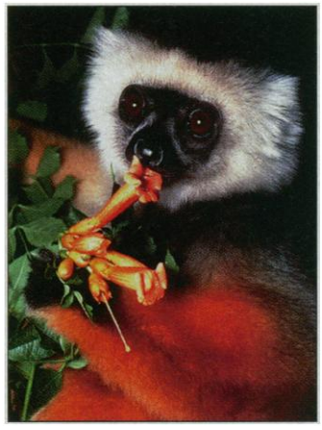
Where Art Thou, Juliet?

Next time you need to capture a rare lemur, try the sacred rum. It worked for Kenneth Glander, anyway. Earlier this month, Glander's team at the Duke University Primate Center captured two diademed sifakas in a forest in eastern Madagascar, with the hope of uniting one—a female—with the lone member of the species in captivity outside the island nation. But the potential mates may be star-crossed, indeed.

Found only on Madagascar and the nearby Comoro Islands, lemurs are diminutive, mostly tree-dwelling prosimians or "submonkeys" that over 50 million years of isolation from the rest of the world have branched into nearly 50 species. About the size of a housecat, the diademed sifaka (*Propithecus diadema diadema*) is the largest living lemur and is listed as threatened by the World Conservation Union as habitats are cut down for firewood or lost to farming.



Romeo waits for love.

In 1993, Duke scientists captured three diademed sifakas and brought them to North Carolina; two soon died, one it appears from the effects of a diet too rich in calcium. Subsequent forays to find a mate for the survivor, named Romeo, failed. This time the Duke researchers sought divine intervention. On the first morning of the search, the team's Malagasy guide "asked the gods to bless our rescue mission," a ceremony involving chanting and a bamboo tube filled with rum, Glander reports from Madagascar.

Lo and behold, after 2 days of wandering in the woods, the researchers spotted a female and a young male companion. Four hours later, both were tranquilized and placed in protective custody. Their acquisition could be a boon to science, says Deborah Overdorff, a lemur expert at the University of Texas, Austin. Watching the poorly understood sifakas in captivity should give insights into their behavior, reproductive physiology, and infant development, as well as ensure preservation of the gene pool, she says.

But it's unclear whether Romeo has finally found his Juliet. The two new captives have darker coloring than Romeo's and white rings around the eyes—features that suggest to Glander that they may belong to a previously unknown subspecies. DNA testing in the coming months will seek to resolve that question.

Harnessing the Seminal Vesicle

The testes may be fertile grounds for drug companies looking for better ways to make certain human proteins. Male pigs—and their semen—could prove to be potent drug factories, scientists say.

Female cows and sheep equipped with foreign genes are already producing blood-clotting factors and other drugs for humans in their milk. Now molecular geneticist François Pothier and his colleagues at the University of Laval in Quebec argue that seminal vesicles are just as adept as mammary glands are at churning out useful proteins.

The scientists tested the idea in mice by inserting the gene for human growth hormone alongside the P12 gene promoter—a DNA sequence that instructs mice to produce particular proteins in their semen. Sure enough, semen of the mature mice contained the human hormone, the researchers report in the November issue of *Nature Biotechnology*. Now, they plan to test the concept with boars, which make the largest volume of seminal fluid of any species of domestic livestock. They can produce 200 to 300 ml of semen several times a week.

Although it would take 200 pigs to produce as much hormone as a single cow can produce, semen may have an edge over milk in some ways, says Pothier: The seminal vesicle is less likely to "leak" protein into the bloodstream, and it's easier to extract protein from semen than from milk. Indeed, proteins from pig semen might well have some "unique applications," says Henryk Lubon of the American Red Cross's plasma derivatives laboratory in Rockville, Maryland. Pigs are closer to humans genetically than are cows, he notes, and human proteins might be less likely to suffer alterations in pig fluids.

Chilly Climate for Deep Thought

"What reveals the limitations of current practices in higher education is the evidently superior performance of small, liberal arts colleges in producing the faculties of our research universities. [T]he large research university does not succeed to the same degree at reproducing the culture of inquiry that leads to careers in scholarship."

—Michigan State University political scientist W. B. Allen, former director of the Council of Higher Education for Virginia, on "The Trouble in Higher Education," a 20 October talk at the American Enterprise Institute in Washington, D.C.

Medicine Men (and Women)

The Institute of Medicine announced the election of 55 new members on 11 October, swelling the honor roll to 588. For names, go to www.nas.edu.

NSF at 50

The National Science Foundation last week kicked off a yearlong celebration of its half-century in existence in 2000 by giving retired chemistry professor Samuel Massie its Distinguished Public Service Award. Massie, 80, has had a pathbreaking career that includes working on the Manhattan Project and being the first African-American professor at the U.S. Naval Academy, where he taught for 27 years. Named last year as one of history's 75 most distinguished chemists by *Chemical & Engineering News* for his research and mentoring, Massie told an appreciative NSF audience that "there were only three blacks chosen, and the other two aren't around anymore."

Massie.

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