NetWatch

edited by Mitch Leslie

IMAGES

Keeping an Eye on Coral

An azure reef rings two of the Society Islands in the South Pacific (below). A new archive can help researchers monitor this and other coral reefs and study how their structures differ in various regions. The library, a collaboration between NASA and the University of South Florida, holds more than 1400 images captured by the Landsat 7 satellite between 1999 and 2003. By clicking on a world map, marine biologists and other researchers can zoom in on a particular reef and download close-up photos. The shots provide baseline data on location and size that are missing for many reefs, making it easier to track changes such as declines that might result from global warming and pollution.

seawifs.gsfc.nasa.gov/cgi/landsat.pl

TOOLS

Worm Genomics Sampler

For their size, parasitic nematodes are disproportionately destructive, ruining more than $80 billion worth of crops around the world each year and causing diseases such as filariasis and trichinosis. Nematode.Net, hosted by Washington University in St. Louis, Missouri, supplies tools for analyzing genomic data from a long list of mainly parasitic worms. The site corrals more than 240,000 expressed sequence tags (ESTs), DNA snippets that can help researchers pinpoint which genes a worm carries. Using NemaBLAST, parasitologists, molecular biologists, and drug designers looking for a worm's weaknesses can hunt for particular sequences in more than 20 nematode species. A search tool lets you view clusters of overlapping ESTs, providing a clear picture of a nematode's genetic endowment.

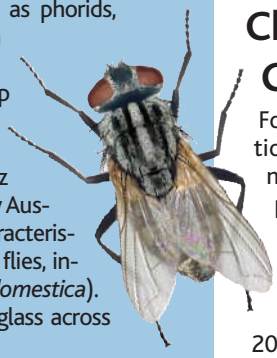
www.nematode.net/index.php

RESOURCES

Flies in the Web

Minute midges, nettlesome gnats, blood-hungry mosquitoes, gangly craneflies. These examples illustrate just a tiny fraction of fly diversity. The Diptera Site,* hosted by the U.S. Department of Agriculture, is a good launching point for fly mavens and neophytes alike looking for information on the more than 120,000 species of these insects. Pages here and on linked sites describe morphology, habits, and other details of 16 fly families, such as phorids, some of which burrow into and feast on ants' heads. Specialists can find possible collaborators in the site's directory or fire up the Nomenclator, a database of valid scientific names.

To brush up on your fly anatomy, buzz over to this linked atlas† being developed by Australian fly experts. Clicking on a list of characteristics highlights them on four representative flies, including the housefly shown here (*Musca domestica*). For close-ups, slide the virtual magnifying glass across the screen.



*www.diptera.org

†www.ento.csiro.au/biology/fly/fly.html

DATABASE

Cold Storage

Before you get sick of trudging through snowdrifts and slipping on slick sidewalks, it might be a good time to visit the National Snow and Ice Data Center in Boulder, Colorado. Experts can dig into more than 400 data sets that record everything from Siberian snow depths starting in the late 1800s to Greenland permafrost temperatures from 1967 to 1982. For instance, satellite images dating back to 1989 let you follow the gradual crumbling of the Larsen Ice Shelf in Antarctica, and thousands of photos of glaciers around the world show how many of these features are disappearing.

The "State of the Cryosphere" section summarizes the latest science on how glacier size, snow cover, sea ice, and other frosty variables may reflect climate change. The site also offers a spectacular gallery, where you can browse historical shots of whopping storms, follow life at a Russian polar station, and view examples of snow and ice formations. The Antarctic landscape above shows the wind-hewn shapes known as sastrugi.

nsidc.org

TOOLS

Chemical Safety Calendar

For authoritative information on the toxicity of common chemicals, many experts rely on the Integrated Risk Information System from the U.S. Environmental Protection Agency (NetWatch, 28 March 2003, p. 1957). The new IRIS Tracker allows users to follow updates to these assessments. The reports proceed through 10 stages, from a literature search to internal and external peer review to appearance on the Web site. For each compound, the schedule lists how far the process has advanced and the expected dates for completing future steps.

cfpub.epa.gov/iristrac/index.cfm

Send site suggestions to netwatch@aaas.org. Archive: www.sciencemag.org/netwatch

CREDITS (TOP TO BOTTOM): NSIDC; NASA/USGS; CSIRO ENTOMOLOGY

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