

Disarmament dispute leaves nuclear treaty's future in doubt

Paris A question mark is hanging over the future of the Treaty on the Non-Proliferation of Nuclear Weapons, after a meeting to set the agenda for an important review of the treaty ended without agreement on 7 May.

Under the treaty, known as the NPT, the 'weapons states' — China, the United States, France, Britain and Russia — agree to supply civil nuclear technology to countries in return for them not developing weapons. The weapons states also commit to disarming their own nuclear weapons.

But after last week's meeting in New York, the non-nuclear states claimed that the weapons states want to avoid the issue of disarmament at next year's conference. "The foundation deal of the treaty is being threatened," says Rebecca Johnson, director of the London-based Acronym Institute for Disarmament Diplomacy, which promotes nuclear disarmament.

The United States also claimed that the NPT failed to stop countries such as Iran from developing weapons. It wants stricter measures to limit nuclear reprocessing plants, and to deal with countries that divert nuclear capabilities to military use.



Trawl aboard: commercial fishermen are being asked to float ideas for better equipment.

Contest casts net for ideas to save marine wildlife

San Diego Fishermen have been offered a **US\$25,000** lure to develop commercial fishing gear that helps to prevent the accidental killing of seabirds, sea turtles and marine mammals.

With tens of thousands of species accidentally harmed each year by fishing, a coalition of environmental and industry groups has created the International Smart Gear Competition to help reduce the problem. The competition was announced on 3 May at the 4th World Fisheries Congress in Vancouver, Canada.

Fishermen already use acoustic alarms to steer marine mammals away from nets, and circular hooks that reduce turtle catches (see *Nature* 428, 594; 2004). Other organizations, such as BirdLife International, also host prizes for such inventions. Last month, two fishermen from New Zealand and Australia netted **€18,000 (US\$21,000)** for their concoction of fish-liver grease that deters albatrosses from frequenting waters where long-lined boats are fishing.

♦ <http://smartgear.org>

Charity worker bids to play animal name game

New York Next time you stumble across a new species, think twice about naming it after yourself — you might be able to raise some cash by selling the privilege instead.

Last week, a New York-based conservation charity, the **Wildlife Trust**, auctioned off the opportunity to christen a single-celled microbe. The organism, which lives in the gut of the endangered gecko *Phelsuma guimbeaui* in Mauritius, was discovered by a team from the charity.

Bidding at the 3 May fundraising bash was fierce. As the hammer fell, Cynthia Stebbins, one of the charity's two vice-presidents, scooped the opportunity to name the beast for just US\$2,600. "How

often to do you get to do such a thing?" she says. She plans to name it *Eimeria stebbinsi* after the microbe's genus and her married name.

US seeks Midas touch to model bioterror attacks

New York The US National Institute of General Medical Sciences is seeking to harness computer models to predict the effects of disease epidemics and bioterror attacks.

On 4 May, the institute announced the first four recipients of grants under the project, which is known as MIDAS, or Models of Infectious Disease Agent Study. The recipients will share US\$28 million over five years to build models that incorporate detailed information about the location and behaviour of individuals in a city before and during an outbreak or an attack. The institute hopes that these will aid the design of better strategies to deal with such events.

Stephen Eubank of the Los Alamos National Laboratory in New Mexico, one of the recipients of the four grants, has already built one model. He and his colleagues worked out how smallpox is likely to spread among the 1.5 million people in Portland, Oregon (see page 180). Eubank

Acid test shows microbes carved caverns

London Some of the world's largest and most spectacular caves were created by some very small builders.

Researchers have long thought that acids created by chemical reactions between thermal springs and air etch away at rocks to form karst landscapes such as the Carlsbad Caverns in New Mexico (pictured) and the Frasassi caves in Italy.

But Annette Summers Engel and her colleagues at the University of Texas at Austin have discovered an alternative explanation.

They found that Lower Kane Cave in Wyoming — long considered a classic example of a cave formed by this mechanism — was instead eaten away by microbes (A. S. Engel, L. A. Stern and P. C. Bennett *Geology* 32, 369–372; 2004).



The microbes devoured hydrogen sulphide from the thermal springs below, the team found, producing sulphuric acid. This converts limestone to gypsum, which dissolves more easily in water.

now hopes to use the MIDAS funding to extend this model to cover the larger city of Chicago.

Engineer takes control at Italy's research body

Rome After a year of government-directed reform, the CNR, Italy's main basic-research organization, has a new president.

The Italian government last year put the CNR in the hands of a commissioner

who was charged with restructuring the organization to make its 100 or so research institutes more efficient.

Fabio Pistella, an engineer at the University of Rome, has now been appointed to run the reformed CNR. Pistella is best known for his administrative skills. He is a former director-general of ENEA, Italy's energy and environment agency, and has also served as director of the National Institute for Applied Optics in Florence.