



Saving Haiti's Frogs

WITH ALL THE SUFFERING THAT HAS BEEN VISITED UPON THE PEOPLE OF HAITI in the past year—earthquake and hurricane, mudslides and cholera—one might reasonably ask why anyone should care about the impending extinction of the island's frogs.

But for biology professor Blair Hedges, who has partnered with the Philadelphia Zoo to rescue Haiti's endangered amphibians, the answer is clear: "It's all related," said Hedges, who calls frogs the proverbial canaries in the coal mine. "The exact same problems that are affecting the frogs are going to affect humans."

Unfortunately, Hedges can't do much for the island's human inhabitants. But he can at least give the frogs a fighting chance—and call attention to the other problems looming for Haiti. —ALEXANDER GELFAND

IT'S ABOUT THE TREES. Earthquakes aside, the greatest environmental threat to life on Haiti's side of the island of Hispaniola is deforestation. Nearly 99 percent of Haiti's trees have been lost, most of them harvested for cooking fuel. While this phenomenon has already led to the extinction of at least two species of frogs—"with trees they're happy, without trees they're gone," says Hedges—it's only the beginning.

EVERYTHING'S CONNECTED. The loss of tree cover and the resulting changes in temperature and humidity will ultimately kill off many other animals and make life even harder for the Haitian people, Hedges says. Without trees to hold the soil together and help regulate the distribution of rainwater, earthquakes and hurricanes become even more dangerous, and water shortages become more acute.

BE FRUITFUL AND MULTIPLY. Hedges and Carlos Martinez, the zoo's amphibian conservation biologist, have brought 10 critically endangered species of frogs back from Haiti's remote Pic Macaya National Park, with help from the Audubon Society of Haiti. Though relatively few in number, frogs from three of the species have already begun breeding, providing some hope that even if they disappear in Haiti, they will not vanish entirely from Earth—and might one day be returned to reforested regions back home.

STAY COOL. As a "last-ditch insurance policy," Hedges has also collected tissue samples from each species and preserved them in liquid nitrogen. If the frogs die out both in Haiti and at the zoo, their frozen cells can be thawed and might one day be used to produce clones that can then be reintroduced into the wild, Hedges explains—"like Jurassic Park."

FROM TOP: JESSICA KNUTH; VENKATESH KRISHNAN/THE DAILY COLLEGIAN

Clean Sweep

NO, THIS ISN'T A DRILL IN CASE SOMEONE (we're looking at you, **Sue Pohland Paterno '62 Lib**) decides to fire up the fan base by pouring paint over the Nittany Lion Shrine. It's the culmination of GEOSCI 498, Health and Safety for Hazardous Waste Operations.

Students study everything from the chemistry of toxic agents to proper use of a self-contained breathing apparatus, then participate in the "whole dress out," which drives home the difficulty of talking while encased in a protective suit, and handling tools with two layers of heavy gloves. The shrine just makes for a convenient—and attention-getting—simulated waste site. —LS

