"Enterprise . . . Imagination . . . Initiative"

The Story of Samuel Green

JOHN H. ALLISON

(Part I)

PREFACE

This is the story of a man who made immense contributions to Minnesota forestry. It is the story of Samuel Bowdlear Green, as prepared for The Conservation Volunteer by John H. Allison, Professor Emeritus, School of Forestry, University of Minnesota.

It should be noted here that Professor Green also made brilliant contributions to the field of horticulture. He was horticulturist for the Minnesota Experiment Station (1888 to 1910) and Dean of the University’s Department of Forestry and Professor of Forestry, 1910.

Professor Allison, however, concerns himself primarily with Samuel Green’s career in forestry. The University of Minnesota’s School of Forestry building (Green Hall), completed in 1938, was named after and dedicated to Professor Green on Nov. 18, 1938.

At this dedication ceremony, the following distinguished personages gathered to pay tribute to Samuel Green, to his “Green Hall”—and to the contributions that the University’s forestry school has made to forestry in Minnesota and the nation:

Fred B. Snyder, Chairman of the University’s Board of Regents; Professor H. H. Chapman of Yale University’s School of Forestry; F. A. Wilcox, Chief of the U. S. Forest Service; I. N. Tate of the Weyerhaeuser Sales Company; W. C. Coffey, Dean of the University’s Department of Agriculture; Clyde H. Bailey, Director of the University’s Agricultural Experiment Station and its Branches; Ellery Foster, Director of the Division of Forestry, Minnesota Department of Conservation; E. M. Freeman, Dean of the College of Agriculture, Forestry and Home Economics at the University of Minnesota; C. F. Forsling, Assistant Chief, Branch of Research, United States Forest Service. Dr. Henry Schmitz, then director of the School of Forestry, served as master of ceremonies. Here, then, is “The Story of Samuel Green,” by Professor John H. Allison.

Professor Samuel B. Green was born on September 15, 1859, in Chelsea, a suburb of Boston, Massachusetts. He was the son of Thomas and Anna F. Green who were descendants of early Massachusetts Bay colonists. Among his ancestors were judges, sea captains and doctors of divinity. His father, Thomas Green, was for 40 years a Boston wholesale flour merchant, had served as mayor of Chelsea and held several other important trusts.
University of Minnesota's outstanding School of Forestry is headquartered in "Green Hall," so named in honor of the School's first director, Samuel Green.

Upon the completion of his secondary school education, young Sam Green, then a 16-year-old city boy who had spent his summers on a New Hampshire farm, informed his father that he wanted to be a farmer. Only on the condition that he would become an educated farmer would his father agree to this proposal. In order to become such a farmer, he entered, that autumn, the Massachusetts State College of Agriculture at Amherst.

Four years later, Sam Green graduated at the head of that College's Class of 1879. He did so in spite of the fact that he ran out of funds in his junior year and had to drop out of college for several months in order to earn enough money to complete his education. He not only made up all the class work he had missed, but won a $50 prize for being the best public speaker in his class.

After working for a year as foreman at the Vine Hill, West Hartford, Connecticut, 70 cow dairy-fruit farm, he decided to specialize in horticulture with the expectation of making himself a master of that field. To accomplish that ambition, he devoted the summer of 1880 to working for a Boston area market gardener. The following fall

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and winter, he was a graduate student in horticulture at Massachusetts Agricultural College. The following "growing season" was spent in the employ of James J. H. Gregory, a noted Marblehead, Massachusetts seed producer. That winter he worked in the greenhouses of William D. Strong, the noted Brighton, Massachusetts, rose grower.

Sam spent the next three years as a horticulturist at the celebrated Cornwall-on-Hudson, New York, Houghton Farm Agricultural Experiment Station. While at this Station, he mastered the intricacies of the New York City fruit and vegetable markets. While doing so, he made the acquaintance of many nationally prominent fruit growers, an acquaintanceship which was to be of much value to him in later years.

