

## **Amos Lawrence Hopkins**

But first, who was the person memorialized by this piece of land? Amos Lawrence "Lawrie" Hopkins was born 10 April 1844, the sixth of ten children borne to Mark Hopkins, then President of Williams College and his wife Mary Hubble Hopkins. His uncle Albert Hopkins, an avid natural historian, was a Williams faculty member instrumental in establishing the Lyceum of Natural History at the College. His older brother Archibald, himself a member of the Lyceum, graduated from Williams in 1862.

The 18 year-old Lawrie entered Williams in September 1862, as a special student assigned to the class of 1863. Rather than living in the President's House or one of the conventional lodgings, Hopkins lived in a room in the Magnetic Observatory. While at Williams he was active in the Adelpic Union, Philologian Literary Society, and the Lyceum of Natural History. Displaying considerable versatility, he was an orator at the 8 July 1863 Adelpic Union Exhibition and also led the military drills as Captain of the student military organization.

The Civil War interrupted his studies when in August 1863, at the age of 19, he received his commission as a second lieutenant in the First Massachusetts Cavalry. On 5 May 1864, he was wounded in the Battle of the Wilderness. Hospitalization followed, and Hopkins saw no more combat, but served in the Army Engineering Department rising quickly to the rank of major on General Davis' staff. After being mustered out in 1866, he assumed the rank of Brevet Colonel and collected his diploma from Williams. His war wounds did not heal completely, forcing him to walk with a limp for the rest of his life. However, his application for a medical disability pension was denied by the Army.

Following the Civil War, Hopkins tried his hand at the wholesale grocery business in Chicago for a year, then headed west to supervise a gold mine in Colorado. However, his main vocation was to be a corporate officer in various railroad companies, starting with the Housatonic Railroad in Bridgeport, CT. Later he returned to Chicago to become the Vice President of the Illinois Central Railroad. On 14 December 1871, he married Anna Pray Breck, a Williamstown native who had moved to Cleveland as a child. A little over a year later his wife died, followed two months later by their only daughter, Ann Breck Hopkins. Hopkins erected monuments in the Williams College cemetery to his young family.

Throughout his professional career Hopkins maintained an interest in natural history, as typified by his gift in 1876 of several crates of rocks for the collections of the Lyceum of Natural History. It is probable that the relationship he established with Professor Tenney, the faculty advisor to the Lyceum of Natural History, was in part the inspiration for the ill-fated 1877 Williams Rocky Mountain Expedition.

Hopkins' position as an officer of the Wabash, St. Louis, and Pacific Railroad brought him into direct contact with Jay Gould when the latter extended his vast railroad empire by purchasing the Wabash in the late 1870s. Hopkins not only became Gould's close business associate but one of his dearest friends as well. Befitting the sensitivities of a robber baron, Hopkins adopted as his personal motto, emblazoned on his bookplates, *Aut Suavitate Aut Vi*, translated as "Either by pleasantness or by force."

In 1879 Hopkins married Minnie Dunlap, daughter of the director of the Board of Trade in Chicago, and soon thereafter the Hopkinses moved in next door to the Goulds in New York City. It was in this period that Hopkins served as an Alumni Trustee at Williams College. Within five years the marriage was unraveling. Polite society of New York and Chicago was scandalized as both parties filed suits for divorce. After several years of nasty legal maneuvering the divorce was finalized and Hopkins returned to his ancestral home of Williamstown, taking a brief break from the railroad business.

### **The Buxton Farms**

In 1887 Amos Lawrence Hopkins took the first steps in establishing a "gentleman's farm" in Williamstown, albeit with the assistance of his family. It was a time of rapid decline of subsistence farming, apparent chaos in the local farm real estate markets, rampant land speculation, and reassignment of mortgages. During the late summer and early fall of 1887, his brother Archibald, then living in Washington, D.C., purchased several farms south and west of the intersection of Northwest Hill Road and Bulkely Street. On 12 September 1887, Mark Hopkins purchased acreage on the slopes of Northwest Hill and two weeks later transferred the land to Archibald, who within six months sold all of these parcels to his brother Lawrie (who was living in New York City at the time).

Upon his retirement from the Gould railroad empire in 1889 (many claim he was forced out by Gould's son), Hopkins quickened the pace of his land acquisition. He capitalized on the turbulent times by purchasing the mortgages on Ford-Starkweather farm. This parcel, located at the northwest side of Northwest Hill Road at its intersection with Bulkley Street, would be the keystone of his "Buxton Farms." The farm took its name from the 3-branched brook that drains the slopes of the Taconics and the plateau that rises to the west of Northwest Hill. (A labeling error on an 1898 U.S. Geological Survey topographic map transposed the names of Birch and Buxton brooks, and thenceforth Birch Brook flowed out of the Buxton Farms and Buxton Brook flowed from Birch Hill).

Hopkins finally found marital stability when, on 30 January 1892 he married Maria Theresa Burnham Dodge, of Boston (many claim she was a "blue blood"). He also reentered the railroad business. He was appointed the receiver of the Chicago and Northern Pacific Railroad and served on the boards of directors of several other companies.

By 1910 Hopkins had amassed 1636 acres in Williamstown, stretching from the eastern slopes of Northwest Hill west to the Taconic Ridge and the New York State line and north to Vermont. However, there was a 60-acre void in the middle of his empire. Alfred C. Moon and his aunt/wife Adelia (whom he had married after coming to help her with chores following the death of his uncle), sold Hopkins the southern 40 acres of their 100 acre farm. But the core of the Moon farm remained an island completely surrounded by a sea of Hopkins' pasture.

Hopkins love of nature reflected in his penchant for naming his personal landscape with names such as "Plains of Abraham," "Central Park," and "Diana's Bath." Hopkins enjoyed Sunday carriage rides around the property with Maria T.B. Hopkins at his side. He knew and loved his trees, and would allow no cutting of trees for fuel or timber in the eastern portion of the Buxton Farms. Hapless farm hands would be severely reprimanded, if not fired, if they accidentally damage trees with farm machinery. (Unfortunately Hopkins was not around to discipline the crew from Massachusetts Electric Co. in the spring of 1979, when they needlessly cut down the yellowwood tree (*Cladastrus lutea*) that he had planted near the mansion in the 19th Century). Hopkins maintained the sugar bush in park-like fashion, with stately trees above and all undergrowth mown to the ground, but he never tapped the trees for sap.

The Hopkinses would typically arrive in Williamstown in May and stay through September, when they would return to Boston and their residence at 46 Commonwealth Avenue. Mrs. Hopkins also had a summer house on Nahant. However the Buxton Farms was not a mere hobby for Hopkins. It was run as a business proposition and careful records kept to be sure it was paying for itself.

