

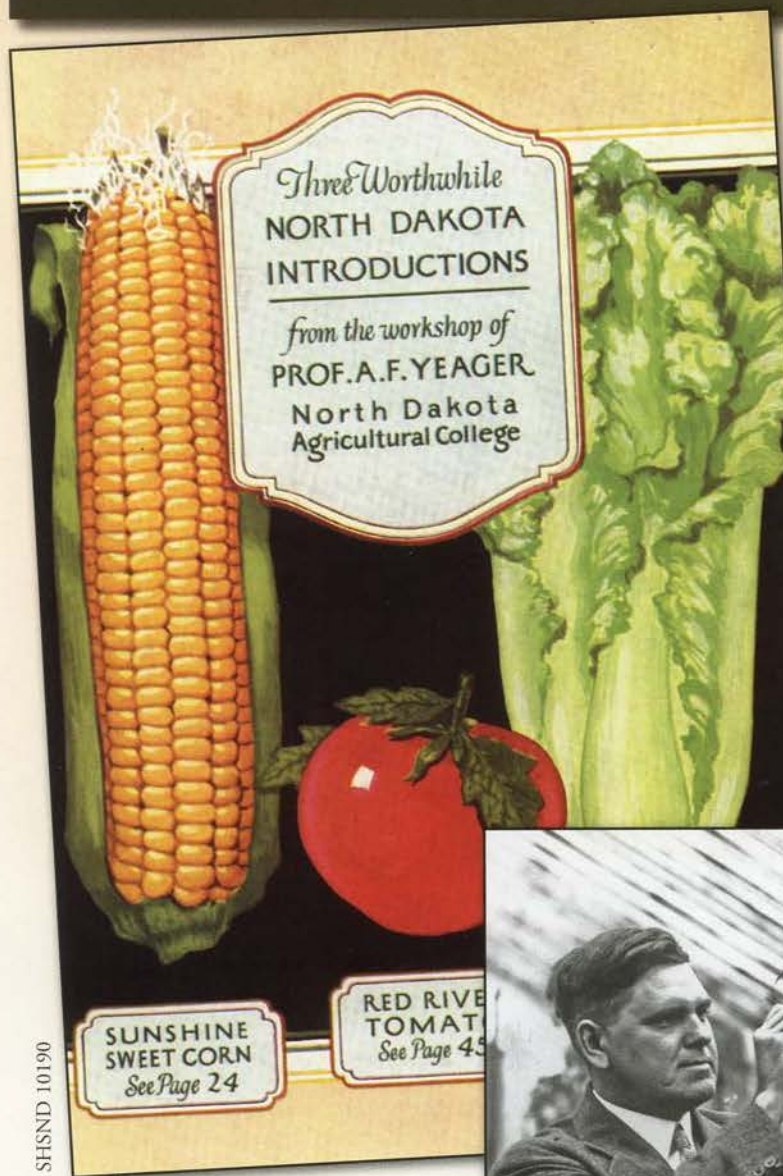
The "Plant Wizard of the North": Albert E. Yeager at North Dakota Agricultural College

by Barbara Handy-Marchello

Albert Franklin Yeager came to North Dakota in 1919 to serve as horticulturist on the staff of the North Dakota Agricultural College (NDAC) and the North Dakota Agricultural Experiment Station (NDAES). He stayed at the college in Fargo for eighteen years, during which time he produced nineteen bulletins about horticultural subjects and developed at least twenty-one new varieties (or cultivars) of fruits and vegetables, including Buttercup squash, Sunshine sweet corn, and Bison tomato. His work in developing vegetables and fruits that could survive the states three greatest agricultural limitations—early frost, periodic drought, and rigorous winters—earned him the respect of fellow horticulturists and North Dakotans, who called him the “plant wizard of the north” or the “Luther Burbank of North Dakota.”¹ Though he would be less successful in dealing with the political problems that plagued the college and the station in the 1920s and 1930s, he positioned himself so well professionally that he had a broad base of support in the state and region to draw on when troubles mounted.

Yeager arrived in Fargo with his wife Arline and infant daughter Mary. He had earned a B.S. degree from Kansas Agricultural College and a master's degree in horticulture from Oregon Agricultural College. Though only twenty-seven, he had already held several professional positions, but his new position in the Horticulture and Forestry Department at NDAC appealed to him because of the nature of the challenges that he faced on the northern Great Plains.²

Yeager quickly identified early frost as the most critical of North Dakota's three-part horticultural problem. Many years later Washburn newspaper editor and novelist Bigelow Neal



A.F. Yeager in his greenhouse at the North Dakota Agricultural College, examining a tomato plant. One of the tomatoes developed by Yeager was the Red River, included as part of the advertisement for three new vegetable varieties on the 1927 back cover of the Oscar H. Will & Company seed catalog. New fruit and vegetables developed by Yeager were frequently offered in the Will catalog.

University Archives, NDSU, Fargo, (FYc23-5(2))

On March 8, 1890, in the first legislative session of the newly formed state of North Dakota, the North Dakota Agricultural College (now North Dakota State University) and the North Dakota Agricultural Experiment Station were created. This action was the result of a number of federal laws, beginning with the Morrill Act of 1862, which encouraged, through the grant of public lands, the establishment of institutions in each state to educate people in agriculture, mechanical arts, and other practical professions. In 1887 the Hatch Act provided federal support for a nationwide network of agricultural experiment stations to conduct research and educational projects on behalf of farmers. The stations were to be associated with the agricultural colleges, and the two North Dakota institutions shared administrative officers and administrators.

The agricultural experiment stations (AES) were part of a national effort to develop the scientific basis for agriculture and to make farming a more professional, businesslike occupation. Because agronomy and horticulture were relatively new disciplines and the conditions of the northern plains still under study, some of the early research at the North Dakota Experiment Station included such essential fact gathering as determining soil types, growing conditions, or listing of native plant species. Research emphasized the development of more hardy, productive, and disease- and drought-resistant strains of wheat and other small grains. Research on the development of vegetables and fruits that could flourish in North Dakota (with an initial emphasis on potential commercial uses) also existed from the station's earliest days. In order to gain information about all parts of the state, field substations were established around the state on land grant acres and farmers were encouraged to participate in field trials. In 1925 the federal Purnell Act expanded the scope of agricultural research to include the social and economic problems associated with agriculture, and the health and welfare of farm families became part of the mission of the institutions.

