Hancock Biological Station (HBS)

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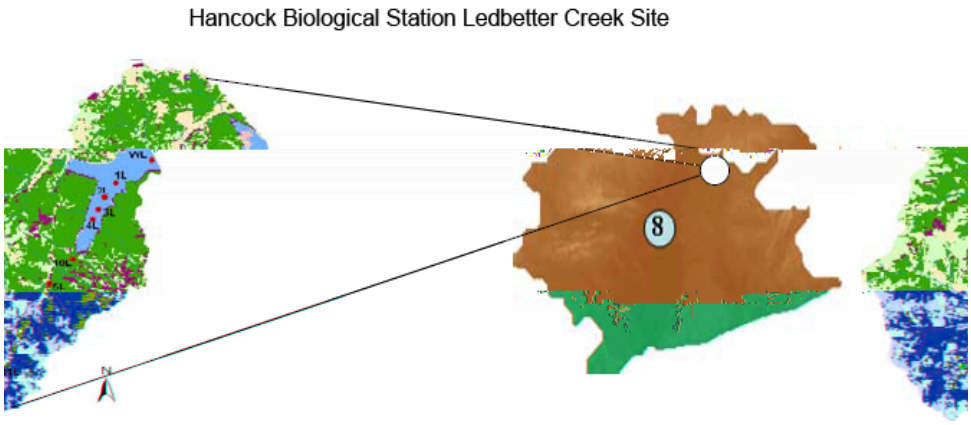
Web Page: http://murraystate.edu/crr and http://murraystate.edu/hbs
Location within Domain: 36.29352N, 87.59270 W



History: Long-term monitoring and research on Kentucky Lake and its agricultural and forested tributaries, established in 1988 with extensive history of field research program (see: http://murraystate.edu/crr and http://murraystate.edu/hbs); long-term funding as one of Kentucky's four Centers of Excellence, established in 1987.

Key Characteristics: Existing vegetation (oak-hickory mature forests, agriculture), soil/landform, ecosystem performance, land use history, and climatic features characteristic of the interfaces of Domains #7 and 8; existing resources can help address climate, land use changes, and invasive species ecological research themes; represents the northern extent of the Mississippi Embayment (Gulf Coast Atlantic Plain) and western extent of the Mississippian Plateaus (Appalachian Plateaus); elevation range of 209 m (Kentucky Lake) to 233 m; partnerships among several institutions – U.S. Forest Service, TVA, Kentucky State Park System, and Murray State University (a comprehensive regional university with focus on undergraduate and graduate ecosystem research).

Existing Infrastructure: Member of numerous existing networks including the Man and Biosphere Reserves, National Atmospheric Deposition Program (NADP), Organization of Biological Field Stations (OBFS), Association of Ecosystem Research Centers (AERC), Consortium of Universities for the Advancement of Hydrologic Science (CUAHSI), Ohio River Basin Consortium for Research and Education (ORBCRE), Global Lake Ecological Observatory Network (GLEON), Ecological Consortium of Mid-America (ECOMA); long-term physicochemical and biological data on 16 sites in Kentucky lake and 4 sites each in Panther and Ledbetter creeks; weather station, continuous water quality sensor systems; experimental mesocosm; extensive remote sensing and GIS capability since 1988, water quality laboratory, stable isotope facility, historical data accessible, K-12 education and outreach serving western Kentucky and Tennessee and Southern Illinois.

Facilities: On-site housing (40 people), field laboratories, equipment fabrication, maintenance, repair, and storage, and logistical support; 5 FTE on site support; modern utilities including T1 fiber optics and wireless network distribution points; within 30 km of additional laboratories at MSU; year around road access. HBS facilities secured area with no unescorted public access, field sites open access.