

SCIENCE SCOPE

Sink Hole Could Allow Climate Pact

And you thought last month's agreement in Kyoto to curb greenhouse gas emissions was contentious. This year, scientists must



THOMAS FLETCHER/PNI

Europe's Stern Test for

New York City—not much to go on. It's also unclear how much carbon gets absorbed by different forest types—say, a replanted forest versus a virgin one.

Given the uncertainties, the Intergovernmental Panel on Climate Change—the Kyoto pact's scientific panel—will be hard pressed to come up with credible estimates before the November deadline. As Princeton University's Daniel Kammen points out, "There is still a lot of basic ecosystem science to be done."

This year could mark a watershed for genetically altered crops in Europe. Although biotech

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**HOT
ISSUES
1998**

genetically modified foods from the United States—particularly tomatoes and soybeans—in prod-

in Europe in 1991, advocacy groups to call such foods. Groups in ends of the Earth are foreign genes in the might spread to wild farm the nutrition of Some companies have untarntly started label others are resisting. groups are also de-

moratorium on trials of crops until government officials can look more closely at the environmental risks—such as the possibility that many trials have already been carried out across Europe—officials are now preparing a new policy statement on a new food agency that will tighten rules for licenses.

The new agency may genetically modified

either to ban deliberate
bioengineered crops.

Tobacco Deal To Boost R&D?

Biomedical scientists may end up with a windfall this year



Banner Year for Science on Capitol Hill?

The favorite of medical jobbies—more than 160 of which have endorsed it—is a bill from Connie Mack (R-FL) and Tom Harkin (D-IA) calling for \$100 billion trust funded from settlement cash. NIH would decide how to spend the money.

Thanks to the proposed settlement between tobacco firms and the government. The \$368.5 billion agreement will go into effect only after Congress passes a law to codify it. Four Senate bills introduced so far—some with matching House bills—would set up a trust fund for biomedical research. All approach the matter differently: John McCain's (R-AZ) bill would set aside \$67.5 billion over 25 years in part for research on helping tobacco users quit, while a plan from Orrin Hatch (R-UT) would collect higher punitive damages from companies to endow a \$95 billion trust for the National Institutes of Health (NIH). And Edward Kennedy (D-MA) wants to raise cigarette taxes by \$1.50 a pack for a fund to be spent partly on child

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■ **2000 census.** Congress has agreed to let the Census Bureau use sampling to increase accuracy in a pilot run, but most Republicans are still hoping to block use of the technique in 2000; they prefer a head count, which is likely to miss more inner-city residents.

■ **NASA squeeze.** A declining budget and soaring space station costs will tempt space agency managers to cut back on science programs. Congress is likely to veto that approach.

■ **Regulatory reform.** A moderate Senate bill requiring cost-benefit analyses of environmental rules and more rigorous risk assessments stands a chance at passage, unlike a host of other recent proposals.

■ **National math tests.** The White House won approval to keep developing the voluntary test for eighth graders, but a 1998 funding bill gives congressional critics another shot at the issue before kids get tested.

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Congress are:
institutes of Health, the National Science Foundation, NASA, and other R&D agencies. Also expected to trigger action—or at least brawls—in the coming year in

symbolic, aides say congressional budget panels are preparing to back up the rhetoric with dollars. Look for Congress to bump up the White House's proposed 1999 budgets—due out next month—for the National

couraging. Representative Joe Kennedy (D-MA) intends to introduce legislation this month urging the government to double civilian R&D spending over a decade—similar to a bill introduced last fall by Senator Phil Gramm (R-TX). While those measures are purely

As the once-unthinkable—a federal budget surplus—now appears possible, R&D advocates are hoping Congress won't forget them this year. The signs are en-

But like trying to track the flow of Mob money, accounting for the world's carbon will require advanced investigations into the shadowy activities of nonhuman life-forms and processes. For one thing, climate scientists are still stymied by the "missing sink"—the unidentified biological system that appears to absorb up to 4 billion tons of CO₂ each year. The sink "might be in the ocean, but it is and soils.

The answer—due by a follow-up meeting in November in Buenos Aires—is crucial because the treaty allows industrialized nations to offset their greenhouse emissions by planting carbon-sequestering trees, but also penalizes them for logging or other practices that release carbon into the atmosphere. So scientists need to come up with a way to accurately account for the amount of carbon stored by different kinds of natural sinks, including forests, wetlands,

sort out the pact's devilish details, starting with a major question: Where is the natural "sink" that absorbs up to half the heat-trapping carbon dioxide (CO₂)

Details, details. Treaty calls for tracking carbon sinks, like forests.