This horse-powered farm had several teams, over 300 sheep, and a sizable dairy herd. The 36 room mansion, the refurbished Ford farmhouse, was one of over 15 buildings on the farm: cow barn, sheep barn, ice house, wash house, root cellar, farm manager's house, and several other houses for year-round farm employees and their families. The carriage house and horse stable, constructed in 1906, housed a tower clock that struck the hour. The Northwest Hill school house was also situated on land owned by Hopkins.

At its peak in the early 1910s, the Buxton Farms employed dozens, including farm hands, chamber maids, a farm manager, a chauffeur, and a gardener to tend to the farm garden as well as the purple-and-gold flower garden southwest of the mansion. In 1908 Arthur E. Rosenberg, then aged 17, came to work as a farm hand. He kept his eyes open and became a careful interpreter of the landscape. Among the projects Rosenberg worked on was the construction of Hopkins' "instant hedgerow" of sugar maples along Northwest Hill Road. The holes for the trees were dug along Northwest Hill Road and mature trees were balled in burlap in the interior of the Buxton Farms during the autumn of 1910. The following winter the trees were loaded on sleds and transported to the Northwest Hill Road holes that awaited them.

Lawrie did not enjoy his hedgerow for long. On 3 April 1912 he died in Boston, a week shy of his 68th birthday. His wife continued the farm for another dozen years before auctioning off most of the farm equipment and disposing of the horses and livestock on 1 November 1924. Some of the farm fields were kept open through leasing them out to surrounding farmers, but the field hands and the domestic staff were let go. Rosenberg, who had more than proved his trustworthiness, was kept on as a caretaker to look after the place. Mrs. Hopkins had the mansion boarded up and became an increasingly infrequent visitor to her property, although she received regular shipments of milk, eggs, and produce sent by Art Rosenberg via the Railway Express Agency on Boston and Maine Railroad.

By the 1920s, the landscape of northwestern Williamstown, as in much of New England, reposed in agricultural quiescence. Alfred C. Moon died of a heart attack on 9 May 1924, and Adelia Sophia (Clark) Moon became a widow for the second time. Mrs. Hopkins had no interest in purchasing additional land holdings in Williamstown, so the Moon farm was sold to Lowell Primmer, an engineer on the Boston & Maine Railroad, who lived on North Street in Williamstown. Mrs. Moon, who was becoming increasingly blind, moved in with the Whitneys on their farm at the top of Northwest Hill. She lived another 20 years, dying of "myocarditis with terminal pneumonia, arteriosclerosis, and senility" on 12 July 1944 at the age of 104 years, 1 month, 21 days.

### **The Birth of the Hopkins Memorial Forest**

On 22 November 1933, twenty-one years after her husband's death, Mrs. Hopkins wrote to Williams College President Harry A. Garfield indicating that she would like to give the Buxton Farms to the College as a memorial to her late husband:

My dear Dr. Garfield,

As you know, I am no longer able to come to W'mstown, but it is my old home and greatly loved by both my husband and myself. As a memorial to him, a graduate of the college, I want to give to Williams College our place, 'Buxton Farms.' It is free from debt and other incumbrances [sic.], and I feel it would be a valuable piece of property.

The President responded on the same day that the College would love to receive the gift and that the matter would be taken up at the 10 February 1934 Trustees Meeting. It was not apparent that the College had any specific uses for the property clearly in mind. The executive committee of the trustees accepted the gift on 9 December 1933, and two days before the February trustees meeting a quitclaim deed transferred the Buxton Farms to Williams College.

The use of the Buxton Farms by the College was, in the words of President Garfield, "...to be carefully considered and that the [Executive] Committee recommended that this matter be referred to the Committee on Instruction for consideration and report at the next meeting." At the May, 1934 trustees' meeting Henry Lefavour, Chairman of the Committee on Instruction, reported that negotiations had started with the U.S. Department of Agriculture regarding the use of the Buxton Farms as an forest experiment station, and the trustees voted that "provision should be made for instruction of undergraduates in connection therewith."

At the same time, the Trustees discussed the possibility of using the mansion and carriage barn as a religious retreat center "...for the serious consideration of religious and kindred problems" by college students under the direction of the Chaplain of Wesleyan College. While that idea never was put into effect, a portion of the land east of Northwest Hill Road and adjacent to Ford Glen Brook was immediately established as a camp site for the Williamstown Boys Club, and to facilitate this use the pond on Ford Glen Brook was refurbished to serve as a swimming hole. The club continued this use for 40 years, until liability issues forced the closure of the camp after the 1974 season. Gender equality lagged a bit, it taking until the late 1930's to establish a Williamstown Girl Scout camp at the old Nathaniel Chamberlain farm at the crest of Northwest Hill Road. After the Girl Scouts relocated to Camp Muriel Flagg in the White Oaks in the 1960's, the Chamberlain house was evidently burned down to give practice to the local volunteer fire department.

Through the second half of 1934, the newly appointed president, Tyler Dennett, continued the productive negotiations between Williams and the USDA. Dennett proposed that the lands abutting Bulkley Street might well be subdivided into 2- to 5-acre lots and be leased to alumni for 25 year periods in order to generate funds for the College. Although this concept was approved by the Board of Trustees, its implementation was put aside.

At the trustees' meeting of 22 February 1935 it was again suggested that the College establish "a course in forestry." By the trustee's meeting in May, Lefavour had completed the negotiations with the Department of Agriculture for the establishment of the sixth branch of the Northeast Forest Experiment Station in Williamstown. It was voted to transfer the property to the U.S. Government, with Mrs. Hopkins approval, for one dollar. The deed established that if the USDA were ever to cease using the land as an

experimental forest, the property would revert back to the College. The trustees also suggested that "Buxton Farms" was no longer an appropriate name for the tract. The Amos Lawrence Hopkins Memorial Forest was born.

### **The U.S. Forest Service Years**

On 17 July 1935 Walter Knickerbocker Starr arrived as the first Forest Service manager of the HMF, and the next day Arthur Rosenberg completed a quarter-century of direct attachment to the Buxton Farms and moved permanently to his farm at the foot of Sheep Hill. Starr and his wife moved into the 13-room farm manager's house at the top of Bulkley Street (currently 336 Bulkley St.). It had been hoped that the Forest Service could use the Hopkins mansion as the headquarters, but during the decade that it had been boarded-up rot had settled into the main beams and the depression era costs of repairs were prohibitive. The Forest Service tore the structure down, leaving as a remembrancer only the stone wall that enclosed a garden to the front porch. The same fate befell the two-story sheep barn located on the path running east from Northwest Hill Road. The barn, perched on top of limestone ledge, had been slowly creeping toward Ford Glenn Brook. The process of its collapse was hastened by the Forest Service.

