

Boyd Deep Canyon Desert Research Center

SITE SPECS



ADMINISTERING
CAMPUS
UC Riverside

ESTABLISHED
1958 (joined NRS 1965)

LOCATION

Riverside County, 8 km (5 mi) south of city of Palm Desert; 2-hour drive from the Riverside campus.

SIZE

6,737 hectares (16,647 acres)

ELEVATION

9 to 2,657 m (30 to 8,716 ft) within Deep Canyon Transect

AVERAGE PRECIPITATION

Annual means range from 15 cm (6 in) at Boyd Center to 40 cm (16 in) along the upper plateau

AVERAGE TEMPERATURES

January: 10°C (51°F), July: 39°C (102°F)

FACILITIES

Two laboratories w/ basic equipment (balances, etc.), herbarium, small library, housing facilities for 14 researchers, and reserve office at Boyd Center; small four-bunk facility w/ workspace at Agave Hill (no water on site); teaching area and campground for classes.

DATABASES

Complete herbarium and other synoptic collections; data from six weather stations and ongoing plant/animal monitoring; maps of various scales; reference library w/extensive bibliography of on-site research.

PERSONNEL

Director in residence, staff biologist, and maintenance person.

NRS PUBLICATIONS

Reserve brochure published 1991.

CONTACT INFORMATION

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UC NRS WEBSITE

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

One of the largest NRS reserves, the Boyd Deep Canyon Desert Research Center encompasses a major drainage system descending from the high peaks of the Santa Rosa Mountains down to Colorado Desert. Deep Canyon's tributaries begin in montane forests, flow across a rolling plateau covered with piñon-juniper woodland and chaparral, join at the head of a precipitous gorge, and plunge 360 meters (1,180 feet) into the canyon. From there, the mouth of the canyon opens out into a broad alluvial fan with sandy washes on the southern edge of the Coachella Valley. Except for a few permanent pools, the streambed in Deep Canyon's lower reaches is dry. However, winter storms can trigger dramatic flooding. The vertebrate fauna is exceptionally rich, with forty-six reptile species, 228 birds, and forty-seven mammals. The reserve is part of the U.S. Mojave and Colorado Desert Biosphere Reserve. Desert research is also possible at two other NRS sites: the Burns Piñon Ridge Reserve and the Jack and Marilyn Sweeney Granite Mountains Desert Research Center.

SELECTED RESEARCH

Population biology of the Coachella Valley fringe-toed lizard (*Uma inornata*), a state-endangered and federally threatened species.

Health and demography of the peninsular bighorn sheep (*Ovis canadensis cremnobates*), a state-threatened and federally proposed-endangered species.

Mountain lion ecology.

Rattlesnake ecology.

Physiology of succulents.

Hybridization of quail species.

SPECIAL PROGRAMS

Fire-recovery monitoring: The long-term recovery of piñon-juniper woodland is monitored using permanent transects established in burned and unburned areas after the 1994 fire.

Exotic species removal: A tamarisk and fountain grass management program was initiated in 1996.

Field courses: Site visits by university courses in ornithology, ecology, botany, plant physiological ecology, biology of ants, conservation biology, cactus and succulents, and others.