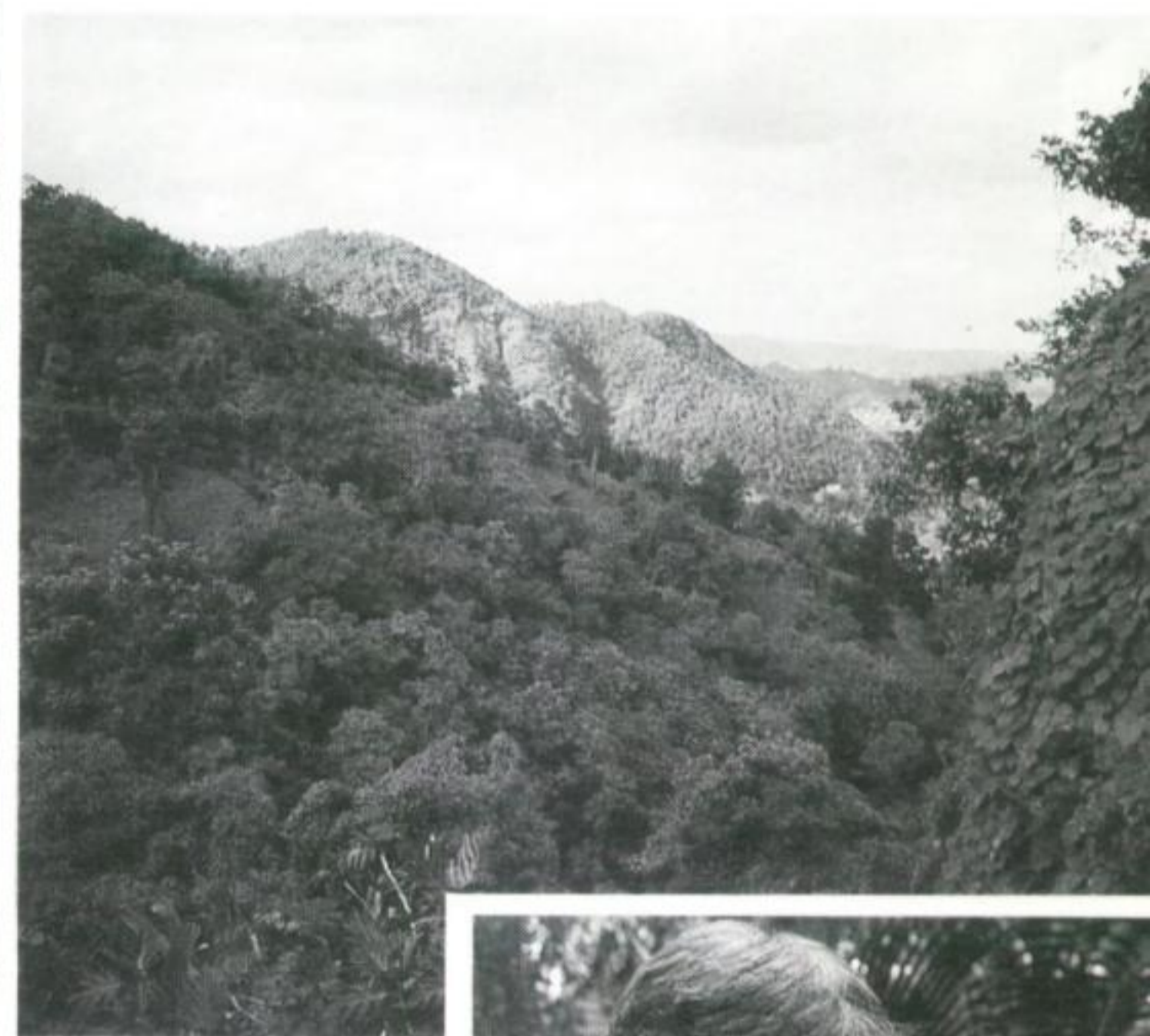
