

that have monitored development projects and had some successes in winning adherence to environmental provisions.

While environmentalists generally contend that bank response to their criticism has been inadequate, most concede that the bank has recently given more attention to environmental issues. The bank is currently in the throes of a study that is expected to recommend organizational changes designed to enable it to handle environmental and natural resource issues more effectively. And Conable's public pronouncements on the environment have fueled hopes that he will wield a new broom vigorously.

In his speech at the recent annual meeting, he listed attention to the environment as among the ingredients necessary for sustained development and later observed that, "we should need little reminder of Francis Bacon's insight: 'Nature, to be commanded, must be obeyed.' To keep development in harmony with natural forces and resources, we must apply that lesson on the largest scale—from the planning stage through the execution of every project."

Conable came to the bank without direct experience in international finance or in administering a large organization. He spent 20 years as a Republican Congressman from upstate New York and was ranking minority member of the tax-writing Ways and Means Committee when he resigned from Congress in 1984. A self-styled conservative, he was highly regarded in both parties for his command of tax legislation and his skill in achieving consensus on difficult issues in Congress. A lawyer, Conable took up a professorship in political science at the University of Rochester when he left Congress. His links with Congress and standing with the Administration are expected to enhance the bank's relations with the U.S. government. Because he compiled a proenvironment voting record in Congress, Conable was regarded as receptive to pleas for environmental reform when he came to the bank.

David Wirth of the Natural Resources Defense Council (NRDC) says his organization is "hopeful that Conable will make rapid changes for the better in the bank." However, he says environmental groups are realistic in recognizing that the bank is "a huge bureaucracy" that is difficult to change and that it will be necessary to "keep the pressure on."

In his speech at the bank's annual meeting, Conable introduced himself as "a lawyer and negotiator." On the environmental question, Conable is likely to be tested as a negotiator by both the environmentalists and his own World Bank bureaucracy. ■

JOHN WALSH

## Soviets Decline Offer to Monitor U.S. Test

A team of Soviet seismologists will visit the United States in early November to lay the groundwork for recording seismic signals around the U.S. underground nuclear test site in Nevada. However, because the Soviet Union has declined an offer from the Reagan Administration for the team to monitor a blast at the test site, the Administration has placed strict limits on the scientists' itinerary.

Thus goes the latest twist in a unique private arrangement between U.S. and Soviet scientists for sharing information that could be useful for verifying compliance with a treaty banning underground nuclear weapons tests. Under the arrangement, agreed to in June by the Natural Resources Defense Council (NRDC), an American environmental organization, and the Soviet Academy of Sciences, seismic monitoring equipment has already been placed close to the Soviet nuclear test site at Semipalatinsk (*Science*, 18 July, p. 278). The installation was jointly supervised by American and Soviet scientists.

A team of Soviet seismologists was scheduled to come to the United States to help plan the installation of similar monitoring equipment on privately owned land near the Nevada test site. However, the Reagan Administration, which has resisted Soviet proposals to resume negotiations for a comprehensive test ban, placed restrictions on their visit.

According to Thomas Cochran, a physicist who is managing the program at NRDC, the Administration said it would give the team visas that would allow them to visit sites where seismometers will be installed only if they agreed to witness a test at the Nevada test site and discuss measures to verify the existing treaty, which limits explosions to 150 kilotons.

The Administration has argued that new measures are needed to verify the existing treaty—it has accused the Soviet Union of violating it in the past—while the Soviet Union says it is interested only in moving toward a comprehensive test ban. "The White House tried to inject its own agenda into our program," contends Cochran.

The Soviets, apparently wary of signaling any willingness to move toward the U.S. position, declined the offer. The Administration then issued members of the team with visas that restricted their visit to New York, San Diego, Dallas, and Washington. They will not be permitted to visit the sites where the seismometers will be installed. However, Cochran notes that the scientists will have an opportunity to discuss and plan

the installation with their American colleagues.

The aim of the agreement is to obtain seismic information that would help discriminate between earth tremors and small explosions, and to demonstrate that a complete ban on nuclear testing could be adequately verified. Seismic data from the monitoring stations set up in the Soviet Union and those to be installed in the United States will be publicly available—including to the Department of Defense. ■

COLIN NORMAN

## Grasshopper Control Program Successful

A month of pesticide spraying by American aircraft has averted serious crop losses from migratory grasshoppers in four West African countries—Senegal, Mali, Mauritania, and The Gambia. The program, which uses DC-7's under contract to the U.S. Agency for International Development (AID), is the largest single operation in an international effort to control serious outbreaks of locusts and grasshoppers in a score of countries in sub-Saharan Africa (*Science*, 3 October, p. 17). Preliminary assessments indicate the campaign has been generally successful in protecting crops in the region.

The spraying operations, using four DC-7's, had been originally intended to cover about 400,000 hectares, primarily in Senegal. However, the success of that operation in September and the location of grasshopper infestations in other areas prompted a decision to undertake another round of spraying. The DC-7's then operated in Mali, Mauritania, and The Gambia as well as Senegal. In all, more than twice as much territory was sprayed as originally scheduled. Total cost of the operation was about \$2.7 million.

In the areas covered by the first round of spray operations in September, AID officials in Senegal estimate that crop losses to grasshoppers were kept to about 5%. The second round of spraying in October was somewhat less effective in protecting crops, but is expected to limit the size of the generation of grasshoppers which will hatch next year from eggs laid this year. Another grasshopper threat in Senegal and surrounding countries is anticipated in 1987, and planning is under way to forestall another emergency.

A sad note was injected into the successful effort by the crash of one of the DC-7's on 9