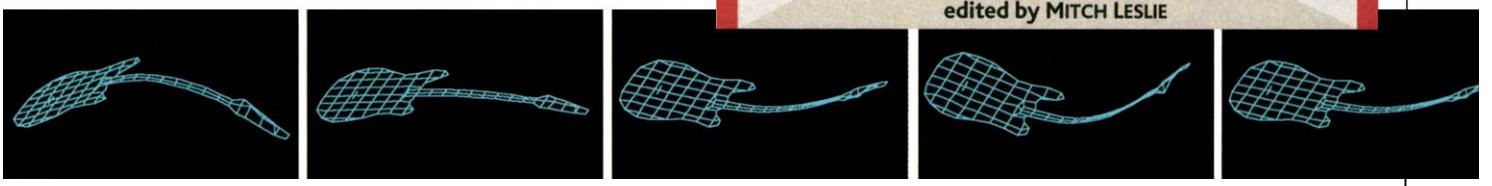
NETWATCH

edited by MITCH LESLIE



EDUCATION

Visualizing Acoustics

Why does a wooden baseball bat make a rich, satisfying "whack" when you hit the ball, while an aluminum bat gives off a wimpy "plink"? According to Acoustics and Vibration Animations, the solid wooden bat emits a range of frequencies of equal intensity, while the aluminum bat behaves like a hollow cylinder, its spectrum dominated by two high frequencies. Physics professor Dan Russell of Kettering University in Flint, Michigan, has loaded this site with easy-to-follow movies and illustrations that drive home basic concepts in acoustics and optics such as the Doppler effect, wave interference, and Fourier analysis. In the stills above, you're not looking at some rock star's abused instrument but the vibration of an electric guitar tapped with a small hammer, a student project included on the site.

www.kettering.edu/~drussell/Demos.html

FUN

Ha Ha, Fooled You

You've probably heard of Piltdown Man, the 500,000-year-old human ancestor with an apelike jaw and a big brain that was unearthed in 1912. But what about the boy cloned in the 1970s in a millionaire's secret tropical lab? These are among scores of scams, swindles, and pranks briefly described in the online Museum of Hoaxes. Alex Boese, a graduate student in science studies at the University of California, San Diego, built this monument to human gullibility by collecting examples ranging from forged medieval documents to phony Internet start-ups—as well as various scientific deceptions. Although some of the hoaxes were amusing stunts, others misled for decades or centuries before being exposed. Only in 1953 did radioactive dating discredit Piltdown Man, for instance, which turned out to be the skull of a more recent human coupled with the jaw of an orangutan.

www.museumofhoaxes.com

Send great Web site suggestions to netwatch@aaas.org

RESOURCES

Beetlemania

Worshiped by the ancient Egyptians, treasured by modern collectors, and cursed by greenskeepers, scarabs account for about 10% of the world's 350,000 beetle species. Although a few kinds of scarabs feast on lawns or crops, according to curator Mary Liz Jameson of the University of Nebraska State Museum in Lincoln, the majority are pollinators or part of "our unseen garbage patrol" that mulches dead animals and dung. Taxonomists and others interested in this widespread and diverse group should make a sweep through the museum's Scarab Central site. The highlight is an illustrated guide to 23 New World scarab families and subfamilies that offers detailed physical descriptions and information on taxonomy, distribution, ecology, and larval forms. There's also an identification key, a glossary, and a directory of scarab researchers with brief biographies.

www-museum.unl.edu/research/entomology/index.htm

TOOLS

Slime Searcher

If you work on the slime mold *Dictyostelium*, check out this new Web portal for searching the roughly 8000 genes of this slithering soil-dweller and popular model for cell biology. Compiled from the three *Dictyostelium* sequencing centers by the San Diego Supercomputer Center, the annotated database allows you to search for proteins by name and to hunt for genes by attributes such as length and position. You can also export the results into the center's Biology WorkBench for further analysis.

dictyworkbench.sdsc.edu

RESOURCES

The Scoop on Swordtails

The gaudy fellow below comes not from a pet-filled aquarium but a lab studying the origin and spread of cancer. Crosses between different species of swordtails (genus *Xiphophorus*) produce fish prone to melanoma and other tumors. Learn more about research on swordtails at xiphophorus.org, a site aimed at cancer biologists, behaviorists, and others interested in these colorful natives of Mexico and Central America. You'll find a genetic map, a gallery with portraits of the showy fish, a jobs board, and a directory of researchers. Founder Steven Kazianis, a cancer biologist at Southwest Texas State University in San Marcos, and colleagues have written a primer on techniques for studying *Xiphophorus*, from photography to artificial insemination. The bulging bibliography counts more than 1700 citations dating back to the early 1900s.

www.xiphophorus.org

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