

SEVEN DAYS

The news in brief

POLICY

Shutdown scars

Last month's shutdown of the US government, during which many 'nonessential' federal workers were sent home, resulted in 6.6 million lost workdays and cost US\$2 billion in staff pay, the White House Office of Management and Budget said on 7 November. The 16-day shutdown, which began on 1 October, also curtailed the US Antarctic programme field season, cut back influenza monitoring and resulted in the loss of observing time at major telescope facilities. See go.nature.com/u5kntz for more.

Fat ban

On 7 November, the US Food and Drug Administration (FDA) proposed eliminating most artificial trans-fats — forms of fat associated with increased heart risk — from processed foods. The agency issued a preliminary determination that trans-fats in the form of partially hydrogenated oils should no longer be "generally recognized as safe", a status that allows a food additive to be used without FDA approval. A final determination will be made after a 60-day public comment period.

Label loss

Voters in Washington state on 5 November rejected a ballot initiative to require labelling of genetically modified (GM) foods. The initiative was one of a string of efforts in more than 20 states this year to label or limit GM foods; California voters defeated a similar proposition last year. No state currently requires labelling of all GM foods, although Alaska has mandated labels for GM fish if they go on sale.



JMA/EUMETSAT

Record storm ravages Philippines

One of the most powerful tropical cyclones on record, Super Typhoon Haiyan, devastated the central Philippines when it made landfall on 8 November. By some estimates, wind speeds topped 310 kilometres per hour as the storm reached the coast, placing Haiyan at or near the top of the list of strongest known storms. The storm surge destroyed much of the coastal

city of Tacloban. Buildings collapsed, and flooding ravaged a region still recovering from a magnitude-7.1 earthquake last month. Officials estimate that at least 10,000 people have died, giving Haiyan a second grim title: the deadliest storm in Philippine history. In 2012, Super Typhoon Bopha killed nearly 2,000 people in the southern part of the country.

Ivory crush

The US Fish and Wildlife Service will destroy its stockpile of contraband elephant ivory on 14 November, officials announced last week. Over the past 25 years, US law enforcement has seized about 6 tonnes of illegal ivory. The tusks will be crushed to send a message to ivory traffickers worldwide, the agency says. In Tanzania, police recently seized nearly 800 elephant tusks in anti-poaching raids, according to media reports last week.

Animal research

A set of draft guidelines committing to less secrecy on animal experiments, and signed by more than 50 organizations involved in UK life-sciences research, was

released for public comment last week (see go.nature.com/3rqcn4). Major research funders and institutions, coordinated by the London-based group Understanding Animal Research, say that they want to be more open about how animals are used in research. But anti-vivisection campaigners said that those backing the agreement did not want true openness about "painful and unscientific" animal experiments.

Deep-sea trawling

European politicians voted to ban deep-sea bottom trawling in the Atlantic Ocean last week, but only in areas where ecosystems are deemed especially vulnerable. The move disappointed campaigners who have

pushed for a total ban on this method of fishing, which they say is highly damaging to certain species. The package of regulations approved by the European Parliament's fisheries committee will be considered by the full parliament in December.

GM crop stir

A third genetically modified (GM) crop may soon be approved for cultivation in the European Union. The European Commission on 6 November asked member-state ministers to decide whether to authorize GM maize (corn) made by DuPont Pioneer in Johnston, Iowa, which first requested approval in 2001. A minority of ministers has consistently blocked approvals in the past,

PLC/BP so the commission had given up referring cases, but its hand was forced by a court ruling in September after DuPont sued. Only a majority of votes in favour of rejection will prevent the maize from being approved.

PEOPLE

Poisoning puzzles

Scientists at the University Centre of Legal Medicine in Lausanne, Switzerland, announced on 6 November that they had found traces of the radioactive metal polonium-210 in the exhumed body of Yasser Arafat, former president of the Palestinian National Authority. But because Arafat died nine years ago it is hard to distinguish levels of synthetic polonium from background radiation, so the results do not clearly establish that Arafat was poisoned, nuclear physicists told *Nature*. Separately, a forensic analysis of exhumed Chilean poet Pablo Neruda, released on 8 November, found no evidence that he was poisoned. See go.nature.com/mpdrjd and go.nature.com/5jaggr for more.

