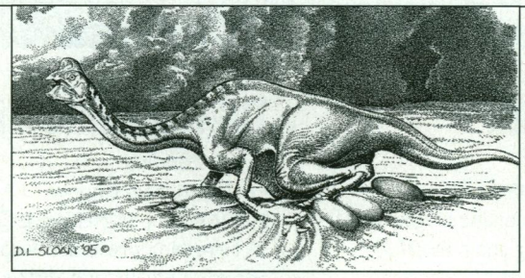
RANDOM SAMPLES

edited by CONSTANCE HOLDEN

Another Nesting Dino

The Oviraptor's reputation is definitely on the upswing. That dinosaur, originally viewed—and labeled by its name—as a lowly egg-stealer, has now been found fossilized in a brooding position on several nests of its own eggs. The latest one, from China's Gobi Desert, is described in the April issue of the *Canadian Journal of Earth Sciences*. And it comes with a possible new cause of death: the strain of laying eggs.

Of the seven reported Oviraptor skeletons, three have now been found on or near nests. Why? Mark Norell at the American Museum of Natural History, who found one of these oviraptors last year (*Nature*, 21/28 December 1995), has suggested they were being good mothers, brooding the eggs like a modern bird until they hatched, and that they were probably suffocated in a sudden sand storm.

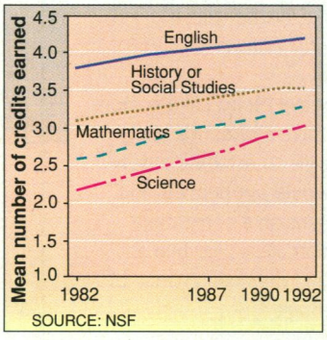


DONNA L. SLOAN

Brooder. Artist's rendition of nesting Oviraptor.

But the scientists behind the new find, Philip J. Currie, curator of dinosaurs at the Royal Tyrrell Museum of Palaeontology in Drumheller, Alberta, and paleontologist Dong Zhiming at China's Academy of Sciences, have another idea. Like Norell's specimen, their Oviraptor was found with its feet planted in the middle of a ring of eggs in the nest, its legs folded up beneath it, and its neck stretched forward over the nest. "It's the classic bird-brooding posture," notes Currie.

And he wonders if the 2-meter-long oviraptors weren't prone to dying from the strain of egg-laying. "They laid some 30 eggs, each one 15 centimeters in length," he notes, "which must have been very stressful for an animal of that size." It may have been for his specimen, which seems to have laid only a half-dozen eggs before being buried by sand. Norell, though, is skeptical. He points out that his dinosaur's chest, like that of a brooding bird, "was directly in contact with the eggs."



Fourth place. High school seniors still prefer English.

Industry Down on Science Education

A survey sponsored by the Bayer Corp. suggests that U.S. industry is more worried about the inadequate state of science education than are educators themselves.

The telephone poll, conducted last month, asked 600 public elementary school principals and human resource directors from a variety of companies for their evaluation of science education. The answers from the industry people were harsh, Bayer announced at a 23 April press conference in Washington, D.C. About 60% said that, what with the virtual disappearance of blue-collar jobs, most young adults lack adequate science preparation for entry-level jobs in industry today, such as auto production. And 84% thought that science literacy—defined as the ability to understand newspaper articles about science—will soon be a requirement for all entry-level jobs.

The principals were more optimistic than the executives: More than 75% felt that public schools are successful at turning out students who know how to solve problems and think independently. Less than half of the executives agreed, and 75% felt that skill levels of entry-level workers would continue to decline over the next decade.

John Mihm, senior vice president of corporate technology at Phillips Petroleum Corp., says the Bayer poll accurately reflects industry sentiment. "If a kid entering school today were given the very best education that any [high] school had to offer, he would still not be trained to adequately function in society upon graduation," he says.

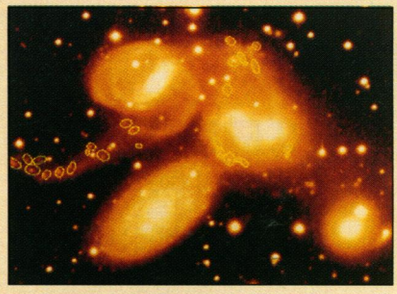
Fattened Crafoord Prize Goes to Ecologist

Ecologist Robert May, chief science adviser to the U.K. government, is to be awarded the 1996 Crafoord Prize from the Royal Swedish Academy of Sciences in September. The prize, designed to complement the Nobels, now totals $500,000, after the Crafoord Foundation decided to increase its prestige by raising the value from $380,000 last year.

May, who began his career in Australia in theoretical physics, switched early on to the application of mathematical theories to ecosystems and population dynamics, where, says the academy, he has made "brilliant pioneering contributions" in both theory and practice. Before taking up his government post a year ago May reassured U.K. scientists that, despite government pressures to increase applied research at universities, he believes "basic research continues to create wealth." Certainly that seems to be true for the latest Crafoord winner.

Dwarf Creation

This dizzying image shows what are believed to be dwarf galaxies—the little ones that make up most of the universe's galaxies—being created from a collision of big galaxies. If that's correct, it means that a lot of galaxies eschew the "standard model" of galaxy formation—the gravity-driven accumulation of material—for a more tumultuous birth. Jane C. Charlton and Sally D. Hunsberger of Pennsylvania State University, with Dennis Zaritsky of the University of California, Santa Cruz, report in the 1 May issue of *The Astrophysical Journal* that they used the 152-centimeter telescope at Palomar Observatory in California to study a collection of "compact groups" where galaxy collisions are frequent. As the galaxies brush past each other, they leave filmy wisps or "tidal tails" that seem to contain dwarf galaxies (circled clumps). Charlton says that while this phenomenon was not unknown, it now looks as though it "may be a very important contribution to galaxy formation." Harry Ferguson of the Space Telescope Science Institute in Baltimore agrees. The study, he says, "highlights that processes other than simple ... accretion of mass may be important in giving us the ranges of sizes and shapes of galaxies we see today." Later this year, the team is going to look at the same areas with the Hubble Space Telescope, at 20 times greater resolution than Palomar. That, predicts Charlton, "is going to be incredibly beautiful."



JANE CHARLTON

Spin-offs. Colliding galaxies leave tails.