

had malignant or benign tumours in their large intestines. None of these growths were seen in rats given pure drinking water.

The prime suspect for causing the tumours is aloin A, which together with other aloe extracts was removed from laxatives sold over the counter in US pharmacies in 2002 because manufacturers had not provided the US Food and Drug Administration (FDA) with sufficient safety information.

"We're looking at designing the next round of experiments," says Daniel Fabricant at the FDA. "We want to relate the results to the products that are out there."

'Ebola' kills lake fish

A VIRUS likened to the human Ebola virus because it makes fish bleed to death has been identified as the mystery agent that caused thousands of dead fish to clog up Milwaukee harbour last month.

The Wisconsin Department of Natural Resources (DNR) announced on 1 April that the shoals of gizzard shad, *Dorosoma cepedianum*, had died of viral haemorrhagic septicaemia (VHS).

Fish virologists at the DNR say that after regularly causing die-offs in at least 25 species in the Great Lakes since it first hit in 2003, the disease hadn't struck since 2008.

They believe VHS vanished because fish that survived the first outbreaks became immune to it. But fish born more recently would not have had any exposure and would therefore lack immunity, causing another die-off. The DNR researchers think this is what happened in Milwaukee.

"The gizzard shad infected with VHS in March were hatched in the summer of 2010, and so were naive to the virus," says Susan Marcquenski of the DNR. Because the lakes are so large, die-offs may occur undetected, but the spectacular and unexpected deaths in the harbour made it easier to identify and diagnose.

UFO search engine

EXPECT a whole new wave of alien conspiracy theories. The FBI has placed reams of information on past UFO investigations online in a searchable database.

"The Vault" gathers together documents frequently requested via the Freedom of Information Act – and should reduce costs in answering such FOIA requests, says an FBI spokesman.

It has already grabbed attention for a 1950 memo about an incident in Roswell, New Mexico, a few years before: an FBI agent cites an unnamed US air force

source revealing the recovery of three flying saucers – each peopled by humanoids "only 3 feet tall, dressed in metallic cloth".

The Vault does not contain any previously unreleased information, but it enables searches of

"It enables searches of handwritten or smudged text, which could spawn new conspiracy theories"

unstructured, handwritten or smudged text, which could spawn new theories. Similar information releases in the UK and France have also added fuel to the fire.

Astronomy's accidental scientists

HOBBYIST astronomers may be scientists without even realising – as long as they put their snaps online.

On 27 October 2007, comet Holmes grew 10,000 times brighter in just a few hours, becoming visible to the naked eye as the dust and gas around it flared to the size of Jupiter. Amateur astronomers were watching and posted their photos online.

Dustin Lang of Princeton University and David Hogg of New York University wondered if these images might be useful to science. "The comet was a good candidate because its explosion and sudden brightening made it both an object of interest and bright enough that a lot of people were able to photograph it," says Lang.

An online search threw up almost

2500 photos. The pair then used the web tool Astrometry.net to position each image in the sky to create a montage of the comet (see below).

Using this and a statistical model, Lang and Hogg pieced together the path of Holmes's orbit around the sun, without knowing where the photos were taken, or by whom (arxiv.org/abs/1103.6038v1).

Though "citizen science" projects such as Galaxy Zoo exist, this is the first in which the contributors were unwitting. The method could lead to new discoveries. "Perhaps one could find unanticipated transient objects, such as supernovae or gamma ray bursts," says Avi Loeb of the Harvard-Smithsonian Center for Astrophysics in Cambridge, Massachusetts.



Snapped by amateurs

DUSTIN LANG AND DAVID W. HOGG

60 SECONDS

Bald young penguins

Penguins moult and regrow their feathers on the way to adulthood, but some young penguins in South Africa and Argentina are not immediately replacing their coats, leaving them bald. The study's authors think it is probably down to an infection but there is no evidence yet for a parasite (*Waterbirds*, DOI: 10.1675/063.033.0321).

Fish curbs depression

Eating oily fish rich in omega-3 fatty acids during the last trimester of pregnancy could reduce the symptoms of post-partum depression, suggests a study presented at the Experimental Biology meeting in Washington DC this week. Pregnant women who took fish oil capsules were less likely to report symptoms associated with the condition.

Chinese milk scandal

Three children in China have died and a further 35 were hospitalised after drinking milk contaminated with nitrite, a salt used for preserving meat. In 2008, 300,000 people in China were made ill by milk containing the industrial chemical melamine, added to falsely inflate the milk's protein content and value.

Telescope in trouble

Plans to launch a telescope that could help find life on other planets and provide insights into the first galaxies are on hold again. Having already been pushed back from 2014 to 2015, NASA now says its over-budget James Webb Space Telescope likely won't launch until 2018.

50 years of space

Imagine being the only human to know what Earth looks like from space. Fifty years ago, Yuri Gagarin of the Soviet Union became the first human to travel into outer space. Since then, 520 men and women from 38 countries have followed him, and the International Space Station has maintained a continuous human presence for just over 10 years.