

WASHINGTON STATE UNIVERSITY

From clearing the land to biotechnology, Washington State University has been helping people shape western Washington. Through research and education, WSU helps families, fosters economic development and new industries, develops innovations in food production, and improves use of forests and land.

100 Years in Western Washington

The first 100 years...

1890

March 28, the state legislature accepts federal land grants and Hatch Act funds to found the State College of Washington and Agricultural Experiment Station.

1891

March 9, legislature approves the State College of Washington (State Agricultural College, Experiment Station and School of Science) and provides for “at least one Experiment Station in the western portion of the state.”

1894

First Agricultural Experiment Station west of the Cascades opens near Puyallup on 40 acres donated by the Ross family and 20 acres secured with a \$2,500 legislative appropriation and \$500 donation from the Tacoma Board of Trade. Erratic funding closes the station from 1897-99 and 1903-07.

1897

F. A. Huntley, first Station Superintendent, reports best methods for clearing stumps from logged-off land. Only five percent of accessible land in western part of state had been cleared by 1908.

1907

Hundreds of varieties of crops planted to determine yield, disease resistance and adaptability to Puget Sound country. First fertilizer experiments compared effect of manured and unmanured soil on vegetable growth.

1913

Legislature passes act creating Extension work at the Washington State College in advance of federal Smith Lever Act (1914). By 1917, Extension Service was reaching out to the remotest communities with agricultural and home economics information to bridge the gap between the Experiment station and farm families who were hungry for knowledge.

1916

First of fourteen Winter Schools commence January 3, and offer practical “how-to-do-it” lectures and practice in berry growing, tree fruit, dairying, and poultry husbandry.

Mr. And Mrs. George Shoup, self-taught poultry specialists, lay the foundation for Washington’s poultry-egg industry. They teach six weeks of poultry husbandry and graduate more than a thousand men and women between 1915 and 1929.

In monthly station bulletins, they describe inexpensive homemade labor saving devices to improve poultry management including the “Shoup” or “Puyallup” house for layers (1919), the industry standard until World War II and mechanization.

1919

\$800,000 received for dairy cattle, a dairy barn, and 60 acres of land. Dairy Scientists and County Extension Agents work together to improve management of dairy herds.

J. L. Stahl, horticulturist, predicts a bright future for raspberries and loganberries with trains moving berries to distant markets in cooled cars.

1923

The Cranberry-Blueberry Experiment Station begins at Seaview to deal with diseases and insects that are destroying 40 percent of the cranberry crop.

D.J. Crowley, plant pathologist, discovers that if sprinklers are turned on when the temperature drops to 34° (F.) frost injury to fruit buds is prevented. Defeating frost by sprinkling is now used on many crops throughout the world.

Work begins to control “Bangs” disease (Brucellosis), prevalent in most dairy herds. Recommendations lead to Washington becoming a Brucellosis-free area.

1926

Dr. J.W. Kalkus, veterinarian, named Superintendent in Puyallup. Under his leadership, the work of the station redirected from demonstrations to a strong research program.

Kalkus, was best known for his research (1915-1920) on iodine deficiency and supplementing livestock feed with iodine in some areas of the state. His work contributed to use of iodine to prevent human goiter and iodination of table salt.

He described western Washington as “particularly well suited to highly diversified agriculture. Farms were of comparatively small acreage but well adapted to growing many crops that can be produced on a moderate basis.”

1933

Hardships and staff reductions of depression offset by reducing dairy herd (35 cows sell for \$45.95 apiece) and having W.P.A. and C.W.A. lay drain tile, build fences and conduct experiments.

1935

National Poultry Improvement Plan sponsored by the U.S. Department of Agriculture to improve breeds and control disease in poultry located at Puyallup. Washington poultry/egg industry is a model for the country.

1936

Growing lettuce and peas gains importance. Research begins on disease control.

1939

Ralph Hodgson, dairy scientist, receives the first annual Borden Award for Dairy Production for work on effects of forage diets on milk production.

1943

NW Seed and Truck Crop Laboratory at Mount Vernon begins addressing acute problems facing vegetable seed and processing industries during World War II in an effort to increase seed available to the U.S. and its allies. Farmers, seed companies, processing firms, the Skagit County commissioners and civic groups pitch in to raise fund for land, buildings, and equipment to make the Mount Vernon station a reality. These research efforts lay the foundation for today's large vegetable and vegetable seed production industries in northwest Washington.

Clark County Horticultural Investigation Program begins research on crop problems and potential new crops for the area. Clark County was a leading producer of prunes in the U.S. from 1920's to 1940's. Other important crops were pole beans, pears, pie cherries and poultry.

Five acres purchased to locate the Cranberry-Blueberry Experiment Station on state land near Long Beach. Sixty-six acres acquired in Puyallup for Farms 2,3, and 4.

