



EDUCATION

What Tree Is That?

The sugar maple, here flaunting its fall colors, is one of the more than 450 species of trees you can learn to recognize at this site on dendrology, the study of trees. John Seiler, a tree physiologist at Virginia Polytechnic Institute and

State University in Blacksburg, says that the site draws a broad audience, from college botany students to curious hikers. Illustrated fact sheets covering the most common species of North America provide distinguishing details of leaf shape, flower structure, and growth form. Find out which trees sprout in your state or use the interactive keys to identify species by their leaves and twigs.

www.cnr.vt.edu/dendro

RESOURCES

Become Statistics Savvy

If you break out in a cold sweat when colleagues mention quantile plots and Kruskal-Wallis tests, you could use a crash course in statistics. Beef up your stats IQ with this primer from the National Institute of Standards and Technology and the microchip consortium SEMATECH. Eight chapters guide you through topics such as measurement, selecting statistical models, and data analysis, using samples and in-depth case studies that emphasize engineering problems.

www.itl.nist.gov/div898/handbook

RESOURCES

Majority Report

Is angioplasty a better way to open plugged coronary arteries than clot-busting drugs? Does the much-touted herb echinacea really defeat colds? Instead of plowing through the literature, visit the Cochrane Library to find answers to health questions such as these.

For the last decade, experts belonging to the Cochrane Collaboration, an international, nonprofit research consortium, have been systematically reviewing the effectiveness of treatments and procedures, scrutinizing the literature and weighing sometimes-contradictory studies to reach a conclusion. Their goal is to provide doctors, patients, researchers, and policy-makers with the best information for health care decisions. The more than 1400 Cochrane reviews now completed assess everything from vitamin A for preventing HIV transmission during childbirth (doesn't work) to acupuncture for tennis elbow (data are inconclusive). Nonsubscribers can peruse abstracts here; paying subscribers, including many university libraries, have access to the full reports.

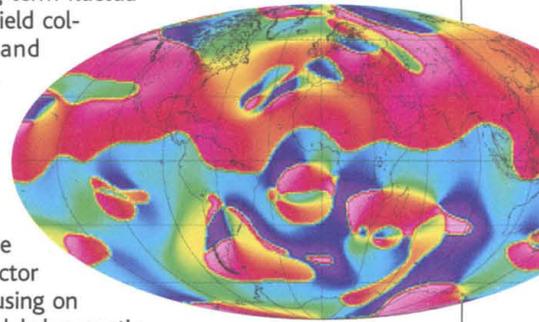
www.cochrane.org

RESOURCES

The Other Sunscreen

Much as the ozone layer fends off DNA-scarring ultraviolet radiation, Earth's magnetic field shelters us from the solar wind—a gale of charged particles blowing from the sun that can addle satellites and even knock out power grids. Keeping tabs on the field, which comes mostly from the motion of molten iron within Earth's core, is this site from the U.S. Geological Survey (USGS). The clearinghouse supplies data on short-term and long-term fluctuations of the magnetic field collected by satellites and earthbound instruments.

Fourteen observatories run by USGS provide current plots of the strength and direction of the magnetic field. Scientists mapping the field use the data to factor out daily variation. Focusing on longer term changes are global magnetic charts and an online calculator that computes characteristics of the field as it has evolved over the past 4 centuries. You can also download results of modeling studies that use magnetic data to peek into Earth's interior. For example, this candy-striped image (above) depicts the flow of liquid rock at the junction between the core and the mantle.



geomag.usgs.gov

TOOLS

Avoid an Identity Crisis

In the 150 years since its official description, the leopard lizard (below) has been tagged with four additional scientific names. The All Species Toolkit can help you untwist the tangled taxonomy of this North American lizard-eater and some 874,000 other species of animals, plants, and microbes.



The search engine roots through 12 taxonomic storehouses, such as the World Spider Catalog, the Hymenoptera Name Server, and Species2000, a growing database that aims to encompass all known organisms. Searches divulge information such as the species' classification, key references, distribution data, discarded synonyms, lists of subspecies, and sometimes photos. You can also retrieve DNA and protein sequences. Released this spring, the Toolkit is one of the first products of the All Species Foundation, a nonprofit organization that plans to compile a complete inventory of life on Earth within 25 years (*Science*, 26 October 2001, p. 769).

www.species toolkit.org

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