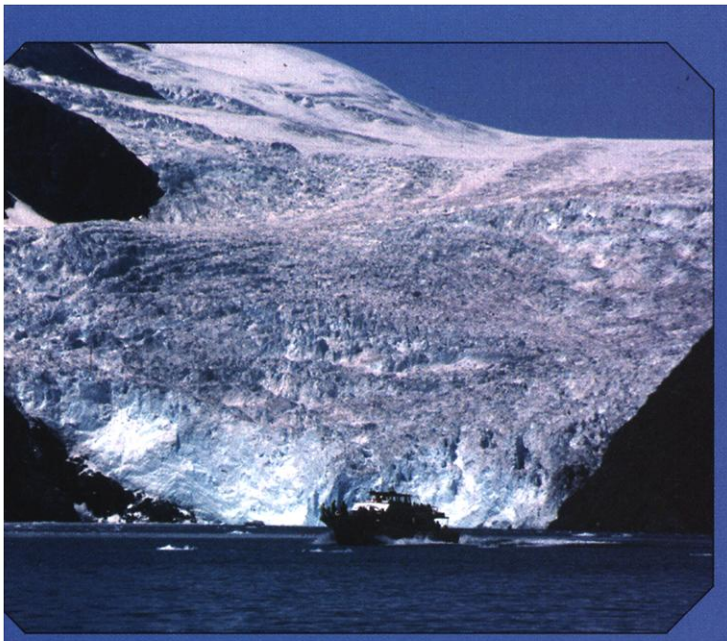
NETWATCH

edited by MITCH LESLIE



IMAGES

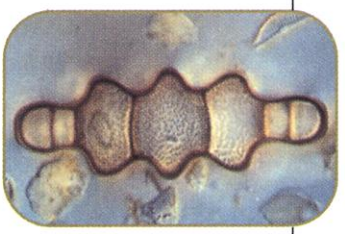
Field Trip to a Glacier

Glaciers are frozen, slow-moving rivers that perform landscaping on a grand scale, carving canyons, creating lakes, and bulldozing soil. The Glacier Image Database illustrates the structure of these giant tongues of ice, like Alaska's Holgate Glacier (above left), and the geological features they form, such as the trails of rubble called moraines. Created by glacier geologist Tom Lowell to supplement his courses at the University of Cincinnati, the gallery transports you atop, inside, and behind glaciers in locales ranging from Antarctica to Iceland. You can watch as melting patches of underground ice stealthily swallow a patch of forest in Alaska, creating a pothole known as a kettle. Or check out the scars left behind when a glacier skidded across the Ohio landscape. And don't slip past the collection of panoramic movies showing 360-degree views of glaciers and their surroundings.

tvl1.geo.uc.edu/ice/image/imageref.html

RESOURCES

Diatom Delight



With their delicate, ornate cell walls made of silicon dioxide (right), the aquatic protists called diatoms rival the work of the world's best jewelers. These beautiful glassy boxes, the occupant's home for life, are also the basis for diatom taxonomy. At this site, diatom devotees can sift through a trove of taxonomic databases and other resources assembled by the California Academy of Sciences, whose glass menagerie includes more than 59,000 samples. To help specialists identify specimens, an illustrated key covers more than 70 genera of diatoms. There's also a diatom glossary, a database of genus names, and a roster of the 472 type specimens in the academy's collection. You can also read a primer on diatom biology or catch up on the latest news articles on diatoms.

www.calacademy.org/research/diatoms

EDUCATION

Microbes on the Move

Looking for some snappy footage of bugs to spice up a virology, bacteriology, or immunology course? Try this video library from the department of microbiology and immunology at the University of Leicester in the U.K. Over 25 clips and animations capture explosive bacterial growth, HIV reproduction, amoebas snarfing their prey, and other microbial dramas. There are also how-to pages on microbiology lab procedures such as viewing specimens with bright-field microscopy and inoculating agar plates. The library is one of the tidbits on a well-done site that supplements the department's basic courses. It also offers lecture notes, news updates, and some primers on topics such as the bovine spongiform encephalopathy epidemic and the discovery that mosquitoes spread yellow fever. Some of the footage is available on videotape.

www-micro.msb.le.ac.uk/MBChB/MBChB.html

LINKS

A Garden of Links

Find a job, read a biography of a famous botanist, locate a picture of a rare plant, or learn how to propagate geraniums. You can do all these things and more at Scott's Botanical Links, a sprawling collection of reviewed and rated links. Creator Scott Russell, a botanist at the University of Oklahoma, Norman, adds a new site to the list every day or two. The content runs from highly technical DNA databases to general how-to's on plant care, and the searchable archives stretch back to 1996.

www.ou.edu/cas/botany-micro/bot-linx

RESOURCES

Organizing Entropy

Originally the bailiwick of thermodynamicists, entropy—a measure of the amount of disorder in a closed system—has spread to fields ranging from information theory to political science and has even infiltrated literature and the arts. Much of the impetus for this expansion came from the work of information theorist Claude Shannon, whose 1948 theory of communication laid the foundation for the Internet. Bringing a little local order to the scattered applications of entropy is a Web site* maintained by Roland Gunesch, a mathematics grad student at Penn State. The site holds dozens of links to expository articles, research groups, and software on various related subjects—from measuring entropy in DNA sequences to using entropy to quantify voting habits. It's not all dry academic stuff. Try out the Shannonizer,† a self-described "Web toy with delusions of literacy," which will translate your choice of text into nonsense in the style of authors ranging from Hunter S. Thompson to God.

* www.math.psu.edu/gunesch/entropy.html
† www.nightgarden.com/shannon.htm

Send great Web site suggestions to netwatch@aaas.org

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