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The Beginnings

The terrain of eastern Kentucky, the Highlands, provides a natural basis for both the region's economy and its culture. Early settlers in the 1840s found the Highlands area in a nearly pristine state, with abundant old growth forests lining the mountains, and with tillable, narrow spits of land surrounding creeks and river bottoms. It was the forests, climax old growth forests of the Cumberland Plateau, that provided sustenance for those early settlers; abundant game, wood for housing, and creek beds full of fish allowed those settlers to live well, but isolated. Their cabins were situated along the creeks and river bottoms, in some measure because those waterways were the early settlers' only highways, and would remain so for some isolated pockets into the 20th century.

By the turn of the 20th century, the area continued to be isolated and still the tall forests persisted with only a few species, such as tulip poplar, having been harvested much at all. However, all of that was to change by the teens of that century.

In about 1912, E.O. Robinson and F.W. Mowbray, Cincinnati area businessmen, purchased or leased great tracts of land throughout 29 counties in eastern Kentucky for logging. America was growing rapidly and with that intense growth came the need for lumber for home and factory construction, as well as for furniture, woodwork trim, and flooring. Logging was lucrative, if you were well equipped with the machinery and organizational skills to bring down the large trees and process them into lumber. One tract in particular, about 15,000 acres that Robinson and Mowbray purchased from Miles Bach (later generations have spelled the name Back), yielded billions of board feet of lumber that was shipped throughout the world. By 1922, the 15,000 acres – about 23.5 square miles of forest in Perry, Knott, and Breathitt Counties – had been harvested, processed, and sold by Robinson and Mowbray and the proceeds had made

them very rich indeed. Their operation, not unlike those of others who pursued riches through logging in eastern Kentucky, left some tracts virtually worthless, save for the minerals that underlay them.

The concept of the Experiment Station substation in Kentucky had its origins in 1908, when the Ky. General Assembly passed a bill to establish a sub-experiment station in eastern Ky. and a similar one in western Ky. But the governor chose not to sign it; therefore, it was not passed into law. Again in 1910, a similar bill passed both houses but an amendment, passed by the Senate, cut the maintenance for substations to \$3,000 a year at each location. Because the amendment was not passed by both houses, the concept was voided at that time.

In 1922, C.N. Manning, president of the Security Trust Company of Lexington, approached College of Agriculture Dean Thomas Poe Cooper about a plan conceived by E.O. Robinson to give practical aid to the mountain people of eastern Kentucky. Robinson believed it was his duty to put the bulk of his immense fortune to good use for the people of eastern Kentucky. To achieve that end, Robinson had established the E.O. Robinson Mountain Fund.

Manning, as director of the E.O. Robinson Mountain Fund, which consisted of about 16,000 acres in Breathitt, Perry, and Knott Counties and which had an endowment of about \$1 million, suggested to Dean Cooper that 14,000 acres of the land be used as a demonstration tract for reforestation. Cooper agreed that this would be a fine use of the land, and that the College of Agriculture would be interested in working with the E.O. Robinson Mountain Fund for that purpose. However, Cooper further suggested that because most of the research conducted by the Kentucky Agricultural Experiment Station was conducted in and around Lexington, it did not apply directly to the situation of the mountains and that this site could be used for other research studies, besides reforestation.



Manning proposed that the E.O. Robinson Mountain Fund lease for 75 years to the College about 14,000 acres of the harvested land in the three counties for research that was far more inclusive than reforestation research.

Cooper was careful to make sure that Manning was aware that the University was not in a position to finance the work he alluded to, but that he believed if a gift could be secured or an agreement of cooperation were struck, it might be possible for the state to make modest appropriations necessary to begin work.

By April of that year, a memorandum of understanding had been drafted for consideration by the University. The draft included the provision that the E.O. Robinson Mountain Fund lease to the University about 15,000 acres in Breathitt, Perry, and Knott counties for 75 years, with renewal possible. The University would establish and maintain on the lands a model farm or farms and would conduct experimental research in agriculture and reforestation. The E.O. Robinson Mountain Fund would provide the University up to \$10,000 annually to carry out the work. The University would match that amount each year to support the endeavor.