In addition to research, station researchers educated farmers on farm management, crops, agricultural practices, and emphasized diversification of farms that had depended solely on small grains. AES researchers published bulletins—publications that provided information on best farming or horticultural practices or the results of experimental research—for the general public as well as scientific reports about their research. Through the years, the AES has maintained its close relationship to the Agricultural College at North Dakota State University while pursuing its dual responsibility to expand scientific knowledge about agriculture and agricultural life and to provide to the state's citizens practical information based upon that knowledge.



Minard Hall at the North Dakota Agricultural College, between 1930. Among the specialties housed at Minard Hall was horticulture. A greenhouse is visible in the background left side of the image.

wrote a dramatic account of Yeager's first encounter with the horticultural shortcomings of his new home state.

We see him first alone. He passed slowly back and forth in the dusk on a road between rows of green things. He paused by long lines of tomato plants.

It was early fall and the first frost was due. The tomatoes were Earlianas, then the "standard of the West." And yet tonight, tomorrow night, in a few days at best, they would be frozen and dead. And they had not produced a crop.

Standing there, a thought flashed through his mind. Knowing the value of tomatoes from a purely commercial viewpoint, knowing from his scientific training the medicinal value of the golden liquids within their fruits - what a wonderful thing for North Dakota and for all the children and sick folks in the great Northwest could someone produce a crop ahead of the early frost.

For a time he stood motionless. His head bent, his eyes closed in thought and then from way out in the land of somewhere, he thought he heard a voice, "nothing is impossible if you will but work it with me." He was inspired and went into partnership with God!³

It is possible that in a private conversation with Neal, Yeager may have expressed a religious perspective on his job, but his record reveals hard work and confidence in his ability to succeed in breeding plants that could beat the frost deadline. He was soon at work on fruits and vegetables that would better serve both home and truck gardens, but among the new cultivars he would produce at NDAC, the most important were corn and tomatoes.

Yeager's earliest bulletins, *Control of Garden and Household Insects* (1921) and *Shelterbelts for North*

PIONEER BRAND SEEDS—BEST FOR NORTHWEST



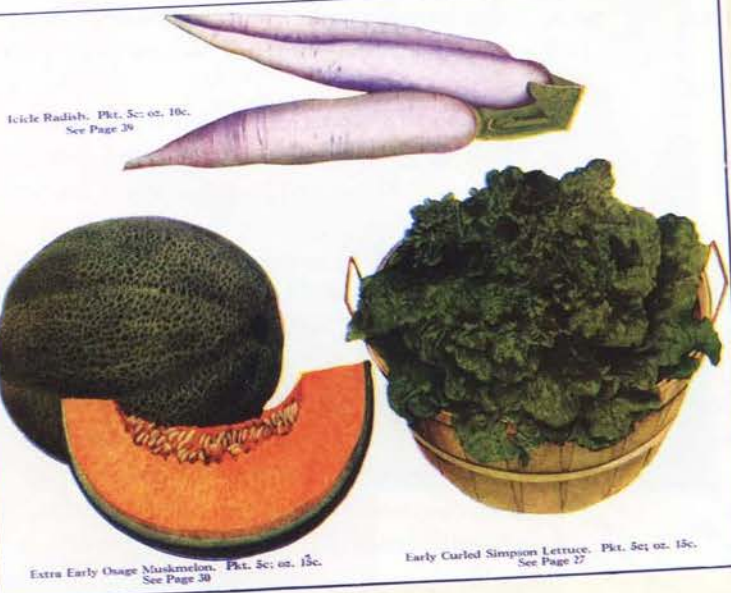
North Dakota Golden Gem Sweet Corn

Professor Yeager's Latest Production. Nothing Like This Ever Offered Before

Three Weeks Earlier than Golden Bantam

Eight-Rowed Ears, 6 to 8 Inches Long. Bantam Flavor

Price, Postpaid: pkt. 10c; 2 oz. pkg. 20c; 1/2 lb. 30c; 1 lb. 50c; 1/2 lb. 85c. See Page 22



Pink Radish. Pkt. 5c; oz. 10c. See Page 30

Extra Early Orange Muskmelon. Pkt. 5c; oz. 13c. See Page 30

Early Curled Simpson Lettuce. Pkt. 5c; oz. 15c. See Page 37

SHSND 10190

Yeager produced one other variety of sweet corn in addition to Sunshine while at NDAC, Golden Gem.

Dakota (1921), were standard topics for an NDAES horticulturist. Though he was earnest in all aspects of his work, his heart was in plant breeding. He began work on corn in 1919, drawing on research begun by his predecessor at the experiment station, H. O. Werner. At that time, the standard sweet corn of immense popularity throughout the nation was Golden Bantam. Developed in the Northeast in the nineteenth century, Golden Bantam had yellow kernels and was a reliable producer even in North Dakota. Yeager, however, thought sweet corn could be improved and made to produce longer ears with more kernels, a lengthier period of tenderness, and, of course, a shorter growing season. He chose Gill's Early Market corn to cross with Golden Bantam. Gill's had larger ears, and a desirable early maturation, but because most consumers had come to expect corn to be yellow in color, its white kernels were not acceptable.⁴

Yeager did not achieve the qualities he desired in sweet

corn until 1923, when he harvested from his research plots one ear that met his standards. In 1924 he harvested enough seed to send a few pounds of seed corn out to farm cooperators for field testing in 1925. He found that there were still a few variations in the offspring and he eliminated those from the seed stock. In 1926 the sweet corn he had now named Sunshine was sent out for widespread testing. The test was successful and Sunshine Sweet Corn appeared in Oscar H. Will & Company's 1927 seed catalog. Sunshine had yellow ears, six to eight inches long, with twelve rows of kernels. It ripened in sixty-three days, three to ten days earlier than Golden Bantam. This new variety retained its tenderness longer than Golden Bantam.⁵

Sunshine had an economic advantage over Golden Bantam because of its earliness. In 1926 field cooperator Charles Peterson of Moorhead, Minnesota, sold Sunshine for twenty-five to sixty cents per dozen in Fargo and Moorhead because it appeared on the market earlier than Golden Bantam, which sold for fifteen cents per dozen. Ninety percent of growers who tested Sunshine called it the best or equal to the best variety they grew. Yeager predicted that 2,500 acres would be planted to Sunshine in 1927 with a potential value of \$160,000.⁶

In concluding his bulletin *Sunshine Sweet Corn*, Yeager revealed some of his philosophy of horticultural research:

No doubt Sunshine will be superseded by something better and earlier, as has happened to many other varieties. In fact, we hope to produce something still better ourselves. Every such contribution becomes a stepping stone from which to advance. *Through its use by plant breeders it may contribute to the joy of life long after its name is forgotten.* In the mean time, the market gardener may make some profit from it, and the home owner may lengthen the season for high grade corn on his table.

