ZOO NEWS

The not very hungry caterpillar
A newly discovered caterpillar may be the world's thinnest. The larval stage of the moth *Houdinia flexilissima* lives inside the stems of cane rushes. At a few centimetres long but less than a millimetre wide, its discoverers have named it 'Fred the Thread'.

SCORECARD

Solar energy
The Internet company Google is planning a solar electricity system for its headquarters in Mountain View, California. With a capacity of 1.6 megawatts, the installation will be one of the largest on any corporate site.

Celebrity genomes
Genomics entrepreneur Craig Venter famously raced the Human Genome Project to sequence the human genome. He has now almost finished a map of his own genome — the first of any individual — and plans to make it public.

ON THE RECORD

"I doubt there's a scientist in the country who fits the description."
As Kazakhstan is promised a 25-fold increase in science spending, Tynysbek Kalmenov, director the Centre for Physics and Mathematics in Almaty, is pessimistic about finding world-class researchers to head the resulting institutions.

"A light bulb goes on in my head, and energizes my hand to begin to sketch out some scribbles."
Architect Frank Gehry explains the creative process to an audience of neuroscientists.

K-PHOTOS/ALAMY

"Experts: some women perform well in math."
The Associated Press has trouble summing up a study on the influence of cultural factors on women's mathematics ability.

Sources: Australian Broadcasting Corporation, Electronics Weekly, Sunday Times, IWPR.

SIDELINES

Sceptics detect flaws in US nuclear monitor plan

WASHINGTON DC

Now that North Korea has joined the nuclear club, the United States is intent on preventing it from extending membership perks to others.

Secretary of State Condoleezza Rice visited the region last week to meet leaders from neighbouring countries and discuss ways to detect and intercept illicit nuclear stocks. But proliferation experts disagree about whether such a screening regime is practical or even possible. Spotting radioactive material aboard ships, trucks and aircraft is technically difficult and would require unprecedented regional cooperation.

North Korea's nuclear test on 9 October (see *Nature* 443, 610–611; 2006) renewed fears about nuclear proliferation. Last week, Mohamed ElBaradei, head of the United Nations' nuclear watchdog, the International Atomic Energy Agency, warned that another 20 to 30 states could soon have the capacity to develop nuclear weapons.

A particular concern is that North Korea might smuggle nuclear material to other states or terrorist groups, says Michael Burns, principal deputy for threat reduction at Los Alamos National Laboratory in New Mexico. Burns says that before leaving for her trip, Rice's team consulted Los Alamos on the possibility of detecting nuclear materials leaving North Korea.

Detection is possible, says Burns, but only by integrating a lot of information: "Detection of nuclear material needs a systems-wide approach." The most important tactic will be to create bottlenecks for goods travelling in and out of North Korea. These ports and border crossings will then need a variety of detection equipment. Passive detectors catch flashes of gamma radiation from the decay products of uranium or plutonium, or neutrons from the decay of certain radioactive isotopes, notably plutonium-240. In addition, active detectors use X-rays or neutrons to scan shipping containers and trucks for dense masses. "That will be an immediate indication to a customs agent to take it aside and look at it by eye," says Burns.

> "This is not something you can do from a mile away. You have to get as close as possible."

If nuclear material were found entering or leaving the country, it would also be important to establish where it came from — which is difficult without international cooperation, says Burns: "We have to establish information-sharing through diplomatic channels." One proposal is to create an international database of nuclear samples (see description on page 907). It's hoped that the ability to trace the origin of illicit stocks would also deter states from selling their nuclear material.

But others disagree about whether such a detection scheme could work. "It's not feasible,"

Polish scientists fight creationism

Fifty leading scientists in Poland have signed an open letter in protest against an aggressive anti-evolution campaign launched by the League of Polish Families (LPR), the ultra-right-wing coalition partner in the conservative Polish government.

"The theory of evolution is a lie," Mirosław Orzechowski, Poland's deputy education minister, told the newspaper *Gazeta Wyborcza* on 14 October. "It is an error we have legalized as a common truth."

The LPR entered the ruling coalition in May 2006. Its leader, Roman Giertych, is also known to favour creationist views. These, as well as his openly homophobic, anti-Semitic and nationalistic opinions, have sparked student demonstrations in Warsaw since he took the minister of education job in May.

Giertych's father, Maciej Giertych, is an LPR member in the European Parliament and is lobbying for obligatory inclusion of creationism in Polish biology curricula. Maciej, who holds a PhD in tree physiology from the University of Toronto, Canada, claims darwinian evolution is refuted by scientific evidence.

Orzechowski's comments have rattled Poland's science