

366 days: An interactive journey through 2012 in numbers

Scroll through *Nature's* numerical guide to the year's scientific events.

19 December 2012

**SCROLL DOWN
TO BEGIN**



2012

THE YEAR IN NUMBERS

7 MILLIMETRES

Length of the frog *Paedophryne amauensis*, which is claimed to be the world's smallest vertebrate.

[Frogs in size war](#)

CREATURES GREAT AND SMALL



1,400 KILOGRAMS

Weight of *Yutyrannus huali*, the largest feathered dinosaur found to date.

[Largest feathered dinosaur yet discovered in China](#)

0

Number of badgers culled to slow the spread of bovine tuberculosis in the United Kingdom this year.

[Badger cull postponed](#)

CREATURES GREAT AND SMALL





DRILLING
THROUGH THE ICE
3,769 METRES

METRES Distance drilled through Antarctica's ice to reach Lake Vostok.
🇷🇺 Russians celebrate Vostok victory

10

Rough number of microbes per millilitre found in a sample from Lake Vostok's surface — about the same number as was found in the researchers' clean room, suggesting that the uppermost layer of the lake is lifeless.

📄 [Vostok's microbes elusive in first measurements of surface water](#)

3,000 METRES

Distance a British team is drilling down to reach Lake Ellsworth, another subglacial lake in Antarctica.

📄 [Hunt for life under Antarctic ice heats up](#)

HUMAN TOUCH

10,898



METRES

Depth to which film-maker James Cameron dived to reach the bottom of the Mariana Trench in his submersible, *DEEPSEA CHALLENGER*.

📄 [James Cameron returns from the deep](#)

1,845

MILLIMETRES

Running height of Oscar Pistorius, who won the T44 400 metres at the Paralympic Games this year.



1,340

KILOMETRES PER HOUR

Speed reached by Felix Baumgartner as he broke the sound barrier and set a freefall record when he jumped from more than 39,000 metres above New Mexico.

[Supersonic skydive](#)



FLU FEAR

5

21 BILLION

Estimated size of the world's poultry population in 2010.

Number of mutations that could allow the H5N1 bird flu virus to spread through the air between mammals, according to a study led by Ron Fouchier at the Erasmus Medical Centre in Rotterdam, the Netherlands.


[Second mutant-flu paper published](#)

1,000

Number of avian flu sequences collected in 2010 to aid surveillance efforts — too few to track disease effectively.

[Flu surveillance lacking](#)

NUCLEAR POWER AFTER FUKUSHIMA



0

145

Number of nuclear reactors operating in Japan as of 5 May. Two have since been restarted.

☞ [Japan switches off its last nuclear reactor](#)

Number of nuclear reactors in the European Union subjected to stress tests by the European Commission. Nearly all were judged to need some safety improvements.

☞ [Hundreds of safety issues found at European nuclear plants](#)

RESEARCHERS BEHAVING BADLY

172

2

Number of papers by anaesthesiologist Yoshitaka Fujii that are probably fraudulent, according to a report from the Japanese Society of Anesthesiologists.

☞ [Retraction record rocks community](#)

67%

Number of publications by social psychologist Dirk Smeesters that were retracted by Erasmus University Rotterdam after his resignation.

☞ [The data detective](#)

Proportion of retracted papers in the life sciences that were withdrawn because of misconduct such as fraud or plagiarism, according to a study in the *Proceedings of the National Academy of Sciences*.

☞ [Misconduct is the main cause of life-sciences retractions](#)

3

The maximum number of people who can share a Nobel prize.

PHYSICS WINS BIG

US\$27 MILLION

Total prize money awarded to nine physicists by billionaire investor Yuri Milner.

☞ Theoretical physicists win massive awards

2,932

Number of authors on the paper from the ATLAS collaboration at CERN, the particle-physics lab near Geneva, that reported the discovery of the Higgs boson.

☞ Physicists declare victory in Higgs hunt

18 BILLION KILOMETRES

Distance travelled by space probe Voyager 1 since its launch in 1977. Voyager 2, launched the same year, has travelled nearly 15 billion kilometres.

☞ Voyager's long goodbye

THE SOLAR SYSTEM AND BEYOND

7

The 'minutes of terror' endured by NASA mission scientists before the Curiosity rover landed successfully on Mars.

☞ Curiosity sets down safely on Mars





UNVEILING THE HUMAN ENCYCLOPEDIA

30 1,640

Number of papers published simultaneously in *Nature*, *Genome Research* and *Genome Biology* by the ENCODE consortium.

[Nature ENCODE research papers](#)

Number of genome-wide data sets collected by the ENCODE consortium.

[Nature ENCODE](#)

6 SCIENTISTS BEHIND BARS

YEARS

The sentence handed out to six Italian seismologists found guilty of manslaughter for allegedly giving false assurances before the L'Aquila earthquake in 2009.

[Italian court finds seismologists guilty of manslaughter](#)



BEHIND BARS

4 YEARS

The sentence requested by the prosecution in the L'Aquila case.



11 YEARS

Time served by Russian physicist Valentin Danilov for alleged espionage and embezzlement before being granted parole by a Siberian court.

 [Russia paroles jailed physicist](#)



£100 MILLION

Amount UK research funding agencies will spend over five years — equivalent to US\$161 million — to help pay for research to be made free to access.

 [Britain aims for broad open access](#)



340,000

Number of research papers published in open-access journals in 2011.

12%

Proportion of the world's research papers (indexed in Elsevier's Scopus database) that were immediately free on publication in 2011.



US\$ 136 BILLION

Total cut to US government spending next year, including science, set to come into effect in January unless Congress reaches an agreement on the budget.

[Cuts loom for US science](#)

2,000

Number of Canadian scientists who marched on Ottawa's Parliament Hill to protest against cuts to science. [☞ Death of evidence](#)

12.4%

Amount by which China increased its science budget compared with 2011, taking it to US\$36.1 billion.

[☞ China's budget backs science](#)

THE END

