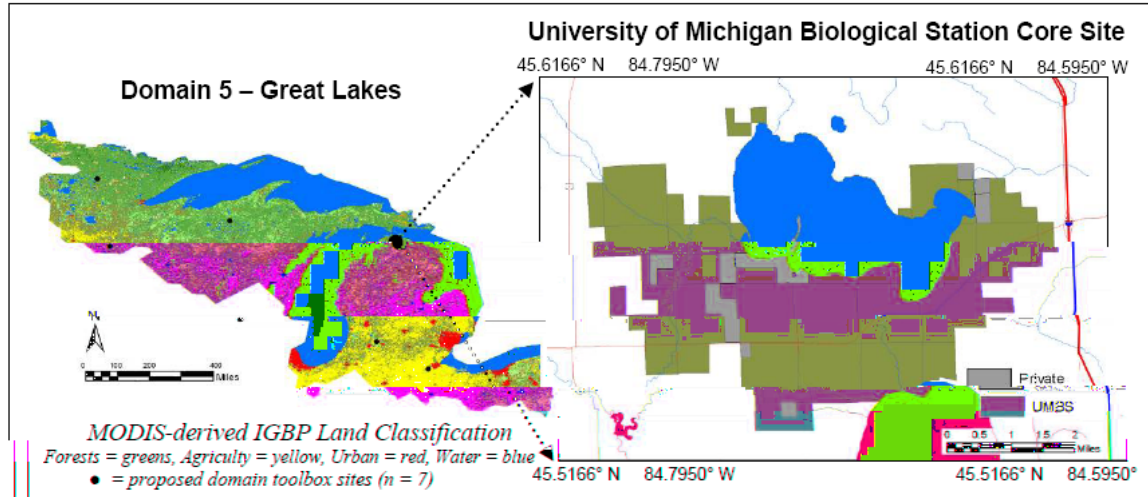


University of Michigan Biological Station (UMBS)

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Web page <http://www.lsa.umich.edu/umbs/>

Location within Domain:



History: Established in 1909 and has developed and sustained integrated programs of research and education in field biology and environmental sciences in the northern Great Lakes region.

Key Characteristics: UMBS manages ~4,050 hectares for research and education. Together with >590,000 hectares of public land and ~ 12,000 hectares of NGO holdings in 8 surrounding northern Michigan counties researchers have access to diverse habitats including pine forests, northern hardwoods, conifer swamps, successional aspen stands, meadows, pine plains, wetlands, rivers and streams. Lake Michigan and Huron shorelines are within 20 miles. Major research topics include community ecology, biogeography, animal behavior, limnology, parasitology, systematics, invasive species, biogeochemistry, atmospheric science, and climate change. Long-term experiments on site include grazing-browsing exclosures, a chronosequence of forest burn plots, and forest thinning-succession manipulations.

Existing Infrastructure: Research is linked to networks focused on ecosystem atmosphere carbon exchange (Ameriflux), precipitation chemistry (NADP), UV radiation (USDA UV-B), and mercury deposition. UMBS Carbon Flux (www.biosci.ohio-state.edu/~pcurtis/UMBS~Flux/) and PROPHET (<http://data.engin.umich.edu/PROPHET/>) researchers interact to investigate forest-atmosphere CO₂ exchange (since 1999), oxidants, and various reactive trace gases and free radicals (e.g. O₃, NO_x, OH-, VOCs). Other resources include weather stations, stream and lake stage gauges, an artificial stream facility, and long-term (since 1909) data on ecosystem structure and populations. We host ~30 senior investigators annually and integrate students (graduate & undergraduate), postdoctoral scholars and teaching faculty into research. Course offerings include ~12, 5-credit courses and 8-10 mini-courses (open to the public) per year. UMBS hosts 8-12 PhD students/yr in the Biosphere-Atmosphere Research & Training program (BART, an NSF-IGERT project, see <http://www.lsa.umich.edu/umbs/bart/>), 10-14 REU/RET program students/yr, and approximately 25-35 other MS and PhD student researchers. Due to a tradition of closely linked education and research programs and to the presence of diverse, protected habitats, the UMBS is designated as a *Biosphere Reserve* by the U.N. *Man and the Biosphere Program*.

Facilities: The UMBS field campus accommodates year-round research and provides housing for up to 250 faculty, students, staff and visiting researchers. Research facilities include a 24,000 ft² laboratory, an enclosed boatwell, boats, greenhouses, an elevated CO₂ facility, a soil Biotron. Lecture halls, classrooms, teaching laboratories, a library, an herbarium, internet access (via T-1 lines) are located on site.