

SEVEN DAYS

The news in brief

POLICY

Nuclear handover

Japan will relinquish more than 300 kilograms of weapons-grade plutonium and around 200 kilograms of highly enriched uranium to the United States. The handover was announced on 24 March at the Nuclear Security Summit at The Hague in the Netherlands. Japan had kept the materials for use in an experimental Fast Critical Assembly reactor in Tokaimura. But the facility is currently not operating, and Japan's stockpile has raised concerns about potential terrorist threats and nuclear-weapons ambitions.

FACILITIES

Climate-data site

The US government launched a pilot website (<http://climate.data.gov>) on 19 March to publish and visualize open data on climate change — a move to increase public awareness and promote community planning around the issue. Operated by NASA and the US National Oceanic and Atmospheric Administration, the website will initially focus on coastal flooding and sea-level rise, using data from various federal agencies. It aims to produce a series of web-based tools for climate planning.

Telescope trauma

The budget for NASA's Wide-Field Infrared Survey Telescope (WFIRST) could spiral out of control if the mission expands to include an inherited telescope and an instrument to hunt for extrasolar planets, concludes a report released on 18 March by the US National Research Council. WFIRST is likely to be the agency's next big astrophysics spacecraft after the James Webb Space Telescope launches in 2018.



DAVE HODSON, CIMMYT

Wheat-disease warning

Wheat farmers in East Africa and the Middle East must be vigilant for a pathogenic fungus that has wiped out more than 10,000 hectares of the crop (pictured) in southern Ethiopia since a 2013 outbreak. The warning comes in a report to the Borlaug Summit on Wheat for Food Security in Mexico on 25–28 March. The strain causing stem-rust disease in Ethiopia — sub-Saharan

Africa's largest wheat producer — is not the virulent Ug99 strain that is spreading across the globe, says the report from a coalition of research organizations, including the International Maize and Wheat Improvement Center in El Batán, Mexico. The disease could spread to countries such as Kenya and Uganda, where farmers are planting vulnerable varieties of wheat.

NASA should expect to spend at least US\$2.1 billion on it, says the report, even if officials repurpose a 2.4-metre telescope donated by the National Reconnaissance Office, the US agency responsible for intelligence satellites.

Collection access

US government agencies must produce new rules for maintaining scientific collections of everything from Moon rocks to dinosaur fossils. On 20 March, John Holdren, director of the White House Office of Science and Technology Policy, ordered each agency with a permanent collection to produce a draft management and access policy within six months. The goal is

to better preserve and increase access to artefacts including rocks, tissue specimens, seeds and other objects retained for scientific inquiry.

RESEARCH

Top-quark mass

Physicists have produced the most precise measurement yet of the mass of the top quark — the heaviest fundamental particle — by combining data from four experiments at the world's two biggest particle colliders. The new measurement, $173.34 \pm 0.76 \text{ GeV } c^{-2}$ ($310.28 \pm 1.36 \times 10^{-27}$ kilograms), has a relative uncertainty of 0.44%. This compares with uncertainties of 0.50% and 0.55%, respectively, in measurements made at

the (now closed) Tevatron at Fermilab near Batavia, Illinois, and at the Large Hadron Collider at CERN, Europe's particle-physics laboratory near Geneva, Switzerland. The result was posted on the arXiv preprint server on 18 March (The ATLAS, CDF, CMS and D0 Collaborations <http://arxiv.org/abs/1403.4427>; 2014).

Genome editing

The Berkeley and San Francisco campuses of the University of California have announced a US\$12-million project focused on the CRISPR/Cas9 gene-editing technology, the powerful technique that allows targeted rewriting of genomes (see *Nature* <http://doi.org/rz6>; 2014). The Innovative

Genomics Initiative will receive \$10 million from the Li Ka Shing Foundation in Hong Kong, with the rest made up by the two universities.

Jennifer Doudna, the Berkeley-based executive director of the initiative, says that it will focus on developing the technology for human-health applications and creating a library of research resources so that others can use the technique.



California has experienced its warmest and third-driest winter on record, with water reserves depleted (pictured) and temperatures from December to February averaging 8.9°C — almost half a degree warmer than the previous record, set in 1980–81. NOAA also said that rivers in half of the continental United States are at minor or moderate risk of flooding this spring. The southern Great Lakes regions are at greatest risk, the report says.