While at Houghton, Green studied landscape gardening under Samuel B. Parsons,2 the highly ranked landscape gardener of Flushing, New York. Parsons was in charge of the landscaping of the Houghton Farm. From that Farm, Green went back to the William C. Strong Nursery as foreman, remaining there for about a year. Then he moved on to the Newton Cemetery Nurseries because of the excellent opportunity that he would have to practice summer propagation of nursery stock, a line of work in which he wished to perfect himself.

Then the Massachusetts Agricultural College, at the request of Professor of Horticulture S. T. Maynard, hired him as superintendent of that college's extensive Horticultural facilities, which included a large commercial nursery, market gardens and greenhouses, then producing a gross income of $5,000 to $7,000 per year. This was the position Green was holding when he was offered the post of Horticulturist at the University of Minnesota's Agricultural Experiment Station.

About six months before he received and accepted this offer, which carried a salary of $1200 per year, Green, on his 28th birthday, September 15, 1887, married Miss Alice C. Hazelton of Wellesley Hills, Mass. According to Professor Harry Snyder, who was their next-door neighbor for 20 years, this was a very happy marriage. Mrs. Green devoted much of her time to reading material pertaining to horticulture, forestry and Minnesota politics, which enabled her to be of great help to her husband in his many activities. At the time of his death, after nearly 23 years of married life, he was still "as ardent a lover as in the days of his youth."4 The Greens had no children. About 1902, they

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2 The statement in "The Minnesota Horticulturist," V. 38, p. 322, reading "It was here that his natural love for the beautiful in nature was especially developed as landscape work which he carried on under the direction of Mr. Samuel Parsons, Jr., then in charge of Central Park, N. Y., ..." with reference to "SAMUEL, PARSONS, JR." and his connection with "CENTRAL PARK, N. Y." must be in error. Frederick Law Olmsted, assisted by Calvert Vaux, prepared the landscape plan for Central Park, N. Y., which was accepted by the New York authorities in 1857. Olmsted and Vaux were its chief designers, hence without any doubt Olmsted ended his connection with Central Park and his partnership with Vaux, Thererat until 1895, Vaux, was, most of the time, landscape superintendent of all of New York City's parks. With reference to "Samuel Parsons, Jr."

adopted, Nathaniel, then about four years old.

To understand the situation Green was stepping into at the University's Department of Agriculture, and his activities during the years immediately following his arrival at St. Paul, we must take a look at the pre-1888 history of the University's Department of Agriculture.

Although this Department of the University was authorized in 1868 including 120 acres of land extending eastward from the intersection of University and Washington Avenues, Minneapolis, it was six years before real agricultural experiment station activities were initiated on that tract, and many more years before a real agricultural college would be established.

By 1874 an agricultural building, located upon the above-mentioned tract, was under construction. This activity did not still the criticism being directed at the University because of its failure, after the passage of six years, to have initiated either experimental or educational work upon the tract. Quite disturbed by this situation and really anxious to get agricultural research and educational work underway, University President William W. Folwell (1869-1884) had Charles Y. Lacy, a B.A. degree graduate in agriculture from Cornell University, Ithaca, New York, appointed an assistant professor and put in charge of the University's Department of Agriculture.

Lacy's attempts to attract college students into taking the agricultural courses being offered by the University's Agricultural Department got nowhere. During the six years following his coming to Minnesota, only five students registered for college credit in the agricultural courses then being offered. Feeling that the development of agricultural education at the University of Minnesota was hopeless, Lacy resigned in 1880.

Still believing that a solution of the agricultural education impasse at the University of Minnesota could be solved if he could find and bring the right man to the University, Folwell began a search which brought him into contact with Professor Edward D. Porter of Delaware's State College of Agriculture. Immediately upon contacting him, Folwell came to the conclusion that Porter was the man who could solve the agricultural educational problem at Minnesota. Although 52 years old, Porter still was a very vigorous man, both mentally and physically. He possessed extensive experience in the agricultural education and experiment station field. Porter agreed to come to Minnesota. His coming to it instilled new life into the University's Department of Agriculture.