1947

NW Experiment Station in Mt. Vernon established at present site with construction of office and lab buildings and greenhouses.

1949

Dr. C.D. Schwartze, horticulturist, and others introduce “Northwest” strawberry, the first of many virus-tolerant strawberries for the Pacific Northwest. It rapidly becomes the most widely planted strawberry in the U.S. This was followed by disease-resistant raspberries and superior berry varieties.

1950

Experimental open-shed calf housing unit constructed as part of the dairy facilities in Puyallup. Improved calf health and well-being are obvious and the idea spreads nationally, leading to reduced calf sickness and herd mortality.

Dr. Folke Johnson, Dr. D.F. Allmendinger and V.L. Miller pioneer work on the damaging effects of atmospheric fluorine to some plants. Subsequent work showed that certain species of gladiolas could be used as an indicator of fluorine gas from alumina reduction factories.

1952

Acreage of Puyallup Station increases to total of 321 acres with addition of Farm 5; Cranberry-Blueberry Station at Long Beach gained 34 acres for a total of 50.

1955

Strip grazing experiments by Dairy Scientist, F.R. Murdock, show importance of grass-legume mixtures as pasture for lactating cows. Milk production was increased significantly.

Extension Horticultural Specialist, John Dodge, transfers to the Experiment Station in Puyallup to serve horticulture west of the Cascades. This worked so well that in 1959-60 a small office building was allocated to Extension and several additional Extension staff moved to Puyallup.

1956

Funds are appropriated for Poultry Diagnostic Laboratory in Puyallup.

1958

Dr. Roy Goss begins a turfgrass program in Puyallup to help urban dwellers with home grounds management. Partially supported by golfers’ green fees, the program investigates fertilizer use (especially use of sulfur) and control of disease. Turfgrass grown around homes, parks, playfields, and cemeteries, cover more acres than any other crop in western Washington.

1964

In Mt. Vernon, Dr. R.A. Norton, horticulturist and Superintendent, begins evaluating tree fruit and grape cultivars for adaptability to Pacific Northwest. By 1974, over 500 varieties tested leads to significant changes in nursery offerings.

1966

Dr. Charles Gould, plant pathologist, and Vernon Miller, chemist, recommend new fungicide treatments to cure bulb diseases. Follow-up research with Dr. Neil Stuart, USDA, on storage temperature for iris bulbs to Europe improves their forcing performance in European greenhouses. Washington is the largest U.S. producer of daffodils, tulips, hyacinths and bulbous iris.

1966

All Experiment Stations renamed to Research and Extension Centers or Units specifying a geographical area, i.e., NW Research Unit, Coastal Research and Extension Unit, Western Washington Research and Extension Center and SW Research Unit.

1967

“Meeker” raspberry introduced by Dr. C.D. Schwartz. It becomes the second most frequently planted raspberry in the Northwest.

1969

Kalkus Hall completed. Both Research and Extension personnel move into new facility.

Topics addressed at the Research and Extension Centers expand. The Expanded Food and Nutrition Education Program, for low-income families, begins in six counties with a specialist in Puyallup. Community Development Specialist hired to focus on problems of community organization and economic development.

1970

Fusarium-resistant green peas developed and introduced by Dr. W.A. Haglund, plant pathologist, at Mt. Vernon after identifying disease organism (Fusarium wilt race 5 and 6) that had first appeared in 1963.

1971

Master Gardener Program begins. Dr. Arlen Davison, plant pathologist, outlines the concept and King County Extension horticulturists pilot test the program. Volunteers receive intensive training to answer questions and provide demonstrations on home gardening. In five years, the volunteer gardening program spreads to 40 states and the idea is used to teach other subjects. 1975 Master Food Preserver program begins in King County.

1978

Dr. Paul Heilman, research forester, Puyallup, and Dr. R. Stettler, University of Washington, receives a grant from the federal Department of Energy to develop hybrid poplars for high productivity plantations, pulp and replacement of fossil

fuels. The trees grow to 50 feet in five years, can be grown on marginal agricultural land and harvested like corn with large mower-like machines.

1979

Education programs on production and management of dairy herds by Dr. Grady Williams leads to Washington State becoming the state with the highest average milk production per cow.

1980

Christmas tree research expands, leading to recommendations for control of Swiss Needle Cast disease. Research on post-harvest physiology by Dr. Gary Chastagner, research plant pathologist, identifies factors that affect Christmas tree quality and techniques, which are being used to improve quality of trees for consumers.

Scientists determine that volcanic ash from Mount St. Helens eruption does not impair animal health or milk production when fed to lactating cows at the Puyallup Center.

1981

The Department of Social and Health Services' Rainier School Dairy Farm in Buckley transferred to WSU and dairy research shifts from Puyallup to Buckley. Emphasis is placed on dairy production with increased use of forages.

