# 60 SECONDS

Bologna have found that bacteria are to blame. DNA tests and electron microscopy confirmed the presence of cyanobacteria. which leave a black residue when they dry out. Analysis of the chemical composition of the deposit showed that it came from cyanobacteria and not from petroleum-based pollution (Environmental Science & Technology, DOI: 10.1021/ eso62176s).

"Iranian officials wanted us to demonstrate that one of the causes of the blackening was the burning of the wells," says Alessandra Bonazza, who led the study. "I think they are probably disappointed by what we found."

**Keep to the dose** 

# **Drug dropped**

IF ANYONE detonates a nuclear bomb in a US city those affected by radiation shouldn't expect an instant remedy. In a shock move, the government has dropped plans to buy a novel drug to treat radiation sickness.

Last week Hollis-Eden, a startup firm in San Diego, California, expected a government order for a million self-injectable doses of Neumune, a drug that stimulates bone marrow growth (New Scientist, 3 March, p 7). The US Department of Health and Human Services now says that no drug meets its requirements. Richard Hollis, CEO of HollisEden, calls this "difficult to understand", especially since government officials told him last October that Neumune was what they wanted.

This is the second cancellation under the \$5.6 billion Project

## "The US government now savs no radiation drug meets its requirements"

BioShield, the US government's plan to defend against biological, chemical and radiological attacks. Last December it dropped its biggest contract, for an anthrax vaccine, with VaxGen, another California firm.

# DARWIN, BURPS AND ALL

US DOCTORS have been warned to go easy when prescribing drugs used to treat anaemia. The US Food and Drug Administration (FDA) is changing the labelling to discourage "off-label" prescribing.

Versions of the hormone erythropoietin, which boosts the production of red blood cells, are approved to treat the anaemia that can occur as a side-effect of cancer chemotherapy or in patients with kidney failure.

Rather than just giving a minimum dose to avoid blood transfusions, as recommended,

### "Such prominent black box warnings are the strongest the FDA can demand"

some US doctors use erythropoietin at higher doses to cure anaemia. High doses can cause heart attacks or stroke. however, and even encourage tumour growth in people with head or neck cancers.

The drug makers, Amgen of Thousand Oaks, California, and Ortho Biotech of Bridgewater, New Jersey, must now print a warning against high-dose use in a prominent black-outlined box on the label. Such "black box" warnings are the strongest the FDA can demand.

What was it like living with Charles Darwin? The discovery of his wife's diaries in a chest of drawers belonging to their family has given us some glimpses. Spanning more than 60 years, they suggest a life dominated by illness.

Emma Darwin's diaries rarely mention her husband's research but record instead visits from friends and relatives, trips to the dentist, the weather and a constant stream of ailments that dogged her family.

In particular, they provide agonising insights on Charles's poor health, says Jim Moore, a historian of science at the UK's Open University, based in Milton Keynes. The detailed documentation of his symptoms is testimony to her unwavering support for him, he says, and show just how dependent he was

on her. "It's as close as we can get to the sacred interiors of their relationship."

The entries reveal that the young Charles was already suffering soon after his return from the Beagle voyage and their marriage. Over the course of several months in 1840, for example. Emma described Darwin as "exhausted". "overtired + trembling". "languid" and suffering "great flatulence" (which then meant burping), symptoms that plagued him until his death more than 40 years later.

"It's amazing that we have an independent, lifelong record of the comings and goings of the Darwin family," says historian John van Wyhe of the University of Cambridge, who has made the documents available on Darwin Online (darwin-online.org.uk).

# **Extinct after all**

The best evidence for the continued existence of the ivory-billed woodpecker, believed extinct for decades until "captured" on video two years ago, has been discredited. A video analysis of the common pileated woodpecker to be published in BMC Biology shows it has the colour pattern and wingbeat frequency thought to be unique to the ivory-bill.

#### Even earlier humans

Modern humans were around at least 100,000 years earlier than we thought, if the teeth in a fossil jawbone are anything to go by. The 160.000-year-old teeth, found in Morocco, show growth patterns more similar to living Homo sapiens than fossil Homo species (Proceedings of the National Academy of Sciences, DOI: 10.1073/pnas.0700747104).

#### Dwarf no more

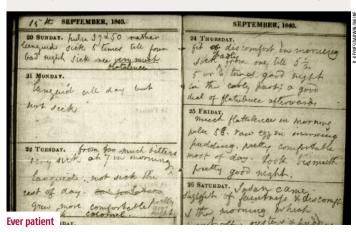
Pluto's no planet - unless you live in New Mexico. The star-struck state. home to a host of observatories, was this week considering reinstating Pluto as a full-blown planet, rather than the dwarf status assigned it by the International Astronomical Union last August. Why? Pluto's discoverer, Clyde Tombaugh, hailed from New Mexico State University.

#### **Hot money**

In open defiance of attempts to restrain its nuclear programme, Iran unveiled new banknotes on Monday bearing the nuclear symbol of electrons orbiting a nucleus. Worth about \$5. the notes carry a saying from the prophet Mohammed: "Men from the land of Persia will attain scientific knowledge even if it is as far as the Pleiades."

### Bound to cut carbon

The UK has become the first country to propose legally binding national limits on greenhouse gas emissions. The draft Climate Change Bill, published on Tuesday, requires cuts in carbon dioxide emissions of 60 per cent by 2050, relative to 1990 levels.



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