Polio in Iraq

Iraq last week reported its first case of polio in 14 years. A six-month-old boy, who had not been vaccinated against the disease, developed paralysis in February. The virus was also isolated from his asymptomatic three-year-old sister. The case represents the first regional spread of polio since an outbreak of the crippling disease began last October in Syria, where, as of

20 March, 37 cases have been reported by the World Health Organization.

BUSINESS

Meningitis vaccine

The United Kingdom could become the first country to routinely immunize infants with a broad-spectrum vaccine against meningitis B. The Joint Committee on Vaccination and Immunisation said on 21 March that the vaccine Bexsero — developed by Novartis in Basel, Switzerland — should be used if it can be purchased at low cost. Last year, after the vaccine was approved in Europe, the UK committee had said that it was not worth its price. Novartis plans to seek approval for the vaccine in the United States later this year, after regulators approved its emergency use in 2013 to quell a meningitis B outbreak at universities.

FUNDING

Forest funding

Countries must pay US\$30 billion a year for tropical-forest conservation by 2020 to halt deforestation and promote rural development, recommends a report from the United Nations Environment Programme. The report, published on 21 March, comes four months after the United Nations climate summit in

COMING UP

30 MARCH

As part of its fifth assessment, the Intergovernmental Panel on Climate Change will publish a report on the vulnerability and impacts of climate change on human and natural systems. go.nature.com/cu4bhk

27 MARCH

Southeast Asia will be declared polio free by the World Health Organization. The last wild polio case was reported from India on 13 January 2011. go.nature.com/5uxoar

Warsaw, where nations agreed on the REDD+ scheme to make carbon payments to developing countries that reduce deforestation and forest degradation (see go.nature.com/pfswg2). Just \$6.27 billion has been promised to the scheme so far.

Turing centre

In its budget report on 19 March, the UK government announced a £42-million (US\$69-million) 'big data' institute, to be named after British computer scientist Alan Turing. The government will also spend £55 million on a centre to manufacture cell therapies for late-stage clinical trials, £19 million on a centre to help to commercialize the carbon-monolayer material graphene, and £106 million on PhD-training centres. The funding will be spread over five years. But researchers remain disappointed that funding for basic science is frozen at £4.6 billion per year for the next two years, the same level it has been at since 2010. See go.nature.com/fefnls for more.

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EVENTS

Ebola outbreak

Dozens of people have died in an outbreak of the Ebola virus in southern Guinea. The World Health Organization in Geneva said on 24 March that 86 suspected cases resulting in 59 deaths have been reported. The situation was changing rapidly as *Nature* went to press. The numbers are likely to change as new cases are identified and suspected infections are ruled out through laboratory testing. Possible Ebola cases in neighbouring Liberia and Sierra Leone are also being investigated.

US drought

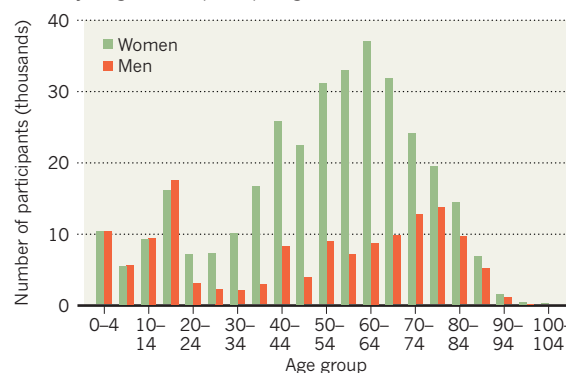
There is no end in sight for the drought ravaging the southwestern United States, the US National Oceanic and Atmospheric Administration (NOAA) said on 20 March in its Spring Outlook report.

TREND WATCH

More than 2.2 million people in the United Kingdom are voluntarily taking part in large-scale population-cohort studies, making for an "unparalleled collection" of data on health and well-being, according to a review of 34 studies by the UK Medical Research Council. The earliest cohort study mentioned in the review, which was published on 21 March, began in 1946 and is still running. However, men aged 20–40 are underrepresented in such studies (see chart).

YOUNG MEN NEEDED IN UK COHORT STUDIES

3.5% of the UK population takes part in medical cohort studies, but few young men are participating.



Data from 26 cohort studies. The Million Women Study (1.36 million women over 50) and UK Biobank (500,000 men and women aged 45–69) are not shown; they eclipse all other studies.