Doubts and questions were raised when the draft was proposed to the University. Cooper came to conclude that the lands to be taken over needed to be granted to the university in fee simple, meaning that they would be deeded to the university rather than leased. The University's reluctance to agree with the draft also had to do with concern that the university would be funding the experiment station for 75 years, only to turn over the renewed forest that would be worth between \$15 to \$20 million in 1922 dollars.

The University of Kentucky Board of Trustees took up the issue in detail in July 1923, and agreed that the University would accept a gift of the land, without mineral title, if the E.O. Robinson Foundation Trust were interested.

The trustees of the fund agreed and by early September of that year conveyed to the University about 15,000 acres of land in fee simple; the land was deeded over in October 1923. Eight tracts of land on the borders of Breathitt, Knott, and Perry Counties comprise the main forest. They are known as Clemons Fork, Buckhorn, Coles Fork, Laurel, Beaverdam, Bear Branch, Fishtrap, Lewis Fork, and Hurricane. Two other tracts, Little Caney and Rose's Branch, consist of about 1,000 acres and are located near Robinson Station. Cooper requested that University of Kentucky President McVey ask the Board of Trustees to authorize him to establish a sub-experiment station on the land. At the same time, Louisville and Nashville Railroad deeded their right of way which ran through the sawmill area to DuMont Tunnel for the Experiment Station.

In his request to McVey, Cooper stated that "this substation should deal with the problem of reforestation which would represent its activity upon the major portion of the land and the various lines of agricultural experimental and demonstration work necessary for development of an accurate knowledge of the possibilities of mountain territory."

The next step was the general assembly, which passed a bill that established the Robinson Substation and was signed by Governor William J. Fields in March 1924. The act provided for an annual appropriation of \$25,000 for the establishment, operation, and management of the fixture.

Cooper moved quickly after that and by the next month, he had hired Roger W. Jones, known throughout his career as Major Jones due to his rank when he served in the army in World War I, to be superintendent of the Station.

Miles Bach deeded directly to University of Kentucky a 10-acre tract at Quicksand that had been used by the lumber company for a machine shop, sawmill, housing for workers and a movie theater as the site for the headquarters of the new Experiment Station. These appurtenances were quickly dispatched to clear space for the Experiment Station buildings. An office, known as the Club House, was erected and used until 1962 when the current office building was erected. Other small acreage plots were acquired by either purchase or donation over the years to expand the Station. The only remaining structure from the sawmill days is a farm storage warehouse referred to as Cooper Hall during the early years of the Station.

Major Jones began immediately to prepare the Experiment Station for its intended use. Crops were planted that spring and poultry and stock barns built and initial work was completed to beautify the 10-acre headquarters. The river bluff on the farm was established as a camping site for those who wanted to use it.

Dean Cooper, upon the recommendation of Major Jones, hired Lula Hale, a local teacher, to establish a model or demonstration house on the grounds of the headquarters and to present lessons on cooking, sewing, and weaving to young girls and occasional classes in homemaking for women. Later, Hale would establish a library at the demonstration house that included 172 volumes. She also made home visits on horse to the people of the surrounding communities.

C.H Burrage, a forester, was hired in August 1924 to manage the reforestation efforts. His efforts were to establish boundaries, organize fire protection, and map the farm and headquarters tract. J.S. Barnes was hired as farm manager.

A dairy herd and operation were established with Jersey cows. (Later Brown Swiss would replace the Jersey; the herd would be terminated in 1957 as sheep were added to the Station.) Crops produced that first year proved that scientific agriculture was greatly superior beyond imagination. In that first year, corn grew to 18 feet tall and yielded the unheard of 80 bushels per acre at the Station.



The Dedication of the Station

By the week after Labor Day in 1925, the Station was ready for dedication. The ceremony was one week after the dedication of the first Experiment Substation established in Kentucky, in Caldwell County.