Not content to rest on Sunshine as his major contribution to northern plains horticulture, he expected that his research would be superceded by himself or others, but he was confident that Sunshine would live on genetically in newer varieties of corn. Yeager also identified the social and economic advantages of plant breeding: advanced varieties of corn will bring joy, profit, and good food to gardeners.⁷

With help from a field crew, laboratory assistants, and a competent stenographer, Yeager also conducted research on tomatoes during his years of research on sweet corn. The tomato, a tropical fruit, required warm temperatures, sunshine, and plenty of water; it would have to be modified

Two of Professor A. F. Yeager's Productions
Developed at the North Dakota Experiment Station

**The New
Bison Tomato**
Early, Self-Pruning, Very
Productive, Highest Quality.
Pkt., 15c; ½ oz., 40c; oz., 70c.
The Tomato for
Northern Gardens.
See Page 43

**Golden Gem
Sweet Corn**

The Earliest Yellow Sweet
Corn. Three weeks earlier
than Golden Bantam.
Eight-rowed, Bantam flavor.
Pkt., 10c; ½ lb., 20c; 1½ lb.,
30c; 1b., 50c, Postpaid.
See Page 22



Two of Professor Yeager's developments were included in this 1934 Will seed catalog advertisement, the Bison tomato, released in 1929, and Golden Gem sweet corn.

for North Dakota growing conditions. H. O. Werner had published a bulletin in 1915 asserting that North Dakota gardeners could raise tomatoes if they were "careful in cultivation" and chose the proper varieties. Though he suggested that a gardener might have a choice of tomato varieties, he could only recommend the particularly early strain of Earliana that had been tested at NDAC plots. Though there was a market for tomatoes in North Dakota, there were no canning factories. Werner surmised that farm canned tomatoes might sell well and return a profit to a farm family, but the market potential depended on a reliably early tomato. However, for all of Werner's positive words, Earliana was subject to early frost and would not be the foundation for a tomato industry in North Dakota.⁸

Yeager was less sanguine about cultivation of tomatoes for market when he took over Werner's position. In a 1933 publication, he looked back to his early research and wrote that "the growing of tomatoes in North Dakota was not considered to be possible except in the hands of skilled gardeners."⁹ Earliana, first introduced in "northern" regions of the United States around 1900, was not quite early enough for North Dakota, and its quality was compromised by rough skin and thin flesh

Yeager began his quest for a North Dakota tomato by crossing Earliana with a smooth English tomato called Sunrise to yield a new variety he named Red River, which became popular in the Fargo area after its release in 1925. Not yet satisfied, Yeager continued working toward a better tomato. He next released Agassiz, a pink, flat tomato "with fine flavor." Then came Early Jumbo, a large, "reasonably

early," pink variety. Subsequent crosses resulted in new varieties that were adequate, but still had undesirable qualities—either too small or too rough. Finally, in 1929 he succeeded with a tomato he called Bison; it was smooth, larger than many others, determinate, and a heavy yielder. In 1931 Yeager reported that, in a trial of twenty-six varieties of tomatoes, Bison yielded fifty percent more ripe fruit than any other cultivar up to September 10. By 1933 Bison had become the leading tomato variety for the northern Great Plains.¹⁰ It is still available from some

heritage seed companies.

Yeager acknowledged that Bison would not be favored in locations farther east or south where weather conditions favored other varieties, but his primary concern was for the gardeners of the north country who needed the vitamins tomatoes provided. "As a source of vitamins, tomatoes rank with oranges," he wrote in *Tomato Breeding* in 1933. Not content with an early, hardy, and appetizing tomato, Yeager was eager to develop a tomato that had twice the normal vitamin content to better protect northerners from deficiency in Vitamin A, a cause of susceptibility to disease and some problems in pregnancy, and deficiency in Vitamin C which leads to scurvy. Yeager eventually succeeded in breeding a tomato, Doublerich, with twice the vitamin C content of ordinary tomatoes, but it was not released until 1947, after he had left North Dakota.¹¹

The Bison tomato was hailed in North Dakota as a great advance for both home and truck gardeners. Bison was also recognized in national horticultural reports, though some scientists dismissed this new determinate variety as having little value beyond the northern Great Plains. Although the NDAC releases were the only determinate tomatoes developed and released in early 1930s, determinate tomatoes were becoming increasingly important to the tomato industry, especially in California, where tomatoes had become a commercial crop. Determinate tomatoes—those that produce fruit at the end of the vine—were easier to harvest mechanically. Though North Dakota would never have a commercial tomato industry, the genetic potential of small round determinate tomatoes were valued in an industry that was becoming mechanized. Ironically, another of Yeager's tomatoes, Farthest North, became the principal tomato grown in Costa Rica by 1951, demonstrating that earliness and hardiness were important qualities even in tropical climates.¹²

While tomatoes may have been Yeager's proudest accomplishment, his work on winter squash has had substantial and long-lasting consequences. He began with the understanding that sweet potatoes, which were a good source of vitamins and stored well through much of the winter, did not grow well in North Dakota's short growing season. Instead of developing a short-season sweet potato, Yeager looked for an adequate substitute and began breeding winter squashes in 1922. He started with a cultivar called Quality, but after three years of trials he identified only one plant with desirable characteristics. He soon decided that this plant was probably an accidental cross between Essex Hybrid and Quality squashes. Regardless of its origins, this single plant produced squash that was superior to the well-known Hubbard. He stopped the research he had been working on and gave more attention to the accidental squash. By 1927 he had the type he called Buttercup. It was a turban-shaped squash, three to five pounds in size with smooth dark green skin that was both thin and tough. The flesh was orange and sweet.¹³

