

## The Building

With 400 undergraduates and almost 70 graduate students, the College of Forestry, Wildlife and Range Sciences was seriously restricted when the Forestry Building opened in the fall of 1971. The three-story, 170 room building, designed to accommodate increases in enrollment over the next 10 years, features the college's administrative offices, laboratories and space for instruction. Hummel, Hummel, Jones and Shawver were architects for the \$3,024,780.00 building. Other costs included the architect's fee and furnishings, bringing the total to about \$3,460,000.00. Construction was completed by Skyline Construction Co. of Salt Lake City, Utah.

According to the architects, the building was designed primarily to satisfy the varied divisions of the college, "of which all are related but separate and were confined within one structure due to site limitations. While keeping these primary requirements in mind, we strived to design a building with identity, dignity, complementary to its surroundings and . . . aesthetically pleasing. Much of the interior finish and exterior landscaping were selected to be both aesthetical and educational, while providing a maximum of service with a minimum of maintenance."

To assure rigidity against vibrations from and to laboratory equipment and machinery, the Forestry Building is composed of pre-stressed concrete. Except for the glass north side, the outside walls are laced with brick, and wood paneling adds to the decor on each end.

Entrances to the Forestry Building are on the second floor, above street level, with a driveway below for service and loading. Inside the building, wood has been used extensively in paneling, railings and for decorative purposes. A striking element in the main stairwell is the 40 foot white bark snag which was found east of Clarkia.

The administrative offices and those for forest business management; forest resource management with specialties such as watershed management and outdoor recreation; wood utilization; range management; wildlife and fishery units; wilderness research center, and the Forest, Wildlife and Range Experiment Station, are located on the all-glass, north side of the building. There are several moveable walls in this area to facilitate future needs.

Although traditional classrooms were excluded from the plans to allow for maximum specialized laboratory space, seminar rooms and an auditorium are used for teaching purposes. Highlights of the instructional facilities are the two "learning laboratories," a self-learning center and a simulation classroom. Both will employ computerized tapes and films to be used by students either individually or as part of a course. When the self-learning center is fully equipped, students will have access to a library of learning tapes prepared from information provided by college faculty or visiting professors and other sources. The simulation classroom will make use of audio and visual effects produced through closed circuit television or films. The system will simulate an environmental situation, or follow the course of a research project in the classroom.

The largest amount of the 90,885 square feet of floor space in the Forestry Building houses research and instructional laboratories. General research laboratories are equipped to monitor biological functions, including enzymatic systems, a system for detecting photosynthesis and transpiration of plants, oxygen monitors, an infrared microscope system and all forms of chromatographs. Equipment for chemical analysis includes atomic absorption and flame spectrophotometers, a system for analyzing radio-isotopes, a Kjeldahl nitrogen apparatus and an infrared gas analyzer. Specialized laboratories for genetics, entomology, forest soils, pathology and silviculture are grouped closely around the two large general laboratories. The effect is to maximize utility and instrumentation while minimizing cost and duplication of facilities.

Other features used by forest resources, range sciences and outdoor recreation are two indoor greenhouses in the basement and four growth chambers where plant growth can be monitored under controlled conditions. Air and soil temperature, light and humidity in the chambers can be regulated.

There are laboratories in wood utilization for testing the strength of wood, wood drying and seasoning research, quality and anatomical studies and conversion of wood wastes into useful products. In addition, there are a wood processing shop and equipment and space necessary for storing lumber at specified moisture contents and for testing wood finishes and paints.

The biometeorology laboratory in the new building contains an electronics shop and the instrument calibration and data processing facilities necessary for maintaining a trailer-based automated meteorological observation system (AMOS) capable of measuring and recording physical interaction between plants and animals in their environments.

Hydraulic simulations are possible in watershed management's "wet" laboratory, while the "dry" lab is especially equipped for soil studies.

Research capabilities of the wildlife and fishery units focus on cause and effect through variance of one or more factors while holding others constant. The fishery unit has five laboratories in which photoperiod, air temperature between 30 and 80 degrees F and water temperature between 34 and 135 degrees F can be regulated for physiological and behavioral studies. Water is pumped to the laboratory tanks through an ultra-violet sterilization unit and iron and carbon filters, insuring a source of uncontaminated water which can be reused.

The fishery unit operates a small hatchery in one of its laboratories. Research facilities also include a water chemistry laboratory for water quality and primary production analysis as well as teaching labs.

Equipment for telemetering the physiological processes of animals, while simultaneously changing the environmental conditions, highlights the research capabilities for the wildlife unit. Its research area was particularly designed and wired so that the environmentally controlled animal room connects with electronic monitoring systems in an adjacent room equipped with one-way observation windows. The animal room is surrounded with an electrostatic shield which prevents radio interference. The wildlife unit also has a lab for chemical analysis and an area for the preparation and storage of study skins and specimens.

In the opinion of the College of Forestry's new Dean, John H. Ehrenreich, the Idaho building is the best equipped in the nation.

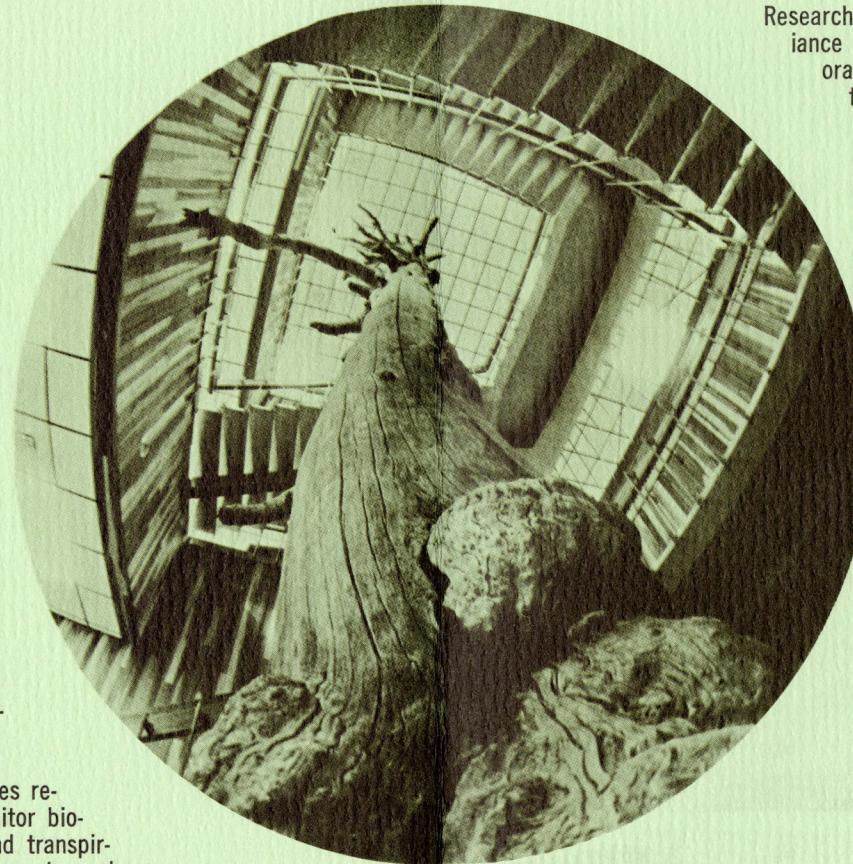


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