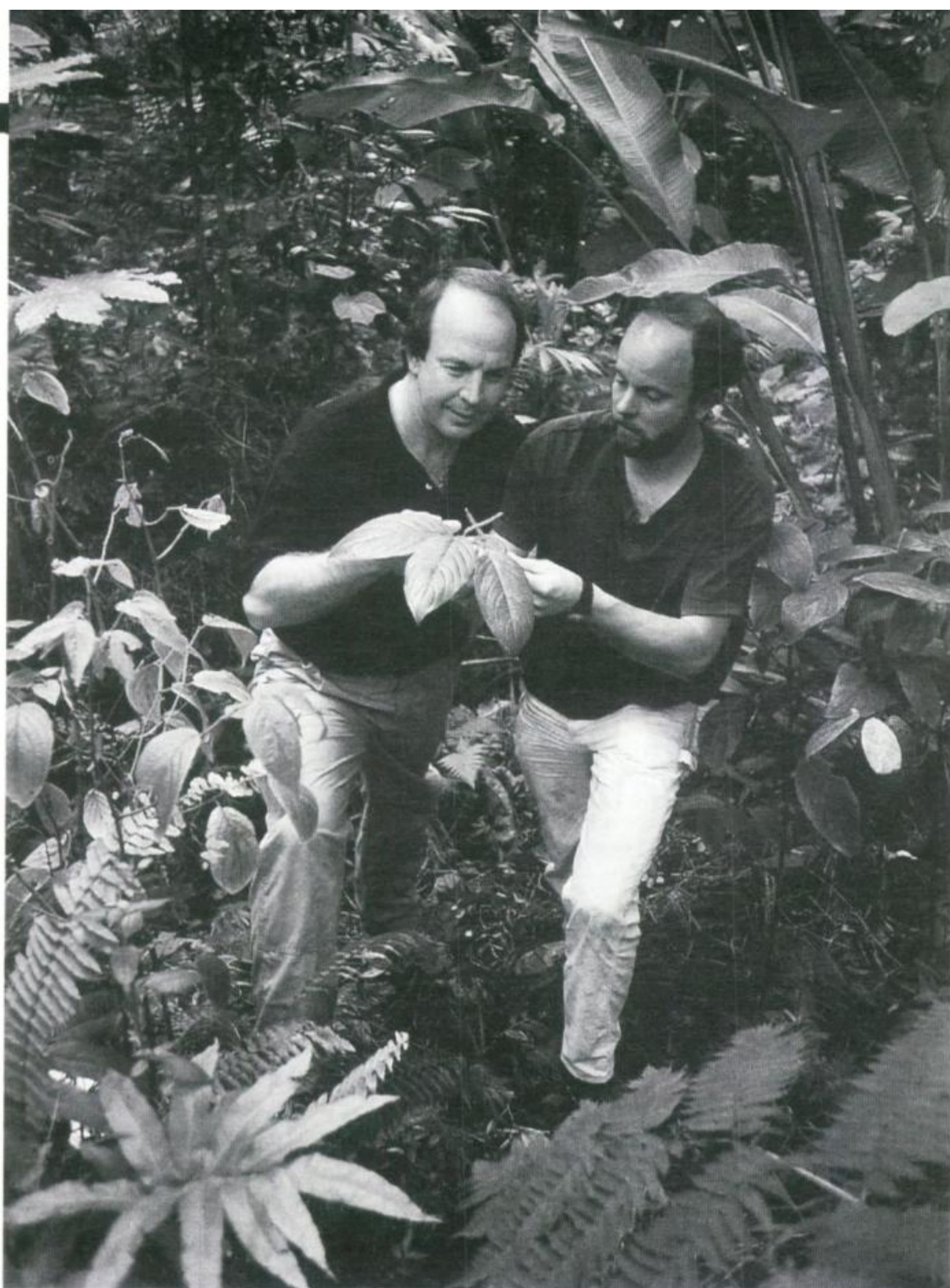