Yeager tested the squash in field trials, chemical analysis, and baking; he also conducted color tests to determine the exact color of the flesh. Using the results of the chemical

analysis and baking trials he selected the squashes that tested well and also had the breeding and maturation qualities he wanted in winter squash. In 1931 he conducted his final analysis of Buttercup squash in comparison to Hubbards he purchased in a Fargo grocery. Buttercup bested Hubbard in every category of analysis but one. Yeager still faced the problem of purifying the seed. Occasionally seed would produce off-types, but he released Buttercup in 1932 to favorable reports from gardeners across the state.¹⁴

Quality	Buttercup	Hubbard
Per cent edible	79.46%	68.78%
Total Waste	20.54%	31.22%
Seed Waste	7.32%	7.21%
Skin Waste	13.22%	24.01%
Steam Loss	9.16%	17.71%

Figure 1. Tests of Buttercup Squash showed its improvement over Hubbard.¹⁵

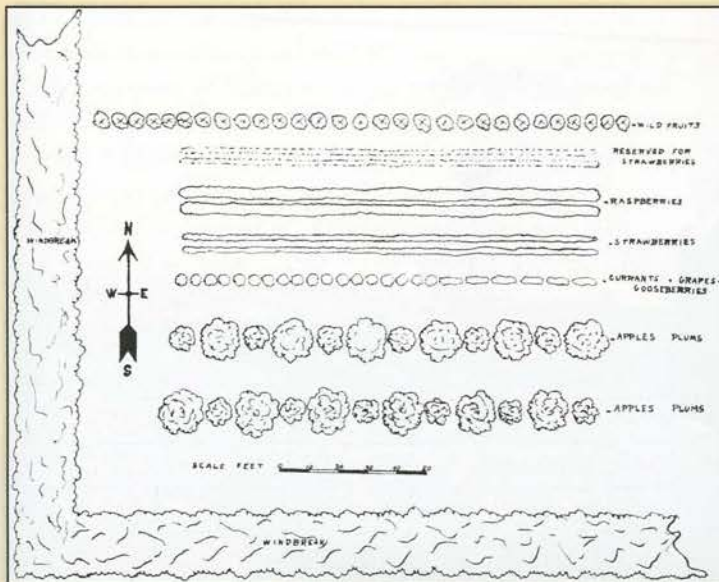
Yeager's bulletin on Buttercup squash contained an unusual amount of information on storing and cooking

Buttercup squash, including five pages of recipes. He suggested serving squash in place of potatoes because its the high vitamin A content. He also noted the squash as a good source of Vitamin B, calcium, phosphorus, and iron.¹⁶

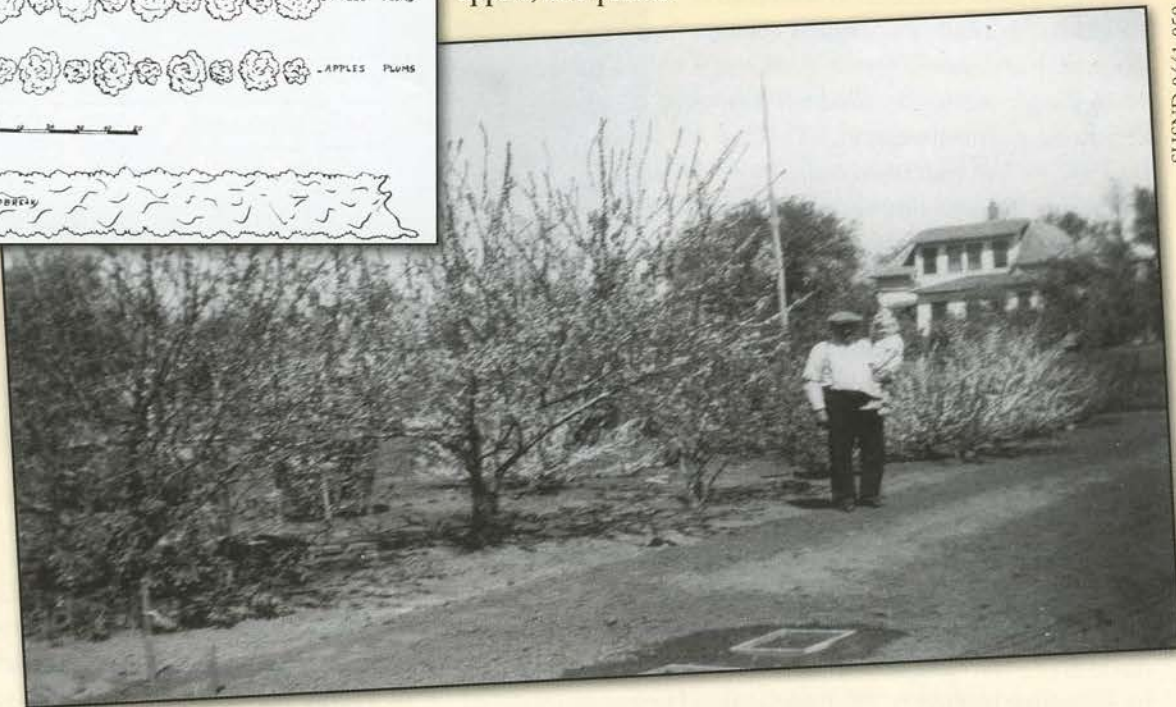
Fruits also commanded Yeager's attention. Like other horticulturists before him at the NDAES, Yeager found the fruit problem in North Dakota to be complex and frustrating.

His first bulletin on fruit (1925) focused on cultivated domestic fruits such as apples, crab apples, plums and "plum like fruits." He described how to order fruit stock, where to plant, how to cultivate. It was pretty ordinary horticultural

The 1934 Will catalog contained this advertisement for Professor Yeager's Golden Bison tomato, released in 1930, and his Buttercup squash, released in 1932, as well as a watermelon developed by Yeager.



Yeager's 1925 bulletin *Fruit Culture in North Dakota* included on page 5 a suggested plan for a North Dakota fruit garden. The plan called for planting of apples, plums, currants, grapes, gooseberries, raspberries and strawberries, as well as "wild fruits." Fruit gardens and fruit trees did become more common in North Dakota. Here Nicholas Bischoff, holding his granddaughter Janice Katherine Halvorson, stands in front of his fruit garden in Rugby, North Dakota, in 1949. Bischoff planted apple trees, crab apples, and plums.



