

Briefings

edited by CONSTANCE HOLDEN

Population Is Environmental

Environmental groups now appear to be making serious efforts to get world population back on the environmental agenda—after 15 years of avoiding the issue as a political hot potato.

Population growth was a big issue in the early days of the environmental movement, but fear of alienating people in developing countries and fierce opposition to family planning by the American right-to-life movement caused activists to shy away from the issue. Population activists say they even had to pressure organizers of this year's Earth Day to get them to mention population in their literature.

In recent years, the Audubon Society has been the only major environmental group that has had a population program. But in January, the Sierra Club hired former marine activist Nancy Wallace as its first full-time population lobbyist. "We have reached the limit of what we can do in dealing with other parts of the environment," says Wallace. Barbara Bramble of the National Wildlife Federation says her group is now looking for money to hire a population person. And the board of the Natural Resources Defense Council has voted, for the first time, to list world population stabilization among its priorities.

Audubon is now organizing a coalition of groups to lobby for increased appropriations for the Agency for International Development's population program. The goal is to more than double the budget, from about \$220 million to \$500 million a year. As part of this push, Audubon's Patricia Baldi is seeking private funding to help form a network of population lobbyists within environmental groups.



Patricia Baldi. Audubon leading the way on population among environmental groups.

Despite continuing resistance by right-to-life groups and from within the Administration, observers believe the political climate is becoming more receptive to such initiatives. And the link between global warming and human activity is helping focus some attention on population growth. Two global warming bills now pending in Congress—introduced by Representative Claudine Schneider (R-RI) and Senator Timothy Wirth (D-CO)—both contain provisions on global population stabilization.

Faculty Salaries Flat

Faculty salaries have stayed almost stagnant over the past 2 years, according to a survey by the American Association of University Professors (AAUP).^{*} Average salaries increased by 6.1%, slightly more than last year's 5.8% increase. But when adjusted for 4.9% inflation, the real increase is the same as last year, or 1.1%.

Data collected from more than 2100 colleges and universities show that the average salary for full professors is \$53,540. Associate professors average \$39,590, assistant professors \$32,970, and instructors \$24,890. Faculty at doctorate-granting private institutions fared best compared with last year. Institutions in the Pacific region offer the highest salaries—\$58,250 for the average full professor.

Gender imbalances are still pronounced: 72.6% of all full-

time faculty are men; 19.9% of women faculty members are professors compared with 53.6% of the men. Male full professors at research institutions earn nearly \$8100 a year more than their female counterparts.

The AAUP report says 10.2% of the 1988–89 faculty left their institutions the following year. "If this continues, institutions will face the equivalent of an entirely new faculty every 10 years."

Alaska OK's Oil Cleanup Chemical

As cleanup crews officially went back to the shores of Prince William Sound last week, Alaska conditionally approved the use of Inipol to help remove what remains of the Exxon-Valdez oil spill. Inipol, a chemical fertilizer, stimulates the growth of oil-eating bacteria when sprayed on oily shores. The state's Department of Environmental Conservation has been reluctant to use it because of its toxicity to small organisms, although Exxon

^{*}AAUP Report on the Economic Status of the Professions, available for \$30 from the AAUP, Suite 500, 1012 14th Street, NW, Washington, D.C. 20005.

Einstein Collection Available

Need to beef up your Einstein library? A private collection of memorabilia on Albert Einstein is now available for sale by a Baltimore rare book dealer. It was amassed over the past 15 years by plastic surgeon Manny H. Moser of Shillington, Pennsylvania, an amateur physicist and author of a book on relativity theory. It includes photographs, letters, first printings of books and papers, and an autographed manuscript of one of Einstein's five major papers on unified field theory.

Described by Stephan Loewentheil, owner of The 19th Century Shop, as "the finest private collection in the world of Einstein material in terms of scope," it is valued in excess of \$500,000. Moser is



Einstein on the beach, winter of '33.

interested in selling the collection now, says Loewentheil, because he has gone about as far as he can with it and "it's time for a change."

The last big sale of Einstein

material occurred 2 years ago when the original manuscript of the theory of relativity was auctioned at Sotheby's to an anonymous buyer for \$1 million.

found it safe and effective in a test conducted last summer with the Environmental Protection Agency on 70 miles of beach (*Science*, 30 March, p. 1537).

The state is proceeding with extreme caution, allowing application of Inipol on only 30 miles of beaches, which will be comprehensively monitored. Field monitors are to keep the area free of wildlife by various means such as cannons, plastic owls, and alarms. If Inipol's efficacy has not been demonstrated within 6 weeks, officials won't approve its reapplication.

Physics Panel Sets Priorities for 1990s

What's the number one priority of high-energy physicists for the 1990s? What else but the Superconducting Super Collider (SSC). Number two: upgrade Fermi National Accelerator Laboratory's proton-proton Tevatron collider to enable U.S. physicists to hunt down the elusive Top Quark.

