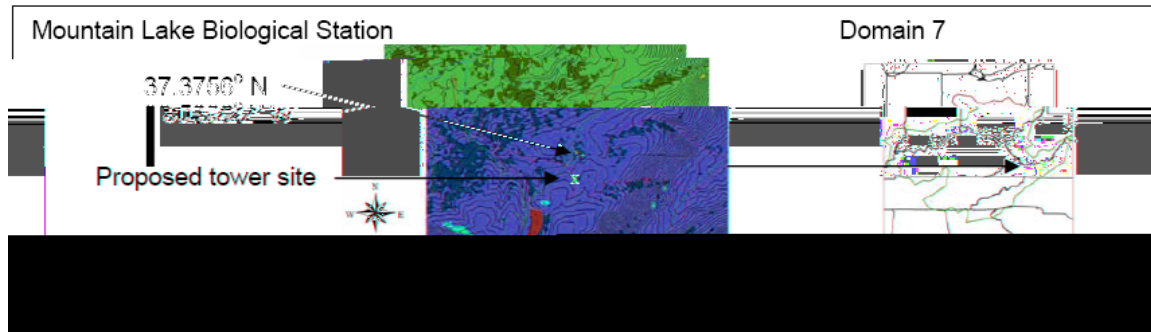


Mountain Lake Biological Station (MLBS): Appalachians/Cumberland Plateau Domain

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Location within Domain:



History: Established 1929 by University of Virginia as a summer teaching facility. Population-based research mission started in 1960s. Focus on population biology, community ecology, evolution, physiology and behavioral ecology since the 1980's. Long-term (20+ years) research programs and monitoring efforts in mammalian and amphibian population dynamics, avian ecology, physiology and behavior, and forest dynamics. Research programs from a large number of institutions from across the US; Virginia institutions UVA, Virginia Tech., Radford College, College of William and Mary, Washington and Lee University; formal HBCU partnerships with Hampton University, Spelman College, Morehouse College, and Howard University.

Key Characteristics: Located on a semi-remote ridge plateau at an elevation of 1,160m on top of Salt Pond Mountain in the ridge and valley region of southwestern Virginia. Holds 2.6km² (260ha) of deciduous hardwood forest. Borders over 40,000ha of National Forest Wilderness Area and private Wilderness Conservancy property. Sandstone, limestone, and shale derived soils typical of the region; station straddles the eastern continental divide. Surrounded by sharp ecological gradients, fine-scale changes in habitat and a large natural lake. Habitats include mixed deciduous forests, mountain streams, successional meadows, large natural lake, ponds, rocky ridges, sphagnum bogs, red spruce, Canadian hemlock, white pine, disturbed and virgin habitats. Instrumentation will be deployed immediately adjacent to station campus in a zero/first-order New River drainage watershed on western side of continental divide. Gravel and dirt roads access the site. Grid power to station. Station is gated and access is regulated. No research or activity restrictions in place and no unusual airspace restrictions.

Existing Infrastructure: Internet via T1; buildings have 100mbps CAT5 ethernet and wireless; LAN with class 3 IP range, full-service file and print serving domain. Networking activities with Organization of Biological Field Stations (OBFS), Southeast Regional Network of Expertise and Collections (SERNEC), LTER, California Natural Reserve System (NRS); American Distance Education Consortium (ADEC). A NADP site neighbors the station. Physical and developing on-line collections include, herbarium,

bird, mammal, fish, insect, and fungus collections. County and station GIS, meteorological and publications databases.

Facilities: 29 lab and housing buildings. On-site housing and dining (100 people); two laboratories with research labs, classrooms, library, collections, common use equipment, and administration. Support sample processing, aquatic and terrestrial experiments, molecular, image analysis, microscopy, and sterile work. Other resources: -80C freezer, GIS/GPS, auditorium, greenhouse, garden enclosures, wood shop, computer lab, controlled environment spaces, 4+ FTE staff support. Additional laboratories and services available at Virginia Tech 30 minutes away (Blacksburg, VA). Site accessible year-round.