Maria T.B.D. Hopkins died, age 89, at her Commonwealth Avenue home on 25 October 1935 and was buried aside her husband in the Williams College cemetery. Her will, probated the following spring, provided a \$25,000 endowment to establish the Amos Lawrence Hopkins Memorial Fund for the maintenance of the Forest.

The early emphasis of the USFS was in timber management and they superimposed an infrastructure on the landscape to facilitate research on silviculture, timber harvesting, and forest genetics. The Forest Service accurately surveyed the tract and found it to contain 1626.5 acres, not the 1636 that Hopkins had validated by Land Court 25 years earlier. Aerial photographs were commissioned, vegetation maps made, and a meteorological station was established by the Forest Service. The weather station was designed to parallel that of the Hopkins Observatory on the Williams College campus, where weather records dating back to 1811 had been conserved.

The second story of the Buxton Farms carriage house was converted to a

dorm for the 45 Civilian Conservation Corps men who worked at the Forest from spring through fall. The CCC labor was used to construct a new gravel-surface road, modifying the former Buxton Farms carriage road and exploiting the gravel bank at the southeast corner of the Moon Lot. Construction was started on the system of five stream gauging stations with ponding basins and V-notch weirs on the branches of Birch and Ford Glen brooks. The CCC corpsmen even cleared brush from around the entire HMF boundary and marked the property line with blazes of three diagonal red stripes. There was also a proposal for cutting a logging road from Vermont to Route 2 across the eastern flank of the Taconic Range, but the CCC were too busy with other projects to carry out the plan.

Perhaps the most important and forward-looking research undertaken by the Forest Service was the establishment of a permanent plot system for the HMF in 1935. As W.K. Starr explained in an article in the *North Adams Transcript* that fall: "...the very nature of the work prevents experiments in forestry from being regarded as of much actual value to the (Forest) Service until they have been in progress for a century or so." The entire HMF was girded into rectangles of 5-acres, and at the intersection of each north-south "plot line" and east-west "cruise line," a quarter-acre permanent plot was established. In the 1930's, about half of these plots were forested and the remainder were open fields or shrublands of one sort or another. In 1936 and again in 1937 USFS personnel measured the diameters of every stem greater than 1/2-inch and recorded its species in 220 of these quarter acre plots. They also made measurements and counts of the shrubs, woody seedlings, and herbaceous plants in 10 one-millacre (1/1000- acre) plots in each of the quarter-acre plots.

One of the five Field Assistant Silviculturalist responsible for inventorying the vegetation for the U.S.F.S. in summer of 1936 was a young forestry student from the University of Minnesota by the name of Norman E. Borlaug. We are indebted to Borlaug for the insightful observations he transcribed into the notes on the backs of the data sheets. (Upon completion of his work in Williamstown he returned to Minnesota, became interested in forest genetics, later focused his research on maize and wheat genetics in Mexico, and, in 1970, was awarded the Nobel Peace Prize for this work.)

The Great September Hurricane of 1938 was a major environmental event in New England. The observations of Halsey M. Hicks who tended the data collections in the HMF, provide an interesting account of the course of the



storm:

*September 23, 1938*

*Memorandum to Mr. Stickel:*

*No doubt you are interested in just what happened here during the flood. The rainfall, according to the standard gauge was respectively: 1.05, 2.95, 2.30 and 1.46(inches) for the readings from the 19th through the 22nd. The 1.46 on the last day represents practically all of the intense precipitation which did the damage. Everything was pretty well under control until about four o'clock on Wednesday. It had been raining pretty hard all afternoon more or less patchily. ... A little after four it started in raining harder accompanied with a high wind. The recording gauge shows a pretty steady rain....I was somewhat worried about the swimming pool dam (at the Boys Club Camp), but some of the boys had been down there a little earlier, and cleaned the debris away from the spillway. That apparently saved the dam from going out....the dam was topped, but it did not go out.*

In 1938 W.K. Starr was transferred to flood control work elsewhere and was replaced at the HMF by Theodore F. Breon. Two years later Dr. Ernest J. Schreiner joined the staff and commenced genetics studies, primarily on species of birch. During World War II the Northeastern Forest Experiment Station temporarily (effective 4 September 1942) suspended activities at the Hopkins Forest, except for Schreiner's work on birch genetics.

The HMF reopened in the fall of 1946 when Frank E. Cunningham arrived as the new Forest Superintendent. The primary focus of the Hopkins Forest renaissance was forest genetics, as the timber industry was moving south and westward. Preparations were made for an extensive system of genetic plantations to be installed. An elaborate series of field experiments were undertaken to determine the best way to plant, maintain and encourage the growth of various tree species. In the years 1949 to 1961, 31 tree plantations were established. On recently abandoned pastures and hay meadows, blocks of pine, spruce, fir, ash, box elder, black locust, sugar and red maples, larch, exotic birches, and especially hybrid poplars marched across the landscape in formation row upon row. The special interest in poplars was directed at producing a "super-tree" with rapid growth, superior disease resistance, and the ability to withstand high concentrations of acids and heavy metals to

reclaim strip-mine spoils in the Allegheny region. One casualty of the new tree genetic research was the one-room Northwest Hill schoolhouse which was torn down by the USFS in 1952 to make way for one of many hybrid poplar plantations. Though timber harvesting was part of the original plan, only cutting of trees that actually took place was a "cutting practice level" experiment that thinned a limited number of trees near the hairpin turn between the south and middle branches of Birch Brook.

Not far from this site Lowell Primmer, having retired from the Boston & Maine Railroad, continued to farm the Moon Lot, raising strawberries and potatoes. He continued to farm through the mid-1950's, when he was displaced from his farm. Local sources claim Primmer's son Walter, a Probation Officer in Pittsfield, obtained the deed to the property and then "kicked his father off the place." The last farm within the Hopkins Forest was abandoned.

The Hopkins Forest was a busy place in the 1950s and early 1960s as measurements were made on the success of individual trees in the genetic plantations, the regeneration of various species in 6 acres of strip clear-cuts in Moon Hollow near the Vermont State Line was inventoried, studies on land use and frost penetration were conducted, and game, such as pheasants and deer, were managed in a cooperative agreement with the Massachusetts Department of Natural Resources (DNR). Richard J. Peterson (currently the Head of the Williamstown Water Department) came to the Hopkins Forest as a Research Technician to aid in the collection of the large quantities of data. Carriage House was converted into a combined residence for Raymond Lavigne, another Forest Service employee, and depot for trucks.

