NETWATCH

edited by MITCH LESLIE

RESOURCES

Ant Mound

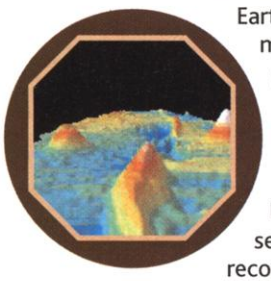
This tubby ant (left) may look like she swallowed a marble, but she's actually packed with food critical to her colony's survival. Some Australian honey pot ants serve as living larders. Stuffed to bursting with sugary fluid, the ants dangle from the ceiling of a dark chamber, and their nestmates occasionally tap them like a keg of beer. Researchers looking for more information on ant habits, taxonomy, anatomy, distribution, and conservation should visit Antbase, a portal maintained by myrmecologist Donat Agosti of the American Museum of Natural History in New York City.

Among the eight databases accessible from the site is a gallery teeming with more than 800 ant images, including representatives from 60% of the world's subfamilies. If you're digging for ant literature, try the bibliography of taxonomic works that stretches back to 1758, or follow a link to FORMIS, a broader collection highlighting some 30,000 references. For questions on nomenclature, the Hymenoptera Name Server from Ohio State University lists more than 100,000 valid scientific names and superseded synonyms. There's also a roster of 152 threatened species compiled by the World Conservation Union. Features from the museum itself include an anatomical primer, a gallery of panoramic images from lush ant habitats in Brazil, and a cheeky slide show on honey pot ants and the humans who eat them.

research.amnh.org/entomology/social_insects

DATABASE

Sea-Floor Sampler



The best spots to find out what's happening beneath Earth's crust are the midocean ridges, where gooey molten rock spills from gashes in the sea floor, says geologist Charles Langmuir: "The series of ocean ridges are like a window into Earth's interior." One place to peer through that window is PetDB, a 3-year-old collection of rock chemistry measurements compiled by Langmuir and colleagues at Columbia's Lamont-Doherty Earth Observatory. Gleaned from the literature, the data record the geochemical composition of more than 30,000 samples taken from ocean-ridge locations around the world (above, the junction of the Pacific and Antarctic plates). You can search the database by expedition, location, ocean or sea, type of topography, or chemical characteristics such as isotope ratios. Along with the sample's chemical profile, the output provides the exact coordinates, sampling technique, and the original reference.

petdb.ldeo.columbia.edu/petdb

DATABASE

Rat Cartography

The good old lab rat will soon join the menagerie of model organisms with sequenced genomes. As a preliminary step, the National Center for Biotechnology Information recently posted a set of genome maps* for the beady-eyed rodent. Right now, the offerings are the genomic equivalent of those early navigational charts that only depicted a few landmarks. The three versions available at the Rat Map Viewer cover all of the Norway rat's 21 pairs of chromosomes, specifying the locations of several thousand marker sequences. For the coordinates of some 1600 genes, along with predicted locations for more than 6300 others, try RatMap, a database hosted by the University of Göteborg in Sweden.†

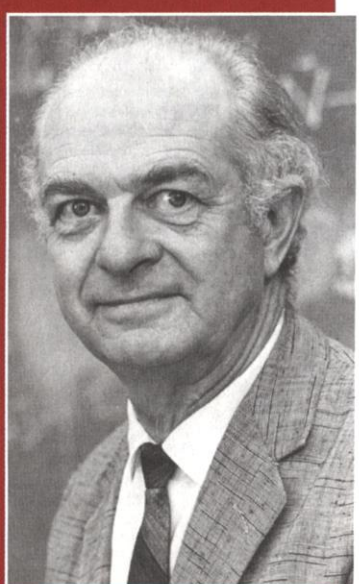
*www.ncbi.nlm.nih.gov/cgi-bin/Entrez/maps.cgi?ORG=rat

†ratmap.gen.gu.se/index.html

EXHIBITS

The Pauling Files

Linus Pauling (1901–1994) revolutionized our understanding of the atomic bond, ushered in the field of molecular biology, nabbed two Nobel Prizes, and then devoted the last decades of his life trying to prove quixotic notions about the health benefits of vitamin C. Posted by Oregon State University in Corvallis, Pauling's undergraduate alma mater, this collection of the chemist's 46 lab notebooks spans 72 years, illuminating his entire career. Although the pages aren't bursting with drama, they are packed with everyday details of Pauling's life and work: everything from experimental results and scientific critiques to budget minutiae and political opinions. You can follow the progress of his early grad school work on x-ray diffraction, for example, or jump ahead to a draft of a 1991 open letter to President George H. W. Bush opposing the Gulf War.



osulibrary.orst.edu/specialcollections/rnb/index.html

Send great Web site suggestions to netwatch@aaas.org

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