Ecology on the Web

Note: We have no biases into the types of web sites that are included and encourage you to submit your own or other's web sites, blogs, wikis, etc., along with a short annotation (150 words or less) that provides readers with a brief description of the contents of the site and why the site is of interest.

Should you wish to submit an annotated web site or have any comments or suggestions, contact the Section editor, **Jeffrey W. Hollister,** directly at the USEPA, Office of Research and Development, National Health and Environmental Effects Research Lab, Atlantic Ecology Division, 27 Tarzwell Drive, Narragansett, RI 02882; (401) 782-9655; E-mail: hollister.jeff@epa.gov.

Submissions for this issue were provided by Derek Ogle from Northland College, Kurt Reinhart from the USDA's Fort Keogh Livestock and Range Research Laboratory, and Theresa Crimmins from the USA National Phenology Network.

fishR: Using R for Fisheries Analyses
‹http://www.ncfaculty.net/fishR›

R is a statistical programming language that has gained favor with many statisticians in a variety of fields and is becoming an important analytical tool for fisheries ecologists. The *fishR* web site contains resources related to using R for fisheries analyses. Currently, *fishR* consists of four main sections:

- **General Examples:** several vignettes that describe various traditional fisheries science analyses.
- **Book Examples:** examples that recreate analyses from fisheries texts. For example, this section currently contains several R recreations of analyses in the "boxed examples" of the *Analysis and Interpretation of Freshwater Fisheries Data* book.
- **Journal Examples:** a list of all known fisheries-related publications that have cited use of R and, more importantly, archived data sets and R scripts that will allow users to reproduce the analyses of some published journal articles.
- **Packages:** a list of all R packages that perform fisheries-related analyses.

Contact Derek Ogle (e-mail: dogle@northland.edu) with questions, comments, or suggestions.

iecolgy.net
‹http://www.iecology.net›

The web site iecology ‹http://www.iecology.net/› is dedicated to providing multimedia content to experience ecological concepts in a fresh and inviting way. The target audiences are teachers and students at the high school to undergraduate levels, but some of the content has broad appeal. The site functions to supplement more traditional types of educational curricula. Topics on iecology cover: biology, ecology, plant development, botany, mycology, microbiology, etc. The site contains 37 unique ecology narratives (17 in panorama section and 20 in time-lapse section), and new content will be added over time. They include 20 time-lapse videos, 8 interactive panoramas, and numerous other panoramas and photographs. Besides this, the site also contains downloadable pdf files providing information on Ecology as a career, and pursuing graduate studies in Ecology/Biology (see Favorites section). For comments or questions please contact Kurt Reinhart (e-mail: kurt.reinhart@ars.usda.gov).

The USA National Phenology Network
‹http://www.usanpn.org›

The USA National Phenology Network (USA-NPN) serves science and society by promoting a broad understanding of plant and animal phenology and the relationship of phenology to environmental and climatic change. The USA-NPN is a consortium of individuals and organizations that collect, share, and use phenology and related data and information. Benefits of engaging with the USA-NPN include access to:

- Standard monitoring protocols that facilitate the integration of phenology data
- High-quality, user-friendly phenology information management system
- Spatially and temporally extensive phenology data for use in many different applications
- Basic research on the role of phenology in ecology, evolution, and society
- Tools that support decision making
- Education and outreach programs and materials
- Connecting the public with nature, the scientific method, and climate change science

The USA-NPN web site offers standard monitoring protocols and an online interface to enter these data, as well as links to education and outreach programs and materials. The Network is developing the capacities to view and download spatially and temporally extensive phenology data, connect individuals and groups with shared interests, and utilize tools that support decision making.

USGS Remote Sensing Phenology
‹http://phenology.cr.usgs.gov›

The USGS has made its long-term historical remote sensing phenology data and graphics available for the conterminous United States, at no charge. Orbiting hundreds of miles above the earth, remote sensing satellites track plant and animal life cycle events that occur at certain times of the year, such as plant leafing and flowering. These products are derived from Advanced Very High Resolution Radiometer (AVHRR) sensor data, and metrics available include start of season, end of season, time of maximum, duration, amplitude. This site also includes clear descriptions of phenology, remote sensing, and vegetation indices including the normalized difference vegetation index (NDVI).