During the 1960's National and regional USFS administrators began to express their doubts about the efficiency of the system of small, isolated experimental forests scattered about the Northeast. In February, 1964, Frank Cunningham prepared a lengthy evaluation of and justification for continuing the operations of the Hopkins Forest. However, four months later he issued a press release informing the public that research at the site would continue for 10 additional years, but effective 1 October 1964 the Hopkins Memorial Forest would cease to be an "administrative entity." The USFS decided to consolidate its operations in Durham, New Hampshire, and personnel from Williamstown would be relocated there.

The estimate that the Forest Service would be conducting research at the

Forest for another decade turned out to be an exaggeration. They completed their research in 1967, and on 15 April 1968, Frank Cunningham turned over the keys to the Hopkins Memorial Forest to Williams College and vacated the site. One of the several ironies in the withdrawal of the USFS from the Forest was that many of the tree plantations were just reaching sexual maturity at the time, and would be started all over again in Alfred, Maine. Another irony, of sorts, was that the Forest Service departed just as Williams College was establishing the first Center for Environmental Studies at a liberal arts college in the United States.

### **The Forest Returns to Williams**

For the second time in 35 years Williams College had to decide what to do with over 1600 acres of land in the northwest corner of town. Others offered their suggestions. Charles H.W. Foster, Commissioner of the Massachusetts Department of Natural Resources, wrote to the College in December 1965 suggesting that the State would be interested in receiving properties on the Taconic slopes to add to the undeveloped Taconic Trail State Park. Later Walter Primmer indicated to the College that a New York City syndicate was interested in purchasing the Moon Lot for use as a hunting lodge. The College declined the offer of becoming involved in a bidding war for the Moon Lot. But when Prentice Bloedel, of Williamstown and Washington State, purchased an option on the Moon Lot from Water Primmer in 1970, the College offered to sell him 500 acres of the surrounding HMF land.

The College administration did decided that the 25-acre tract at the head of Bulkley Street would make an ideal 12-lot faculty housing development, and a mirror image of the development could take place on the west side of Northwest Hill Road at a future date. During the summer of 1970 the infrastructure of the Forest Road Development took shape and two of the 12 house lots were sold. The College subdivided an additional five lots on Northwest Hill Road in the vicinity of the old Chamberlain Farm. The carriage house would be used for housing non-tenured faculty members. The College sold the Buxton Farm manager's house on Bulkely Street and 98 acres of Northwest Hill to Walter and Mary Ann Beinecke, of New York City and Nantucket, in 1969.

A Hopkins Forest liquidation plan was taking shape: develop some of the land for housing lots, retain Northwest Hill Road frontage for future

development, give the western portion to the State, and sell the rest. However, these plans were not shared with the Williamstown or Williams College communities beyond the walls of Hopkins Hall.

### **My Introduction to the Hopkins Memorial Forest**

In August, 1970, I came Williams as a Research Associate in the Center for Environmental Studies (CES) and Assistant Professor of Biology. As fate would have it, I was assigned to the carriage house apartment in the Hopkins Forest for my faculty housing. I was told that few other faculty would want to live in such a remote location, and it was a fitting place for a forest ecologist newly arrived at the CES. My primary duty at the CES was to spend my time during the fall semester studying potential field research/education sites for the new environmental studies program. The two obvious alternatives were the Mount Hope Farm and the Hopkins Memorial Forest, both considered to be surplus College land. I was told that Mount Hope, which the CES was using for conferences, might serve a site for the study of applied land uses. On the other hand, who knew what the U.S. Forest Service might have done in the Hopkins Forest to make it an interesting possibility?

While investigating possible field facilities for the CES I was also looking for sites to conduct research on measuring forest biomass and productivity, preferably using stands of quaking or big-toothed aspen. Soon I was in contact with Frank Cunningham and Peter Garrett at the Forest Service in Durham, New Hampshire, to determine the relationship between the "natural" stands of poplars scattered about the HMF and the hybrid poplar plantations they had installed. These discussions started to reveal the rich history and data base of the Forest. Frank Cunningham delivered three filing cabinet drawers of data collected by the Forest Service to my office in Van Rensselaer House when he dropped by Williamstown in October to check up on his plantations. There were hints of additional data, including maps at our own Buildings & Grounds department, permanent plot data loaned to a previous member of the biology department at Williams, other maps in the Forest Service files. Cunningham also suggested if we really wanted to know about what went on in the Hopkins Forest in earlier days, we should contact an 80 year old farmer by the name of Rosenberg -- he worked on the land before it became the Hopkins Memorial Forest.

The more I dug into the files and research of the Forest Service, the more the HMF looked vastly preferable to Mount Hope as a site for environmental education and research. An outline of a proposal took firm shape around Thanksgiving. On 10 December 1970 I met with President Jack Sawyer, Provost Steve Lewis, CES Director Andrew J.W. Sheffey, and Assistant Director Carl Reidel to discuss the possibility of the CES using the Hopkins Memorial Forest as a field station.

It was during this meeting that the administration's plan to liquidate the HMF became known. The initial reactions to our suggestion for the use of the HMF was that the administration did have plans for the land, and that Mount Hope would be a perfectly good site for the CES to use. By the middle of the meeting the discussions were drifting toward a scaled down version of the Hopkins Forest in which the programs would occur with the permission of various non-college owners -- a have your cake and eat it too solution. By the end of the meeting President Sawyer suggested that the CES quickly provide him with a specific proposal for the use of the Hopkins Forest as a field facility, and the administration would reconsider their liquidation plan. But time was short.

In the week before fall semester examinations I started to fleshed out the proposal. Concerned about how the Moon Lot would fit into the landscape of an education and research facility, I nervously arranged to meet one evening with Prentice Bloedel at his house in Colonial Village. During our discussion Bloedel elaborated on his plans to purchase the "heart" of the Forest from the college, combine it with his Moon Lot holdings, and then reintroduce cougar, beaver, and other wildlife into the tract. He also planned to refurbish the house, first built by the Moons in the 1860s (and somewhat renovated by Primmer when the chimney blew down in a storm). I then discussed the vision of the Forest as a site for interdisciplinary environmental education and research that accommodated public education and passive recreation. It was clear that Bloedel's plans for the land were not compatible with its use as an environmental field facility. I left the meeting thinking that the proposal I was about to submit was a futile effort.

