Fossil Vomit

Scientists in Britain have identified what they say is the world's oldest fossilized vomit—a collection of shells from an extinct squidlike creature that were once in the stomach of an ichthyosaur.

Geologist Peter Doyle of the University of Greenwich and Jason Wood of the Open University say that electron microscope scans have provided definitive evidence that a collection of belemnite shells found in a clay quarry in Peterborough were upchucked by an ancient marine reptile.

The pair found that the shells had pits that they believe are evidence of corrosion caused by the stomach acids of an ichthyosaur that plied the warm coastal waters about 160 million years ago. The acid marks distinguished the belemnite shells from other shells in the same area, says Wood. What's more, says Doyle, the belemnites were juveniles, indicating that "they did not die of old age." Doyle says the shells couldn't have come out the other end of the ichthyosaur because they would have damaged its internal organs. His conclusion: "This is the first time the existence of fossil vomit on a grand scale has been proven beyond reasonable doubt." The scientists presented their yet-unpublished findings at a paleontology conference at the University of Copenhagen in December.

Paleontologist Glenn Storrs of the Cincinnati Museum Center says vomiting is not an unusual dietary adaptation among carnivores: Sperm whales regurgitate the hard beaks of octopuses they devour, and owls throw up mouse bones after swallowing their prey whole. But this, he says, appears to be "the first solid report" of "vomite" from an ichthyosaur.

Bullet-shaped belemnite skeletons (inset, belemnite).

Taxonomic Tussle

Paleontologists are steamed that a trio of entomologists has renamed a well-known dinosaur with a tongue-in-cheek moniker. The dinosaur is *Syntarsus*, an early Jurassic theropod from South Africa first described in 1969. On 1 February, Michael Ivie, an entomologist at Montana State University in Bozeman, posted a note to a dinosaur listserv announcing that the name had already been given to a beetle 100 years before. He said he and two co-authors had come up with—and formally published—a replacement name: *Megapnosaurus*, meaning big, dead lizard.

Listserv participants loudly complained that the new name is ugly and disrespectful. They were also ticked off that Mike Raath of the University of the Witwatersrand, Johannesburg, the original describer of the dino, had not, as custom dictates, been accorded the opportunity to rename the beast. Ivie says he tried unsuccessfully in 1996 to contact Raath, who has chastised the behavior of the bug people as "bad form, insensitive, and uncollegial, if not downright unethical."

The lesson for paleontologists, says Tom Holtz of the University of Maryland, College Park, may be to underscore the usefulness of tacking "saurus" onto a new dino taxon—a tag almost no bug would be caught dead with.

Ancestor figure, Kwakawaka'wakw Nation, ca. 1906.

21st Century Ethnography

Canada plans to blaze new virtual trails in the world of ethnographic anthropology with a $40 million project to electronically link institutions in North America and Britain.

With money from the provincial government, the University of British Columbia (UBC), and the Canada Foundation for Innovation (a federal program for renovating university labs), the UBC Museum of Anthropology will link up with other aboriginal collections, including the Smithsonian Institution's National Museum of the American Indian and Oxford University's Pitt Rivers Museum, which holds more than half a million archaeological and ethnographic objects from around the world.

UBC anthropologist Ruth Phillips says she's "pinching" herself over the possibilities that the links will create. A researcher interested in a particular ceremonial mask, for example, will be able to access multiple images taken from different perspectives, call up images of similar masks located at other museums, view photographs of people using the mask, and listen to recordings of songs and myths relating to the mask.

The partnership also includes three First Nations groups, and participation by aboriginal peoples is encouraged. The entire project, which includes refurbishing Canadian museum facilities, is a "marvelous, stunning" initiative, enthuses Patricia Clements, president of the Humanities and Social Sciences Federation of Canada. "It's building on an absolutely unique resource and proposing extremely innovative research."

NAE Prizes

The U.S. National Academy of Engineering (NAE) this week doled out $1 million for two prizes, including its first-ever award in engineering education.

The Charles Stark Draper Prize, called engineering's Nobel Prize, went to Robert Langer of the Massachusetts Institute of Technology. Langer was awarded $500,000 for using polymer plastics to invent new drug-delivery technologies—such as a way to get chemotherapy directly delivered to a cancerous brain tumor (*Science*, 3 September 1999, p. 1531).

The new Bernard M. Gordon Prize went to Eli Fromm of Drexel University in Philadelphia for his work in reforming the undergraduate engineering curriculum to increase retention rates and boost participation by women and minorities. Begun in 1987 at Drexel, the project has spread to seven universities with funding from the National Science Foundation. Fromm hopes to use the $500,000 prize, divided between himself and the program, to create an endowment to foster ongoing reform and increase collaborations among campuses.

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