Soon after he assumed this Department's directorship, Prof. Porter persuaded the Regents to sell the Department's Minneapolis land. With the funds received from this sale, the Regents acquired the greater part of the land now included in that part of the St. Paul Campus located south of Larpenteur Avenue. This move provided the Department of Agriculture with land which was much better suited to its needs than was the land sold. But it made the Agricultural College much less accessible to the University's Minnesotans.
neapolis Campus and also to the general public. Porter felt that the gain to the Experiment Station far more than offset the loss of accessibility to the Minneapolis Campus.

Realizing that, in Minnesota, no one was interested in higher education in the field of agriculture, Porter decided to set up and advertise visitors’ days during which the Experiment Station would show what it had already accomplished, and what it was hoping to accomplish toward solving the farmers’ problems. *Scarcely any farmers came to these meetings!*

Finding he could not get them to come to the Experiment Station, Porter decided to take the work of that Station and a modicum of agricultural education to farmers and their families. To do so, he initiated a type of meeting, known as “Farmers Institutes,” usually held in rural school or church buildings, in which the Agricultural Experiment Station staff took such of the Station’s findings as they considered would be of value to the farmers. *These Institutes went over well.*

The contacts between the farm families and the Experiment Station which the “Institutes” brought about contributed greatly to the successful establishment, in 1888, of the School of Agriculture, which represented, in Minnesota, the first breakthrough of specialized education in agriculture into the general field of education. The activation of the “Institutes,” and the somewhat later establishment of the School of Agriculture, received President Cyrus Northrup’s (1884-1911) hearty support.

The passage of the Hatch Act by Congress in 1887 was a milestone of great importance in the development of the University of Minnesota’s Agricultural Department. It enabled that Department, in 1888, to add a number of outstanding young men to its staff.

Agricultural Department Director Porter, in a “Report to the Executive Committee of the Board of Regents,” dated January 26, 1888, listed the qualifications which he proposed to use as a guide in the selection of the person whom he would recommend to them for appointment to each of the positions to be filled.

In part of this Report dealing with horticulture, he urged the Regents to appoint, as “Horticulturist to the Experiment Station” a man “well trained in both theoretical and practical horticulture, accustomed to handling help, growing and marketing produce and competent to give instructions in all branches of his department, to the students in the farm school, and to conduct the experimental work committed to his charge.” The speed with which Samuel Green was selected to fill this position of Experiment Station Horticulturist indicates that, in Porter’s mind, he possessed all of the above-listed qualifications.

Professor Green took up his duties as Experiment Station Horticulturist on April 10, 1888. He immediately plunged into the activities connected with that position. He secured the ex-
Dr. Henry Schmitz, a former director of School of Forestry, stands before a portrait of Samuel Green. Dr. Schmitz presided at ceremonies honoring Green and his great contributions to Minnesota forestry. The forestry school is now under the able directorship of Dr. Frank Kaufert.
clusive use of a portion of the Experiment Station's land. Upon it he initiated experimental plantings of apples, pears, grapes, various vegetables and such trees as might prove of value for use in the establishment of farm windbreaks. Very shortly, the Minnesota Horticultural Society was to feel his invigorating attention. He was elected its secretary for the year 1890. Almost immediately after arriving in St. Paul, Green began to take a very active part in the "Farmer Institutes" program. Finding that the literature pertaining to the State's horticultural problems was almost non-existent, he got out, within a year, three bulletins on the work which he was carrying on at the Experiment Station.

Altogether, he was to publish more than 20 Experiment Station Bulletins (most of them dealing with horticultural problems); also a number of books amongst which the more important were: "Vegetable Gardening" (1896); "Amateur Fruit Growing" (1898); "Forestry in Minnesota" (1898); "Principles of American Forestry" (1903); "Farm Windbreaks and Shelter Belts" (1906); "Ornamental Trees and Shrubs and Herbaceous Plants in Minnesota" (Minn. Agr. Exp. Sta. Bul. 96, 1906); and "Popular Fruit Growing" (1909).

