

NRSN A T U R A L
R E S E R V E
S Y S T E M

Sedgwick Reserve

University of California

Site Specs

Administering
Campus
UC Santa BarbaraEstablished
1996

Location

Santa Barbara County, in the Santa Ynez Valley; 56 km (35 mi) north of the city of Santa Barbara.

Size

2,358 ha (5,896 acres), including a 313-ha (783-acre) conservation easement in favor of the County of Santa Barbara.

Elevation

290 to 790 m (950 to 2,600 ft)

Average Precipitation

38 cm (15 in) per year

Facilities

Limited overnight accommodations/classroom available on site; ranch buildings and infrastructure serve as a base for staff and researcher housing, laboratory, and teaching facilities; frame relay internet connection to UCSB campus.

Databases

Meteorological station; geographic information system (GIS) under development; below-ground microbial observatories.

Personnel

Resident staff reserve director and steward on site; outreach coordinator; senior clerk.

NRS Publications

Reserve flyer available through the Santa Barbara campus NRS office; Outreach Program newsletter.

Contact Information

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NRS Website

<<http://nrs.ucop.edu>>

Encompassing 24 square kilometers (9.2 square miles) on the southern slopes of the San Rafael Mountains, the Sedgwick Reserve spans an elevational range of 500 meters (1,650 feet) and is noted for both its large size and environmental heterogeneity. The reserve contains a major geologic fault system and two distinctive geologic formations: relatively young Paso Robles alluvium and much older Franciscan metamorphosed seafloor, including large areas of serpentine. Diverse vegetation types include coast live oak forest, blue oak woodland, valley oak savannah, buckbrush chaparral, coastal sage scrub, grassland, willow riparian forest, serpentine outcroppings, and agricultural lands. The site contains major portions of two watersheds and a variety of localized wetland habitats, notably vernal pools. The region has a rich Native American heritage, and at least one Middle Chumash habitat site (1,500 to 2,000 years old) rests on site. The reserve's large size enables research of varying scales on native ecosystems.

Selected Research

Oak regeneration: Ten-year collaborative project on the roles of livestock and grazing and other factors in regeneration of two oak species; valley oak population genetics.

Native grasses: Competitive interactions between native perennial grasses and introduced annual grasses; perennial grass population genetics.

Soil nutrient flow: Movement of nutrients in grassland systems, including below-ground processes.

Floristic survey: Collection and identification of vascular and nonvascular plant species on site.

Special Programs

Environmental monitoring: Photo-monitoring plots; stream-water analysis program; ongoing inventories of arthropods, mammals, birds, reptiles.

Field instruction: Numerous university courses, including botany, creative studies, geology, environmental studies, ecology, biogeography, soils, journalism, landscape painting.

Public service: Outreach programs in sciences, humanities, and the arts for regional elementary/secondary schools; field trips through partnership with Santa Barbara Museum of Natural History, Land Trust for Santa Barbara County, Santa Barbara Botanic Garden, Santa Ynez Valley Natural History Society, and other organizations, as well as numerous local artists.