While reports of that dedication are sketchy at best, we do know that College of Agriculture Dean T.P. Cooper and other dignitaries from Lexington sojourned by Pullman train from Lexington on the morning of September 11, 1925 for the dedication that afternoon. Lieutenant Governor H.H. Denhardt gave an address before viewing work undertaken thus far, including the poultry flock, dairy herd, and the areas planted to trees.

By the following year, things were in full speed with a field day held in late September. The two-day event, called the Robinson Harvest Festival, featured ballad singing, hog and chicken calling and fiddling contests, as well as displays of fruits and vegetables, home handicrafts, and farm products; rounding off the festival were a mule show and a healthy baby contest.

Miss Hale, the field worker hired the previous year, was the secretary/treasurer of the festival. In the beginning of her report about the 1926 festival, Miss Hale reiterated the importance of the station's work to the people of the area. She wrote:

"Someone has said that where there is a big need and a little faith that need will be met. Surely, there is a big need for better agricultural conditions in the mountains of Kentucky. The time was when, if the contents of the smokehouse ran low, there was a forest of game nearby. The time was when, in case of financial emergency, such as a doctor's bill, there was a black walnut tree standing on the farm. Today, these conditions have changed, yet the population is rapidly increasing and the demands for the necessities of life are becoming greater." According to the *Courier Journal* report of the event, folks came "from 40 miles around bringing chickens and chairs, ballads and baskets."

Miss Hale's report also notes that area livestock flocks and herds had already improved, as evidenced by the winners at the festival. She wrote:

"Another encouraging feature of the festival was that a number of the prize winners were folks who had obtained a start from the Robinson Substation Farm. For example, the woman winning the most prizes on poultry had purchased egg settings from the Substation, and the winner of the sweepstake on hogs had obtained his stock here. In a number of instances, ribbons were tied on corn raised from seed grown on the Robinson Substation Farm."

It was in that first year that the Substation began an unusual program referenced by Miss Hale that made improvements on surrounding farms quickly. That deal was that anyone could bring in a bushel of ordinary corn seed to the Substation and trade it in for a bushel of improved seed; a poor, common rooster could be traded in for an improved rooster; and any common boar could be swapped for an improved one. By making this deal, farm families in the area could see, quickly and on their own farms, the vast improvements that scientific agriculture could make.

Miss Hale, who seems to have been indefatigable (she logged 3,000 miles by horseback for farm visits), left her position as field worker in 1929 to work with E.O. Robinson. Robinson asked her to establish Home Place at Ary in Perry County, which was a model school and demonstration home. Her work was similar in nature to that which she had so successfully completed at the Substation. Her position remained vacant after her departure.



The Thirties, Forties, and Fifties

By the early 1930s, the work which Mr. Robinson envisioned a decade earlier was clearly resulting in better lives for families surrounding the Station. Louis Hillenmeyer of Lexington, who had been appointed by the UK Board of Trustees to evaluate the progress of the substation, reported that "so much has been done in the limited amount of time that the Station has been in operation I feel that its usefulness is firmly established." He went on to praise the employees of the Station for their diligence in their work.

Forestry work in the early years of the Station involved observation studies of the regrowth of yellow poplar, a species of good value because it was widely used in building and flooring, and studies of an imported species, Japanese Red Pine, an Asian species of pine noted for its strength and durability as a wood and also as a traditional plant used in bonsai arboriculture.

From the onset of negotiations for the gift to the University of Kentucky, Dean Cooper was concerned about the mineral rights on the properties. The mineral rights had not been transferred to the University, but rather had been sold by Robinson and Mowbray to W.E. Chilton of Charleston, West Virginia, taking mortgage notes in payment. Cooper was concerned that the possibility existed that Chilton either would explore the properties for coal or would transfer the mineral rights to someone who would, and that exploration could disturb the Station's reforestation efforts.

As it turned out, Chilton failed to pay some of his promissory notes and the taxes on the mineral rights. After a futile attempt at forcing the sale of the mineral rights to the University of Kentucky for non-payment of taxes, Robinson foreclosed the mortgage and regained the coal

rights, which he and his wife conveyed to the University of Kentucky in late 1930. Gas and oil rights, however, were not transferred to the University.

