Odds & ends

Down with a bang

NASA's Genesis mission, which was designed to bring samples of the solar wind back to Earth, crashed into the Utah desert in September. The craft had such delicate detectors that mission designers had planned for Hollywood stunt pilots to swoop in and catch the capsule by its parachute, allowing for the softest possible landing. But the parachute didn't open, owing to an error in the design drawings that led to some crucial switches being installed upside down.

A whale of a time

An otherwise ordinary day in a busy Taiwanese street was interrupted in February by 60 tonnes of exploding sperm whale. The dead whale was being delivered by truck to a laboratory for an autopsy, when the carcass exploded after gas from decomposition built up inside. Luckily, only some of the internal organs fell into the street. The focus for the post mortem — the heart and lungs — was still intact.

Newton revealed

A 300,000-word interpretation of the biblical book of Revelation that Isaac Newton wrote in the late seventeenth century was published online in August. The eye-opening text, peppered with references to dragons and reflections on distrust of the Catholic faith, revealed Newton's intense interest in spiritual matters. More than half of Newton's works seem to have been predominantly about religion rather than science.

From the archive

A theoretical physicist aired his life history, including stories of growing up as a Polish Jew in occupied France during the Second World War, in an unusual medium this year. He put it all on the arXiv physics preprint server, which more usually hosts original research. But the archive won't put everything up online. Researchers who feel they have been unfairly excluded from the server banded together this year to form their own 'archive freedom' website, to protest at the site's selection criteria.

Beagle wrangling

No one really knows what happened to the ill-fated Beagle 2 lander when it went missing on its descent to Mars this time last year. But the bigger question may be who will pay for the failed attempt. The European Space Agency (ESA) 'lent' mission leaders in the United Kingdom €16 million (US$21 million) for the project, and this autumn some ESA-funded researchers were beginning to grumble about whether, and how, the space agency would ever get it back. Britain may or may not want to repay in kind with goods and services, but space scientists were quoted as saying a cheque would be best.

"To find an organism in ocean sampling that would help to eliminate the world's dependency on carbon-based fuels."

Craig Venter, head, J. Craig Venter Science Foundation, Rockville, Maryland

"Five minutes with Charles Darwin. Or, failing that, a modern genomics laboratory for the Charles Darwin Research Station in the Galapagos."

Hunt Willard
Geneticist, Duke University, Durham, North Carolina.

The Galapagos Islands are a living laboratory for studying evolution, and naturalists have been drawn there for more than a century. The islands once helped spark revolutionary theories about evolution, but experts say that the archipelago's Charles Darwin Research Station on Santa Cruz now desperately needs better equipment to keep pace with twenty-first-century genetics — and to unravel some remaining mysteries of evolution.

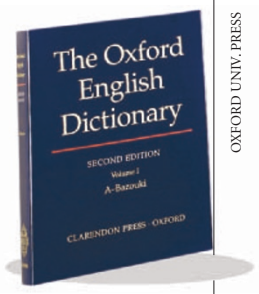
Biologists tend to assume that evolutionary changes arise from rare genetic mutations becoming fixed in a species population thanks to environmental pressures. But, says Willard, changes on the Galapagos Islands seem to be happening too quickly for this to be the only mechanism at work. More dramatic, large-scale genomic changes may be occurring as a result of coupling between different subspecies, he says. But until a 'Galapagos revisited' project does thorough genomic studies, we won't know what's really going on at the DNA level, he says.

Such genetic studies have already proved useful for some of the lonelier species on the islands. An analysis of tortoises helped to find the best potential subspecies match for Lonesome George — a giant tortoise thought to be the last of his line on the island of Pinta. George has not yet been introduced to any of these chosen females, but scientists are hoping that he won't ignore them in the same way that he has rejected the other potential mates now in his enclosure.

ZUMA PRESS

"A spell check for English (Euro-speak) to add to my computer languages of English (UK) and English (US). And a dictionary to go with it, so I can work out what the Euro-words actually mean."

Anon



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Coffee-breaks at European science conferences this year were alive with complaints about the increasingly difficult application process for European 'Framework' grants. Scientists say that the forms, riddled with neologisms such as 'sideground', are becoming increasingly impossible to read, let alone to fill out.

There actually is a glossary for the Framework programme (see http://fp6.cordis.lu/fp6/glossary.cfm), but sadly neither it nor the *Oxford English Dictionary* includes the word 'sideground'. If you dig through the European Commission's Intellectual Property Rights Helpdesk website, you'll find that the word means "information and rights acquired in parallel with a project".

Scientists say that the increasingly complex application forms seem to want them to prove that they will help cure Europe's economic and social ills, while doing a bit of science on the side. Writing the research project is the easy part, they say; trying to work out how to handle the political add-ons is a full-time job.

The details of the Seventh Framework Programme, to begin in 2006, will be hammered out during 2005. But it's a good bet that any wish for simplicity in the new application forms won't be granted. Researchers instead set their hopes on the creation of the planned European Research Council, which should be distanced from politics in Brussels.

Add your thoughts to *Nature*'s wish list at
www.nature.com/news/specials/wishlist

"A firm commitment by the European Commission to earmark enough money for the European Research Council, no matter whether the research budget will be doubled or not."

Erwin Neher, biophysicist, Max Planck Institute for Biophysical Chemistry, Göttingen, Germany