

## Briefings

edited by CONSTANCE HOLDEN

### Indian Geologist Suspended

Prominent Indian geologist Viswa Jit Gupta, publicly accused 2 years ago of basing his research on spurious fossils, has been suspended from his post as professor and director of the Institute of Paleontology at Panjab University in Chandigarh.

The suspension comes almost 4 years after his chief accuser, Australian paleontologist John Talent of Macquarie University, first suspected that fossils Gupta said he had obtained in the Himalayas were actually from other parts of the world. *Nature* reported in its 21 February issue

that investigations by the Geological Survey of India and the Society for Scientific Values have concluded that Gupta's Himalayan fossils were not from the Himalayas. The Indian National Science Academy and the *Journal of the Geological Society of India* have also been looking into the matter. The *Journal* has told its readers that all the papers by Gupta that it has published over the past two decades have been called into question, according to the 9 February *New Scientist*.

The scandal broke 2 years ago when Talent went public with his charges (*Science*, 21 April 1989, p. 277). Since then, reports the *New Scientist*, he has also accused Gupta of plagiarizing other scientists' fossil photographs and drawings. Gupta has responded by threatening to sue

Talent but has yet to do so. He has declined to answer inquiries from the press on the charges, and has reportedly refused to make his collections available for independent examination. The British magazines relate that the scandal has not only damaged the university's reputation but is having repercussions throughout Indian science.

### Answer to Mad Cow Riddle?

British scientists may have identified the origin of mad cow disease. The current suspect behind bovine spongiform encephalopathy (BSE), they say, is a drop in the price of wax.

Scientists have long theorized that a change in the process for rendering sheep carcasses—

which were used to produce protein for animal feed—may have enabled the scrapie-causing organism in sheep to survive and infect cattle feed. At first they thought a shift from batch to continuous processing of carcasses was to blame: the latter uses lower temperatures and hence might permit survival of the scrapie agent.

Now, thanks to the largest study ever of Britain's rendering industry, epidemiologists at Britain's Central Veterinary Laboratory have another theory. It seems that before about 1980, renderers mixed carcasses with organic solvents to extract animal fat for tallow. But then tallow prices fell, prompting them to dispense with the solvents. Around then, BSE appeared. The link, says veterinary epidemiologist John Wilesmith, is much stronger than that between continuous processing and BSE. In Scotland, for example, where solvents continue to be used, BSE incidence is low.

The mystery behind BSE may have been solved, but that doesn't mean the scourge has ended. Last week, the first victim of BSE in France turned up in an animal imported from Britain. It is not yet known whether she had eaten the suspect feed.

### Hopes for Relic Florida Ecosystem

A unique desert ecosystem in central Florida may become the first federally designated national refuge for endangered plants.

Ornithologist John Fitzpatrick says the Fish and Wildlife Service (FWS) is gearing up to propose such a refuge on Lake Wales Ridge, a 100-mile-long ridge that contains the remnants of a 2-million-year-old ecosystem containing "one of the most ancient plant communities in the United States." Fitzpatrick is director of the Archbold Biological Station, a private institute that occupies 4800 acres south of Lake Placid.

"Everybody is paying attention to Florida now as a big [endangered] wetland system," says Fitzpatrick. But most of the state's endangered species are in small desert-like ecosystems in the high dry central uplands, 100 miles from the sea, which originated when Florida was nothing but an archipelago of sand dunes 1 to 3 million years ago. Among these species are the state's only endemic bird, the Florida scrub jay; skinks, nearly legless lizards that swim through the sand; and 1000-year-old, 4-foot-high dwarf oaks.

Threatening all these is the dizzying pace of central Florida development and especially the encroaching citrus industry. Says Fitzpatrick, "Entire self-contained ecosystems are teetering at the edge of complete annihilation."

The Archbold station has been spearheading a campaign to protect 20,000 acres—all that remains of a system originally covering 200,000—by buying up lands, now largely in private owner-

Thomas Eisner



**Central Florida.** Infrared satellite photo shows Lake Wales Ridge as white sandy strip down the center, interspersed with sinkhole lakes. Lake Okeechobee is at lower right. **Lake Placid scrub mint.** Entomologist Thomas Eisner's "focal plant" for "chemical prospecting."

ship, to form a network of scrub preserves. It has asked the state to acquire one site for \$50 million and has been raising private funds for further purchases. If the FWS will buy up 8000 acres of the "best patches," says Fitzpatrick, "we can declare a bunch of species saved," as well as "knock off a dozen" candidates for the endangered list. Designation of the refuge could also lend a boost to "chemical prospecting"—the search for useful new substances from plants and insects. Its chief advocate, Cornell entomologist Thomas Eisner, who regularly does field research in the area, recently discovered a local species of scrub mint that has the properties of a powerful insect repellent.

Archbold Biological Station

### Biomatrix Society

The union of biology with computers has been sanctified with the formation of "Biomatrix—A Society for Biological Computation and Informatics."

Based at the Santa Fe Institute in New Mexico, the society seeks the reordering of biological knowledge into more comprehensible and accessible forms by using new methods of database management, artificial intelligence, computational theory, and computer modeling.

Among the chief movers behind the new society are biophysicist Robert Morowitz of George Mason University, biologist Chris Overton of Unisys Corp., and computer scientists Peter Karp of SRI International and Larry Hunter of the Na-