

RANDOM SAMPLES

edited by MARTIN ENSERINK

Field of Dreams

Scientists in Alberta, Canada, are marveling over a field of late Pleistocene fossils and animal footprints laid bare earlier this year in an emptied-out reservoir.

The 3-square-kilometer site, located in Cardston, near the U.S. border, was discovered in March by a local grade school teacher, who came across some stone points in the Clovis style, which dates to about 11,000 years ago. The reservoir had been emptied last fall for repairs to the spillway. After the last puddles dried out, high winds screaming down from mountain

passes stripped away several meters of sediment to reveal scores of animal bones, an ancient hearth, stone tools, and track marks from extinct oxen, bison, horses, camels—a fairly common beast in Pleistocene North America—and mammoths.

A team led by vertebrate paleontologist Jim Burns of the Provincial Museum of Alberta has been racing to make casts of the prints before wind



Len Hills checks out mammoth prints.

erases them. So far they have salvaged seven mammoth prints, a dozen horse prints, and a half-dozen prints from *Camelops hesternus*, a thick-coated camel. Carbon dating of a bison bone puts the site at about 11,000 years old, near the end of the last Ice Age,

says paleontologist Len Hills of the University of Calgary, who led the excavations.

Fossils of most Pleistocene-

era mammals are common, experts say, but the prints are special. The site is "intriguing, mainly because of the footprints," says paleontologist Richard Harington of the Canadian Museum of Nature in Ottawa. "It's marvelous."

Hills's team excavated as much as it could before the reservoir was being refilled earlier this month to provide farmers with water to irrigate for summer sowing. Next fall, the water level will again be lowered to complete repairs. Scientists hope to be able to do more research then, before the site is submerged permanently next year.

Math Sucks ...

First it was the early '90s Barbie doll that squealed, "Math is hard." Hardly the inspiring words a child might need to learn arithmetic, countersquealed the National Council of Teachers of Mathematics (NCTM), whose protests led Barbie's maker, Mattel, to pull the math-wimp version off the market and offer buyers a replacement.

Now math teachers are taking on another irreverent pop icon: Jimmy Buffett, baby-boomer troubadour, has a new album that includes a song called "Math Suks" with lyrics such as "I'd like to kill the guy who invented this." The album is currently the fourth leading seller on the Internet.



"I'd like to burn this textbook," Jimmy Buffett says on his new album.

"Songs such as 'Math Suks' can easily hamper efforts to motivate students to learn

and excel in mathematics," the NCTM wrote in a 17 May statement. "I heard some young fans calling in to a radio talk show and saying that Buffett is right," says NCTM president Glenda Lappan. "You can say this song is not serious, but the damage is there." The National Education Association also disapproves of the song. Buffett's words pain even some of his math-minded admirers. "As a university professor who tries to get students to absorb mathematical concepts, a Jimmy Buffett fan, and the parent of three daughters, I have to say that I was quite disappointed that Jimmy Buffett stooped to recording this song," says Marc Feldesman, chair of the anthropology department at Portland State University in Oregon.

But Buffett, who says he was inspired by graffiti on a bridge in Key West, Florida, thinks the teachers' complaints, well, suk. "They should get a sense of humor," the crooner said in a written statement.

... Or Does It?

In Munich, Germany, meanwhile, one of the world's largest science museums is pushing the opposite message. In an exhibit that opened at the Deutsches Museum on 27 May, mathematics sheds its fusty image and bursts into vivid Technicolor life.

Entitled "Mathematical Cabinet," the museum's first permanent math show in over half a century features objects that visitors can pick up and play with, such as a collection of models of a torus (mathematese for "bagel") sliced in various ways. One cut produces what looks like two bagel halves ready for cream cheese. Another curves all the way around the torus, surprisingly leaving it in one piece. The secret: This kinder cut forms a Möbius band, a strange surface that appears to have two sides but really has only one.

Visitors can try their hand at tying bright blue ropes into complicated knots, constructing a 30-sided polyhedron out of wooden blocks, or coloring a map of part of Bavaria without giving two bordering counties the same color. For technology buffs, computer stations offer explorations of the wilds of number theory and geometry. "The point is to interest people to go deeper into mathematics," explains 74-year-old physicist and computer pioneer Friedrich Bauer, who conceived the exhibit and helped the museum create the objects.



One way mathematicians like to cut their bagel.

Cash Incentive

"If you put money between computer scientists and biologists, they will find ways to collaborate."

—Neuroscientist Mark Ellisman of the University of California, San Diego, in response to an NIH advisory panel proposal to fund a new network of interdisciplinary biocomputing centers.