SHSND 0441-059

literature compared to the passion evident in his bulletins on tomatoes and corn. In the introduction to this bulletin, however, Yeager touched upon a subject of sociological and historical interest. The first sentence, in particular, is both provoking and somewhat mysterious.

Yeager wrote: "Fruit is essential to the happiness of the white man." Indeed, it was the "white man"—especially soldiers—who suffered from disease due to a poor winter diet on the northern Great Plains. Native Americans had learned to utilize and preserve wild fruits for winter diets thereby preventing scurvy, a Vitamin C deficiency disease, and a complex of diseases related to a deficiency in Vitamin A. Historical records reveal that soldiers stationed at posts in Dakota Territory in the 1860s had a winter diet of meat and hard tack. Lacking a dietary source of vitamins A and C, they sickened and died in shocking numbers in late winter and early spring. It is doubtful that Yeager knew the military history of the northern plains, yet his interest in providing North Dakotans with sufficiently nutritious food that they could grow in their own gardens reflects on that dim time past. This was the personal challenge that Yeager accepted with his position at NDAC.¹⁷

It was in this essay introducing the fruit bulletin that Yeager introduced his historical view of the horticultural situation facing North Dakota's settlers and their obligation to their new home. Yeager noted that the "greatest criticism of many people who have lived in North Dakota in the past

and have moved away has been its dearth of fruit" which he understood as a concern for state officials charged with encouraging migration to the state. However, he asserted that residents, too, had to do their part.

Some have moved away leaving our State no better than they found it. Others with a broader vision have looked to the past and from its story learned that every new country must have its period of adjustment and have done their part in carrying North Dakota through that time.

Thanks to the strong hearted believers and those who would not be defeated we have quickly passed through the most discouraging time and are emerging into an era when every home in North Dakota will have its fruit garden, which shall add joy to the hearts of the youngsters developing with it, and make sweet the memories of the older generation.¹⁸

In 1935 Yeager published a bulletin in which he praised wild plums, chokecherries, sand cherries, Juneberries, wild raspberries, buffalo berries, currants, gooseberries,

and highbush cranberries for their nutrition, flavor, and usefulness in shelterbelts. Though this bulletin did not constitute new information for most North Dakotans (especially rural residents and Native Americans), who were accustomed to picking, baking, preserving, and consuming wild fruits, it was an important concession for a horticulturist to suggest that wild fruits should be "utilized to the fullest extent when they are found."¹⁹

Yeager was highly productive in his eighteen years at NDAC. By 1937 he had published bulletins presenting his newly developed vegetable and fruit cultivars and encouraged gardeners to continue his work by following their own plant breeding program. He identified more areas of research and had new vegetable and fruit projects constantly under development in his laboratory. He had formed friendships with George Will, the owner of the influential seed and nursery stock company of Bismarck, and Fannie Mahood Heath, famous around the world as the "Flower Lady of North Dakota" whom Yeager graciously called "my most important horticultural discovery." He was called a "warm and enobling friend" by Canadian researcher, W. Russ Leslie. He was active in regional horticultural associations as a founder of the Fargo Garden Society and as secretary of the North Dakota Horticultural Society. Yeager had been appointed head of the Horticulture and Forestry Department at NDAC in 1934, and with the encouragement of NDAES Director P. F. Trowbridge, he completed his Ph.D. degree at Iowa State College in 1936.²⁰ His family had grown by the birth of a son, Albert, Jr., in 1928. He enjoyed his work and might have remained at NDAC throughout the remainder of his career had not the state's political turmoil infected the agricultural college.

The agricultural and economic depression that gripped the nation during the 1930s started earlier in North Dakota. Market prices for most agricultural commodities dropped precipitously after World War I. The state legislature, looking for ways to save money, cut state employee salaries. Until 1922 the salaries of NDAC employees who also had a NDAES appointment were split fifty-fifty between state and federal funds. In 1922 the state portion of NDAES employees was reduced by twenty percent. Yeager's total salary remained the same, but federal funds made up a larger portion of his paycheck.²¹

In 1932 North Dakota citizens presented a petition to



Professor Yeager, (right) examining a potato field, circa 1930.

the legislature asking that salaries of legislators and state employees be cut by ten percent. The legislature responded vigorously cutting the NDAC appropriation by fifty-nine percent; deans and department heads were limited to salaries of \$1,920 per year. This figure was among the lowest of all professional employees of the State of North Dakota. In protest, nine professionals left NDAC and found better-paying jobs elsewhere. Yeager's salary for the 1933-1934 fiscal year, even with federal funds for the NDAES portion of his position, was less than what he had earned in 1920. He seemed to take the loss of income in stride; he was apparently quiet, or at least responded only privately, if he felt some dismay in his personal pay loss of thirty-six percent in 1933.²²

The next three years saw Yeager lose important resources for his research. Little by little, his laboratory space was reduced by half, and his research assistants were dismissed. The productivity he had enjoyed was threatened by these losses, but he remained quietly at work in the laboratory, classroom, and field. In the meantime, the long and complicated history of political intervention at the Agricultural College was coming to a head.

In 1917 newly-elected Governor Lynn Frazier had illegally tried to dismiss members of the Board of Regents, the NDAC governing body, and replace them with members who would be more farmer friendly (or NPL friendly). Although this effort failed, in 1919 the legislature established a new governing board, the Board of Administration, which

had a political vision that was often in conflict with the educational mission of the NDAC.²³

The election of William Langer to the governor's office in 1932 led to further conflict between state government and the NDAC when the college and its faculty refused to accede to Langer's demand that state employees contribute five percent of their salaries to Langer's NPL newspaper, *The Leader*. Faculty members began to make known their displeasure at this political turn of events. Discouraged by salary reductions so extreme that employees of the State Mill and Elevator and state beer inspectors made as much or more than NDAC faculty members, the loss of appropriations "necessary to our work," and the appointment of a "Langer man" in the college administration, several faculty members argued publicly that state politics had no place on campus. In November 1933 the Board of Administration eliminated several positions and reorganized departments. Again, several members of the faculty protested, though Yeager was not visible among them, and he later noted that he did not challenge any of the changes. The protests began to generate some suspicion in Fargo that "the activities of some faculty at NDAC have all the earmarks and resemblances of communism." Though Eli Weston, who made this statement, eventually recanted, the words had widespread effect and others also raised the issue.²⁵