## **The Re-birth of the Hopkins Memorial Forest**

However, over the course of the first month of 1971 there was a sea change in the view of College administration regarding the highest and best use of the Hopkins Forest. Under the leadership of President Sawyer, the proposal to use the Forest as a field facility for the CES was not only embraced, the administration negotiated with Bloedel to finalize his purchase the Moon Lot and then sell it to the College for inclusion in the HMF. By spring 1971, the College had accomplished what Amos Lawrence Hopkins had been unable to do: incorporate the Moon Lot into the landscape of the Buxton Farms.

The student response to the Hopkins Memorial Forest being available as a research and education site was immediate, and the forest was heavily utilized in the first interdisciplinary course taught by the CES, **ES 350 *Perspectives on Environmental Analysis***. Students also quickly took advantage of the recreational opportunities of the newly accessible trails and registered for independent study opportunities and summer research positions.

That spring Frank Cunningham suggested that I track down Don Whitehead, a former member of the Williams Biology Department, to whom the Forest Service had lent the 1936-7 data on the permanent plots in the Hopkins Forest. Whitehead, a palynologist (one who studies pollen and spores), had hoped to use the data to calibrate the pollen production of regional vegetation that falls into the local ponds and bogs that he was studying. I called Whitehead at his new office at Indiana University to find that yes, he thought he had the data packed in a crate in the cellar of the Biology Department. Several weeks later a large carton of this priceless data arrived in Williamstown in time to benefit our first summer of research in the reborn HMF.

During the summer of 1971, Gordon Greene '72, Ken Liu '72, and Jim Affolter '73 joined in the task of relocating the permanent plots and inventorying all trees with a diameter greater than 1/2-inch. The region was in the midst of a saddle-prominent (*Heterocampa guttivitta*) caterpillar outbreak, and measuring tree diameters as caterpillars crept over the trunks was a messy job.

It became clear through this early field research that we could not accurately interpret the patterns we perceived at the ecosystem and landscape levels unless we knew how the centuries of human uses had influenced the land. This realization has guided a large portion of the research that has been

conducted in the HMF over the past two decades. To learn about past land use, we started to collect oral history on the site.

We contacted Arthur E. Rosenberg, W.K. Starr, and several farmers, such as Howard Black and Doc Beverly, who had worked in the Buxton Farms or the Hopkins Memorial Forest. These human resources contributed what Rosenberg's son Arthur G. Rosenberg calls "elaborate recollections of the past." They have turned out to be among the most important sources of information on the land use history of the tract.

That first summer we also designed the logo for the Hopkins Forest, drawing symbols emblematic of the landscape. The weather vane in the upper right quarter represents the relationship between humans and the physical environment. Drawn from the vanes atop the Buxton Farms carriage and cow barns, the horse is pointing to the northwest -- symbolic of both the direction of the prevailing winds and the hill in the eastern portion of the Forest. The sugar maple in the lower left quarter has a full crown, indicating that it was open-grown and that even climax forest species are influenced by human activities. The "H" and "F," for Hopkins Forest, are set in *Clarendon*, a type face popular in the late 19th Century when A.L. Hopkins was consolidating the Buxton Farms. The sketches for the logo were taken by Mark Livingston '72 and rendered into the form soon appearing on boundary signs and T-shirts alike.

During the spring of 1971, J. Hodge Markgraf, of the Chemistry Department, finished the first house built in the Forest Road Development. Shortly thereafter, Julius Hegyi enlarged an exploratory water well on house lot #2 on Northwest Hill into a full foundation for a house without owning the land. Rather than forcing him to fill in the hole, the College sold the lot to him in September. Several years later the College would "un-subdivide" the remaining four parcels on Northwest Hill, returning the land to CES management in order to protect the old age forest that lies down-slope.

In the 1971-2 academic year Gordon Green undertook an senior honors thesis of a cultural/biological/landscape history of the Forest. Gordon brought together 18 months of field, lab, deed office, library, and living history research experiences, culminating in his writing *Working Papers on the Hopkins Forest* in the summer of 1972. This work, printed by the CES, continues to provide an excellent introduction to the Hopkins Forest and research methods employed in deed and land use history research.

During the early 1970s there was a flurry of activity in the Forest as numerous students participated in research ranging from the complete reinventorying of the quarter acre plots, to studying the biomass, productivity, and organic matter cycles in a mature red oak stand (under a grant from the International Biological Programme), to building upon the existing Hopkins Forest herbarium, to censusing small and large mammal populations under the direction of Lee Drickamer of the Biology Department. We also inventoried the herbaceous and shrub layers and then extend the permanent plot system to include areas in the Forest that were old fields, stands of unmerchantable timber, or under other ownership 35 years before.

Several students conducted research as part of a National Science Foundation - Undergraduate Research Participation (NSF/URP) grant to the Biology Department.

Annually between 1974 and 1979 the Center for Environmental Studies was successful in obtaining NSF/URP grants for student research in the Forest. The focus of these projects changed from year-to-year, ranging from New England Forests as suppliers of renewable energy resources (in 1974 following the OPEC oil-embargo) to an interdisciplinary investigation of the extent to which past land uses have influenced ecosystems (in 1979). A total of 72 students from Williams and 18 other institutions were involved collaboratively with faculty of the CES and Edward Flaccus from the Biology Department at Bennington College in this program.

Other student initiatives, that intersected with the scientific research, were launched in the mid-1970s. Peter B. McChesney '75, through his research experiences in the Hopkins Forest and course work in environmental studies and history, developed an intense interest in land-use history. During his senior year he undertook a truly novel approach to conducting an honors thesis in the History Department: He wrote a proposal for the establishment of the Hopkins Forest Farm Museum (HFFM) to be housed in the to-be-relocated-and-renovated barn used by the Moons. The dismantling, raising, and restoration of the Moon Barn into the Hopkins Forest Farm Museum would be the centerpiece in Williamstown's observance of the US bicentennial.

McChesney conducted the requisite research, made prescribed architectural drawings, wrote a matching grant proposal to the Massachusetts U.S.



Bicentennial Commission, and solicited pledges from local donors for the required private contribution to the cost-sharing. The grant was awarded in June, 1975, shortly after Peter received Honors in History for his efforts. McChesney, along with Peter Jensen '71, Tom Hardie '78, and several volunteers, immediately commenced dismantling the house and barn in the Moon Lot and transporting the beams to a newly cleared site diagonally across from the carriage barn. Richard Babcock, a highly respected barn-wright from Hancock, Massachusetts, lent technical supervision to the collection of students, faculty, and townspeople involved in the project.

On 2 August 1975, a day of soaring temperatures and humidity, the renovated frame of the Moon Barn was raised by a community effort befitting its 19th Century origins. The roofing, masonry work, and siding were completed over the course of the autumn by McChesney (who remained in Williamstown to see the project to completion and establish the HFFM) and William Flynt '75 who joined the effort.