Once those are taken care of there's likely to be no room in the budget for any more major facilities, says the Department of Energy's High Energy Physics Advisory Panel, in a report ranking research goals for the '90s in light of a static budget outlook. The panel says fuller use should be made of existing facilities and more support should go to university-based researchers.

The panel declined to endorse construction of an electron-positron storage ring that is much sought after by particle physicists. Both the Stanford Linear Accelerator Center and Cornell University are competing for the 10-billion electron volt facility that would produce B-mesons to search for violations in the symmetry of weak force interactions. The report, which will be available from the DOE next month, said construction of the machine should await more R&D as well as more money.

Rat Fluoride Study "Equivocal"

Sodium fluoride, the chemical that's added to drinking water to prevent tooth decay, got a mixed review from the National Toxicology Program in a long-awaited report issued on 26 April. The conclusion—that male rats in the study were prone to higher rates of cancer—is of keen interest to anti-fluoride crusaders and to the experts who are supposed to tell the federal government what this news means for public policy.

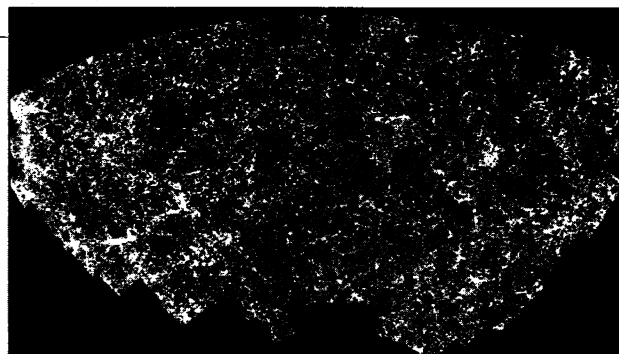
Interpreting the data will be tricky because the evidence is "equivocal," according to NTP. Female rats and mice of both sexes showed no excess cancers. Male rats who received the highest doses of fluoride (100 and 175 parts per million) showed a slight increase in bone cancers when examined after 2 years. But NTP director David Rall said the male rat results could have been produced by chance.

Now that the NTP's lab work is done, the implications will be scrutinized by another federal panel—this one headed by Frank Young, deputy assistant secretary of Health and Human Services for health science and the environment. He and 20 independent advisers will examine the risks and benefits of fluoridated drinking water and report back in July.

NIH: New Rumor List

A new list of people alleged to be on the short list for the NIH director's job circulated around Washington this week as thousands of biomedical scientists gathered for the annual clinical research meetings.

Those in the know say that the names that reportedly have been sent to Health and Human Services Secretary Louis Sullivan by the search committee include Yale medical dean Leon Rosenberg; Dominick



Department of Astrophysics, University of Oxford

View of a "Clumpy" Universe. Astronomers at Oxford University last month completed a 7-year survey of the galaxies, the largest one ever undertaken. It is the first one detailed enough to confirm the immense size of the long, thin, curving "sheets" of galaxies in space that are separated by voids. The survey covers 2 million galaxies in an area covering 10% of the sky. They are up to 2 billion light-years from Earth, existing in clumps on the order of 150 million light-years across. Oxford investigator Steve Maddox says this survey "is the first reliable confirmation that the distribution of galaxies in the universe becomes uniform on large scales."

Purpura, dean of Einstein; Institute of Medicine president Samuel O. Thier; and Washington University chancellor William Danforth, who rebuffed a previous effort to get him to take the job when a White House staffer said the appointment would be contingent on a firm anti-abortion stance. It is not clear whether any of them would accept the job if offered.

Superconductivity: Japan Versus U.S.

When high-temperature superconducting materials were discovered in 1986, the U.S. government responded admirably, says a new report by the Office of Technology Assessment (OTA). From 1987 to 1990 the feds boosted funding for superconductivity research to \$130 million, and now a 10% increase is planned.

But, says OTA, private industry has not responded so well. OTA surveys in the United States and Japan show that Japanese firms are investing 50% more than American ones (about \$107 million versus \$73 million) on commercial applications of superconductivity, such as superconducting thin films and magnet technologies.

Furthermore, in Japan, 20 companies are spending more than \$1 million apiece on this kind of R&D, compared with only 14 U.S. companies. A big difference in expectations appeared as well: Japanese firms anticipated that their first commercial product would hit the market (on average) in 2000, while U.S. firms predicted quick payoffs by 1992. The OTA reads this as a sign that the Japanese are making long-term investments while U.S. companies are trimming and hedging.

The congressmen who released the OTA report—Representatives Robert Torricelli (D-NJ), Dave McCurdy (D-OK), and Tom Lewis (R-FL)—questioned whether U.S. business leaders even understand the nature of the competition. "This is not a sprint," said McCurdy, "it's a marathon." Torricelli added, "You can't win the game if you don't understand the rules." All were critical of the Bush Administration's leadership. Citing recent decisions to play down the role of the Defense Advanced Projects Research Agency as an industrial research leader, McCurdy said he fears the "Detroit syndrome" now prevails in DARPA—an attitude that promotes "loyalty over excellence."