

search, says Draggan, will be to develop better indicators of ecological change or improve current indicators such as crown dieback in forests, species abundance in lakes, or songbird diversity. That's good news, says Fisher: "Some of these things we have thought of as good indicators, such as the nutrient value of tree foliage, have proven to

be poor indicators of long-term trends."

Huggett and other EPA officials are still working out the details of the revised program, which they hope SAB will approve for implementation in the fall. In the meantime, other environmental officials think Huggett is the right man for the job. "Bob is very open to the sorts of changes [needed] to make

EMAP a much more valuable program," says Robert Watson, associate director for the environment in the White House Office of Science and Technology Policy. And even EMAP's sharpest critics are pulling for it to succeed. "EMAP is a program that in the future we'll be really glad we have," says Fisher.

—Richard Stone

SCIENCE IN CHINA

Leaders Pledge More for Shrinking Pool

BEIJING—China's largest national science conference in 17 years ended here last week with senior officials vowing to triple within 5 years the slice of the economic pie spent on research but, in the meantime, support fewer scientists. The apparent contradiction reflects tensions between policies that emphasize the importance of science and technology to a growing economy and those aimed at weaning scientists from a guaranteed source of public funds.

Virtually all of China's top-ranking leaders, including President Jiang Zemin and Prime Minister Li Peng, attended the 5-day National Science and Technology Conference, which ended on 30 May. The conference, which received extensive coverage in government-run media outlets, was organized jointly by the government and the Communist Party, and many of the speeches were devoted to ideological theorizing.

Buried in the oft-repeated rhetoric about science as "the primary productive force of a socialist economy," however, were several

concrete proposals. The most welcome was a pledge to triple overall R&D funding to 1.5% of the gross domestic product (GDP) by the year 2000. Science's share of GDP has remained flat for the past decade.

China's top science official, State Science and Technology Commission Chair Song Jian, promised to put more money into new research centers, upgrade scientific equipment, and improve working conditions for researchers. The government spent \$275 million last year on research, a 13% increase over 1993, after an increase of less than 1% in real terms in the previous year.

One detail that has raised eyebrows is Song's promise that the government will maintain "a first-class contingent of 100,000 scientists and researchers." Song said this figure represents about 10% of the country's R&D work force, and that "it is quite proper for China to maintain a research contingent [of that size] during the next decade for major fields of basic and high-tech research." However, as recently as last year, Chinese policy-

makers said they planned to continue funding one in three scientists now on the government payroll, in particular those doing long-term, fundamental research. The remaining two thirds are expected to pursue applied research with funding from outside sources.

A Beijing biologist who attended the conference said Song's remarks appear to mark a retreat from the earlier goal. At the same time, the scientist noted that the number of basic researchers at government-run institutes has been declining steadily as a result of budget cuts. Others have estimated that less than 10% of the staff at some research institutes is engaged in productive science.

Chinese researchers have nevertheless welcomed the kind words offered at the conference, saying that such high-level expression of concern for science is useful in its own right. But they remain skeptical that the lofty commitments will be met, especially as the rhetoric was not accompanied by any specific spending proposals.

—Ted Plafker

Ted Plafker is a free-lance writer in Beijing.

U.S. CONGRESS

Gingrich Urges Panels to Spare Science



On 23 May, shortly after the House passed a budget resolution that would reduce government support for basic research and slash spending on applied science (*Science*, 26 May, p. 1120), House Speaker Newt Gingrich (R-GA) privately delivered a surprising message to a handful of key legislators: Don't pull the purse strings too tight on federal research programs. Gingrich, along with House Science Committee Chair Robert Walker (R-PA), met with the heads of the five House Appropriations subcommittees that oversee most civilian science programs to urge them not to sacrifice science to pay for other programs.

The appropriations subcommittees will be the prime focus of the budget battles over the next several weeks as they set funding for each agency within a shrinking federal budget. Gingrich's unusual intervention is being interpreted as an effort to ensure that basic research gets a high priority in the com-

mittees' deliberations; some participants in the meeting are even interpreting it as a signal that appropriators should treat research more favorably than it was treated in the budget resolution, which is not binding on appropriators.

"Gingrich was concerned there was the mistaken impression that science was not a priority, and that it was okay to go ahead and cut it," says an aide to Walker, who was instrumental in formulating the science portion of the budget resolution and helped to arrange the meeting. Other staffers said Gingrich was upset with press reports that the cuts proposed in the House budget resolution would hit science hard, and he did not want the Republican party to be accused of devaluing research.

But some appropriators say Gingrich had more than spin control in mind. "The speaker did not criticize the budgeteers per se, but he did clearly imply that his relative priorities are different from those of the Budget Committee," says Representative Jerry

Lewis (R-CA), who chairs the panel that oversees space and environmental programs and the National Science Foundation. Gingrich did not go into program specifics, Lewis told *Science*, but "he wants us to do what we can to see they stay healthy."

The speaker also made his case to John Myers (R-IN), who oversees energy efforts; John Porter (R-IL), an advocate of the biomedical programs under his purview; Ralph Regula (R-OH), who oversees the Interior Department; and Harold Rogers (R-KY), whose panel includes the Commerce Department. Regula is particularly angry about proposed cuts to clean-coal technology research.

Although the legislators made no promises, Lewis says Gingrich's point was clear. "The speaker's concerns about science funding are very well taken," he said, adding that the budget resolution is "a very helpful document, not a list of things I have to do." Adds one Republican aide: "We're trying to make it clear that science is important to us, and now [the committee chairs] understand the speaker is involved."

—Andrew Lawler