

SEVEN DAYS

The news in brief

POLICY

Desert treaty woes

Canada withdrew from the United Nations Convention to Combat Desertification (UNCCD) on 28 March, leaving 193 countries party to the legally binding treaty. Canada is due to pay around US\$310,000 to the convention in 2013 — just over 3% of the convention's budget. The nation will honour its 2013 financial commitments, say media reports. The move comes ahead of conferences to be held under the aegis of the convention this month; where the first ever cost-benefit analysis of desertification and sustainable land management will be presented.

UK open access

Rules making publicly funded research in the United Kingdom free to read came into force on 1 April. This year, universities and research institutions are expected to openly publish at least 45% of any research funded with grants from the UK research councils. Results will be made available either immediately or after a delay of between 6 and 24 months, depending on the research subject. This policy is due for review in 2014. See nature.com/scipublishing for *Nature's* special on open access and the future of publishing.

China spring-clean

Beijing is spending 100 billion renminbi (US\$16 billion) on a three-year effort to clean up the city's air, land and water. The plan, announced on 28 March, includes measures such as shutting down illegal construction sites, setting up water-recycling plants and establishing an emergency headquarters to deal with extreme air-quality problems. Shanghai launched its own air-pollution plan on



AURORA PHOTOS/ALAMY

US waterways in bad shape

More than half of US rivers and streams are in a poor environmental condition, according to a survey published by the Environmental Protection Agency on 26 March. The data from 2008–09 — the most recent available — show that 28% of the nation's waterways have excessive levels of nitrogen, and 40% have high levels of phosphorus. This nutrient pollution

causes algal blooms (pictured; near the Iron Gate dam on the Klamath River in northern California), the breakdown of which saps water of the oxygen that aquatic life needs to survive. "This is the most dire in a string of water assessments over the last 20 years," says Earthjustice, an environmental law organization in San Francisco, California.

1 April, providing emergency measures for when air quality declines below a set target. These include halting building projects and swapping coal for natural-gas in power generation.

Climate change

More than 80% of Americans believe that the planet is warming and think that coastal communities should be better prepared for rising seas and stronger storms, a survey published on 28 March has found. However, the poll, commissioned by scientists at Stanford University in California, also found that the US public does not want the government to pay for climate-change adaptation. Most of

the 1,174 people surveyed said that those living in at-risk areas should bear the costs of making their communities more resilient. See go.nature.com/z23dot for more.

RESEARCH

HeLa-cell debate

An ethical controversy erupted last week over whether to publish genetic data on old tissue samples that were originally established without their donor's consent. Researchers hurriedly removed from public databases their recently published genome of the world's most famous cell line, HeLa, which was established without consent from

Henrietta Lacks around 1951 (when consent was not legally required). Lacks's descendants, together with bioethicists and other scientists, said that it could reveal information about traits carried by living family members — although other genetic data about HeLa cells remain available online. See go.nature.com/yimiwgi for more.

FACILITIES

Deep-sea dive

The film-maker James Cameron is donating his deep-sea submersible to the Woods Hole Oceanographic Institution in Massachusetts, he announced on 26 March. Cameron used the craft, the

YASUYOSHI CHIBA/FAO
DEEPSEA CHALLENGER, to set a record last year for the deepest single-person dive when he travelled to the bottom of the Mariana Trench, reaching a depth of 10,900 metres. The **DEEPSEA CHALLENGER** is the only submersible capable of carrying a human deeper than 7,000 metres. See go.nature.com/hhsk8 for more.

EVENTS

Bird flu deaths

Two men have died after being infected with a type of bird flu never before seen in humans, China reported on 31 March. The men, aged 27 and 87 and from Shanghai, contracted the H7N9 virus in February and died within 8 days. A 35-year-old woman from Anhui province, who contracted the virus in March, was in a critical condition as *Nature* went to press. See go.nature.com/vrjulj for more.

Locust plague

The worst locust plague to hit Madagascar in decades prompted the United Nations on 26 March to call for US\$41 million in funding from donors to implement immediate emergency and longer-term control measures. Around half the country is already affected by the pests (**pictured**), which threaten large swaths of the island's rice



production and could thrust more than 10 million residents into hunger. Called-for control efforts include aerial spraying of some 1.5 million hectares and improved aerial and ground surveillance to monitor the threat.

BUSINESS

Patent blocked

India's Supreme Court ruled on 1 April against an attempt by Swiss drug company Novartis to patent the anticancer drug Gleevec (imatinib mesylate). India's patent law limits the ability of drug firms to make minor modifications to drugs to extend their patent life, a tactic known as evergreening. The patent claim by Basel-based Novartis on a modified version of Gleevec "fails in both the tests of invention and patentability", India's high court said. The nation's support for cheap generic drugs has reduced prices, notably those

of anti-HIV medicines. But drug companies complain that it weakens intellectual-property rights and stifles innovation. See go.nature.com/csqesi for more.

GM crop deal

Two agricultural biotechnology giants agreed on 26 March to settle a lengthy legal battle over patent rights to 'next-generation' genetically modified (GM) soya beans. DuPont, based in Wilmington, Delaware, will pay Monsanto, based in St Louis, Missouri, at least US\$1.75 billion over the next decade for the right to offer two herbicide-tolerant lines of soya bean. Monsanto will gain access to some DuPont patents covering disease resistance and maize (corn) defoliation.

Diabetes drug

US regulators have given the green light to the first in a new class of drugs to treat diabetes. On 29 March, the Food and Drug Administration approved canagliflozin (Invokana), which was developed by Johnson & Johnson, headquartered in New Brunswick, New Jersey. Canagliflozin blocks sugar reabsorption in the kidneys by inhibiting the sodium/glucose cotransporter 2 (SGLT2) protein, increasing the amount of sugar patients excrete in their urine. Companies have

COMING UP

6–10 APRIL

Discussions on mapping the epigenomes of cancer take place at the American Association for Cancer Research's annual meeting in Washington DC. go.nature.com/wiozbn

7–11 APRIL

Plenary talks about the sustainability of the world's food system feature at the American Chemical Society's Spring Meeting in New Orleans, Louisiana. go.nature.com/xgylsf

8–19 APRIL

The United Nations Forum on Forests meets in Istanbul, Turkey; it will discuss progress on a 2007 commitment to manage forests sustainably. go.nature.com/potx5i

been racing to bring an SGLT2 inhibitor to market; last year regulators shot down another such drug, dapagliflozin, citing cancer concerns.

PEOPLE

NICE head departs

The head of the National Institute for Health and Care (formerly Clinical) Excellence (NICE) in London stepped down on 31 March. Michael Rawlins has led the body, which is tasked with assessing the cost-effectiveness of medicines, since 1999. The government confirmed last month that NICE will have a central role in a new pricing scheme for medicines under which, from 2014, drug companies will be paid what their products are deemed to be worth. For more see go.nature.com/37lsu2.

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TREND WATCH

A record low in the extent of sea ice in the Arctic last September has been followed by a record refreezing of uncovered ocean surface, resulting in a winter maximum on 15 March that is still the sixth-lowest recorded since satellite measurements began in 1979. The US National Snow and Ice Data Center in Boulder, Colorado, said that the data indicate "a more pronounced seasonal cycle" and "the increasing dominance of first-year ice in the Arctic".

ARCTIC ICE MAXIMUM

Sea-ice extent in the Arctic has reached its sixth-lowest maximum in the satellite record.