Demand, during the middle 1880's, for a practical school of agriculture brought about the establishment at the University's Agricultural Experiment Station of the School of Agriculture. This school provided boys, 15 or more years of age, with training in those branches of science which were directly related to agriculture. Included in their required training was a considerable house of supervised practical work on the Station's experimental farm. The boys were paid normal wages for such work.

The first session of this School opened on October 18, 1888, and closed April 17, 1889. The School year consisted of two 12-week terms. Two years later the course was lengthened to three years. The fall-winter scheduling of the School's terms permitted the boys to be at home during the cropping season. The Experiment Station provided this School with most of its instructors at very little cost to the School.

Green became a member of this School's teaching staff a few months after his arrival in St. Paul. Although he had had no previous experience with classroom teaching, his ability and accomplishments in that field are summarized by former Station Director Andrew Boss as follows:

"His knowledge of the subject matter in his field, his vigorous mentality, and his insistence on prompt and thorough work in the classes he taught won the respect and admiration of the students. Aside from being a first-class teacher, he was a good counselor and adviser to the farm boys. His enthusiasm for his work, his interest in horticulture and his knowledge of farm life were distinct assets in popularizing agricultural education."

The above words fit equally well his relations with the college students with whom he was to come in contact after the College of Agriculture.
and Forestry had come into being. The quite extensive printed records gone over by the author of this article contain no indication that Green had any interest in forestry prior to his coming to Minnesota. But his activities in connection with the "Farmers Institutes" held in the prairie portions of the State must have quickly brought to his attention the need for home and field windbreaks in those portions of the State.

To help the farm boys coming to the newly established School of Agriculture solve this problem, he listed in that School's 1889 Bulletin a course named "Forestry" in which he proposed to cover the problems which one would meet in the establishment and maintenance of windbreaks around the farm buildings and fields. Also briefly covered in this course was the need for, and proper procedure to be followed in the seasoning of lumber and fence posts; in the treatment of posts with wood preservatives; etc. This course was given for the first time in the winter of 1891 to the students who entered the School in October, 1889.

By deduction, from the fact that he had his official University title changed in 1897 from Professor of Horticulture to Professor of Horticulture and Forestry, we must come to the conclusion that, by that date, Samuel Green had become deeply interested in forestry. This conclusion is further substantiated by his having included, in the 1897 Bulletin of the College of Agriculture, a four credit course in forestry to be given in the junior year to the students entering that College in the fall of 1897. To

### PROFILE OF A DROWNING VICTIM

This is a profile of a Minnesota drowning victim.

By careful analysis of drowning deaths, the water safety section of the Minnesota Safety Council has compiled a composite picture of the victims — the adult, the teen-ager, the child.

The "how" and "why" of these drowning deaths? This is the sad picture painted by the Safety Council.

The adult: He is 42 years old. He loves fishing and boating. At the time of his death, he was pursuing his beloved pastime. Normally wise in the ways of weather and water, this "one day" he was careless. His boat was overloaded, the water was rough.

The teen-ager: He has just turned 14. He was exuberant, full of fun, confident of his swimming ability, ever ready to respond to the challenge — the challenge of swimming to the distant island, of testing his endurance in deep water, of his ability to go it alone beyond the rope barriers of the beaches.

The child: He was only 5 years old, a full life ahead of him. But he was not yet wise in the way of water. His heart knew no fear. For mere fleeting minutes, he was out of the sight of his mother, intrigued by the floating twig, the "boat" in the water.

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provide a textbook for this course probably was the reason for his writing "Forestry in Minnesota." By this time he was a member of the Executive Board of the Minnesota State Forestry Association, and had become intimately acquainted with Minnesota's very enthusiastic forestry propagandist of the 1885-1910 period, General C. C. Andrews.

