SCIENCESCOPE

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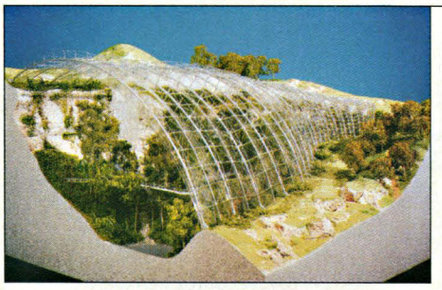

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Biosphere Europe? Eden Project would house plant populations from around the world.

Brits Propose World's Largest Greenhouse

The rocky fortunes of the glassed-in Arizona ecology project known as Biosphere 2 might seem to deter similar schemes, but that isn't stopping a British duo from dreaming up a greenhouse that would dwarf Biosphere in size.

This week in London, entrepreneur Tim Smit and architect Jonathan Ball announced they have applied for £40 million ($60 million) in start-up funds from the U.K.'s Millennium Commission, which is disbursing £350 million in National Lottery profits for projects to mark the year 2000. The team's £83 million Eden Project centers on an 8-hectare (20-acre) steel-arched, transparent plastic structure to be built over an old clay pit in Cornwall, where it would serve as both tourist attraction and scientific lab. Biosphere 2, still fighting an image problem (see p. 451), covers just 1.3 hectares.

A series of linked, climate-controlled capsules stretching for 1 kilometer would snake around the site, enclosing 3.6 hectares of tropical rain forest—including a 40-meter waterfall—and smaller desert and subtropical zones. In addition to educating the public, says project trustee Ralph Riley, a Fellow of the Royal Society and former chief of the U.K.'s Agricultural and Food Research Council, the project would provide a research facility of "model systems with which we can interfere on an experimental basis." Topics pursued by visiting scientists might include habitat and plant species conservation, and sustainable agriculture.

Sir Ghillean Prance, director of London's Kew Gardens, says the Eden Project has "terrific potential for scientific research." The Millennium Commission is to complete initial screening of proposals by early March. If successful, Eden's planners hope to raise more funds from local government and private sources.

NASA Shifts Augur Changes

Top management changes are under way at the National Aeronautics and Space Administration headquarters in Washington, D.C., and at two big NASA centers. Ken Munechika, director of Ames Research Center in Mountain View, California, is being shuffled in March to head nearby Moffett Federal Airfield. Munechika lost his political patron last year when Rep. Norm Mineta (D–CA) stepped down. Agency sources say Mineta's departure cleared the way for NASA chief Daniel Goldin to put in someone willing to cut costs more aggressively. That person is Henry McDonald, a Penn State expert in information technologies—the area Goldin wants Ames to emphasize.

Meanwhile, Wayne Littles, who heads NASA's space flight office, will take over next week as director of Marshall Space Flight Center in Huntsville, Alabama. Sources say Goldin wants Littles to focus the center's research on propulsion and cut back work such as microgravity science. He replaces Porter Bridwell, who is retiring, while Wilbur Trafton, now in charge of the space station, will become acting chief of space flight.

Returning to academia after 2 years in Washington is Charles Kennel, chief of NASA's Mission to Planet Earth. In May Kennel will become vice chancellor of the University of California, Los Angeles. At NASA, he has struggled to keep the controversial Earth Observing System on track amid technical and political problems.

Germans Reject U.S. Reactor Plan, Fueling Nuclear Worries

Munich's Technical University (TU) is likely to go forward this spring with construction of a new research reactor powered by weapons-grade highly enriched uranium, after a U.S. delegation failed last week to get the Germans to redesign the fuel system as a precaution against possible illicit use of HEU.

The United States has been trying to persuade Germany to change the design of the $520 million FRM-II neutron source, to be built in Garching, to run on low-enriched uranium (LEU) (*Science*, 4 August, 1995, p. 628). The U.S. effort is part of a global program to convert HEU-fueled reactors to LEU fuel. At last week's meeting in Bavaria, U.S. nonproliferation officials argued that the German plan could hurt the conversion program, and Argonne National Laboratory physicists circulated a modified reactor design and a study asserting that it is "feasible to use LEU fuel in the FRM-II without compromising safety or performance."

But TU scientists and German officials were unconvinced. TU President Wolfgang A. Herrmann said that the FRM-II would continue as planned because a redesign would cause delays and "LEU fuel is insufficient for our project." "The problem remains that any redesign to use [LEU] fuel would cause scientific disadvantages for our neutron source," TU physicist Wolfgang Gläser told *Science*.

The Germans agreed to continue a dialogue with U.S. experts, and to consider using LEU fuel later if research improves its capabilities. But disappointed U.S. officials say they expect FRM-II construction to begin according to current plans once TU receives initial licensing from Bavaria—probably this spring.

Crozemarie Quits

Jacques Crozemarie, president of France's single largest funder of cancer research, the Association for Cancer Research (ARC), resigned last week. Although some members of the ARC's board had urged Crozemarie to quit after an auditing court accused ARC of financial mismanagement (*Science*, 12 January, p. 140), he had resisted stepping down.

Two new developments seem to have changed his mind: The state's decision to open a criminal investigation into the mismanagement charges, and newspaper articles claiming Crozemarie received more than $300,000 in "honoraria" from a U.S.-based firm linked to ARC suppliers between 1990 and 1993. Crozemarie has denied that this money had anything to do with the ARC. As *Science* goes to press, a 25 January ARC board meeting is expected to focus on whether the organization should continue.

Joining the Roundtable

The Government-University-Industry Research Roundtable (GUIRR) tries to find common ground among leaders of those three communities. So who better to head the 12-year-old program, run by the National Academy of Sciences, than a former IBM physicist and congressional aide who has spent the past decade as a college dean?

Thomas Moss, who this week was named GUIRR's executive director, says he hopes his broad experience will be useful in the current debate about the future of U.S. science. "We need to rethink everything," Moss says–"why we do it, who participates, and how to sell it to the public."

Moss, 56, is no stranger to Washington, having served as an aide to the House science committee before going to Case Western Reserve University, where he is dean of graduate studies. He has also worked closely with GUIRR's chair, former Ohio governor Richard Celeste, who created the state's Edison technology program. Moss's plans for GUIRR include a national symposium on "why we spend money on R&D and on training scientists."