1983

Biotechnology changes research techniques. In Mt. Vernon, tissue culture research by Dr. W.C. Anderson, research horticulturist, leads to new methods for commercial production of rhododendrons, small fruits, crucifers and spring flowering bulbs. Dr. W.A. Haglund develops new method of obtaining pure breeding parents for hybrid spinach seed production. In Puyallup, Dr. Pete Bristow, plant pathologist, in cooperation with plant virologists at Agriculture Canada, Vancouver, B.C., uses immunological techniques (ELISA-based test) for rapid identification and elimination of plants infected with a newly recognized virus of blueberry.

1984

First inter-cropping experiments with corn, sunflowers, fava beans, sweet clover and forage sorghum improve nutritive value of silage. By 1988, adoption of inter cropping by some commercial dairymen in western Washington increases milk production efficiency.

1985

Research emphasizes control of insects, disease, and weeds without chemicals and Extension introduces Integrated Pest management (IPM) across Washington to teach growers to use little or no pesticides. At the Coastal Research and Extension

Unit, pheromone traps monitor fireworm and girdler emergence to time insecticide applications.

David F. Allmendinger Center dedicated as first privately financed building at the Puyallup Center. The DFAC was designed to accommodate full telecommunications and add extended teaching capability to the Puyallup Center.

1986

State 4-H foundation transfers 147-acre 4-H Demonstration Forest and Educational Center at Bonney Lake to WSU. Nature trails, a learning shelter, forest management plots, an arboretum and a wildlife pond promote environmental education. A "Challenge Course" helps youngsters learn trust and improve self-confidence.

1987

WSU joins other agencies to improve water quality around Puget Sound. Extension agents and research scientists seek ways to reduce groundwater pollution and farm run-off and educate people to protect water supplies.

Research focuses on characteristic movement of specific chemicals through the soil.

1988

WSU and the Washington Alliance for School Age Parents co-sponsor a statewide effort to mobilize communities for an Adolescent Pregnancy Prevention program.

1989

WSU and Oregon State University researchers and extension personnel and a broad spectrum of conventional and organic farmers make a successful bid for a USDA Low Input Sustainable Agriculture grant. Consumer surveys, two symposia take place concurrently in Post Falls, Idaho and Portland, Oregon. Intensive whole-farm case studies are being conducted to determine profitability and sustainability of farming with reduced chemical inputs.

SUPERINTENDENTS/DIRECTORS

Washington State University Centers/Units in Western Washington

Puyallup

Superintendents:

F. A. Huntley, horticulturists, July 1, 1895 – 1897

David A. Brodie, agriculturist, 1899 – 1903

William H. Lawrence, plant pathologist, 1907 – 1911

George Severance, agriculturist, 1911 – 1913

W.A. Linklater, animal scientist, 1913 – 1926

Dr. J.W. Kalkus, veterinarian, 1926 – 1953

Dr. D.F. Allmendinger, horticulturist, 1953 – 1975

Dr. Ernest Bay, entomologist, 1976 – 1986

Dr. Arlen Davison, plant pathologist, 1986 – 1994

Interim Director:

Dr. Alan Pettibone, agricultural engineer, 1994 -1996

Director:

Dr. Dean A. Glawe, micologist, 1996 – 2002

Interim Director

James A. Kropf, agronomist, 2002 – 2004

Director:

Dr. Jonathan R. Newkirk, agricultural economist, 2004 – present

Mount Vernon:

Dr. Thomas E. Randall, horticulturist, 1943 – 1947

Dr. Martin W. Carstens, horticulturist, 1947 – 1961

Dr. Robert A. Norton, horticulturist, 1962 – 1988

Dr. Wilbur C. Anderson, horticulturist, 1988 – 1994

Interim Director:

Dr. Alan Pettibone, agricultural engineer, 1994 - 1996

Director:

Dr. Dean A. Glawe, mycologist, 1996 - 2002

Interim Director:

Dr. Debra Inglis, plant pathologist, 2004 – present

Vancouver:

Dr. D.F. Allmendinger, horticulturist, 1943 – 1953

Dr. R.M. Bullock, horticulturist, 1953 – 1958

Dr. Perry Crandall, horticulturist, 1958 – 1980

Dr. Carl Shanks, Jr., entomologist, 1980 – 1994

Interim Director:

Dr. Alan Pettibone, agricultural engineer, 1994 - 1996

Director:

Dr. Dean A. Glawe, mycologist, 1996 – 2002

Director:

Blair Wolfley, horticulturist, 2002 – present

Long Beach:

D. J. Crowley, plant pathologist, 1923 – 1954

Dr. C. C. Doughty, horticulturist, 1954 – 1965

Azmi Shawa, horticulturist, 1965 – 1989

Interim Director:

Dr. Alan Pettibone, agricultural engineer, 1994 – 1996

Director:

Dr. Dean Glawe, mycologist, 1996 – 2002

Director:

Blair Wolfley, plant pathologist, 2002 - present