IMAGES

Born of Splendid Isolation

Spending a long time cut off from the rest of the world isn’t a recipe for good mental health, but it worked wonders for biological diversity in places like Hawaii. This new photo gallery showcases many of the unique plant species that evolved during the island chain’s millions of years of isolation, including the nanu (Gardenia brighamii, above), whose wild population has dwindled to fewer than 20 trees. The site, which cultivates shots of more than 900 species, is an outgrowth of the Hawaiian Ecosystems at Risk project (NetWatch, 15 February 2002, p. 1199). The gallery also captures many of Hawaii’s introduced plant species. You can track the spread of some troublesome invaders such as cat’s claw, a spiky vine, using downloadable reports and range maps based on recent surveys.

RESOURCES

Boost Your Chemical IQ

Even students who sail through inorganic chemistry can founder when they reach organic, with its multitude of mechanisms to remember, puzzling stereochemical structures, and tricky synthesis problems. Students who can’t tell a boat from a chair conformation, or who need a refresher on the Diels-Alder reaction, can consult this tutorial from Paul Young of the University of Illinois, Chicago. The five chapters cover structures and bonding, different types of spectroscopy (with data for 50 compounds), the nomenclature and reactions of the major functional groups, and stereochemistry. Each chapter drives home its lessons with a wealth of molecular illustrations (you’ll need the Chime plug-in) and sample problems.

Another handy reference for chem students comes from the American Chemical Society. The periodic table that hangs on the wall of every chemistry classroom packs information into each square, but the site shows how the Web can enhance the old standby. Click on “Vanadium,” for instance, and you get a whole appendix worth of vital stats: the metal’s mass, melting point, density, atomic radius, and so on. You can also make plots that compare the qualities of different elements, such as their electronegativity, or how strongly they attract electrons in a bond.

DATABASE

Science in the Public Eye

Has heavy media coverage of controversial, non-peer-reviewed findings undermined the public’s confidence in science? Are today’s snazzy, interactive museum exhibits informative or just distracting? If you’ve been mulling these or other questions about science’s relationship with society, stop by this bibliography from the Wellcome Trust Library in the United Kingdom. The hundreds of references fall into categories such as public attitudes toward science, how news stories shape perceptions of research findings, and how scientists can best communicate risk. The collection provides annotated citations for scholarly journals, newspapers, popular magazines, and reports; some original sources are available as full text.

EDUCATION

Bunk Buster

By the time they walk into a college astronomy class, many students have swallowed a whopping dose of pseudoscience from the Internet, movies, and TV shows such as the X-Files. However, teachers can transmute these misconceptions into lessons on critical thinking and scientific methods—if they have the straight story behind purported paranormal events. Fortunately, the truth is out there—on reputable Web sites and in plenty of skeptical books and articles—and this new site from the Astronomical Society of the Pacific helps teachers find it.

Andrew Fraknoi, an astronomer at Foothill College in Los Altos Hills, California, has gathered scores of links and other resources that refute space-related humbug such as crop circles, NASA’s supposed faking of the Apollo moon landings, and the “Roswell Incident,” in which an alien spacecraft purportedly crashed near this New Mexico backwater in 1947. Here, a high-resolution 1998 shot from Mars Global Surveyor (right) demolishes another pseudoscience staple, showing that the “face” visible in this photo from the 1976 Viking mission (left) is a trick of the light, not an alien edifice as some true believers aver.

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