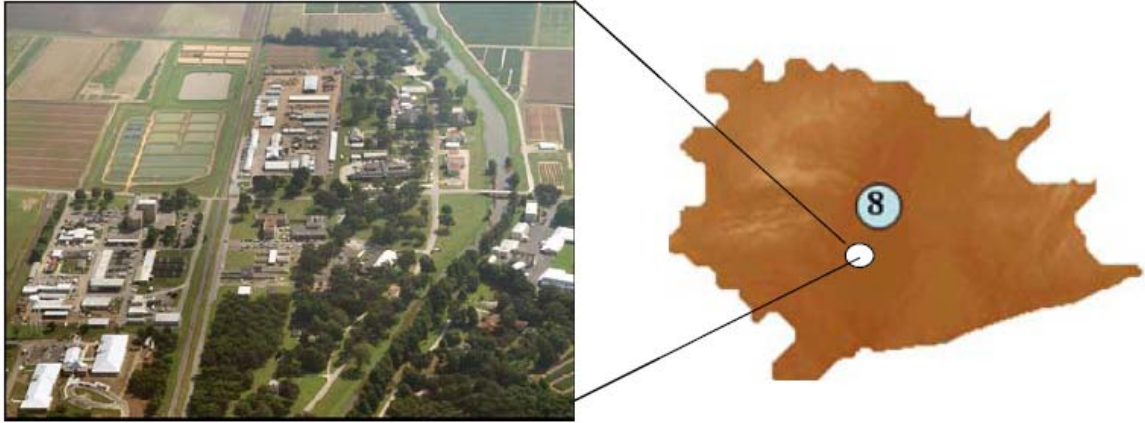


Delta Research and Extension Center (DREC)

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Web Page: <http://www.msstate.edu/dept/drec/index.htm>

Location within Domain: 33.475 N, 90.907 W



History: The Delta Research and Extension Center (DREC) was formed in 1904 and is now part of Mississippi State University's (MSU) Division of Agriculture, Forestry, and Veterinary Medicine. It is one of MSU's 16 branch experiment and research stations and is in close proximity to several regional and federal agency offices/labs (USDA Whitten Research Center, USDA National Biological Control Laboratory, U.S. Forest Service Center for Bottomlands Hardwood Research). It has a focus on research and extension activities on row crops (cotton, rice, soybean, corn) and catfish production.

Key Characteristics: DREC includes 486 ha in row crops out of a total area of 668 ha (1650 acres) in the Mississippi Alluvial Plain, which is the broad floodplain of the Mississippi River that flows south through the center of Domain #8. Elevation ranges from 35-40 meters. It is a site that can be used to address climate, land use change, invasive species, and coastal instability (hurricane inland effects) ecological research themes. DREC land use is characteristic of cultivated areas that now dominate vegetation cover in the lower Mississippi floodplain and has typical climate and soil features (fine sandy loams to heavy clays) of the area. Prior to cultivation, this area was covered by bottom-land deciduous forest (ash, elm, cottonwood, sweetgum, water tupelo, oak and bald cypress). The Delta Experimental Forest near DREC is a managed forest used for bottomland hardwood research. Although the alluvial plain is not the dominant ecoregion in Domain #8 in terms of areal coverage, it is a key area with DREC proximate to the Lower Mississippi River and on the inland path of northern Gulf Coast hurricanes.

Existing Infrastructure: Besides the research component, the major activity at DREC is the transfer of new research information and technology through extension education activities and methods. DREC is well connected to local, regional, and national organizations through nearby offices and facilities, including the Delta Wildlife Council, Delta F.A.R.M., MDAC Bureau of Plant Industry, The Southern Regional Aquaculture Center, several USDA and US Forest Service facilities (see above), Wildlife Mississippi, and the Yazoo-Mississippi Water Management District. To best serve the ecological research themes, the relocatable unit for this site should include at a minimum advanced met instruments, radiometric measurements, soil sensors, flux instrumentation.

Facilities: DREC has a staff of more than 30 research scientists and over 100 support personnel. Its network of laboratories, offices, greenhouses, research, engineering, and maintenance shops, as well as its comprehensive library, create an integrated work environment.