

edited by Mitch Leslie

EDUCATION

The Word on Human Origins

The human family tree keeps sprouting branches as anthropologists unearth new fossils or reclassify existing ones. Whether you're looking for an introduction to human origins or want to catch up on the latest developments, visit Fossil Hominids: The Evidence for Human Evolution, a well-written overview created by enthusiast Jim Foley.

The human evolutionary story swarms with almost as many characters as a Dickens novel, so Foley supplies a brief guide to our close relatives. You can unearth the basics on *Sahelanthropus tchadensis*, a 6-million to 7-million-year-old species from Chad described in 2002 that may be the oldest hominid. Or bone up on *Homo heidelbergensis* (left), a big-browed human that roamed Europe about 400,000 years ago. The jam-packed site also features a timeline of recent fossil finds, synopses of new papers, and guest essays by researchers. Another section debunks a litany of creationist misconceptions and misrepresentations about human origins, such as the notion that Neandertals were merely modern humans warped by disease. Fossil Hominids is a section of Talk.Origins Archive, an offshoot of a decade-old UseNet discussion group where scientists and others ponder questions about evolution and creationism.

www.talkorigins.org/faqs/homs



DATABASES

Big-Picture Ecology

Ecologists coined the term "biocomplexity" to describe broad questions such as the effect of biodiversity on ecosystem function. The new field is the subject of these two sites. The Knowledge Network for Biocomplexity* is a catalog of some 1700-and-counting data sets collected by ecologists and environmental scientists. The offerings cover everything from bacterial abundance along the Georgia coast to the impact of gophers on plant growth in abandoned California farm fields. Contributors include the federal Long Term Ecological Research stations. You can access many data sets directly; for others, the site provides contact information for the authors. There's also free software for downloading and analyzing data from the collection.

Keep track of the field's vocabulary with the Biocomplexity Thesaurus† from the federal National Biological Information Infrastructure. From "genetic isolation" to "nitrogen fixation," the tool helps you see the relations between terms and ideas.

* knb.ecoinformatics.org/home.html

† thesaurus.nbi.gov

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

IMAGES

Picturing the Human Body

What look like spring's first leaves decorating a barren twig (left) are tiny dendritic spines protruding from a pyramidal cell, a type of brain neuron. The pro-



jections mark synapses where other neurons relay messages to the cell. The image is one of more than 3600 photos, videos, animations, Web pages, and other visuals offered by the Health Education Assets Library, a teaching archive for every level from high school to medical school. The collection's holdings, contributed by medical libraries, the Irish Royal College of Surgeons, and other sources, are wide-ranging—from videos of brain dissection, to anatomical drawings of the lymph nodes in the head and neck, to an animation of blood surging through the heart. Free registration allows you to download items for use in the classroom. The collection will grow about 10-fold in June with the addition of a new set of images on pathology.

www.healcentral.org

RESOURCES

Breaking the Mold

The fungus *Aspergillus fumigatus* isn't your typically fuzzy, harmless mold. It picks on patients with AIDS, cystic fibrosis, and asthma and can incite potentially lethal illness by bedding down in the lungs, brain, or other organs. Aimed at scientists, doctors, and patients, The Aspergillus Website from the University of Manchester, U.K., teems with information about the formidable fungus and its kin.

Taxonomic accounts describe *A. fumigatus* and more than 30 other species. Researchers can browse a database of toxins produced by *Aspergillus* varieties or follow lab protocols for tending cultures, testing drug susceptibility, and other procedures. Scientists haven't quite finished sequencing the genome of *A. fumigatus*, but the site offers a roster of known genes and their functions. Visitors can download slide shows on the mold's biology and control or watch videos of fungal filaments growing and tangling with immune cells. Galleries supply species portraits and other images such as the one above, in which glowing proteins mark cell nuclei in a filament of *A. nidulans*. Accessing some sections requires free registration.

www.aspergillus.man.ac.uk

