tery," says Booske. Jerby adds another low-tech application of his silent drill: concrete construction. "If you have ever had a neighbor drill into a concrete wall next to your apartment at midnight, you know what I mean," he says.

But don't expect to see the microwave drill during your next dental checkup. Although the lab model emits less radiation than a typical home microwave oven, Jerby says, "safety is still a big concern." To keep stray microwaves from cooking the internal organs of an unwary drill operator, production models of the microwave drill either will be completely enclosed, like an oven, or will use a shielding plate. –MARK SINCELL

Mark Sincell writes from Houston, Texas.

FISHERIES SCIENCE

Miscue Raises Doubts About Survey Data

A misrigged trawling net has brought a haul of problems for the U.S. National Marine Fisheries Service (NMFS). The faulty net has been used for the past 2 years in NMFS surveys of Atlantic fish populations, which help regulators set catch limits for cod and other important species. Now, some commercial fishers and members of Congress want the government to delay controversial catch restrictions that they say might be based on flawed data.

All wet? Critics say mismarked trawl net (*above*) might have biased fish population counts.

The controversy, which some have dubbed Trawlgate, was triggered last month when NMFS officials disclosed that the 1000-meter-long cables aboard the government research vessel *Albatross IV* were mismarked. The cables are supposed to carry marks every 50 meters, so that researchers can repeatedly pull trawl nets evenly across the bottom in annual efforts to track population trends. But officials said that the uneven spacing caused one cable to be as much as 2 meters longer than the other during typical tows, in which the net is lowered 70 to 250 meters. That could make the trawl lopsided and possibly reduce catches. The admission, prompted by a tip from a commercial fisher who 2 years ago noticed contractors misapplying the marks, produced a hailstorm of criticism from fishing groups. NMFS quickly invited six critics on a 3-day cruise that examined the troubled net with underwater video cameras and called a 2-day summit between scientists and fishers. On 3 October, the two sides reported that the error had an as-yet-undetermined "effect" on at least eight surveys over the last 2 years.

Independent researchers say the scientific impact of the misrigging is likely to be minor. But the mishap has accelerated efforts to overhaul the 60-year-old Atlantic survey program, which senior NMFS researchers at the summit described as "broken." Government officials and commercial fishers are already discussing ways to gather more and better data by using upgraded government equipment and getting more help from commercial trawlers.

Until such improvements are in place, some critics say the government should drop plans to help some stocks recover from decades of overfishing by limiting catches in New England and elsewhere. A federal court, for instance, has ordered New England regulators to cut catches by one-third or more by next August (*Science*, 17 May, p. 1229), a deadline Representative Bill Delahunt (D–MA) now wants the judge to delay for up to 2 years. "Given the documented shortcomings of the research, the only sensible course is to pause for a deep breath," he says. NMFS officials, however, note that almost none of the potentially flawed data were used in formulating the recovery plan, and they say it should move ahead.

Government fisheries researchers, meanwhile, hope that the painful glitch will bolster their push for better—and better funded—stock-assessment efforts. "We've been wanting to make improvements for a while," says fisheries scientist Russell Brown of the Northeast Fisheries Science Center in Woods Hole, Massachusetts. "We just didn't expect to have to do it in this kind of charged atmosphere." –DAVID MALAKOFF

ScienceScope

Linear Leaders The global competition to build the next huge linear electron-positron collider, a 30-kilometer-long machine aimed at answering fundamental questions in physics, appears to have become a two-horse race. Four teams are working on designs for the multibillion-dollar device, which would pick up the baton from the Large Hadron Collider now under construction at CERN near Geneva. But last week, at a meeting of the International Committee for Future Accelerators, Germany's TESLA collider and a joint bid from the Stanford Linear Accelerator Center (SLAC) in California and Japan's KEK particle physics lab emerged as the clear front-runners.

A panel that has spent 15 months vetting the four entries has identified about 30 R&D issues that must be addressed before physicists try to sell their favored design to funders. But panel chair Greg Loew of SLAC told *Science* that there are no apparent technical "show-stoppers" for the top two entries.

Advancing Aurora The European Space Agency (ESA) is getting ready to give potential funders their first look at blueprints for Aurora, a planetary research program that aims to send human explorers to the moon and Mars by 2030. As a first step, Aurora planners earlier this month commissioned studies of four robotic missions that would test the technologies needed to send a rover to Mars and return samples to Earth by 2009. In December, Aurora officials will present study results to ESA's 15 member nations and Canada. Funding decisions could come as early as next summer.

Fire Fallout In an ironic twist, the cost of fighting this year's record fires in the western United States has left many fire scientists without funding for studies aimed at preventing future burns. To pay for extinguishing fires on more than 2.5 million hectares, the U.S. Forest Service (USFS) has diverted at least $27 million designated for research. USFS officials say most of the money should be restored by spending bills pending in Congress. But for the moment, fire researchers have to cool their heels and possibly delay some planned projects.

Contributors: Jocelyn Kaiser, John Bohannon, Robert F. Service, Daniel Clery, Alexander Hellemans, Ben Shouse