Larry Connors (left), KMOV-TV anchorman, with MBG research scientist Jim Miller in the Caribbean National Forest during filming of the television special.



Above: Virgin rain forest in the Caribbean National Forest, Puerto Rico. Right: Charlotte Taylor prepares a plant specimen.



Rescuing the Rain Forest

The St. Louis Connection

By Charlotte Taylor, Ph.D.

IN the dark undergrowth of the Caribbean rain forest, only a rustle of leaves betrayed the presence of Larry Connors, KMOV-TV news anchorman. Executive producer Al Frank and videographer Tom Newcomb peered through the lush vegetation trying to spot him.

"Are you okay?" Al Frank called.

"Just fine, although there's a big black snake by my foot," Larry replied. "But he doesn't seem to be going to bother me, so let's go ahead with the filming."

The KMOV-TV Channel 4 team was on location in the tropical rain forest of Puerto Rico for the preparation of an hourlong documentary "Rescuing the Rainforest: The St. Louis Connection," which will air in prime time during late February or early March. This documentary is a cooperative project among Channel 4, the Garden, the Saint Louis Zoo, and the St. Louis Science Center. It will be broadcast to complement the Smithsonian Institution's travelling exhibit "Tropical Rainforests: A Disappearing Treasure" on view at the Science Center through April 5. The television program highlights the activities of local St. Louis institutions in tropical conservation.

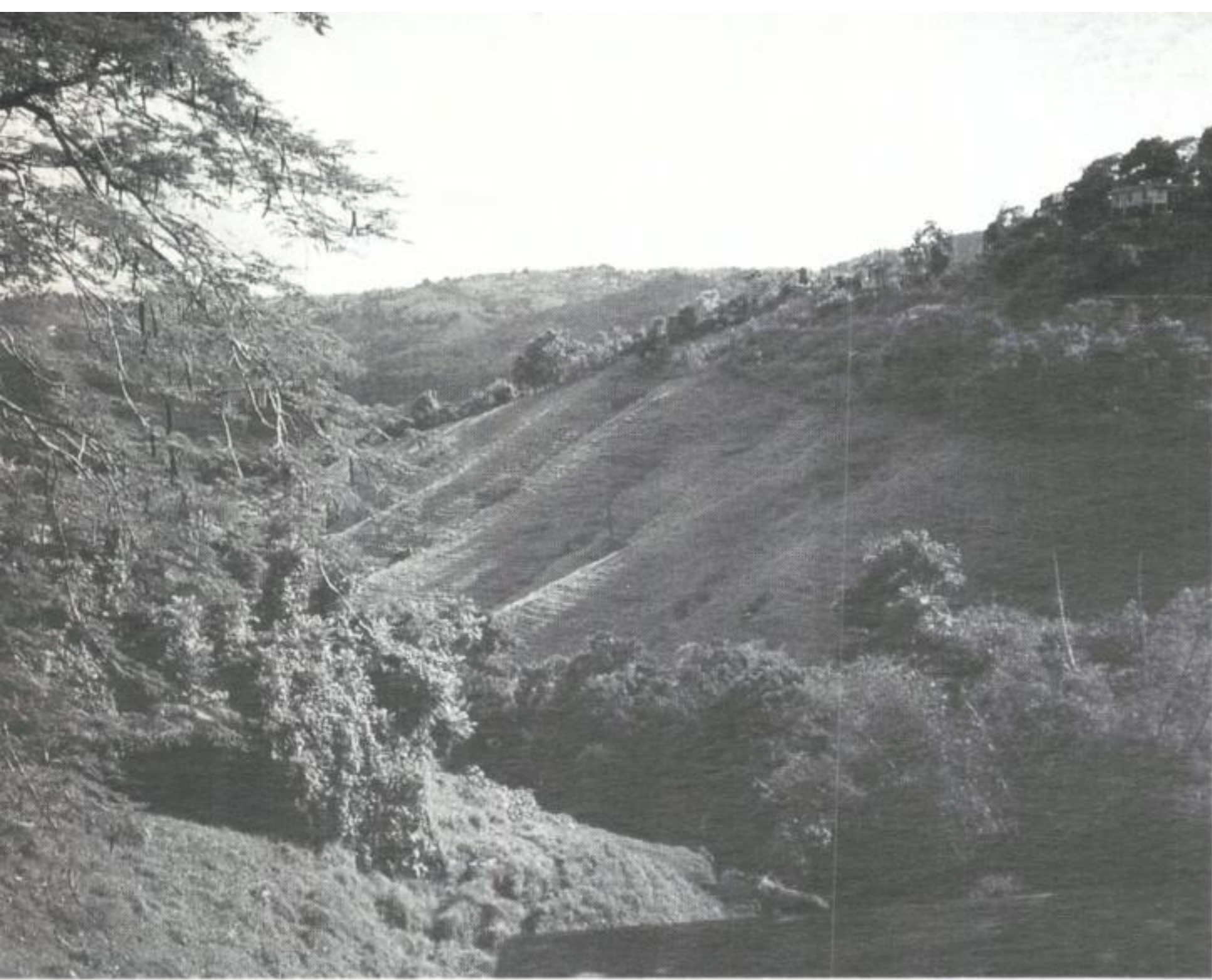
And the activities of our local institutions are significant. St. Louis is a nationally recognized center for scientific research and education, including tropical biology and conservation. The Garden is one of the world's most active institutions in tropical botanical research. The Saint Louis Zoo is an important center for captive breeding of endangered tropical animals. Both institutions collaborate closely with programs of graduate study at Washington University, Saint Louis University, and the University of Missouri-St. Louis (UMSL), including the new graduate program in Tropical