The years of conflict escalated in 1937 into a full attack on NDAC known as "the purge." The legislature looked into "misuse of funds" at NDAC and called President Shepperd to appear before it. Shepperd was weary after years of battle, and when he was asked to resign, he agreed. President John West of UND was appointed president of NDAC as well.²⁶ A few days later, on the morning of Saturday July 31, seven faculty and administrators at NDAC received notices from the Board of Administration that their positions had been terminated as of August 1. They had to leave their offices by that noon. The Board did not offer any reasons for the dismissals, nor offer the seven any method of appeal. H. L. Walster was relieved of his positions as director of the Extension Service and the NDAES, although he remained Dean of Agriculture. The campus and the city of Fargo were stunned. Immediately, suspicion for this drastic action was leveled at Governor Langer, who quickly identified himself as the savior of NDAC, especially when, he claimed, the legislature had attempted to close NDAC. Nevertheless, the majority of appointees on the Board were beholden to Langer. Though his motives were never proven, it appears that Langer desired more power over the college in order to control federal funds

for New Deal farm programs that were funneled through NDAC appeared to have a role in this action.²⁷

Albert Yeager was not dismissed and in this purge retained his position as head of the Department of Horticulture and Forestry. However, like many other faculty members he was deeply disturbed by the loss of research funds for his laboratory and assistants and the Board's apparent lack of understanding about what NDAC faculty did to earn their meager pay. Though he had kept quiet over the years of administrative changes, outside interference, budget cuts, and faculty turmoil, he finally had to face the situation squarely. On September 30, 1937, two months after the purge dismissals, he resigned.

On October 2 the *Fargo Forum* published an article announcing Yeager's resignation. Yeager said little other than that his "reasons should be obvious" because of the dismissal of NDAC personnel, and "the continual shifting of authority and personnel which had prevailed at the college since the State Board of Administration [began] its purge of the institution." The article concluded with a long list of Yeager's accomplishments at NDAC.²⁸

Yeager apparently had spent some weeks thinking about resigning. Though he excelled in his field, the Depression was still limiting job opportunities and he had children to support. His earliest statements about his resignation were terse; he seemed to hold to his loyalty to the institution and the state and was reluctant to enter the war of accusations that continued for months after the dismissals. Yeager's resignation raised concerns among college and state officials. He was popular in the state, widely known as a



A.F. Yeager (left) and Harold Mattson, who replaced Yeager as horticulturalist at the North Dakota Agricultural Extension Service, examine an apricot tree at the extension service grounds. Yeager made a return visit to Fargo in 1951.



A Golden Bison tomato plant, photographed in the author's garden in August 2010. The author noted the Golden Bison tomato was still one of the earliest ripening tomatoes, and the writer of this caption, who was given several fruits, can attest to their tastiness.

horticulturist, and had plainly served the state well in his position.

Soon after Yeager resigned, President West and Dean Minard, through the efforts of Bigelow Neal, asked Yeager to revoke his resignation and remain at NDAC. Neal understood Yeager's position: his assistants had been "fired without warning, [and] his stenographer who checked and recorded experimental data was fired." His greenhouse space had been reduced by one-half, forcing him to give up some of his research. Nevertheless, Neal, a close friend of George Will and President West, valued Yeager's work and had raised many of Yeager's new vegetables in his home garden. During a visit in Grand Forks, he convinced President West to try to make peace with the NDAC faculty and find a way to keep Yeager on staff. Neal told of a night when he, West, and Dean Minard

worked on Yeager until three o'clock in the morning and there we took a licking. West offered him anything and everything. He offered him a green house of his own, complete self-management, and complete protection. No soap. Toward morning, Yeager became very friendly but we still lost the battle.²⁹

Through his November 6 editorial, Neal appealed directly to Governor Langer and the Board of Administration to reinstate Yeager with "a little corner of the agricultural college where he can work among the people and the plants he loves without interference except from the president of the college. If that is done, he will remain North Dakota's most valuable asset. If it isn't, this will be a black year indeed for all of us." There is no record of Langer's response, if any, and Yeager remained steadfast in his determination to sever ties with NDAC.³⁰

Meanwhile, Yeager received job offers. One of South

Dakota's institutions offered him a position, and the Manitoba Growers Association petitioned the Dominion to hire him. Yeager was also applying for positions, and in December he announced that he had accepted a position at Michigan State University. Shortly before leaving Fargo, he wrote to the *Forum*, finally explaining at length his reasons for leaving. His major complaint was that NDAC employees were not valued for their hard work or ability. He cited the case of his research foreman. This man, whose name was not given, had supervised "laborers who worked on horticultural projects. He got his men to work hard for little money and produce results which could be published in the *Journal of Agricultural Research* - the best scientific publication. He supervised large crews of WPA employees and inspired them to do good work." However, the foreman had been told that he could be replaced by "any other farmer" with only two weeks notice. Yeager, revealing his own strong work ethic, despaired that the Board had destroyed the "fine spirit and morale [that] money can't buy." He stated that Walster had been unfairly treated, that now NDAC employees needed the support of "some politician" to continue their work, and that NDAC was being punished for being in Fargo. In addition, research was underfunded; horticulture had received only \$37.73 in research funding from the legislature in 1937.³¹

Yeager's bitterness had finally emerged. He was no longer a loyal employee of the NDAC and with the security of his new position in another state, he made his final statement. One more shot was to be fired, however, concerning Yeager's departure. On April 7, 1938, *The Normanden*, a Norwegian-American newspaper located in Fargo, published the "confidential audit" of the NDAC requested by Governor Langer. Admittedly drawn from rumors, the "audit" strung out a long list of often senseless twists on events that may or may not have occurred to justify the

purge. Yeager's resignation, however, raised some concerns, and the auditor, M. H. Chernick, gave the subject an entire paragraph in the brief report. Yeager resigned, the audit stated, because

of his failure to cooperate with others in the department. He failed to cooperate in the preparation of his annual budget and apparently refused to control expenditures to stay within his allotted funds. . . . In fact, when he was advised about the first of October 1937 that he had already exceeded his budget for the entire year and that he would have to cooperate or it would be necessary to have someone else take care of the financial transactions of his department he presented his resignation. His ability should be given some consideration, but we feel that no person [is] larger than the institution which he serves.