The 1930s brought with them both hardship and opportunities. Wages for logging at the forest, which had been \$2 per day in the late 1920s, were reduced to \$1 and \$1.50 per day due to the depression gripping the world. Fire wardens were paid \$5 per month to watch for fires during spring and fall fire seasons. A blight invaded the forest with a vengeance and virtually killed every native American chestnut tree standing. (Chestnuts comprised a substantial portion of the forest.) Early tasks were primarily building fire roads, removing fire hazards, fighting fires, and building low water bridges.

Early reports from Superintendent Jones to Dean Cooper highlight the activities at the Station and forest in curious detail, including lists of the number of fires, fire dates, acres burned, location, damage estimates, labor costs for fighting fires, and the like. From those reports, it appears that a great deal of activity was centered on removing and converting to lumber the dead chestnuts that had been killed by the blight.

Those early reports indicate that telephone service to Robinson Forest headquarters was completed in 1932 by installing a line from old Highway 15 to the headquarters, a distance of 6.5 miles, at a cost of \$597. And a horse named "Joe" that had been lent to the home demonstration agent during the winter of 1934-1935 was returned to Robinson Forest. He was sold in 1937 for \$75, which was only \$5 less than what was paid for him a few years earlier.

Depression-era federal programs, notably the Civilian Conservation Corps, did help the forest with facilities. A CCC camp was established and opened in 1933 on Buckhorn Fork, part of the Forest. Those working with the program cleared trails, built fire breaks, planted trees,

cleared more than 70 miles of foot trails in the forest, constructed three fire towers (including the 99 foot steel tower on Boarding House Knob, still in use today) and worked with the resident forester to improve stands. The CCC camp was closed in 1936 and the buildings and area were allocated to the University's engineering college, which used the facilities to train students in civil engineering techniques until the middle 1950s.

The National Youth Administration, which was set up in the mid 1930s as part of the Emergency Relief Appropriations Act to provide work training for unemployed youth and parttime employment for needy students, started building a camp at the forest in 1939. Five rustic buildings were constructed from blight-killed chestnut. The buildings were only partially completed when work stopped in 1941 as a result of the start of World War II. (All materials and hardware remained in storage until 1954; when the buildings were completed they were used by the university for summer camps in 1956.)

From the inception of the University's ownership of the forest through the 1950s, the bottoms were farmed. Vegetable gardens and fruit orchards were established for the families living in the forest. Other crops, including field corn, soybeans, alfalfa, lespedeza, orchard grass, and oat hay were raised to feed the horses and mules essential to the forest operation.

In 1943, foresters at the forest planted stands of Asiatic Chestnuts, often called Chinese Chestnuts, to see how well they grew in the mountain soils. (Recall, that the American Chestnuts had all but disappeared from the forest due to blight in the previous decades.)

In 1947, a cooperative agreement between the University of Kentucky and the Kentucky Department of Fish and Wildlife established major portions of Clemons Fork, Robinson Fork, and Coles Fork as a game refuge. Deer, beaver, turkey, and ruffed grouse were released; the beavers disappeared quickly but the remaining species thrived and continue to be abundant in the forest. In 1954, the university purchased an American No. 1 sawmill to be used for research and demonstration at the forest. Within six months of its operation, the sawmill had processed about 65,000 board feet of lumber.

In 1957, an International TD-14 tractor with a blade, winch, and logging arch was purchased to help with logging in the forest. Until this time, all work in the forest was completed with the aid of mules and horses. The following year, the university purchased two pieces of secondary wood manufacturing equipment: an Oliver double arbor universal saw and a 36-inch band saw. The present sawmill was put into operation in 1963. An herbicide (2,4,5T) was first used for timber stand improvement in 1959 at total cost including labor of \$5.40 per acre.

Beginning apparently in the early 1940s, 4-H camps were held every June at the Robinson Station under the supervision of Mr. J.M. Feltner and later Mr. Boyd Wheeler. These camps were an annual event through the 1950s, except for the summer of 1950, when the bridge to the Station was closed to all but foot traffic. The Louisville and Nashville Railroad depot was used as the 4-H kitchen at first, but the depot was razed in 1948.

