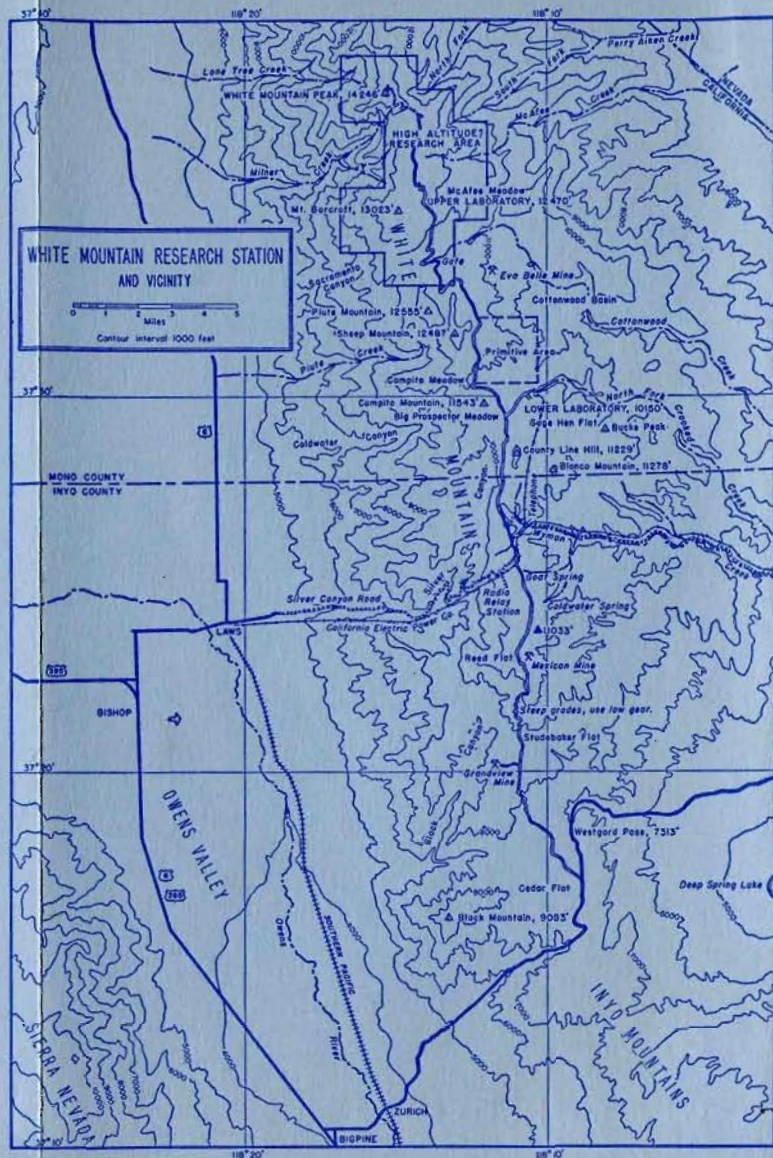


operation of diesel or gasoline driven generators capable of an output of 15 kilowatts each at 110/220 volts, 60 cycle A.C. Heat is provided by oil-burning stoves, and hot and cold running water are also provided. Telephone communication is possible with the Crooked Creek Laboratory at 10,150 feet. A small technical library, principally physiological, has been established at the Mt. Barcroft Laboratory at 12,470 feet.

It should be pointed out that, although the Mt. Barcroft Laboratory has been occupied continuously since the summer of 1952 and has been the site of a number of research projects in this time, the structure is only now rounding into finished form. Because of limited funds, the completion of many interior details has proceeded slowly and is still continuing. These, however, have not been essential to the basic operation and receive attention only as time permits from more urgent maintenance matters.

Basic charges for use of the Station are \$6.00 per day, which include food and lodging in addition to use of the general facilities. Additional charges are levied at cost for special needs as they may arise. Those interested in use of the Station may direct inquiries to Professor S. F. Cook or Professor Nello Pace, Department of Physiology, University of California, Berkeley 4, California.