The Hopkins Forest Farm Museum, was "...to display and interpret the historical artifacts of agriculture as the instruments that have shaped much of the presently forested New England landscape." The Museum, designed to link the agricultural and social history of the site to the ecology of the landscape, would not only provide exhibits and workshops, it would provide students with opportunities to become directly involved. On 22 May 1976 the Hopkins Forest Farm Museum opened featuring a display of tools and implements given by Arthur E. Rosenburg and addresses by Tom Jorling (Director of CES), Don Beaver (History of Science Department), Ted Birmingham (of Vermont's Sterling School), John Ott (Director of the Hancock Shaker Village), and Rev. Thomas John Carlisle '34 (who became the Poet-Laureate of the Hopkins Forest). This was the first of many student originated events to take place at the museum over the next decade.

Simultaneous with the establishment of the HFFM, the restoration of the Buxton Garden was taking place as a combined effort of interested faculty, students, the Williamstown Garden Club, and A.E. Rosenburg. The combined flower and kitchen garden had been abandoned in 1924 when Mrs. Hopkins vacated the Buxton Farms. When I moved into the carriage house, the site to the north was filled with a dense forest of white ash and a few sugar maples. However in the summer of 1971 I noticed foxglove growing along the side of the carriage road, and further investigation led to the discovery of several beds of lemon daylilies. The following spring the

outlines of several other flower beds were indicated by the rows of poet's narcissus.

As often was the case, Arthur E. Rosenberg was the source of detailed information concerning a cultural feature in the Hopkins Forest. He shared with us personal recollections of the garden, the grape arbor at its center, what species were grown there, and even cuttings from its original plants that he had been given by the Forest Service. He also had elegant photos of the garden that helped in its restoration as a period piece filled with as many of the original plants as we could obtain. Mark Gates (son of a Williams economics professor), Debra Hall '76, and later Ellen Schneider '93 all were involved in further research on making the Buxton Garden as historically accurate as possible.

### **The Rosenberg Center**

July, 1977, a two-year grant was secured from the National Science Foundation - Comprehensive Assistance for Undergraduate Science Education (CAUSE) program to fulfill a long-held desire: the renovation of the carriage barn into a field lab, classroom, and office complex in addition to a caretaker's residence. The main challenge of the project was its centerpiece: renovations of a 1906 carriage barn into a modern field station facility that would meet building codes while not violating the aesthetics of a graceful structure that is historically significant to the site. It was not easy to carry out this bridging of the past to the future, but the combined creative skills of the group of young architects from RPI (Tech Associates), The College's Buildings & Grounds Department, and a project advisory committee prevailed. The College administration even willingly doubled the Williams contribution to intended matching funds once the project got underway. The technical and Building Code difficulties of the project are tales for another time and place.

The award of the CAUSE grant enabled us to renovate and equip not only the carriage barn into a support facility with classroom, laboratories, office, and museum space, but also to reestablish weather and hydrological stations in the HMF. John Dohrenwend, of the Geology Department, was in charge of renovating two of the v-notch weirs on Birch Brook that had fallen into disuse shortly after the CCC had built them in the 1930s. Many meteorological instruments were purchased through the grant, but others

were donated by the U.S. Weather Bureau. They were installed in the open meadow near the sugarbush.

On 20 October 1979 the renovated carriage barn was officially dedicated as the Rosenberg Center in honor of Arthur E. and Ella M. Rosenberg. The structure was appropriately named for a farm family who had maintained close ties first to the Buxton Farms and then the Hopkins Forest and scores of Forest Service personnel and Williams students. In the dedication address I remarked:

In one respect, the Rosenbergs are a uniquely human resource -- active participants in the landscape's history with its field patterns and fence lines accurately traced on their memories. This alone is deserving of recognition. But more than that, it is their wit, charm, and love of land and people that serve as a foundation for the facility which we dedicate today.

### **The Hopkins Forest in the 1980s**

In 1981 the administration of the HMF was re-organized: I was named the first Director and the previously informal Hopkins Forest Users Committee was formalized. It was becoming evident that the number of different uses in the Hopkins Forest needed a greater degree of coordination than previously required. There was an increasing possibility of interference between studies and experiments. There was also need for a common set of guidelines to establish lines of administrative responsibility and ensure the long-term viability of the forest. For over four years the Hopkins Forest Users Committee submitted drafts of policy statements to the CES and College administrations without success. Finally in 1987 the Hopkins Forest Use Policy document was ratified by President Francis Oakley and CES Director William Moomaw.

The policy stresses an approach based on zoning, rather than multiple-use. Public, disruptive uses, and manipulative research activities will be concentrated near the eastern entrance off Northwest Hill Road. The entrance area will be maintained as much as possible as a statement of the 1890-1920 Buxton Farms landscape. The bulk of the landscape, especially the system of 1/4-acre permanent plots, is dedicated to non-destructive research and preservation, and to ensure the integrity of the Forest systems, no further trails will be constructed.

Over the past two decades the Forest has been blessed with caretakers who have lived in the carriage barn and have been active stewards of their back yard (or is it front yard?). I moved out of the carriage house in 1975 and Howard Oakes (a Buildings and Grounds employee) took over caretaker duties until the arrival of Taber D. Allison in 1977. Allison, who had participated in the CES program as exchange student from Wesleyan in 1972-3, also served as the Assistant to the Director, took over the direction of the National Science Foundation / Undergraduate Research Participant programs, the supervision of the HFFM, and initiated the first harvest festival as one of the Museum's community events. When Taber left in 1979 to pursue a Ph.D., Gaye Symington '76 filled these roles. Through a course she energized students in the design of the solar greenhouse they then built on the south side of the carriage barn. Gaye departed for graduate school in 1981 and was replaced by Nan Jenks-Jay who reinvigorated the autumnal harvest festival and reintroduced maple sugaring and sheep to the landscape at the Forest's entrance. Carl Phelps, was the interim caretaker while Jenks-Jay was at Yale getting her Master of Environmental Science degree in 1985-6. He became the regular caretaker in 1987 (just in time to cope with the freak snowstorm on 4 October that dumped over a foot of snow on fully-leaved trees felling thousands of branches and making the trails in the Hopkins forest impassable).

When David P. Dethier joined the Geology Department in 1982, he expanded the scope of research in the Hopkins Forest and the degree of sophistication of instrumentation and data collection reached levels not previously been seen. For the first time ever a systematic collection of hydrological data was begun in the Forest, and for the first time since the mid-1960s meteorological data collection was made in a systematic fashion. David coordinated the monitoring of acid deposition and stream water chemistry with a growing state-wide network sponsored by the Massachusetts Water Resource Research Center (MassWRRC).