Robinson Auditorium at the Station was constructed in 1940 and 1941 by the Works Progress Administration, using wood from the forest. The auditorium was used as a community center, as well as for Station activities. Annual family reunions, class reunions, weddings, and many other community meetings and activities were held at the auditorium. The building also was used as a dorm and kitchen for the first nine years of the Wood Technician School, which began at the forest in 1962 and operated until 1982. While it is no longer rented to outside groups, the auditorium continues to be used for Quicksand Extension area activities.

The Station road's maintenance, heretofore a responsibility of the College of Agriculture, was turned over to the Kentucky Highway Department in 1950; and the state painted and repaired the old bridge that had been closed to all but foot traffic for several months because of its unworthiness to carry heavy cars and trucks. The roads into the Station were blacktopped in 1952.

It was also in the early 1950s that W.D. "Army" Armstrong, a horticulturist headquartered at the other end of the state at the West Kentucky Experiment Station in Princeton, became involved in expanding horticulture research at Quicksand. In 1952, he began research on dwarf apples, pecans, grapes, blueberries, raspberries, and strawberries. In addition, agronomists began experimental plots to evaluate hybrid corn varieties. In 1950, about 30 different hybrid corn varieties were tested at the Station. To this day, new corn varieties are subjected to testing at the Quicksand Station and results published each year.

The dairy herd, first established at the Station in the 1920s, was terminated in 1957 and a sheep unit was established. The swine and poultry units began to be phased out at this time as well.

A stream of research on horticultural crops was initiated in 1957 and still continues. The first plastic greenhouse, an innovation in the field in the 1950s, was erected in the spring of 1957 to test whether it could perform as well as conventional glass greenhouses. A second one was added in the fall of that year. Later, two more were built to evaluate the efficiency of

various fuel types. These early greenhouses were razed in the mid 1970s, and another has replaced them, built in 2001.

Major Jones, the superintendent of the Station from its inception, retired in 1957 and Charles Derrickson became the Station's superintendent. (Derrickson remained in the position until 1965.)



The Sixties, Seventies, and Eighties

The 1960s evidenced a flurry of new activities at the Station. In 1961, the East Kentucky Resource Development Project (EKRDP) was started through a grant from the Kellogg Foundation. The program, a forerunner of much of today's community development work, operated for 8 years in 30 counties in Appalachian Kentucky. Through the program, the current office building for the station was built in 1962 and 1963. The Quicksand Water and Sewer District was established in 1962 to provide much needed services to the Station.

Another program was initiated at the Station in the early 1960s and has had a decided impact on forestry and forest products industries in Eastern Kentucky. The Forest and Wood Technician School program, a two-year associate degree program, was initiated in 1962 and operated through 1982. The program, in cooperation with the University of Kentucky Community College system, taught more than 300 students about forestry management and processing concepts as well as the manufacturing and design of wood products. After a 13-year hiatus, the program was renewed in 1995 in cooperation with the Lee campus of Hazard Community College. Currently, 63 student are enrolled in the program.

In 1962, a bull performance test was centered at the Station. The test and sale that accompanied it were held through 1964, focusing attention on genetic improvement in beef herds in eastern Kentucky.

The Plant Materials Center was established at Robinson Substation in 1969. This cooperative effort between the Kentucky Agricultural Experiment Station and the Soil Conservation Service under terms of the Federal Appalachian Act allowed researchers to

assemble, evaluate, select, and study grasses and legumes for use in soil and water conservation and the reclamation of eroded soils and strip mine lands. The Center operated at the Station through 1998.

Two acting and temporary Station superintendents (James E. Dalton and Charles Martin) followed Charles Derrickson's departure from the post in 1965. Then George Armstrong was named Station superintendent, a position he held until his retirement in 1986. From 1972 until 1986, Armstrong also served as Quicksand Extension area director; at that time Mason Morrison, the current superintendent, was appointed. (Shirley Griffith has been secretary and staff assistant for all six of the Station's superintendents.) The Quicksand area program director's office was headquartered at the Station in 1969, as was an Extension agent for Expanded Foods and Nutrition programs. The Northeast area Extension program director's office was located at the Station beginning in 1991.

