

Botanists at Work

Up in the west end of the Biology Building's third floor live Dr. George J. Goodman, U. T. Waterfall, '42ms, and their Botany students. The scientists dwell among the 100,000 pressed plants of the Bebb Herbarium.

They also weave their ways among the file cabinets of the Herbarium card index, a file which contains the name and bibliography of every known plant in the western hemisphere.

"I was so excited last June when President Cross found me that they'd granted us the index," Dr. Goodman says, "that I shouted 'Eureka, we've got it!'"

Dr. Goodman is a botanist, complete with straight-back, iron-gray hair, glasses, bent stemmed pipe, mustache and Vandyke beard. He works every day and night with the plants. "I don't have a phone in my room in the Union Building," he says. "Nobody would want to call between midnight and 7 a.m. anyway."

"Here's how it works," he says enthusiastically. The card index at O.U. is one of three in the southwest. Every known plant is in the file.

An amateur or professional botanist in this area finds what he thinks may be a new plant. But he can't be sure, in these days of increasing research. So he writes a fan letter to the University's herbarium curators, Dr. Goodman and Waterfall.

With a flick of the wrist, the scientists find the card describing the species in question. They painstakingly examine the little package of plants sent to them by the one who believes he's discovered something new.

By careful comparison of the plants with previous descriptions, they decide if the plant is a new one. The huge card index is kept up to date. New cards are received from the central clearing house of botanical information at Harvard University.

New cards are being added to the Sooner index at the rate of 5,000 a year. Students find the index useful for research. Dr. E. T. Wherry, America's foremost authority on the phlox plant and botanist from the University of Pennsylvania, paid a visit to the University during April. He wanted to check the index for certain varieties of phlox, and also to chat with the O.U. plantmen.

But what if you find a plant not listed in the index? Then, friend, you've discovered a new one! O.U. botanists have done just that three times during the past few months.

Dr. Goodman, who is an expert on *Eriogonum*, found a species of plant on a Watonga butte which he'd never seen before. That was in 1935. The species was familiar to the Rocky Mountain area but not to Oklahoma.

Dr. Goodman moved to Iowa State College and studied economic plants of Mexico and Central America. But he kept the Watonga plant on tap. Ten years later he returned to the University. There was still no information on the plant.

He studied it carefully, decided on a Latin name for it and wrote his required Latin description of the plant, along with the English description. Then the report was published in a botanical periodical.

Eventually it went across the clearing tables at Harvard. A card was made giving the name of the plant and listing the magazine in which information was published. Finally the card was sent to the University, and to the few other schools which have the index.

"Oklahoma is a botanist's paradise," says Dr. Goodman. The great variety in Oklahoma altitude and rainfall creates a haven for many types of plants," he says. The climate varies from desert conditions to the area in the southeastern part of the state, where altitude is only 500 feet above sea level and rainfall is 50 inches a year.

Of 100,000 specimens now in the University Herbarium, over 60,000 are native Oklahoman. The Sooner plant hunters are continually on the move, searching for new specimens to add to the plant library. They bring 'em back. Then they

press them with the care a young girl bestows on her favorite orchid.

The scientists then write about their plants, mount them neatly in cardboard folders, and catalog them in the big Biology Building cabinets. They are adding 5,000 plant specimens annually to the collection.

The University's first plant collection was destroyed in January, 1903, by a fire of undetermined origin. The building in which the plants were then housed was located near what is now the open air theater, close to Holmberg Hall.

Again the plant collection went up in smoke in December, 1907. The second building was located where the present Biology building now stands.

Slowly, plants were gathered and pressed during the following years. In 1924 Robert Bebb, who operated the Bebb Floral Company in Muskogee, died after a long illness. His private collection of 30,000 plants was given to the University, and the collection was renamed the Bebb Herbarium.

Most recent expedition of Sooner plant hunters was the Easter pilgrimage of Dr. Goodman, Dr. L. M. Rohrbaugh, U. T. Waterfall and Sid Glassman to the Rio Grande area of Texas and the Big Bend State Park.

Part of the area visited had not seen any precipitation in nearly two years. Yet the 2,000 mile trip yielded 150 species of desert plants to be dried and placed in the herbarium.

And they brought back several dozens of plants for the University greenhouse. Among them was a plant, actually a tree, whose leaves resemble those of tobacco. As a result of the Easter mecca, the Sooner campus may soon sprout tobacco trees!

Dr. Goodman, during his numerous hunts, has found sugar maple growing as far westward as the Caddo Canyon. Ordinarily, that plant grows no farther west than the Ozark forests. The canyon affords seepage and wind protection for the maple, enabling it to survive in the western climate, he says.

He has done extensive investigation in the Arbuckle and Wichita mountains. In the Arbuckles he found a Mexican juniper tree, which is a Mexi-

can plateau plant. He believes that limestone once covered the entire region, and when it eroded away it left isolated plant communities.

The University botany department, under the chairmanship of Dr. Howard W. Larsh, associate professor of plant sciences, trains men for park service work, seed laboratories, soil conservation, forest service, and teaching.

It now has two candidates for the Ph.D. degree, U. T. Waterfall, special instructor in plant sciences, and Sidney F. Glassman, graduate assistant in plant sciences. They will be qualified, after their graduation, for positions in any of the other fields and also in universities and other botanic centers.

M. T. Hall, '43bs, is now working on a Ph.D. in the Missouri Botanical Garden, Washington University, St. Louis. Ed Dale, '42ba, '47ms, is a doctorate candidate at the University of Nebraska.

Julian Howard, '36ba, is with the Wichita Mountains Wildlife Refuge.

Lights burn late at night in the botany department, and the plant hunters burn up plenty of tire rubber on their expeditions—but it's paying off.

New Library Study Plan Considered

A proposal for increasing library study space to accommodate a larger percentage of the University enrollment was submitted to the Faculty Senate at a recent meeting. Plans, as outlined by the Committee on Library, would include increased shelf space, the use of seminar rooms in the basement of the library as study rooms for graduate students, and the removal of the bindery from the library building to another location, possibly at the North Campus.

On the Faculty Library Committee are L. N. Morgan, professor of English and assistant dean of the College of Arts and Sciences; Dr. John H. Rohrer, associate professor of psychology; Dr. J. Teague Self, '36ph.d, chairman of the department of zoological sciences and associate professor of zoological science, and Dr. J. H. Leek, professor of government.



"No seeds this year," observes Dr. George J. Goodman, professor of plant sciences and curator of the Bebb Herbarium, as he and students in his taxonomy class inspect a Chinese elm behind the west stands of Owen stadium. The tree froze during the winter. Left to right, are Ed Rogers, '41bs, junior; Archie Wood, senior; Dr. Goodman, and Joan Fisher, also a junior.