It is possible that there is a kernel of truth in this statement. Neal noted that the new director of the NDAES, Herbert C. Hanson, "didn't like Yeager." Yeager himself complained of his ridiculously inadequate budget. On the other hand, none of Yeager's other complaints were addressed by the audit, nor was the fact that he submitted his resignation on September 30, either before or possibly at the same time he was warned to "cooperate" on "about" October 1.³²

The powerful position Yeager had created for himself in his years of developing early, hardy, and drought-resistant vegetables and fruits for North Dakota's gardeners probably contributed to the relatively gentle treatment he received while others were dismissed or reassigned without warning. An editorial published on December 19, a few days after Yeager announced his acceptance of the Michigan State position, argued that Yeager's resignation and departure might have been the wake-up call NDAC and the Board of Administration needed. The resignation of this popular, productive, and largely trouble-free professor "may provide a lesson for politicians who overstep themselves and find that in their crude efforts to grab the spotlight they have wrecked the very thing in whose reflected glory they had hoped to bask."³³

Yeager moved on to Michigan State for a couple of years. In 1939 he accepted a position as head of the Horticulture Department at the University of New Hampshire where he remained until his retirement in 1959. He continued to conduct horticultural research and released many new varieties of fruits and vegetables, several of which were sold in North Dakota through Bismarck's Oscar H. Will and Company seed catalog. In a slight shifting of his fame, he became known in New Hampshire and in the American Society for Horticultural Science as a "fruit guy" because his main interest had turned to garden fruits, especially

melons.³⁴

NDAC and North Dakota lost a tremendously vigorous and valuable researcher when Yeager left. He accumulated awards throughout his forty-three year career, including the 1953 Certificate of Merit in Plant Breeding by the Vegetable Growers Association of America, the Stevenson Memorial Gold Medal by the Manitoba Horticulture Association of Canada in 1954, the Robertson Gold Medal for "significant contribution to American Horticulture" in 1956, and the Wilder Medal from the American Pomological Society in 1957. He was a Fellow of the American Association for the Advancement of Science, Fellow of the American Institute of Biological Scientists, and President of the American Society of Horticultural Science (1951). Several of the vegetable cultivars he developed became All America Selections and some, such as Bison and Doublerich tomatoes, and Buttercup squash are still available in garden catalogs.

In 1951 Yeager returned to Fargo for a brief visit. His visit was recorded in a *Forum* article which honored Yeager as "North Dakota's Luther Burbank." The article celebrated his career with a list of the successful students he had trained at NDAC including Dr. Joseph Schultz, who was then head of the Horticulture Department at NDAC, and Harry Graves, who was Extension Horticulturist for North Dakota. The article made no mention of the purge or the Yeager's angry resignation. Another article published at about the same time also compared Yeager to the famed amateur horticulturist, stating that Yeager had the "vision and zeal of Luther Burbank, born forty-three years earlier, plus the science—which Burbank did not possess."³⁵

Returning to Yeager's introductory essay to *Fruit Culture in North Dakota*, we can see he then, in 1925, established the pattern of his work, his response to the purge, and his vision of what a good citizen should do:

Some have moved away leaving our State no better than they found it. Others with a broader vision have looked to the past and from its story learned that every new country must have its period of adjustment and have done their part in carrying North Dakota through that time.

Yeager was a man of "broader vision" who with the widespread support of farmers, business, and college administrators, conducted himself with professional dignity when the college could no longer maintain conditions necessary for productive research and teaching. When he departed, he left this state far better for his efforts.³⁶

Acknowledgments

I am grateful to several people who provided me with significant help in my research on Dr. A. F. Yeager. Much of this research was conducted under the auspices and with the financial support of the State Historical Society of North Dakota. Dr. Fred Schneider kindly provided me with a thorough list of Yeager's vegetable and fruit varieties and much encouragement as I conducted this research. Loren Ingebretsen of Felton, Minnesota, uncovered explanatory information on the Peterson Truck Farms. John Bye of the North Dakota State University Institute for Regional Studies located material on Yeager's career at NDAC after a thorough search of the archives. His help was, as always, invaluable.

Barbara Handy-Marchello is associate professor emerita of history at the University of North Dakota. She has a master's degree from North Dakota State University and a PhD. From the University of Iowa, both in history. She is the author of *Women of the Northern Plains: Gender and Settlement on the Homestead Frontier, 1870-1930* (Minnesota Historical Society Press, 2005), which won the Caroline Bancroft prize in 2006. She has also written several articles for *North Dakota History*, including "Land, Liquor, and the Women of Hatton, North Dakota," *NDH* 59.4, and "'The Main Stay': Women's Productive Work on Pioneer Farms," *NDH* 63.2&3, which won the 1997 Editor's Award; and "Lovesickness is the Worst Sickness: The Letters of John C. Boren," *NDH* 75.1 & 2.