Conservation Biology at UMSL. And the St. Louis Science Center is a unique facility for education of both the general public and school classes in issues related to science, including the importance and plight of tropical rain forests.

Although tropical rain forests cover only seven percent of the Earth's surface, they contain more than half of the world's plant and animal species and are disproportionately important in moderating the world's climate and atmosphere. Under current human pressure the rain forests are being destroyed rapidly, with an area the size of Illinois eliminated every year. This will result in their virtual disappearance—along with their plants and animals—by the year 2050.

The KMOV-TV team was accompanied to Puerto Rico by Dr. Jim Miller and Dr. Charlotte Taylor of the Garden, and Zoo Deputy Director Roger Birkel. Jim Miller coordinates the Garden's natural products research programs, and has made two previous trips to the island collecting for the Garden's collaborative program with the Monsanto Company, searching for new plant derived medicines. Charlotte Taylor was a professor of botany at the University of Puerto Rico-Rio Piedras before coming to the Garden. During the four days of taping, the team visited the Caribbean National Forest—the only tropical rain forest in the National Forest system, and an international center for research and conservation—and several of Puerto Rico's Commonwealth Forest Reserves.

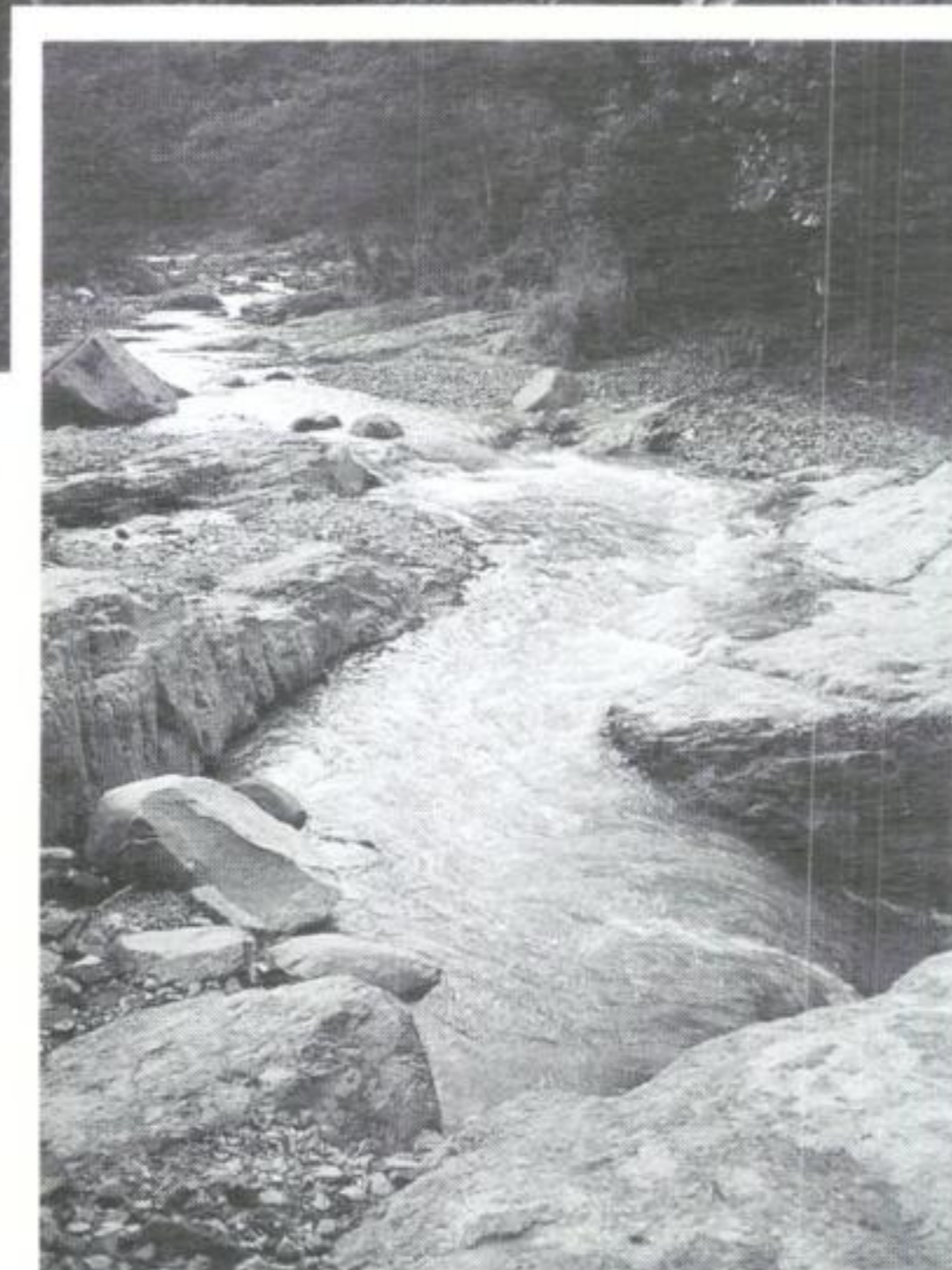
Tropical forests provide the world, including St. Louisans, with many important products. "About 25 percent of currently marketed pharmaceuticals are derived from plants," Jim Miller says, "and in developing countries—mostly tropical—reliance on plants is much greater. Ninety percent of Africans depend only on the forest for their health care. And while people may realize that the plants and