Dethier's interests in biogeochemistry fit well with those of other CES faculty in the Biology and Chemistry departments and naturally led to collaboration on research into the impacts of acid deposition on soils, heavy metals, and the biota. In 1984, Dethier and Art received a grant from the US Department of Interior- U.S. Geological Survey through the MassWRRC to study the impacts of acid deposition on soil acidification processes and vegetative control of soil chemistry in successional communities. Just as this grant was expiring, Dethier, Moomaw, and Art received a grant from the US

Department of Agriculture to study the circulation of aluminum in Hopkins Forest ecosystems. These research projects were dependent on a series of laboratory technicians who served both in the Hopkins Forest and the Environmental Analysis Laboratory on campus. Over the past decade Sue Jones, Sarah Milham, Linda Brasel, Pam Scarfoni, Rachel Hopkins, and currently Sandy Brown have filled the position.

Not all of the activities in the Hopkins Forest in the 1980s were of a strictly academic nature. The Williams Outing Club (WOC) cut a new trail, known as "The Shepherd's Well Trail," to connect the Taconic Crest Trail with the upper portion of the RRR Brooks Trail. In the early 1980s the WOC cabin site off of Route 100 in Vermont was sold to a developer and the funds used to construct a new cabin in memory of James Dorland '50 on a site closer to campus. It was felt that building a rustic cabin relatively close to the Rosenburg Center might serve the needs of both the WOC and the CES. The original plans called for a modest, rustic structure with a composting toilet. Running water was to be the only modern convenience. However, the Williamstown Building Inspector and Coach Ralph Townsend feared that kerosene lanterns in the hands of students might endanger the structure as well as human lives; their concerns produced a fully plumbed and electrified structure. To provide an even more wilderness camping experience, a lean-to was constructed in a recent addition to the HMF in New York State near the tri-state monument.

Maple sugaring utilizing the old-age sugarbush near the Rosenburg Center was started by Nan Jenks Jay as a cooperative effort involving students and CES faculty. At first sap was boiled-down in a small converted chicken coop that Jay Shelton, Hodge Markgraf, Tom Jorling and I had moved from the old Williams Inn to the HMF when the Inn was renovated by Williams for student housing (Dodd House). We had used the structure for our short-lived "Total Loss Egg Farm" that was abruptly ended by back-to-back raids by a neighbor's dog and a weasel. This structure soon proved inadequate as a sugar house, and Don Campbell '84 spearheaded the effort to build the more efficient, commodious structure that now stands adjacent to the sugarbush, not far from the Moon Barn.

## **Changes in the Land**

For more than a half century following its consolidation in 1910, the Buxton

Farms/HMF remained a constant 1626.5 acres. During the past quarter century that the Hopkins Forest has returned to Williams, it has grown to over 2400 acres through the gifts and purchases of land, although a few small parcels have been sold from time-to-time. The stories of these gifts and purchases at times have seemed more like scripts for soap operas than real estate transactions.

The purchase of the Moon Lot in 1971 represented the first vital addition to the Forest. The first outright gift of land to the Hopkins Forest was from Walter and Mary Ann Beinecke in 1974. They gave back 68 of the 98 acres they had purchased 5 years earlier. This was an especially important tract since it contains a 12-acre tract of old-growth sugar maple and red oak forest with some trees that pre-date the settlement of Williamstown. W.K. Starr mentioned that he had wanted to harvest some of the trees back in the 1930s, but wasn't allowed to. Arthur Rosenburg mentioned that trees were never cut there but fallen trees were periodically salvaged; some were so large they couldn't be split by conventional means. Hopkins had the men bore holes along the logs, insert a double charge of black powder, and blow the stems apart so they could be salvaged for fire wood. Current studies, based on data collected as early as 1936, indicate that the Beinecke Stand, as we now call it, was never cleared, although it is possible that a few individual trees could have been selectively harvested in the past. We know that the tract was impacted by the great hurricane of September, 1938, the fallen trunks still being visible in the 1970s and 1980s..

A year after the Beinecke Tract returned to the HMF, the 130-acre parcel lying to the north and east was given to the College by Shavaun Towers, daughter of Preston Robinson (who had previously owned the land). With the addition of this tract the HMF extended from the banks of the Hoosic River to the New York State line. However, the crest of the Taconic Range in the vicinity of the Hopkins Forest are situated entirely in the State of New York, and full control of the three watersheds that make up the Birch Brook drainage remained out of the grasp of the CES -- for the time being.

In 1981, as a complete surprise to all of us in the CES, Samuel Humes IV '52 and Graham Humes '54 inquired whether we would be interested in receiving a gift of 226 acres of New York State land adjacent to the HMF and extending south from the Vermont State line. This was the bulk of the long-coveted Taconic Crest that would complete our holdings in two of the three branches of Birch Brook. The land had come to the Humes through a

very circuitous routing in the will of their aunt, Jessica Krom. Their ownership of the land had come to light when Caroline Prindle Langworthy, who thought she owned the tract, had the land logged by Potvin Lumber Company of Stamford, VT. Potvin refused to pay her for the logs when they checked the land records and found that she did not possess a clear title to the lands. Sam, Graham, and their brother James '57 cleared up the title by purchasing a quitclaim deed to the three parcels that made up the Taconic Crest tract. With the gift of the "Samuel Humes Tract" to the College, we also received a deeded right-of-way across lands owned by Samuel Humes IV in Pownal, VT, to gain access to the portion of the HMF in the Moon Hollow, near the tri-state corner. Two years later (1983) Graham Humes indicated that he would like to give the HMF his interests in lands he had purchased in Vermont adjacent to the Taconic crest tract. This "Humes II" tract would be given over a several year period.

We were notified in the fall of 1983 that we could bid on an half-interest ownership of the 111-acre woodlot adjacent to both the HMF Humes II that was being sold for failure of the estate of Howard Black to pay taxes. Black was a farmer from Pownal who had worked briefly at the Buxton Farms. The other half interest was (and is) held by Anita and David Thornton of Connecticut; they thought they owned a divided interest in the land and therefore did not put in a bid to purchase it in this tax sale. A small bidding war almost developed when Rudy Goff, of Williamstown, desired the land to build a hunting cabin. However Rudy dropped out after the first bid. Deed research has determined that the half-interest in the land is undivided, meaning that neither party can do much on the land without the permission of the other.