Throughout the 1970s, research and Extension work continued at a steady pace. Horticulture research focused on new crops that could be used to improve farm income on small tracts. Variety testing of new types of horticulture crops continued, and disease control research for commercial vegetable crops (notably bell peppers and tomatoes) helped farmers improve yields and profits. In addition, agronomy research focused on on-farm production of feedstuffs for livestock, including hay, silage, and field corn. Field corn variety testing has been conducted at the Station since the 1940s. (The 1950 report, for example, mentioned that 30 varieties were tested; today, more than 300 varieties are tested annually.) Forestry research expanded to environmental research concerning water quality on the steep hillsides as an aftermath of timbering.



The wide use of strip mining to mine coal reserves prompted a spate of research. Research streams were, and continue to be, varied, and include reforestation of the reclaimed land, using the land for grazing cattle, raising vegetables and other crops, as well as hydrology studies to assess the effects of strip mining on water quality.

By the early 1980s, the University of Kentucky Board of Trustees conducted a review of the opportunities of raising money from the Robinson Forest through timber sales and leasing coal reserves that underlay much of the forest. The University concluded in 1982 that it should not become involved at that time in the leasing of coal reserves because of the potential adverse environmental impact.

The Present [2001]

The issue of coal mining again arose in 1990 when Arch Mineral, which held mineral rights to about 105 acres in the forest, proposed to mine the properties. The university administration, along with three environmental groups, petitioned to declare 70 percent of the Robinson Forest holdings as unsuitable for surface mining under Kentucky law. The Kentucky Natural Resources and Environmental Protection Cabinet upheld the petition. However, in 1991, the University of Kentucky Board of Trustees decided to sell the timber rights of the remaining 4,500 acres of the forest and to lease the mineral rights to the land. The action was taken to generate an anticipated \$30 to \$50 million in support of the original purposes of the trust.

The money from the sale of timber and the leasing of coal reserves has been used to make improvements on the physical facilities, namely refurbishing Camp Robinson, which is used for in-depth study of the forest by forestry and biology students from the University of Kentucky, and for initiating the Robinson Scholarship program. The latter provides economic assistance to promising young people from a 29-county area in Eastern Kentucky. It targets eighth grade students who have the potential to succeed in higher education, but who for various reasons may not be able to afford a college education.

Throughout the remainder of the 1990s, faculty at the Station continued to conduct research and Extension programs centering around crops that could be important to the people of the region. Intensive research concerning berry production from brambles, including raspberry, blackberry, and blueberry, was begun in the 1990s. Research into the commercial production of medicinal herbs and ornamental shrubs was initiated with success.

Fruit work research included pears, apples, and plums. Sweet corn research, largely built around needs for the fresh market, was started with great success. New crop opportunities investigated by researchers included cucumbers, cantaloupe, watermelon, and hot peppers, as well as gourds, Indian corn, and pumpkins. A pecan grove planted in 1987 began to produce pecans and will provide information about the potential for pecan production in eastern Kentucky. A new plastic greenhouse was first put into operation in the spring of 2001.

Agronomic research continues to focus on on-farm production of feedstuffs for livestock, silage, and field corn. Burley tobacco research, involving cultural practices as well as plant disease prevention, was initiated at the Station. Starting in the 1980s and continuing to the present, some of the key research in the nation on blue mold in tobacco was conducted at the Station by Dr. Bill Nesmith, Extension plant pathologist. The Quickstand variety of Bermuda grass was developed at the Station under the direction of Dr. Harold Rice, Station agronomist, and is in wide use as an athletic field grass.



Epilogue

As the Robinson Station celebrates 75 years of distinction in research and Extension work, we are reminded of the reason for its existence: to help the people of the region improve their lives and livelihood. To be sure, the station at Quicksand has kept its promise to effect the reason for its existence. While the faculty and staff at the Station no longer take in old roosters, poor boars, or bad corn seed in trade, they do offer a complete array of research and educational services for the people of eastern Kentucky.

