

Briefings

edited by CONSTANCE HOLDEN

Fleas Turn a Deaf Ear

Ultrasonic flea collars have been touted as the safe, non-chemical answer to keeping Spot and Puff comfortably flea-free.

But it seems there's a hitch: they don't work, according to a controlled study conducted by a veterinary research team at Purdue University.

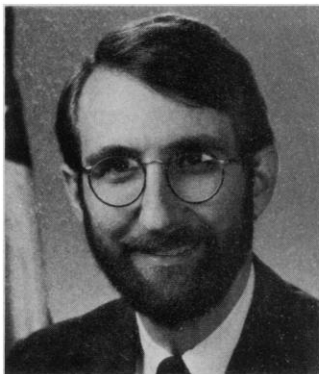
The researchers tried two brands of ultrasonic collars on five cats. Each cat was furnished with 50 fleas. After 7 days the fleas were removed and counted. An average of 98.6% of the fleas were still hanging in there.

The fleas were then put back on the animals for a week of no collars. The result was the same.

Fleas continued to feed and reproduce during the experiment. Although some insect species produce and receive acoustic signals, said the researchers, "there is no evidence that fleas can either hear or produce ultrasonic signals."

CDC Head Named

The Centers for Disease Control in Atlanta finally has a new director. He is William L. Roper, 41, a physician who apparently has the requisite scien-



White House

William Roper

tific and ideological credentials.

Roper was the head of the Health Care Financing Admin-

Moss Landing Labs Destroyed by Quake

Not all Bay Area academic centers escaped the brunt of last October's earthquake. It wiped out the entire campus of Moss Landing Marine Laboratories, disrupting the work of its 50 employees and 150 associated students. The lesson is an old one: do not build your house upon the sand.

The laboratories were on a spit of sand just a few meters from the high-tide mark of Monterey Bay. Although 50 kilometers from the epicenter, the underlying water-saturated sand and mud

liquefied and flowed from beneath the main building, stretching it more than a meter. Among other effects, the stretching and shaking opened a gaping crack right beside the desk of one startled teaching assistant.

No one was hurt and almost all the scientific materials were retrieved intact. But Moss Landing is now a shambles and the single-story main building a mass of teetering walls and shattered floors. Luckily, San Jose State University, which runs the labs, has a new building in nearby Salinas to house offices and classes. Lab space in the form of trailers will arrive later this month. Permanent rebuilding—presumably on a more stable site—will require perhaps \$8 million in federal and state funds.

History could have foretold Moss Landing's doom. The same sand spit suffered liquefaction during the great 1906 San Francisco earthquake as well as during more modest offshore quakes in 1926.

H. Gary Greene



Main Building. Total loss.

istration in the Reagan Administration and is presently a White House adviser. He replaces James O. Mason, who left CDC nearly a year ago to become assistant secretary for health and head of the Public Health Service.

Roper has a medical degree from the University of Alabama. His wife, Maryann Roper, deputy director of the National Cancer Institute, has announced she will leave that post at a date yet unspecified to join her husband in Atlanta.

Stanford News Director Resigns

A conflict over how to handle news at Stanford University has broken into the open with the resignation of Bob Beyers, who has been director of the university's News Service for 28 years.

Beyers, who has often been cited for running an outstanding operation, says he fears that Stanford's traditionally open news policy is in danger of be-

ing abandoned in favor of a safe, corporate-style PR shop. "I have been told," he wrote in a letter to Stanford president Donald Kennedy, "that the university has become a billion-dollar corporation and we at News Service should behave accordingly."

Beyers also complained that his budget had been capped and that the resources of his offices had been squandered in "administrivia" rather than "solid, trend-setting coverage."

The resignation ends several years of conflict with mid-level administrators. A report commissioned by Robert E. Freelen, vice president for public affairs, supplied the last straw. Conducted by John Burness, vice president of university relations at Cornell University, it was highly critical of Beyers' management style.

Freelen told *Science* that there were differences with Beyers relating to management and resource allocation, but that there will be "no retrenchment on policies of candor and openness that Bob established long ago."

Incredible Lightness of Gyroscopes

Have a pair of little known Japanese physicists discovered anti-gravity?

In the 18 December 1989 issue of *Physical Review Letters*, Hideo Hayasaka and Sakae Takeuchi of Tohoku University report that gyroscopes spinning clockwise seem to grow lighter in proportion to their spin rate—while the same gyroscopes spinning counterclockwise show no change whatsoever. The weight loss is roughly proportional to the mass of the gyroscope—three different rotors were used—and is independent of what the rotors are made of, the ambient magnetic field, the type of scales used, and a host of other variables.

"It's a neat experiment," says Purdue University physicist Ephraim Fischbach, who has theorized about a possible "fifth" force in nature similar to gravity. No reputable physicist wants to believe the Japanese results, he says. "There are no