Left: A view at the edge of Toro Negro Commonwealth Forest Reserve, showing private land cleared from the rain forest for pasture.



Above: Occasional residential dwellings appear in forested areas. Left: Rio Turabo, one of many mountain rivers in the region.



imals are threatened, they seldom think of the tropical soils: when forest is cut, the nutrient-poor soils become hardened and infertile, and unable to sustain the growth of plants or micro-organisms. In addition to the importance of plants as food and pharmaceuticals, about 9,000 medicines currently marketed in the U.S. are derived from micro-organisms."

Tropical rain forests moderate the world's climate, both temperature and atmosphere; when they are destroyed, the vegetation that replaces them is much less effective. And, in addition to medicines, tropical forests provide us with timber and many of our daily foods, such as coffee, tea, sugar, and citrus fruits. As the rain forests disappear, potential new foods and medicines disappear with it.

KMOV-TV's documentary will focus on the nature and importance of rain forests, and on what steps St. Louisans can take to ensure the preservation and continued existence of the tropical rain forests. Teacher's Guides for school study programs to accompany the Smithsonian exhibit and the documentary will be available through the education departments of all three collaborating institutions. Interested educators may call 577-5140 for more information. As the rain forests continue to be destroyed at an alarming rate, we need to act so that their beauty, marvels, and economic potential can be enjoyed by future generations.

Raven Receives Honorary Degree from Argentina



Dr. Raúl Matera, Secretary of Science of Argentina (left), with Dr. Peter H. Raven.

During a visit to Argentina December 3-11, 1991, the Garden's director, Dr. Peter H. Raven, received a Doctor Honoris Causa degree from the Universidad Nacional de La Plata. The University pre-

sents the degree to outstanding individuals in the fields of science, culture or education. Former recipients include Abdus Salam and Carlo Rubbia, past winners of the Nobel Prize in Physics, and the well known

North American paleontologist George G. Simpson.

The Universidad Nacional de La Plata was founded at the beginning of this century and has the greatest concentration of scientists in Argentina. Dr. Angel Plastino, president of the University, presented the honorary degree to Raven at a public ceremony where Raven delivered an address titled "Biological Extinctions: A Global Crisis."

During his visit to Argentina Dr. Raven was made corresponding member of the Academia Nacional de Ciencias Exactas, Físicas y Naturales in a ceremony at the Instituto Darwinion, one of the leading botanical institutions in Latin America. Raven also met with Dr. Raúl Matera, Argentina's Secretary of Science, to discuss topics of mutual interest and to sign a cooperative agreement between the Garden and Argentina, a major new undertaking. Watch upcoming issues of the *Bulletin* for more on this project.