Concurrent with the acquisition of lands in Vermont, the College consulted lawyers in Troy, NY to apply for tax-exempt status for the Samuel Humes Tract. In the process it became clear that the southern 79.8 acre parcel that the Humes brothers had given to the college contained an error, and that Caroline Langworthy had not intended to convey the land to the Humes brothers. Instead she had given the land to Dr. Manfred Marx, of Bonn, W. Germany, who had married her daughter Penny. When we contacted Dr. Marx, we found him more than agreeable to sell the land. However, he was undergoing a divorce from Penny, who claimed that she had joint ownership in the land and that her mother had intended to give it to them jointly. The deed clearly stated that Dr. Marx was the sole owner, and we purchased the parcel from him, naming it "The Prindle Lot" in memory of Caroline

Langworthy's father who had raised blueberries on the land.

In 1984 the College was also successful in purchasing a 25-acre parcel situated between the Prindle Lot and Petersburg Pass in New York. The land was once part of the Petersburg Pass Ski Area owned in the 1960s by a partnership that included Pat and Tank Wilson. The land was sold to Mark Raimer in the 1970s who further developed ski trails south of Petersburg Pass with assistance of Small Business Administration loans. Raimer renamed the peak to the south of the Pass "Mt. Raimer," but by 1979 went bankrupt and defaulted on his loans. The ski lodge was used as a nightclub in the early 1980s until destroyed by a fire on 9 May 1983. We convinced the Small Business Administration to subdivide the property and allow us to bid on the parcel contiguous with the HMF. Our bid turned out to be the only one submitted for the parcel.

After posting the newly consolidated Taconic Crest land in 1984 it came to light that Anthony Garrison, an abutter with a farm in Petersburg, New York, believed that he owned the Prindle Lot and was sure that he had been paying taxes on the land for over a decade. Further research convinced Mr. Garrison of the College's ownership, but according to the applicable laws he was entitled to only a single year tax rebate from Renesselaer County.

By the mid-1980s the Hopkins Forest had grown to nearly 2350 acres, with lands in three states, stretching from the Hoosic River to west of the Taconic Ridge. In 1991 the purchase of the 81-acre Driver Lot would give us complete control of the South Branch of Birch Brook. Finally, the three watersheds that make up the headwaters of Birch Brook were united under the ownership of Williams College.

## **Conclusion**

There have been numerous changes in the Buxton Farms-Hopkins Forest landscape during its first century. The configurations of land ownership have been altered, the uses of the land have changed from agriculture to education and research, the cast of characters interacting with the land has turned over several times. However one constant has become most evident as we study the linkages between the past and the future: the intense identification with the land that has been embraced by those whom have interacted with this landscape. Early in the century it was Amos Lawrence Hopkins, later on the



Rosenburgs, and then the employees of the U.S. Forest Service. During the last quarter century, this sense of place has been felt by the dozens of faculty and hundreds of students have conducted research, thousands of students have taken courses, and tens of thousands of people have enjoyed the Amos Lawrence Memorial Hopkins Forest as a place for recreational and spiritual refreshment.

### **Box 1: Some Hopkins Forest Highlights 1987-1993**

#### **1987**

July 1: David P. Dethier becomes the Director of the Hopkins Memorial Forest. Karen McCoy arrives as an Assistant Professor of Studio Art and commences an environmental art program utilizing the HMF.

August: Dethier and Art receive a National Science Foundation grant to modify and enhance the meteorology and hydrology instrumentation in the Forest.

October 4: Unusual 14" snowfall while trees are in leaf causes extensive, but temporary damage to tree canopies at elevations below 1500'. Assessments are undertaken by Jeff Reardon '88 as a Senior Honors Thesis and by John Potter '87 as a forestry project at the Yale School of Forestry and Environmental Studies.

December 16. The New York State Department of Environmental Conservation purchases the residual Petersburg Pass Ski Area and lands adjacent to the west boundary of the HMF for the newly created Petersburg Pass Scenic Area.

#### **1988**

February 29: Ella Mae (Goodrich) Rosenburg died. Our sadness at her departing was as profound as our celebration of a life fully lived.

## **1990**

October 15: Arthur E. Rosenberg dies, aged 99 years, 11 months, 6 days. If he fell short of his goal of living long enough to celebrate his 100th birthday, it was one of the few things he fell short of. To the very end he enjoyed simple pleasures, the company of friends, and generously sharing his kind and gentle humor.

## **1991**

September: The first canopy walkway in North America, the creative effort of Visiting Professor Meg Lowman '76, opens. The walkway enables research on life in the canopy, and is the site of several honors theses projects.

October 9: The Driver Lot, a critical parcel in the South Branch of Birch Brook which has been coveted since 1972, is purchased through funds supplied by an anonymous donor. This completes the HMF holdings in the South Branch above the stream gauging station.

## **1992**

July . David C. Smith serves as the Acting Director of the HMF while David Dethier is on sabbatical.

August. An aviary is constructed by Prof. Daniel Clemens, of the Biology Department, to study the eco-physiology of birds.

## **1993**

A new map of the Forest is to be completed. The field work for this 2-year project is conducted by Mikal Platt and the computer mapping by Patrick Dunlavy.

**Box 2: Hopkins Memorial Forest Land Acquisition Chronology**

<b>DATE</b>	<b>PROPERTY</b>	<b>SIZE IN ACRES</b>	<b>TOTAL SIZE</b>
1910	Buxton Farms consolidated	1636	1636
1912	Buxton Farms willed to M.B.T.Hopkins	1636	1636
1934	Buxton Farms given to Williams	1636	1636
1935	Hopkins Memorial Forest deeded to USFS	1636	1626.5
1968	Hopkins Memorial Forest reverts to Williams	1626.5	1626.5
1968	Forest Road Development established	-25	1601.5
1969	Northwest Hill tract sold to W. Beinecke	-98.4	1503.1
1971	Moon Lot purchased	58.3	1561.4
1972	Northwest Hill Rd. Lot sold to J. Hegyi	-5.4	1556
1974	Beinecke Tract given	68.5	1624.5
1975	Robinson-Towers Tract given	130.5	1755
1976	Old NW Hill Rd right-of-way sold to Beals	0	1755
1981	Samuel Humes Tract given	146.5	1901.5
1983	Undivided 1/2 interest in Black Lot purchased	111	2012.5

1983	Undivided 1/2 interest in Humes II given	249.7	2262.2
1984	Small Business Administration Tract purchased	25	2287.2
1984	Prindle Tract purchased	79.8	2367
1985	Northwest Hill Rd. Lot sold to R. Mason	-17.7	2349.3
1985	Undivided 1/2 interest in Humes II given	0	2349.3
1991	Driver Lot purchased	81.4	2430.7

a + = land added to the Forest

a - = land subtracted from the Forest