

ON THE RECORD

“Public concern is probably the only thing capable of overcoming the special interests that have obfuscated the topic.”

Climate scientist James Hansen argues for open discussion of climate change, charging that NASA is trying to muzzle him for promoting cuts to greenhouse-gas emissions.

“No harm can possibly come out of eating good haggis.”

A Scottish butcher protests against official warnings that frequent haggis consumption could contribute to obesity in young children.

Sources: *New York Times*, BBC

SCORECARD

Prison break
Israel's Megiddo prison, together with its 1,200 inmates, looks set to be relocated after an ancient Christian church was unearthed in its grounds.

Space suits
Old space apparel is being given a new lease of life: as a satellite. NASA is to throw a space suit equipped with batteries and a radio transmitter out of the International Space Station. Ham radio operators are encouraged to track the 'SuitSat'.

'Undercover' research
A professor whose membership of the US National Socialist Movement got him fired from his university post claims he joined the Nazis as a research project to understand the mentality of white supremacists.

NUMBER CRUNCH

Chinese officials last week unveiled a plan for an aerial photographic survey to measure the Great Wall.

6,300 km is the length of the wall according to Ming dynasty historical documents.

7,000 km is its length according to local surveys last century.

US\$25 million is the price tag for the new survey.

Source: <http://english.epochtimes.com>

Experts plan to reclaim the web for pop science

Is it feasible to peer-review the Internet? A coalition of science agencies and Silicon Valley entrepreneurs is trying to do just that. They are launching what they claim will be an authoritative network of websites, where users can find trustworthy information on any subject. Top science organizations are signing up, but critics are sceptical about the project's rationale, and whether it can succeed.

The Digital Universe project is billed as a “network of web portals”, run by experts, on topics ranging from the Arctic and the oceans to the Solar System and the Universe. Users would navigate through the portals using a three-dimensional browser.

You could “fly over an accurate virtual Earth to explore the contours of the Grand Canyon, swim with the fish of the Great Barrier Reef and travel through the human body”, says an enthusiastic Robert Corell, chair of the steering committee for the Arctic Climate Impact Assessment and senior scientific adviser for the Digital Universe's Earth Portal.

The project also includes an encyclopaedia that will use similar technology to the popular online encyclopaedia Wikipedia, and Larry Sanger, a co-founder of Wikipedia, is helping to create it. But that's where the resemblance ends. All content in the Digital Universe will come from vetted experts, and articles will be reviewed by editors before going live. There will also be links to approved websites.

The driving force behind the project is ManyOne, a company headed by Joseph Firmage, who made a fortune in the 1990s from an Internet consulting company. He resigned in 1999 after the fallout from his book claiming that he had encountered extraterrestrials.

Firmage says he vehemently opposes the “anyone can edit” vision of Wikipedia. “Wikipedia is a very uninviting place for most intellectuals,” he adds. “I myself would not want to be writing articles that could be edited by somebody who does not necessarily have any expertise.” He hopes that peer-reviewed content will raise the standard of content on the web, which he describes as having “an intellectual deficiency of serious proportions”.

“The Digital Universe is an attempt to massively mobilize the scientific community,” adds Cutler Cleveland, director of the Center for Energy and Environmental Studies at Boston University and editor of the Digital Universe's Earth Portal and other portals on Earth's environment. “The information you see here you will know is trustworthy in a fundamental way.”

Many are enthusiastic. The US National Council for Science and the Environment, the University of California, Berkeley, Massachusetts Institute of Technology, the University of Oxford and the World Resources Institute have all signed up to help. The Digital Universe's Earth Portal, which is to be released next

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The Digital Universe: science you can trust on the Internet.

month, has contributors that include Gene Likens, the discoverer of acid rain, Thomas Kunz, a top bat expert, and Robert Costanza, founder of the field of ecological economics. Its international advisory board includes Rita Colwell, former director of the US National Science Foundation.

Critics interviewed by *Nature* were unwilling to speak on the record. But some believe that the project is over-complicated, and that much of its underlying technology — which still requires significant development — runs against the trend to distribute information in lightweight formats that can be accessed by cell phones or PDAs such as the BlackBerry. “If you have to rely on a high-bandwidth always-on network environment, on devices with a lot of storage, you are pretty much going in the wrong direction,” says one critic, an expert in Internet information systems. He is also unimpressed by the Digital Universe’s concept

of peer-reviewing material. “There’s more than enough content on the web, even substantive content,” he says. “I’m not sure that generating new content is really a breakthrough.”

There are also questions over the business model, in which revenue would largely come from selling high-speed Internet access, with half the profits fed back into the work. “It’s an odd choice; that’s a dying business,” comments one observer familiar with the project, pointing out that in the future consumers will be unlikely to notice where their Internet access comes from. But he says he can’t help being inspired by the idea. “They’re trying to package science in a way that has some of the glitz and entertainment appeal of television, but that is also complete and correct,” he says. “They’re not in it for the money; actually, they’re trying to save the world.” ■

Declan Butler

♦ www.digitaluniverse.net

Senators seek cash to save US science

WASHINGTON DC

The United States is losing its scientific edge and needs billions of extra dollars to rekindle innovation, according to a bipartisan group of US senators.

After years of growth in areas such as biomedical research, funding at US science agencies is now mostly flat or decreasing, and critics charge that the nation’s competitiveness will soon suffer. The senators’ solution consists of three new bills that would dramatically increase the number of science teachers nationwide, boost funding for research, and increase tax breaks for industrial research and development.

“This is a basic problem that America faces and that everybody in the US Senate ought to be totally committed to solving,” said Senator Pete Domenici (Republican, New Mexico), unveiling the bills on 25 January. The other sponsors of the legislation are Democrats Jeff Bingaman (New Mexico) and Barbara Mikulski

(Maryland), and Republican Lamar Alexander (Tennessee).

The legislation, collectively dubbed the Protecting America’s Competitive Edge (PACE) Act, recommends spending US\$9.5 billion in the first year alone. That money would go towards hiring some 10,000 science and maths teachers, creating a crash programme for advanced energy research, and boosting funding by 10% at agencies such as the National Science Foundation, the Department of Energy and the National Oceanic and Atmospheric Administration.

Over the long term, the PACE Act recommends doubling the budget of these and other research offices, as well as providing research tax credits for industry and incentives for students who take a bachelor’s degree in science, maths or engineering. The legislation is an attempt to implement the recommendations made in a report by the National Academies, which was released last October and warned that other countries were

threatening US scientific dominance (see *Nature* 437, 1208; 2005).

Not surprisingly, science advocates were almost universally enthusiastic about the proposed legislation. “We’re excited about it,” says Gerald Wheeler, executive director of the National Science Teachers Association in Arlington, Virginia. “We’re creating the engine that’s going to get us out of this crisis.”

But others are more cautious about the bills’ prospects. Sam Rankin, president of the Coalition for National Science Funding in Washington DC, notes that the PACE Act would only recommend spending levels. Money for the initiative would have to be coaxed from congressional appropriators, who must also fund the US presence in Iraq and other government programmes. “Time will tell whether the rhetoric is backed up by the funding,” Rankin says. ■

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