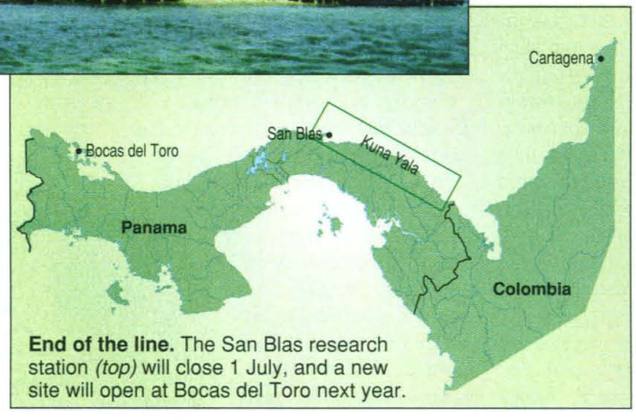
CORAL REEF MONITORING

Smithsonian Field Station Gets the Boot

After 21 years of hosting studies of Caribbean coral reef ecology on the coast of Panama, the San Blas research station, a satellite facility of the Smithsonian Tropical Research Institute (STRI), will close on 1 July. The reason, Smithsonian officials admit, is that they failed to recognize and allay suspicions about the station's activities among local Kuna Indians, who voted last fall to end the institution's $3000-a-month lease.

SMITHSONIAN INSTITUTION



End of the line. The San Blas research station *(top)* will close 1 July, and a new site will open at Bocas del Toro next year.

A new monitoring station will eventually open some 500 kilometers to the west, but several long-term reef monitoring projects will end, including one that uses San Blas data as a baseline for the entire Caribbean. "This is really a shame. San Blas has become an important reference for many other reef studies in the Caribbean," says reef ecologist Nancy Knowlton, a senior scientist at STRI and a professor at the Scripps Institution of Oceanography in La Jolla, California.

The closure took Smithsonian officials by surprise. "We probably didn't do enough preparatory work educating the Kuna people at large about what we do at San Blas," concedes Ira Rubinoff, director of STRI, whose main facility in Panama City and a half-dozen other research stations are not affected. "We had been assured by the Kuna *cacique*, or chiefs, that [renewal of the lease] was a done deal, so we didn't even go to the Kuna Congress in May 1997 at which the vote was taken."

That may have been the fatal mistake. The Kuna Yala, the 160-kilometer-long autonomous area owned by the Kuna along the Atlantic Coast of Panama near the Colombian border (see map), is run as a well-organized democracy. Although older Indians and those who live near the research station approved the Smithsonian as a good neighbor, younger Kuna and those from farther away were suspicious, says Adrian Cerezo, a Smithsonian anthropologist working at STRI when the Indians voted on the lease renewal: "There was talk of the station being a military operation, of the scientists harvesting coral to sell, and of evil things going on in the waters where the scientists were working." When the vote came, which is done by murmuring, the nay murmurs were judged louder than the yay murmurs.

STRI officials and the Kuna leadership were stunned. Rubinoff persuaded the Kuna to revisit the lease issue at another Congress in November, and the station embarked on a widespread educational effort. But it was too late, says Rubinoff, who attended this second meeting. Once again, the nays murmured louder.

As a result, scientists will no longer be able to dive from San Blas to inspect corals and associated reef animals, in particular sea urchins. Two decades of study by reef ecologist Harris Lessios, a senior researcher at STRI, has shown that the loss of urchins' algae-scrubbing power has serious consequences for coral, which are then smothered with algae. Monitoring studies of both urchins and other indicators of reef health on the relatively undisturbed San Blas reef have served as a baseline for studies throughout the Caribbean. "That [urchin] study will end, and that's an unfortunate loss," says Rubinoff.

But he notes that other studies can be done, albeit less conveniently, from research boats sent out from STRI's home base. And the Smithsonian plans to set up a new station at a pristine 60,000-square-meter site at Bocas del Toro, at the opposite end of Panama near the Costa Rican border. The Smithsonian has made arrangements with the Panamanian government to buy the site—avoiding any further problems with landlords.

–Joseph Alper

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INTELLECTUAL PROPERTY

Japan Law Fosters Academic Patents

TOKYO—In the late 1980s, University of Tsukuba cryogenic engineer Ryozo Yoshizaki conducted joint research with a major Japanese company on forming crystals from compounds of bismuth, then a promising high-temperature superconductor. When the work was done, Yoshizaki incorporated the findings into a paper, and the company, which Yoshizaki declined to name, took the results and filed for a patent. Yoshizaki doesn't know if the patent contributed to the company's bottom line. But he's sure that no royalties ever flowed back to the university or his lab.

Yoshizaki's experience is typical: Researchers at Japan's national universities are largely on their own when it comes to patenting, and few spend the time and money pursuing a legal claim to an invention. As a result, potentially lucrative research results are often given away or pass into the public domain, where they are of little commercial value.

But that neglect may be about to change. Earlier this month the Japanese Diet passed legislation providing monetary support and other incentives for so-called technology licensing organizations (TLO) to work with university researchers to patent and license their discoveries. Although a few TLOs already exist, the law is expected to validate the idea that private bodies—they would not be operated by universities—should play a bigger role in transferring technology from national universities and laboratories to industry. "It's an extremely good thing [for university researchers]," says Yoshizaki, who now heads the liaison office at the University of Tsukuba's Tsukuba Advanced Research Alliance. Takao Tsuruzono, an official with the Ministry of International Trade and Industry (MITI), which co-sponsored the law with the Ministry of Education, Science, Sports, and Culture (Monbusho), anticipates "a positive effect" on Japan's economy.

The new law is the latest effort to cut through the thicket of regulations and practices that stymie cooperation between academe and industry. The issue of patent rights is one particularly thorny branch. Because individual professors typically hold the right to an invention and any ensuing royalty from licenses, universities have little incentive to get involved in intellectual property issues.