SIDELINES K. GARRETT/NATIONAL GEOGRAPHIC/GETTY IMAGES

ZOO NEWS

Colossal effort

Zoologists at the Museum of New Zealand in Wellington have embarked on perhaps their biggest and most delicate feat of engineering so far. They have started the lengthy process of thawing out the most complete specimen of colossal squid (Mesonychoteuthis hamiltoni). The 10-metre, half-tonne creature was caught and frozen last year.

ON THE RECORD

"Gravity's not really my friend right now."

Peggy Whitson, an astronaut on the Soyuz capsule that came near disaster last week, reflects on the unpleasantness of pulling 8.2 G during the craft's botched re-entry.

"You would have thought I claimed the pyramids were carved by lasers."

Materials engineer Michel Barsoum wonders why so much hostility has greeted his theory that the Egyptian pyramids were 'cast' like concrete, not built from stone blocks dragged from quarries.



SCORECARD

Artificial meat
Animal-welfare group
PETA has offered a
US\$1-million bounty to the
first scientist who can produce
marketable lab-grown meat,
thereby saving real animals from
the abattoir.

Snacks
Confectioners might be worried by a British study of appetite, which suggests that dieters who think hard about their last meal are less tempted by the prospect of eating biscuits.

Sources: BBC, PETA, New Scientist, Associated Press, boston.com

Programs promise to end PDF paper-chase

Researchers are buzzing about a new type of software that allows them to manage their research paper downloads from online journals much more effectively.

One of the most popular programs is Papers, a commercial offering released last year with a similar interface to iTunes, Apple's successful music-file organizer. Papers and similar programs are able to read a file's 'metadata' so that a batch of PDF (portable document format) files can be sorted by, for example, author, journal name or year. Users can add new files to their hard drives by 'dragging and dropping' or use the program to search and download directly from databases such as PubMed, IEEE Xplore and the arXiv preprint server.

Papers was developed by Alexander Griekspoor and Tom Groothuis, then working at the Netherlands Cancer Institute in Amsterdam. The idea was borne of the frustration they experienced in trying to sort and search papers they downloaded from online-access journals. Griekspoor refers to Papers as a "personal library of science" — the full text of papers in the library is indexed and easily searchable, he says.

Users have responded excitedly to the software, arguing on the blogosphere about the various merits of programs from the free BibDesk to Sente. "It means I can remember something I have read somewhere, and I can type a few words and find it again," says Papers user Tim Hubbard, head of informatics at the Wellcome Trust Sanger Institute near Cambridge, UK.

Although Papers has achieved a fair amount of success, an earlier open-source program called iPapers still has its devotees. iPapers emerged in 2004 and is still managed on a parttime basis by its developer, Toshihiro Aoyama

of Suzuka National College of Technology in Japan. The second version of the software, released in 2006, has been downloaded more than 13,000 times.

"It definitely speeds things up," says biochemist Jocelyn Côté of the University of Ottawa in Ontario, Canada. Côté says that he struggled to invent a consistently useful filenaming algorithm for his hard disk's burgeoning paper collection. Although his PDF library has grown from 500 papers to roughly 3,000, Côté says iPapers still enables rapid recall.

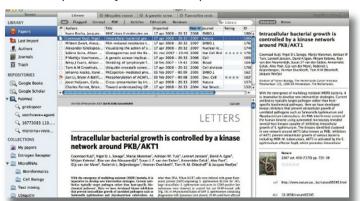
Adobe Systems in San Jose, California, which created the PDF file format, says that it has its own management software, called Digital Editions, but that other such programs are a welcome addition to the market.

Both iPapers and Papers were developed for Macintosh operating systems, although the programs inspired graduate student Derek Anderson at the University of Texas, Dallas, to create a Linux version of the software called gPapers.

The programs do not yet build bibliographies like traditional reference management tools. Some programs, such as Bookends by US company Sonny Software, organize PDF files while allowing some citation formats. Reference tools, such as Thomson Scientific's EndNote, have recently begun to bridge the gap by including some file-management functions, such as linking to PDF files.

Managing papers is just the first step, developers say. "PubMed is an absolutely fantastic repository, but it's a one-way street. You can download something, but you can't contribute anything," says Griekspoor. Ultimately, he thinks programs such as Papers may network researchers to share information and commentary.

Rachel Courtland



The Papers application for organizing downloaded research papers has a similar interface to iTunes.