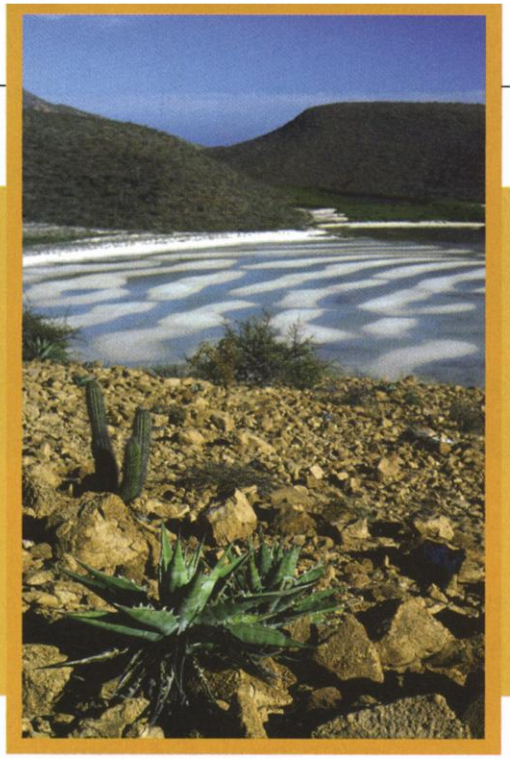
NETWATCH

edited by JOCELYN KAISER



FIELD GUIDES

Baja's Bounty

Six million years ago, colliding tectonic plates tore a strip of land from what is now northwest Mexico and shoved it up into California. The result is the stark and beautiful Baja California and the Sea of Cortés, where craggy topography, erratic rains, and currents that stir up deep, nutrient-rich cold waters make for an extraordinary array of desert and marine life.

Ocean Oasis, a Web site created by the San Diego Natural History Museum for a film playing in giant-screen theaters this year, offers an introduction to this ecologically rich corner of Mexico. A field guide describes the region's geologic history and its flora and fauna, ranging from the kangaroo rat, prickly-pear cactus, and mangroves to seahorses, sardines, and migrating humpback whales. There's also a teaching guide (for grades 4-8) and a glossary. Biologists may find interesting the history of conservation in Baja, which includes lobbying by aviator Charles Lindbergh in the early 1970s and recent efforts to save the endangered vaquita porpoise.

www.oceanoasis.org

DATA

Raw Rodent Genomes

When DNA is fed into a sequencing machine, it doesn't come out as one long string of A's, T's, G's, and C's. Instead, the instruments read short snippets of DNA that then have to be put into their proper order along chromosomes. The international consortium that is working to produce a rough draft of the mouse genome by April is now sending the raw data from each sequencing machine—known as trace data—to public Web databases each week. Researchers can use these 500- to 600-base bits to look for matches with the newly completed human genome—without having to wait for the polished product, which won't be available for months. Sequencers are also archiving trace data from the rat genome and may later add more organisms being analyzed by the "whole-genome shotgun" approach.

www.ncbi.nlm.nih.gov/Traces

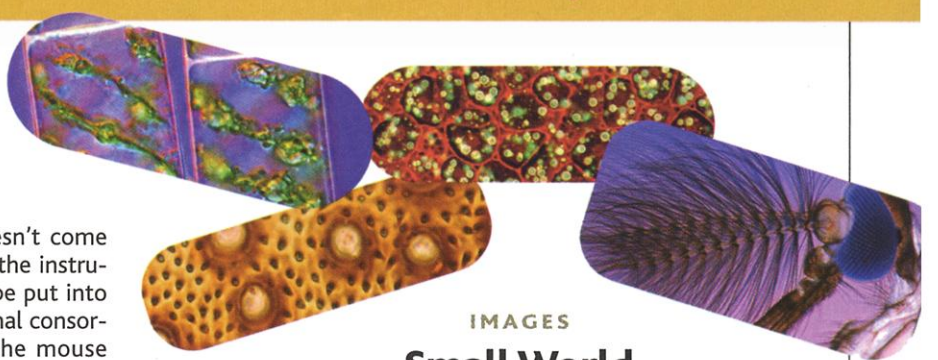
trace.ensembl.org

LINKS

Stone Soup

It may seem hard to believe when you gaze up at a massive granite building or sit on a cold marble bench, but many building stones were once liquid that cooled and solidified. Igneous rocks such as granite, for instance, crystallized from hot magma, whereas marble is a metamorphic rock, limestone that has been squeezed by geologic forces so its mineralogy changed. This site at the University of Calgary lists dozens of Web sites offering data and software for analyzing the chemistry and thermodynamics of rock formation. You can troll a mineral property database, predict the crystallization of lava, find out how much heat it takes to melt garnet, model the chemistry of groundwater, and much more.

geo.ucalgary.ca/~tmg/Research/thermo_links.html



IMAGES

Small World

Got a fancy for the microscopic world? If you're a scientist honing your microscopy techniques or just a Web spectator who wants to see what corn kernels look like up close, then drop by Nikon's MicroscopyU. Although slanted toward the company's own optical microscopes, the site, put together by microscopists who run the Molecular Expressions site at Florida State University, includes much material of broad interest. There are Java tutorials that let you tweak virtual microscopes, a forum for swapping tips, and a searchable microscopy dictionary. And, of course, there are dazzling image and movie galleries (including winners of an annual contest; see *Science*, 24 November 2000, p. 1495). See what mothballs look like under polarized light as they sublime, or witness amoebas oozing about and paramecia engaged in their version of sex.

www.microscopyu.com

Science ONLINE

Looking for funds to support undergraduate students? Then check out NextWave's GrantsNet, which has recently added to its trove of grants and fellowships for biomedical graduate students and postdocs a database of research opportunities for undergrads. The Howard Hughes Medical Institute–supported site also sports a snazzy new look and features, such as My GrantsNet and monthly funding updates, designed to simplify your search for funds.

www.grantsnet.org

Send great Web site suggestions to netwatch@aaas.org

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