



A view of the Philip L. Boyd Desert Research Center near the mouth of Deep Canyon, Riverside County, California. The air-conditioned laboratory and living quarters are on the right with the cistern and generators housed in the buildings on the left.

DESERT LABORATORY

DEEP CANYON DESERT RESEARCH AREA AND THE PHILIP L. BOYD DESERT RESEARCH CENTER

RODOLFO RUIBAL,
CHAIRMAN CONTROL COMMITTEE

The University of California established the Deep Canyon Desert Research Area at the western edge of the Colorado Desert near Palm Springs, California. This 10,000 acre preserve, including the lower gorge of Deep Canyon itself, is located at the base of the Santa Rosa-San Jacinto Mountains some 75 miles from the Riverside Campus of the University. The area has been set aside to provide wild land where biologists can make continued studies of native desert plants and animals in an undisturbed environment.

The Deep Canyon Area has a range of elevations from 250-1,550 meters (700 to 4600 feet). Mt. San Jacinto with an elevation of 3,600 meters (10,800 feet) is 40 miles by road to the west. Immediately

north and east of Deep Canyon is the low-lying part of the Colorado Desert whose lowest point is the Salton Sea, 78 meters (235 feet) below sea level.

The average annual rainfall in this region is approximately three inches. This rain usually falls in the winter months although Deep Canyon is also subject to occasional summer floods. The mean maximum temperature in July is 41° C and the mean minimum temperature in January is 4° C.

The Area includes the following desert habitats, which are listed together with their most characteristic vegetation:

Higher elevations (4,000 feet)
Pinyon (*Pinus monophylla*);
Juniper (*J. californica*).

- Desert hillsides and plateaus
 Mojave Yucca (*Yucca*);
 Agave (*Agave*).
- Alluvial fan
 Creosote bush (*Larrea*);
 Sandbur (*Franseria*);
 Ocotillo (*Fouquieria*);
 various cacti.
- Desert wash
 Smoke tree (*Dalea*);
 Palo Verde (*Cercidium*);
 Desert Willow (*Chilopsis*).
- Intermittent stream and permanent water hole
 California fan palm (*Washingtonia*).

The presence of permanent water holes in Deep Canyon is a major factor in bringing about a summertime concentration of animal life and year-round populations of amphibians (*Hyla* and *Bufo*) and of big-horn sheep (*Ovis canadensis*), which range at elevations from 1,000 to 4,000 feet on the eastern slope of the Santa Rosa Mountains.

Along the western rim of Deep Canyon is the Palms-to-Pines Highway, State Highway 74, which in conjunction with State Highway 111 provides access to both the higher elevations of the Upper Sonoran (Pinyon-Juniper Association) and Transition (Yellow Pine Forest) life zones, and to the lower portions of the Colorado Desert (Lower Sonoran), where habitats such as sand dunes and alkali flats are available.

In addition to University ownership of about 4,000 acres, the Bureau of Land Management, U. S. Department of Interior, has recently agreed to retain 6,400 acres along the eastern and southern boundaries of the area in public ownership and to manage them under a cooperative program to aid the research studies of the University. A protected area

of about 10,000 acres is thus being created.

The area is not a teaching facility, but is administered entirely for research. The Control Committee for Deep Canyon does not administer any research funds for individuals.

In the spring of 1962, an air-conditioned building containing a research laboratory and living quarters was completed at the Deep Canyon Desert Research Area. This new facility, The Philip L. Boyd Desert Research Center is available to qualified investigators for either long-term studies within the area, or as a base for studies in the surrounding desert or mountains. The laboratory is equipped with gas, electricity, and running water, as well as dissecting microscopes and lamps. The living quarters consist of a bedroom, bath and kitchen, all air-conditioned; the kitchen includes a refrigerator and range. The laboratory is located near the mouth of Deep Canyon and is readily accessible by road from Palm Desert. Water is available from a well, and it is pumped to a cistern for storage. Electricity as 110 or 220-volt current is available from generators. Facilities are sufficient to accommodate from two to four resident researchers. The use of the living quarters and of the laboratory is free of charge.

Research on various aspects of desert biology is currently being undertaken by Lloyd Tevis, Resident Research Biologist, at the Philip L. Boyd Desert Research Center. The administration of the area is by a Control Committee. Currently, Chairman of the Committee is Dr. R. Ruibal. Anyone interested in utilizing the area or the laboratory should write to: Control Committee, Deep Canyon Desert Research Area, Division of Life Sciences, University of California, Riverside, California.