages will involve identifying and collecting the most vulnerable species, leading gradually to an ever-larger collection.—**JEFFREY L. FOX**

OMB Relents on Rescue Satellite

In a last minute reversal, the White House Office of Management and Budget (OMB) has agreed to let the United States participate fully in the international search and rescue satellite program, SARSAT, one of the few remaining cooperative agreements between the United States and the Soviet Union (*Science*, 7 September, p. 999). U.S. delegates accordingly signed a pact renewing the program at a meeting in Leningrad on 1 October.

The SARSAT transponders, built by France and Canada, are designed to fly on U.S. polar-orbiting weather satellites, two of which are supposed to be in orbit at any given time. The Soviets, meanwhile, are flying equivalent equipment on their own weather satellites. OMB director David Stockman, however, has been trying for years to cut the U.S. two polar-orbiter system down to one orbiter as a cost-saving measure. His renewed efforts last summer sparked widespread concern that the United States, by reneging on its commitments to a popular and successful humanitarian program, would be handing the Soviets a propaganda coup.

On 18 September, however, in hearings before the House subcommittee on natural resources, it was revealed that the OMB had decided just the night before to relent. James Bailey, head of the SARSAT program at the National Oceanic and Atmospheric Administration (NOAA), testified that the Administration would now support a two-SARSAT system. But he added that this was not a committment to fly the SARSAT's on NOAA weather satellites indefinitely. Perhaps they could fly on future Landsats, or even on dedicated satellites.

The subcommittee, while applauding the Administration's support for SARSAT, was unimpressed with this latter suggestion. A new commercial Landsat is 4 years away if it flies at all. Moreover, under questioning from subcommittee chairman James Scheuer (D–N.Y.), Bailey admitted that Stockman's estimates of a $300 million savings on cutting back to one polar weather satellite "was quite a bit higher than the actual number would be." And when asked about the cost of a dedicated SARSAT satellite, he admitted that no one really knows.

—**M. MITCHELL WALDROP**

IIASA Wins Support

Continued American support for the International Institute for Applied Systems Analysis (IIASA) in Austria now seems assured. Last year, the American Academy of Arts and Sciences took over the role as the American member of IIASA from the National Academy of Sciences, after the Reagan Administration decided the government couldn't afford the $2.3 million in annual dues.

The arts and sciences academy has succeeded in raising money, much of it from private corporations, to fulfill a reduced dues requirement of $1.4 million a year. Meanwhile the Administration has conducted a review of its stance and the State Department has indicated that it will no longer oppose contributions to IIASA projects by individual agencies, such as the Department of Energy.

Last month IIASA was further bolstered by the announcement that the