

SEVEN DAYS

The news in brief

POLICY

Marine protection

US President Barack Obama has vastly expanded a marine reserve in the central Pacific Ocean, making it one of the largest in the world. On 25 September, Obama increased the Pacific Remote Islands Marine National Monument — which surrounds a group of small islands to the south and west of Hawaii — by more than 1 million square kilometres to 1.3 million. Former President George W. Bush created the reserve in 2009. See go.nature.com/gpr5or for more.

Wandering wheat

The US Department of Agriculture announced on 26 September that it had finished investigating an instance of escaped, experimental genetically modified wheat — and had begun looking into another such event. The agency said that it had exhausted all leads without determining the origin of herbicide-resistant wheat discovered on an Oregon farm last year (see *Nature* **499**, 262–263; 2013). It is now investigating the discovery of a different transgenic wheat strain at a research site in Montana. No transgenic wheat is approved for sale in the United States.

Pathogen policy

The US government issued new rules on 24 September regulating a set of 15 pathogens and toxins related to ‘dual-use research of concern’ — life-science research that could be used for nefarious purposes. Researchers who receive government funding must report any work that they do with these agents to their institutions, which will assess potential hazards. In parallel with this, the federal



FREDERIC STEVENS/GETTY

Large-scale ivory seizures on the rise

The worldwide trade in illegal ivory seemed to reach record levels between 2011 and 2013, driven by strong consumer demand in Asia, according to TRAFFIC, a wildlife-trade monitoring network based in Cambridge, UK. In a report published last week, the group found a rising trend in the frequency of seizures involving 500 kilograms of ivory or more since 2008. Elephant strongholds are collapsing:

for example, Tanzania's Selous Game Reserve once held more than 100,000 elephants; the population still exceeded 70,000 in 2007, but fell to just 13,000 in late 2013. TRAFFIC also reported a surge in rhinoceros poaching since 2008, after a lull from the early 1990s. In South Africa, rhino losses to poaching have grown every year since 2008, reaching 1,004 animals last year — around 5% of the 2012 population.

government will work with institutions to mitigate biosecurity risks. See go.nature.com/h1sosc for more.

FUNDING

Mental-health grant

The US National Institute of Mental Health has funded a US\$16-million, 4-year study of the genetic basis of schizophrenia and bipolar disorder. Researchers at the University of Southern California in Los Angeles, the University of Michigan in Ann Arbor and the Broad Institute in Cambridge, Massachusetts, will sequence the whole genomes of at least 10,000 people, split between

those with schizophrenia, those with bipolar disorder, and healthy controls. In July, the Broad Institute also received a \$650-million donation to expand research into psychiatric conditions (see *Nature* **511**, 393; 2014).

Ebola funding

On 25 September, the World Bank pledged to nearly double its commitment to fighting the Ebola outbreak in West Africa, to US\$400 million. The outbreak, which has claimed more than 3,000 lives, could have potentially disastrous economic and public-health impacts on the region (see page 15). On 23 September, the Wellcome

Trust biomedical-research charity in London announced a £3.2-million (US\$5.2-million) grant to accelerate clinical trials for Ebola therapies at existing treatment centres.

School status push

On 26 September, Japan's education ministry announced that it would boost funding for 37 institutions designated as ‘super global universities’ to elevate their international research status. The institutions — including the University of Tokyo and Kyoto University — will hold the title for ten years, and will receive either ¥172 million (US\$1.6 million) or ¥420 million each year.

Universities will make their own plans for the money, but are expected to attract international faculty members and students.

Gender progress

The London-based charity Equality Challenge Unit on 25 September announced its latest round of awards recognizing UK research institutions and departments with strong gender-equality policies. The University of Cambridge became only the fifth institution to win the silver Athena SWAN award, given to institutions that show effective action against previously identified challenges to gender equality. The UK National Institute of Health Research has suggested that from 2016 it will only shortlist medical schools for funding if they have received the silver award.

EVENTS

Volcanic eruption

Mount Ontake in central Japan erupted on 27 September at 11:53 a.m., spraying ash and debris on the surrounding region (pictured), as well as on hundreds of unsuspecting hikers on its slopes. As *Nature* went to press, at least 36 people were feared dead. Global-navigation stations and monitors of surface deformation related to rising magma did not detect any



unusual activity leading up to the eruption. See go.nature.com/wpwymr for more.

Flying on solar

Two Swiss pilots have planned the first round-the-world aeroplane flight powered only by solar energy. Last July, André Borschberg and Bertrand Piccard, co-founders of the Solar Impulse project, piloted the first all-solar plane flight across the United States. On 25 September, the team announced plans to circumnavigate the globe next year in a more-advanced solar aircraft. The fuel-less journey, which will begin and end in Abu Dhabi, is expected to take about ten legs between March and August 2015.

Mars-club member

India has become the first Asian nation to get a craft into Mars orbit. Its Mangalyaan probe arrived at the red planet on 24 September, three days after NASA's MAVEN mission. Only the United States, the former Soviet

Union and the European Space Agency have previously sent successful missions to Mars. See go.nature.com/ynzqsqz for more.

Support for climate

The United Nations climate summit held in New York City on 23 September produced few firm pledges but generated international enthusiasm for climate-change policy. World leaders are scheduled to meet at the UN climate talks in December 2015 in Paris, where they are expected to discuss the successor to the 1997 Kyoto Protocol. See go.nature.com/h8ljlh for more.

BUSINESS

Chemicals buy-out

German chemicals firm Merck has agreed to pay US\$17 billion to buy Sigma-Aldrich, a company headquartered in St Louis, Missouri, that makes and sells more than 230,000 chemicals and biomolecules to researchers worldwide. Merck, headquartered in Darmstadt, said that the acquisition, announced last week, would make it a leading player in the global life-sciences industry.

RESEARCH

Super responders

On 24 September, the US National Cancer Institute launched a clinical trial to study

COMING UP

6–8 OCTOBER

The Nobel prizes are announced for physiology or medicine, physics and chemistry.

9–10 OCTOBER

Physicists gather at the US National Institute of Standards and Technology in Gaithersburg, Maryland, to plan experiments that could determine a more reliable value for 'big G', the universal gravitational constant. go.nature.com/wzya7c

people who respond unusually well to cancer therapies. The Exceptional Responders Initiative will deposit genomic data from 100 such people in a database, and will aim to use their biological and clinical data to identify others who may benefit from the same treatments. Advocates say that the approach could yield information about important genes and molecular pathways; critics counter that small sample sizes make it difficult to draw firm conclusions from such studies.

Kepler back to work

NASA's Kepler spacecraft has returned its first batch of science data since resuming its hunt for planets outside the Solar System in June, the mission team announced on 23 September. The data include observations of more than 12,000 stars, as well as galaxies, to be scanned for supernovae or signs of black holes. The craft, hobbled since May 2013 by the failure of two of its reaction wheels, now steadies itself by balancing its frame against the oncoming solar wind. The team expects Kepler's fuel to last until at least late 2017.

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TREND WATCH

Natural catastrophes displaced nearly 22 million people last year, with the largest displacements affecting populous Asian nations, according to a report by the Internal Displacement Monitoring Centre in Geneva, Switzerland. Storms forced 14.2 million people from their homes, including 13.8 million in Asia (see chart). In November 2013, 4.1 million people in the Philippines were displaced by Typhoon Haiyan — one of the largest typhoons ever recorded.

RISING STORMS

Recent storm-related disasters have displaced increasing numbers of people across Asia.

