Horticulture students receive hands-on instruction in ornamentals propagation.

Budd's 22-year tenure at the college began in 1877. During these years he gained a legion of admirers among his students and fellow horticulturists. Among his proteges was George Washington Carver, who lived in the Budd Home during his early student days; later he moved into the horticulture greenhouse as caretaker.

Budd also figured at the center of a sometimes bitter battle over Russian apple cultivars—an innovation that failed in Iowa. Budd promoted growing Russian apple cultivars, reasoning that they would be hardy in Iowa's climate. He distributed thousands of them throughout Iowa for a nominal price. The "Russians", as they came to be called by disappointed fruit growers, proved to be highly susceptible to fire blight.

Windbreaks and general forestry were another concern of the state's residents and the college's horticulturists. In 1874, H. H. McAfee, professor of horticulture and forestry, initiated a tree-planting and forestry program on campus. The magnificence and variety of trees on campus today owe much to McAfee and his immediate successors.

S. A. Beach was the second person to head the horticulture department for more than a year or two. Beach's 17-year tenure began in 1905. He is regarded as the man who led the department into the era of modern horticulture.

A noted pomologist, Beach came to Iowa with 14 years of experience in fruit breeding at the New York Agricultural Experiment Station. He expanded fruit-breeding activities in Iowa and made it his goal to improve the scientific basis of this work. Among the rewards for his efforts was the introduction of 1 peach and 10 apple cultivars. When he died in 1922, more than 20,000 seedlings of cross-bred fruits were being tested at the college.

Other standouts among early horticulturists were T. M. Maney, who discovered how to produce dwarf trees by inserting a short stem piece of Clark's Dwarf in the trunk of a standard apple cultivar, and E. S. Haber, best known for his development of hybrid cultivars of sweet corn.

Many colorful stories about early Iowa horticulturists center around fruit and vegetable research, but researchers also conducted studies on plant propagation, storage and packaging of nursery products, floriculture, and turfgrass. Public and private horticulturists were an enthusiastic, productive lot. Indeed, the Iowa Horticultural Society won the first prize for the largest and best exhibit at the Centennial Exposition in Philadelphia, 1876.

The horticultural research station

It takes a leap over several decades to arrive at the Horticultural Research Station (see back cover). The 229-acre farm, less than 10 miles north of Ames, was acquired in 1966. It is used for teaching and research. A 12.5-acre pond that feeds two automated irrigation systems is the centerpiece of the tableau of research plots.

Station activities include research on turfgrass, fruit trees (apple, cherry, peach), small fruits (strawberries, summer and fall blackberries, currants, grapes), watermelon, muskmelon, tomatoes, vegetables (sweet corn, potatoes, broccoli, squash), ornamental shrubs, and annual flowers. Apples have become a major crop on the site. When research objectives are met, the apples are graded, stored and sold at the station.

The station boasts an extensive collection of walnut trees and a wide-enough variety of other trees that it is the site of certification exams for nurserymen. Horticulture students come to the station for hands-on experience in cultural techniques.

A pesticide disposal pit designed especially for the station became the focus of multi-disciplinary research on pesticide disposal—research that provides most of the information now available to people who need answers on how to comply with regulations of the U.S. Environmental Protection Agency.

The station also provides the setting for research and teaching by the animal ecology department. Daily supervision of the site makes it possible for the animal ecologists to conduct programs they could not conduct on most other public lands.

The horticulture building

Another, smaller, leap over time and it is 1980, when the Department of Horticulture moved into a remodeled, enlarged facility (see front cover). For the first time in years, no students had to be turned away because of lack of facilities. In the first year in the new facility, the department taught 1,774 students in 30 different classes.

The Iowa General Assembly had appropriated almost $2.5 million for the remodeling and addition and another $1 million for teaching and research equipment. Private horticultural businesses contributed $112,000 for 6 new air-conditioned greenhouses, a boon to research programs.

Among the resources now available to faculty and students are 3,600 square feet of air-conditioned greenhouses and growth chambers—all equipped with monitoring equipment, soil handling and processing equipment, equipment for post-harvest handling and processing, equipment for product-quality evaluation, tissue culture facilities, a herbarium, and cold storage rooms.

Horticultural businesses in Iowa

Most commercial fruit and vegetable businesses in Iowa are family-operated, fresh-market enterprises. Pick-your-own options are available on the farms. (Continued on page 427)