

edited by RICHARD STONE

Zoology Society Struggles to Survive

The new year has ushered in a challenge for the American Society of Zoologists (ASZ): It must reduce a huge deficit by increasing fees—without losing members.

For months, officers of the ASZ, a 103-year-old organization now devoted to integrative and comparative biology, have been trying to correct shoddy management practices that led to a \$300,000 debt and brought the Internal Revenue Service down on its neck. To cope with its new burdens, the ASZ officers fired all five of the society's employees in

the Thousand Oaks, California, office last spring and handed over management to a firm in Chicago. Now, to reduce the debt, the ASZ plans to assess each full member \$200 later this year, says ASZ president Peter Marler, a UC Davis zoologist.

ASZ officers blame the debt on several mistakes. "We'd developed champagne tastes on a beer budget," says past president David Wake of UC Berkeley's Museum of Vertebrate Zoology. Specifically, he says, ASZ's annual meetings had become "events" that failed to pay for themselves. In addition, he

says, the society's office was "shockingly behind the times," with employees having to hand-sort thousands of membership cards for mailings.

With an assessment looming, "there's a deep concern we may lose members," Marler says. In an attempt to prevent a stampede, ASZ is enlarging the scope of its mission. This year it hopes to increase the frequency of its journal, *American Zoologist*, from four to six times a year, and, says Marler, it might launch a new journal for integrative and comparative biology modeled after *Trends in Neurosciences*.



Sandoz Adds Brainchild to Brood

Like a baseball team building a formidable farm system, Swiss pharmaceutical giant Sandoz Pharma is assembling a heavy-duty network of basic biomedical research centers that it hopes will serve as a pipeline for hot candidate drugs. After pledging in the last 2 years to invest more than \$1 billion over the next decade in a pair of independent institutes, Sandoz was expected to announce this week that it will spend another \$75 million at The Neurosciences Institute in La Jolla.

Sandoz began building its network in 1991, when it invested \$100 million in research at Harvard's Dana-Farber Cancer Institute. Then last month, Sandoz signed a billion-dollar contract to fund biochemistry and other biomedical research at the Scripps Research Institute in La Jolla. Now comes the neuroscience deal. "Their research investment is coming to a head," quips Nobel Prize-winner Gerry Edelman, an immunologist who heads the Neurosciences Institute.

Starting this month, Sandoz will provide \$75 million over a 14-year period to the non-profit institute. Edelman says Neurosciences plans to spend much of the money on computer modeling—to study, for example, how groups of cells are organized to function in the brain and in the

endocrine system. "It's not a very big step to imagine using [modeling] to test a drug's effects on, say, tissue function," he says.

What does Sandoz get for all of this? The first crack at licensing any Neurosciences Institute research—and another toehold in U.S. biomedical research.

DOE Sets Sights on Exotic Isotopes

To investigate some exotic phenomena—such as deformed atomic nuclei and the mechanisms of proton burning in neutron stars—the Department of Energy (DOE) is assembling a new tool in one of its laboratories. Over the next 2 years, DOE intends to spend \$2.4 million to modify a particle accelerator in Tennessee to produce radioactive ion beams, which will smash into target materials and yield isotopes that are unnaturally rich in protons.

Few facilities worldwide produce such beams, though physicists are increasingly interested in them. One objective is to test the "Standard Model"—equations that tie together the forces of nature. And the plan has a good pedigree: U.S. advisory panels have recommended that the government build a billion-dollar facility devoted to radioactive beams later this decade.

But until funding for a big project becomes available, physicists will have to improvise. At Oak Ridge National Laboratory they have begun to upgrade the world's largest electrostatic accelerator to enable it to produce about 200 new proton-rich isotopes, says Jerry Garrett, an Oak Ridge physicist. The lab is building a high-voltage platform that will inject radioactive ions into the existing beam line, using technology developed at Europe's CERN accelerator. By 1995, Garrett says, the project should be complete and ready to run.



Tall order. DOE is upgrading an accelerator to produce radioactive ion beams.

Landsat Program Faces Moment of Truth

Officials at the National Aeronautics and Space Administration (NASA) who are trying to keep the 20-year-old Landsat satellite program alive are caught between a rock—the Department of Defense (DOD)—and a hard place—Congress. The NASA-DOD program is threatened because DOD officials must cancel their \$80 million contribution toward Landsat 7 if NASA fails to ante up its \$25 million share by 1 May. NASA, meanwhile, is having problems scraping up the cash because Congress underfunded its 1993 budget request for Landsat by \$15 million and now is interfering with NASA's attempts to make up the difference.

Climate scientists argue that Landsat 7, which would be the latest in a series of remote-sensing satellites, is vital for understanding global climate change. According to a NASA official, work on the satellite must continue uninterrupted if it's to be launched by 1998. A delay might leave gaps in the program's data collection, because Landsat 6, scheduled for launch this summer, is expected to function only until 1998.

After Congress triggered Landsat's budget crisis last fall, NASA officials attempted to make up the \$15 million shortfall by raiding the agency's Earth Sciences Research and Analysis program. But last month, appropriations subcommittees that oversee NASA sent a joint letter to NASA administrator Daniel Goldin, directing him to transfer the money to a different program—the Upper Atmosphere Research Satellite (UARS)—which also suffered cuts. Congressional staffers say the subcommittee didn't want to fund a new satellite—Landsat 7—when UARS, an operating satellite, lacked money for data analysis.

That still leaves NASA officials with the task of finding money for Landsat 7 by May. They're mum on what program they might raid next, and one official told *Science* that Goldin may soon have to choose a new victim.