

University of Minnesota and the Minnesota Academy of Science.

Cedar Creek Forest, which is located approximately 25 miles north of the Twin Cities in northern Anoka and southern Isanti counties, contains a wide variety of trees, other plants, and animal life. Among the trees are all three kinds of pine that are native to Minnesota, old prostrate junipers, white cedar, white pine, black spruce, and many species of hardwoods. Among the birds are ruffed grouse, Canada spruce grouse, Canada jay, and, occasionally, the rare arctic three-toed woodpecker. Deer are numerous, and other mammals of the northern forest can be found.

The forest will be administered as a natural history area—that is, it will be used primarily for observation rather than experimentation. Access for scientific and educational purposes, as well as for protection from fire, will be permitted. The administration will seek to conserve and if possible to develop the natural values of the area and to minimize the loss or depletion of plants and animals through hunting, collecting, fishing, picnicking, or other disturbances.

William S. Cooper, of the botany department of the University of Minnesota, first called attention to the Cedar Creek Bog, as it was then known, in 1937, when he described it to the Academy Committee for the Preservation of Natural Conditions. In 1939 the Academy approved the committee's recommendation that some effort should be made to preserve the area, and in 1942 the University agreed to accept and preserve the land if the Academy would obtain gifts from private sources to make the purchase possible. By 1953, 750 acres had been purchased.

Construction of the laboratory, purchase of additional land, and other improvements were made possible by a grant, in 1954, of \$250,000 from the Max C. Fleischmann Foundation of Nevada. The laboratory building contains an office, a combination meeting room, classroom, and laboratory, a map and record room, three research laboratories, and small dormitories.

Studies now underway at the forest include a wildlife survey of a portion of the area, population studies on frogs, and studies on external parasites of mice. A three-year study on total plant yield under natural conditions was begun last summer.

Sky High

A new laboratory 17,000 feet high in the Bolivian Andes, to be used for the study of the effect of altitude on the human and animal body, will be set up

shortly by the University of California's Donner Laboratory with the cooperation of Bolivian scientists and with the support of the Atomic Energy Commission and private donors.

The altitude chosen is considered to be about at the limit of human acclimation. When oxygen tension is low, the production of red blood cells increases tremendously. Immediate plans call for an attempt to isolate a humoral factor that appears to stimulate production of red blood cells.

Three American scientists will remain at the high Bolivian laboratory for a month. Thereafter, the Bolivian scientists will continue research with collaboration from the California group. Much of the biological material taken at the Bolivian laboratory will be shipped to California for analysis.

Temperature Test Facility

An elevated temperature test facility which can duplicate the intense heat developed by missiles from atmospheric friction at high velocities has been developed by Westinghouse Electric Corporation.

The facility, which consists of an analog regulator, graph recorder, and multiple banks of infrared lamps, can create a 2500-degree temperature in 12 seconds. This will make it possible for aircraft builders and designers to pre-test structural parts in simulated flights.

The regulator controls the "flight pattern," proportioning the output of the infrared lamps to generate the amount of heat produced at various speeds. In actual practice, the missile or aircraft component, such as a nose cone or wing section, would be loaded to produce the aerodynamic stresses expected during flight. The theoretical flight is plotted on the graph recorder; by means of the plot, the "flight" may be checked to assure that all conditions of speed and heat were accurately reproduced.

NAS-NRC Medical Science Awards

The Division of Medical Sciences of the National Academy of Sciences-National Research Council has announced that applications for postdoctoral research fellowships for 1958-59 will be accepted *until 1 Dec.* Further information may be obtained from the Medical Fellowship Board, NAS-NRC, 2101 Constitution Ave., NW, Washington 25, D.C.

Two fellowship programs are offered: National Research Fellowships in the Medical Sciences and Donner Fellowships for Medical Research. The latter

were initiated in 1956 with the support of the Donner Foundation of Philadelphia.

These programs are designed to provide research experience in the basic medical sciences for people who plan careers in academic medicine and investigation. Fellows are expected to devote their entire time to research, and funds are not available for support of practical experience in the clinical field. Awards are open to citizens of the United States and Canada who hold the M.D., Ph.D., or Sc.D. degree. Ordinarily fellowships are not granted to persons over 35 years of age.

The Division of Medical Sciences has also announced, on behalf of the James Picker Foundation, the continued availability of funds in support of radiological research. The program is oriented toward, but not necessarily limited to, the diagnostic aspects of radiology. Support is not restricted to citizens of the United States or to laboratories within this country.

Three distinct types of support are offered:

1) *Grants-in-aid* are awarded to institutions for support of specific research projects.

2) *Grants for Scholars* are a transitional form of support, designed to bridge the gap between the completion of fellowship training and the period when the young scientist has thoroughly demonstrated his competence as an independent investigator. The application is submitted by the institution on behalf of the prospective scholar. Grants of \$6000 per year are made to the institution as a contribution toward the scholar's salary, or his research, or both.

3) *Fellowships in Radiological Research* are open to candidates seeking to gain research skills leading to investigative careers in the field of radiology. Candidates holding the M.D., Ph.D., or Sc.D. degree are eligible, but those trained in radiology who are 35 years of age or less will receive preference.

Applications for Picker awards for 1958-59 should be received at the NAS-NRC by 1 Dec. However, it should be noted that within the next year the National Research Council of Canada will assume the responsibility for serving as scientific adviser to the Picker Foundation with respect to its Canadian program.

Scholarships

The U.S. Office of Education has reported that 237,000 scholarships having a monetary value of \$65.7 million were available to undergraduate college students in the school year 1955-56, com-