UNIVERSITY OF CALIFORNIA

The White Mountain Research Station



THE WHITE MOUNTAIN RESEARCH STATION, near Big Pine, California, had its inception in September, 1950. At that time, a structure at an altitude of 10,150 feet, which had been erected in 1948 by the U. S. Naval Ordnance Test Station, Inyokern, was transferred to the Office of Naval Research for use as a general high altitude laboratory. The Office of Naval Research delegated the administration of the laboratory to the University of California, Berkeley, by contract, and the University has continued in this capacity to the present time.

During the year 1951-1952, a large Quonset type building, comprising 1200 square feet of laboratory space and living facilities for up to 24 men, was erected at an altitude of 12,470 feet in a location ten miles north by road along the White Mountain Range from the original installation at 10,150 feet.

In 1952, the Rockefeller Foundation and the National Science Foundation joined with the Office of Naval Research in contributing to the maintenance costs of operating the Station, each of the three agencies contributing equally.

The local administration of the Station is vested in an Administrative Committee of the University, known as the Advisory Committee on High Altitude Research, which is made up of twelve faculty members representing the agricultural, biological, medical, and physical sciences, and two administrative officers of the University. Professor S. F. Cook, Department of Physiology, University of California, Berkeley, serves as Chairman, and Professor Nello Pace, Department of Physiology, University of California, Berkeley, has been designated as Operations Director of the Station. The Station is maintained by a permanent crew of five men, and Mr. Paul J. Manis is the resident Operations Manager.

Because of favorable and unique climatic factors, it is feasible to operate the Station on a year around basis, and this has been done since the Station was opened in 1948.

The purpose of the Station is to provide the basic facilities for conducting scientific investigations at high mountain altitudes. These facilities are available to any qualified investigator in this country or abroad who wishes to use them. A partial outline list of the users of the Station during the past few years follows, to give some idea of the scope of the research conducted there.

University of California, Davis

Department of Agronomy. Survey of range grasses.

Department of Animal Husbandry. Utilization of C14 acetate by sheep.

Department of Food Technology. Storage characteristics of military rations.

Department of Poultry Husbandry. Growth curves and egg production in chickens and turkeys.

University of California, Berkeley

Department of Entomology. Survey of insects and field course in Entomology.

Department of Physics. Cosmic ray studies.

Department of Physiology. Myoglobin studies on rats, circulatory studies on dogs, metabolic studies on mice, and electrocardiographic studies on man.

Department of Zoology. Reproductive cycles in small native mammals.

Radiation Laboratory. Cosmic ray studies.

University of California, Los Angeles

Department of Physics. Cosmic ray studies and measurements of sound velocity.

Institute of Geophysics. Electrical conductivity properties of the atmosphere.

California Institute of Technology

Department of Physics. Measurements of sky brightness and cosmic ray studies.

Stanford University

Department of Physiology. Studies on the contractility of rat cardiac muscle.

Duke University

Department of Physics. Cosmic ray studies.

University of North Carolina

Department of Physics. Cosmic ray studies.

In addition, classified research has been conducted by the U. S. Naval Ordnance Test Station, Inyokern, the Northrup Aviation Company, the Armour Research Foundation, and by the California Institute of Technology. Also, the facilities have been utilized by biological collectors from the California Academy of Sciences, the Department of Zoology, University of California, the Department of Botany, Stanford University, and the Department of Botany, University of Arizona. Finally, daily weather observations made at the Station and broadcast by radio are utilized for forecast purposes by both the U. S. Navy and the U. S. Weather Bureau.

The White Mountain Research Station represents one of the three major high altitude facilities in the United States and is the only one operating above 12,000 feet the year around. The Upper Laboratory, at 12,470 feet elevation, is located in the Inyo National Forest in the approximate center of a 20-square-mile area set aside under a Cooperative Agreement between the U. S. Forest Service and the U. S. Navy for purposes of basic high altitude research.

The area also encompasses the highest portion of the White Mountain Range, including White Mountain Peak, which rises to 14,246 feet above sea level at its summit. The peak is some four miles north of the Upper Laboratory, and is accessible by foot from the end of the present road at 13,200 feet and about one mile from the summit. A grant has recently been made by the National Science Foundation to finance the construction of a small, permanent laboratory structure on the summit of White Mountain Peak, thereby considerably enhancing the research potential of the Station. Construction of the summit laboratory will be carried out during the summer of 1955.

Electric power for the Station is provided by the