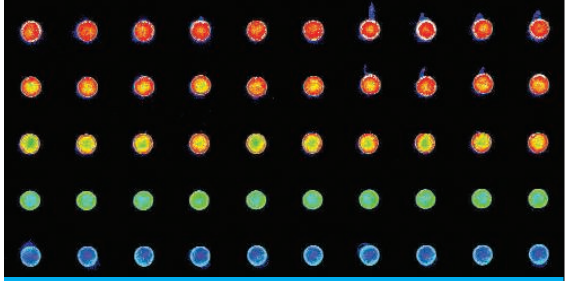


TOOLS

TELLTALE SPOTS

ProMAT is a free program for analyzing protein microarrays (above). Relatives of DNA chips, the microarrays can help researchers identify proteins lurking in a drop of blood or a particular cell type and measure their concentrations. The software, which works for ELISA microarrays, can also help users gauge the reliability of their data. To download it, visitors need to register by e-mail with the program's creators at the Pacific Northwest National Laboratory in Richland, Washington. >> www.pnl.gov/statistics/ProMAT/index.htm

WEB LOGS

Speaking of Systems

To discourage tree-cutting and save topsoil, China has begun taxing disposable chopsticks, triggering higher prices and a search for alternative sources by Japanese importers. This unexpected side effect of a conservation measure caught the eye of geoscientist and environmental engineer Daniel Collins of the Massachusetts Institute of Technology. His new blog Down to Earth brings a pragmatic attitude to discussions of ecosystem engineering, land use, natural hazards, and related subjects. Other topics that Collins has considered include safety concerns about a new dump for Hurricane Katrina refuse. >> getdowntoearth.blogspot.com

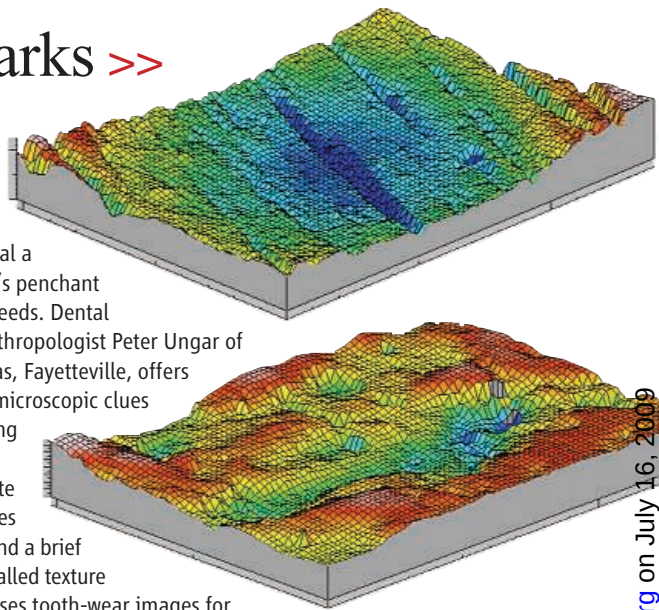
COMMUNITY SITE

Life From Scratch

So-called synthetic biologists have already reconstructed the polio and 1918 pandemic flu viruses and someday might be able to design and build bacteria that pump out drugs or hunt down cancer cells. The effort to craft new biological components and systems or refine existing ones intrigues scientists, but it also raises questions about whether artificial bugs could harm human health or the environment. Tended by researchers at the Massachusetts Institute of Technology (MIT) and other universities, this meeting place for synthetic biologists features a news roundup and listing of recent research and policy papers, including ones that led up to a meeting last month that pondered self-regulation of the field (*Science*, 26 May, p. 1116). The tools section offers a long list of software, Web sites, and other resources for working with DNA, RNA, and proteins. For instance, you can link to MIT's Registry of Standard Biological Parts, a catalog of cellular building blocks such as DNA sequences that stop the production of messenger RNA. >> syntheticbiology.org

IMAGES

Tooth Marks >>

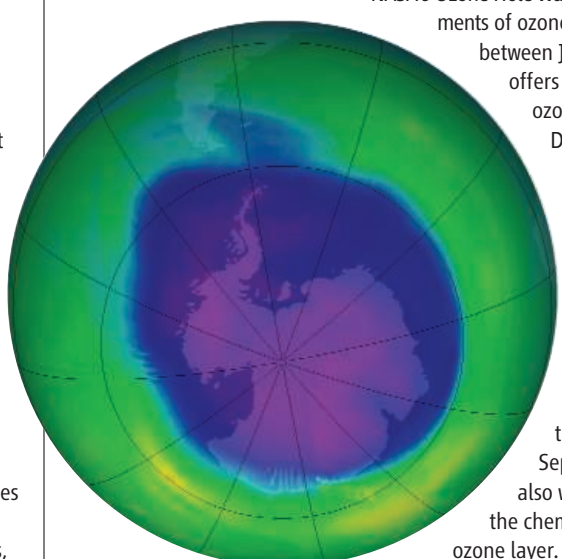


Munching tough leaves produces scratches on the teeth of a mantled howler monkey (top). By contrast, deep pits and gouges (below) reveal a tufted capuchin monkey's penchant for crunching nuts and seeds. Dental Microwear from paleoanthropologist Peter Ungar of the University of Arkansas, Fayetteville, offers an introduction to such microscopic clues to primate diets, including the dining habits of our ancient ancestors. The site features background pages on studying tooth wear and a brief tutorial on one method called texture analysis. A database houses tooth-wear images for two monkey species and two types of early humans. Ungar hopes researchers will contribute results for many more vertebrates, from dinosaurs to humans. >> www.uark.edu/microwear

IMAGES

Ozone Tracker

In a few months, spring in Antarctica will mean not only that sunlight returns and the penguins get amorous. It will also herald the reappearance of the Antarctic ozone hole, a thinning of Earth's shield against ultraviolet radiation caused by humanmade chemicals. NASA's Ozone Hole Watch posts daily satellite measurements of ozone levels over the South Pole between July and December. The site also offers statistical summaries and maps of ozone readings dating back to 1979. Despite the phase-out of ozone-destroying chlorofluorocarbons, the hole remains large. In 2005, for example, its average size during the peak period of September through October was 24 million square kilometers—below 1998's record of 26 million square kilometers but still the third largest on record (left, September 2005). Visitors can also watch animations that follow the chemical reactions that gnaw at the ozone layer. >> ozonewatch.gsfc.nasa.gov



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

CREDITS (TOP TO BOTTOM): PACIFIC NORTHWEST NATIONAL LABORATORY; PETER UNGAR/UNIVERSITY OF ARKANSAS; NASA

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