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-

pared with only 124,000 scholarships, worth approximately $27 million, in 1950–51.

The survey also indicated that, in 1955–56, 1562 institutions of higher learning, which enroll more than nine-tenths of the college and university students in the country, reported some form of student financial aid. This figure compared favorably with the figure for 1950–51, when 1198 institutions reported that they gave scholarship aid.

These facts and figures are part of a survey released by the Office of Education which is intended to keep parents and young people informed of the types and amounts of financial aid available. Copies of two publications bearing on the subject, "Financial Aid for College Students: Undergraduate" and "Financial Aid for College Students: Graduate" can be obtained from the Superintendent of Documents, U.S. Government Printing Office. ($1.00 and $0.50, respectively).

News Briefs

Industrial Exhibitions Limited of England has announced that the 1958 Instruments, Electronics, and Automation Exhibit will be fully international for the first time and that overseas firms will be able to show their products at its exhibition in London. Further information can be obtained from Industrial Exhibitions Limited, 9 Argyll Street, London W.1.

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The Sister Elizabeth Kenny Foundation has announced that it will continue to award post-doctoral scholarships to promote work in neuromuscular diseases. Depending upon the applicant's qualifications, grants vary from between $5000 and $7000 a year for a 5-year period. Appointments are made annually. Those interested may write to Dr. E. J. Huenekens, Medical Director, Sister Elizabeth Kenny Foundation, 2400 Foshay Tower, Minneapolis 2, Minn.

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The National Cancer Institute's 20th anniversary was celebrated by a special symposium in the August issue of the *Journal of the National Cancer Institute*, which took note of both the growth of the Institute's program and progress in research during the past 20 years.

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A 73-page paper-bound booklet entitled "U.S. Research Reactors" has been released by the Atomic Energy Commission. It describes more than 30 research reactors and contains drawings, photographs, and charts; it was prepared for scientists, engineers, and administrators. The reactors are grouped according to major types, and one or two examples of each are described at some length as typical examples. The booklet is available from the Office of Technical Services, U.S. Department of Commerce ($1.50).

* * *

A new series of 13 educational television programs entitled "The World of Medicine" has just been launched under a grant from the Schering Corporation. Among the programs to be included in the series are "The nurse," "Recovery room," "The eye," "Geriatrics," "Veterinary medicine," and "Allergy."

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The third U.S. Atoms-for-Peace mission is currently visiting Central America, including Panama, Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua. The purpose of this mission, as of the two preceding ones which visited ten other Central and South American Republics, is a discussion of the programs for practical applications of nuclear energy in agriculture and medicine, and in nuclear education and training. The U.S. team is meeting with scientists, educators, and government officials of the six host countries.

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Three Agriculture Department researchers have isolated a new chemical compound from the seeds of green beans and kidney beans. The compound, which may play an important role in the germination of bean seeds and in the metabolism of the plants, was discovered by Robert M. Zacharius, Clayton J. Morris, and John F. Thompson. It is a peptide, γ-glutamyl-S-methyl-cysteine, consisting of two amino acids—glutamic acid and S-methyl-cysteine—linked together.

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The Atomic Energy Commission has issued a temporary regulation, effective 26 Sept. 1957, designed to give immediate protection to the public and to licensees and their suppliers against losses arising from reactor accidents. The regulation is based on Public Law 85-256, the indemnity legislation signed by the President on 2 Sept. The temporary regulation will provide protection while a permanent regulation is prepared, issued for public comment, and reissued as an effective regulation.

Public Laws

During the 85th Congress, which recently recessed, members introduced 14,013 bills. According to the *Congressional Quarterly*, this sets a new record for recent years, but the number of bills passed and signed into public law by the President was only 316, a number somewhat below the average for a first session of Congress. Those of the public laws that have a special bearing on science or education are as follows:

Public Law 155. HR 2460. Improve career opportunities of nurses, medical specialists of Army, Navy, and Air Force.

Public Law 164. HR 1058. Preserve key deer and other wildlife resources in Florida Keys.

Public Law 175. HR 9379. Fiscal 1958 appropriations for Atomic Energy Commission.

Public Law 177. HR 8992. Concerning the International Atomic Energy Participation Act.

Public Law 208. HR 7914. Amend Career Compensation Act of 1949 to provide incentive pay for human test subjects.

Public Law 245. S 268. Provide that the Secretary of the Army return certain mineral interest in land acquired by him for flood-control purposes.

Public Law 247. HJ Res. 404. Provide for recognition and endorsement of second World Metallurgical Congress.

Public Law 253. HR 3377. Promote national defense by authorizing construction of aeronautical research facilities and acquisition of land by National Advisory Committee for Aeronautics necessary to effective prosecution of aeronautical research.

Public Law 287. HR 8994. Amend Atomic Energy Act of 1954, as amended, to increase salaries of certain executives of the Atomic Energy Commission.

Public Law 296. HR 9280. Facilitate conduct of fishing operations in the Territory of Alaska, to promote conservation of fishery resources thereof.

Scientists in the News

NIELS BOHR, director of the Institute for Nuclear Physics, Copenhagen, Denmark, will receive the first $75,000 Atoms for Peace Award during a special convocation at the National Academy of Sciences in Washington, D.C., on 24 Oct. President Eisenhower will head the body of government and UN officials, scientists, diplomats, and industrial leaders invited to attend the convocation.

The award to be presented to Bohr is the first of ten to be granted to those persons anywhere in the world who have made the greatest contributions to the peaceful uses of atomic energy. The prize is given without regard for nationality, politics, or any other consideration except the merit of the contribution. Bohr was selected from among 75 candidates proposed by scientific bodies in 23 countries.

The Atoms for Peace Awards were created in 1955 as a memorial to Henry Ford and Edsel Ford. Funds are provided