Endnotes

1. On the history of the North Dakota Agricultural College and the North Dakota Agricultural Experiment Station see William C. Hunter, *Beacon Across the Prairie: North Dakota's Land-Grant College* (Fargo: North Dakota Institute for Regional Studies, 1961) and David B. Danbom, "Our Purpose is to Serve:" *The First Century of the North Dakota Agricultural Experiment Station* (Fargo: North Dakota Institute for Regional Studies, 1990). Luther Burbank was a famed horticulturist of southern California who developed 800 new varieties of plants. He died in 1926.
2. Albert F. Yeager Biography File, North Dakota State University (NDSU) Archives, Fargo (hereafter AFY Bio). "And Dr. Yeager Goes," December 19, 1937, clipping from unidentified newspaper, AFY Bio. The Yeagers welcomed a son, Albert Franklin, Jr., in 1928.
3. Bigelow Neal, "Neal Appeals to North Dakota to Keep Man Who Walks with God." *McLean County Independent*. Reprinted in *The Bismarck Tribune* November 6, 1937.
4. A.F. Yeager, *Sunshine Sweet Corn* (Fargo: NDAES Bulletin 205, February 1927).
5. *Ibid.*, 7. Oscar H. Will & Company Seed catalog, 1927, 24. Will wrote of Sunshine: "a golden cross developed by Professor A.G. Yeager of the ND Experiment station . . . 10 days earlier than the earliest strain of Golden Bantam and much larger."
6. Yeager, *Sunshine Sweet Corn*. Charles Peterson and his son, Henry, owned and operated several truck farms in the Moorhead, Minnesota, vicinity.
7. *Ibid.* Italics added. Yeager produced only one other variety of sweet corn while at NDAC, Golden Gem, released in 1932.
8. H. O. Werner, *Tomatoes for North Dakota*, (Fargo: NDAES Bulletin 111, March 1915).
9. A. F. Yeager, *Tomato Breeding* (Fargo: NDAES Bulletin 276, November 1933)
10. A. F. Yeager, *Tomato Breeding*; A. F. Yeager, "North Dakota Horticulture," *North and South Dakota Horticulture* III:X (October 1931): 147. Bison tomatoes first appeared in the 1931 Oscar H. Will and Company Seed catalog. They are still available through some heritage seed catalogs.
11. *Ibid.* AFY Bio.
12. Victor R. Boswell, a USDA horticulturist in the 1930s, 1940s, and 1950s, was the horticulturist who did not see a future in Yeager's tomatoes. Boswell is quoted in Darrel Bienz, "Genetics, Health, and Prosperity of the West: Horticultural and Specialty Crops," *Journal of the West* 41 (Winter 2002): 58. "Dr. Yeager Visitor in Fargo; Once North Dakota's 'Luther Burbank,'" *Fargo Forum*, 17 September 1951.

13. A. F. Yeager and E. Katzke, *Buttercup Squash: Its Origins and Use* (Fargo: NDAES Bulletin 258, June 1932).
14. Ibid.
15. Ibid.
16. Ibid.
17. On military deaths from scurvy see Regis de Trobriand, *Military Life in Dakota: the Journal of Phillipe Regis de Trobriand*, trans. Lucile M. Kane (Lincoln: The University of Nebraska Press, 1951); *The Frontier Scout*, 15 June 1865 (published at Fort Rice, D.T. Available online at <http://history.nd.gov/archives/frontierscout.html>.) On the improvement of diet and health through the establishment of post gardens, see also John S. Billings, *Circular No. 8 Report on the Hygiene of the U. S. Army* (May 1, 1875), reprint: Sol Lewis, New York, 1974.
18. A. F. Yeager, *Fruit Culture in North Dakota* (Fargo: NDAES Bulletin 188, February 1925). Yeager developed new cultivars of muskmelon, gooseberries, raspberries, strawberries, and crab apples.
19. A. F. Yeager, Esther Latzke and Dorothy Berrigan, *The Native Fruits of North Dakota and Their Use* (Fargo: NDAES Bulletin 218, April 1935). See also the final paragraph of Yeager's *Growing Fruit in North Dakota* (Fargo: North Dakota Agricultural Experiment Station Bulletin 280, November 1935) where he states that where the soil and climate will not permit growing of domestic fruits, native fruits will grow "practically anywhere that grain will grow." Yeager developed many varieties of domestic fruits including Pixwell Gooseberry, Favorite Yellow Honey Watermelon, Gold Raspberry, Yeager Sweet Apple, Dry Weather Strawberry, and several varieties of melons.
20. Yeager took sabbatical leave from October 1930 to July 1931 to begin work on his Ph.D. degree at Iowa State College. A. F. Yeager to Dr. P. F. Trowbridge, July 7, 1930, Walster Papers, Mss 11, NDSU Archives; Hunter, *Beacon Across the Prairie*, 112, 232, 233; A. F. Yeager, "North Dakota Horticulture," *North and South Dakota Horticulture* III: XI (November 1931): 173; W. Russ Leslie, "Dr. Albert F. Yeager," handwritten note dated December 1961 in Walster Papers, Mss 11, North Dakota State University Archives; AFY Bio.
21. Hunter, 124; Albert Franklin Yeager Salary Card, NDSU Archives.
22. Yeager Salary Card; Hunter, 126.
23. Hunter 91-93, 96-97, 110.
24. Hunter, 126, 128-130.
25. Hunter, 132; "Why Did Yeager Resign?; Herewith He Tells All; Merit System Gone," *Fargo Forum* January 2, 1938.
26. Hunter, 136-137. I primarily use Hunter for the events of the purge, but readers can find other perspectives and fuller treatments in Danbom, *Our Purpose is to Serve*, 111-114, and Agnes Geelan, *Dakota Maverick: The Political Life of William Langer* (Fargo: NP, 1976), 83-84.
27. Hunter, 145-147. The NDAC Alumni organization challenged Langer's claim to have protected NDAC at the legislature; legislative records did not reveal any attempt to close NDAC. Geelan, 84.
28. "Yeager Throws Up Post at NDAC; Has No Plans; Plant Wizard Points Out His 'Reasons should be Obvious,'" *Fargo Forum* 2 October 1937. Other members of the faculty also resigned in protest.
29. Neal, "Neal Appeals to North Dakota. . ."; Bigelow Neal to H. L. Walster, 16 February 1956, SC 144 Institute for Regional Studies, Fargo.
30. Neal, "Neal Appeals to North Dakota. . ."
31. AFY Bio; "Dr. A. F. Yeager Accepts Michigan State Post at Higher Pay; Leaves Soon after Christmas," *Fargo Forum* 16 December 1937; "Why Did Yeager Resign?" *Fargo Forum* 2 January 1938. WPA stands for Works Progress Administration, a federal agency which supported local employment during the Great Depression.
32. "Langer's Confidential Audit on A.C. Exposed; Founded Entirely on 'Rumors,'" *The Normanden* April 7, 1938. Chernick's audit was dated November 1, 1937; Neal, "Neal Appeals to North Dakota."
33. "And Dr. Yeager Goes," December 19, 1937, AFY Bio.
34. Dr. Don Maynard, archivist, American Society of Horticultural Science, personal communication to the author 28 September 2009 via email.
35. "Dr. Yeager Visitor in Fargo; Once N.D.'s 'Luther Burbank,'" *Fargo Forum* September 17, 1951; C. L. Fitch, "Dr. A. F. Yeager to Retire from Executive Work," *The Packer* September 1951, clipping, AFY Bio.
41. According to the biography provided by the American Society of Horticultural Science, Yeager died in 1961.