Energy nomination

US President Barack Obama has nominated physicist Ellen Williams (pictured) to head the Advanced Research Projects Agency-Energy, a branch of the Department



of Energy that funds high-risk, high-pay-off research. Currently on leave from the University of Maryland in College Park, Williams has been chief scientist for oil-and-gas giant BP since 2010. From 1996 to 2009, she directed the University of Maryland Materials Research Science and Engineering Center.

Climate politics

Republican Kenneth Cuccinelli lost his bid on 5 November to become the next governor of Virginia, in an election that highlighted scientific issues. As the state's attorney-general, in 2010 Cuccinelli launched an investigation of climate scientist Michael Mann. Virginia's Supreme Court later ruled that he lacked the authority to demand Mann's grant applications, e-mails and other documents. During the gubernatorial campaign, Cuccinelli's opponent, Democrat Terry McAuliffe, called him a climate-change

denier and accused him of running a 'witch-hunt' against Mann.

RESEARCH

Genome access

An effort to encourage people to make their genome sequences and medical histories public has expanded from the United States to the United Kingdom. George Church, a genomicist at Harvard Medical School in Boston, Massachusetts, who launched the Personal Genome Project in 2007, and Stephan Beck, a genomicist at University College London, announced the UK arm on 6 November; a European franchise is on the way in 2014. See go.nature.com/izmgpo for more.

Greenhouse gases

Atmospheric greenhouse-gas concentrations reached a record high in 2012. According to a 6 November report by the World Meteorological Organization (WMO) in Geneva, Switzerland, carbon dioxide levels climbed last year to an average 393.1 parts per million (p.p.m.) — 141% above pre-industrial levels. Long-lived greenhouse gases — including CO₂, methane, nitrous oxide and chlorofluorocarbons — rose collectively by 2.6 p.p.m. to an equivalent CO₂

COMING UP

18 NOVEMBER

NASA's MAVEN mission to Mars is scheduled to launch. See page 178 for more.

19–21 NOVEMBER

In Paris, the International Energy Agency holds its biennial meeting to set new strategic priorities.

go.nature.com/qrijmcg

concentration of 475.6 p.p.m.. The observations come from the WMO's global monitoring network, which last May measured a record daily concentration of atmospheric CO₂ at Mauna Loa, Hawaii (see *Nature* 497, 13–14; 2013).

Biology preprints

Life scientists have a new website for sharing research papers before journal publication. The site, called bioRxiv, was started by Cold Spring Harbor Laboratory Press in New York, and went live on 11 November. Unlike the arXiv.org preprint server popular among physicists, the site will allow readers to comment on articles, and will include sections devoted to different subdisciplines of biology. See page 180 for more.

BUSINESS

Rare-disease deal

Pharmaceutical giant Shire, headquartered in Dublin, announced on 11 November the purchase of drug company ViroPharma for US\$4.2 billion. Based in Exton, Pennsylvania, ViroPharma develops drugs for rare diseases. The bulk of its roughly \$400 million in annual sales revenue comes from a drug used to treat a rare blood condition known as hereditary angioedema.

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TREND WATCH

Science projects seeking crowdfunding in the past two years have included a glow-in-the-dark plant that raised US\$484,013 (see *Nature* 498, 15–16; 2013) and an asteroid-hunting telescope called Arkyd that raised \$1.5 million. But an analysis of 115 science appeals shows that the median amount raised is about \$3,000, with mean donations of \$60–100. The data were collected by Ethan Perlstein, an evolutionary pharmacologist in Oakland, California (see go.nature.com/3fembu).

THE SCIENCE OF CROWDFUNDING

On four popular crowdfunding websites, 115 successful science appeals collected more than US\$5 million from 2011 to 2013.