Prior to 1897, he had been offered professorships carrying much higher rates of pay than he was receiving at Minnesota by Purdue University and the University of Missouri. With reference to one of these offers he is reported to have stated, "I must be worth as much to Minnesota as I am to them."

The 1899 Session of the Legislature authorized the creation of a Forestry Board. Somewhat later this Board was ordered to provide for the administration and protection of Itasca Park and any other gifts of forest land which the State might receive or might obtain ownership of through purchase. At that time a large acreage of cut-over forest land was tax delinquent. It was hoped that some of these lands would be donated to the State. Only one such present was ever received, that of about 1000 acres of Crow Wing County lands from Governor John S. Pillsbury. Green was one of the first men appointed to membership upon this Board. Very shortly he became its most active member and remained such until his death. His intimate acquaintance, General C. C. Andrews, became this Board's secretary.

Wishing to learn more about forestry and how it was being taught where it was being practiced intensively, Green spent the summer of 1900 in Germany studying the German forestry schools and their attached forests. He also investigated the German agricultural schools and experiment stations.

(The second and concluding part of "The Story of Samuel Green" will appear in the next edition of the Conservation Volunteer.)

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The Story of Samuel Green

JOHN H. ALLISON

(Part II)

ABOUT THIS STORY

This is the concluding chapter of "The Story of Samuel Green," by John H. Allison, Professor Emeritus, School of Forestry, University of Minnesota.

In the first chapter, Prof. Allison related highlights of Green's early years, from his boyhood in Chelsea, Mass., and his outstanding scholastic record at Massachusetts State College, to his intense personal application to obtaining "practical experience" in the field of horticulture, his first-chosen profession.

It was as a horticulturist that Samuel Green first came to the University of Minnesota. And his record in this profession was most impressive. Gradually his interest evolved toward forestry. His lasting contributions to forestry in Minnesota are further explored in this chapter. Today, "Green Hall", headquarters of the University of Minnesota's School of Forestry on the St. Paul Campus, is a monument to Samuel Green's memory and achievements.

Before proceeding further with Samuel Green's career, we should take a look at the agricultural college situation in Minnesota at the turn of the century. Green was a strong believer in agricultural education at both the secondary and collegiate levels. He was constantly urging farm boys to utilize the educational opportunities being offered them by the University's Department of Agriculture.

Response to the form of secondary education provided by the School of Agriculture was good. In its first year (1888) its registration was 47; by 1898 it had risen to 312; in 1899, after becoming co-educational, to 583. This School reached its peak enrollment, 898, in 1912. Thereafter, Smith-Hughes schools gradually replaced this phase of the educational program. But the story pertaining to higher levels of education in the College of Agriculture was very different. The 1889 Bulletin for that College includes a full, four-year curriculum. Apparently no students registered in this college. Several years were to elapse before another college curriculum was published. By 1899, the year in which the college's registration was first published, only 21 students, one of them a forester, were listed as being enrolled in the College. By 1909, the college enrollment had only risen to 91 — 40 of whom were foresters.
"Oldest Living Thing on Earth" — This mammoth cypress, known as the "Tree of El Tule", stands in village churchyard near Oaxaca, Mexico. For centuries, it has been worshipped as the "Tree of Life" by Indian tribes. It was old and venerable when Christ was born.

home economists and only 32 agriculturists. Should one be surprised that Professor Green had come to the conclusion that on the basis of forestry students, a College of Forestry was as much needed as a College of Agriculture?

A monument to Green's ability to get funds from the Legislature is the present University Horticulture Building. Pre-1938 students registered in forestry might be interested in its original cost of $35,000, and in the cost of about $40,000 for its mid-1920's face lifting. Green got a pretty good building for the money invested.

In the spring of 1903, Green found that there were registered in the College of Agriculture one man (Cusner) who was completing his sophomore year, and four other men, Cox, Detwiler, Rockwell and Tierney, who were completing their freshman year, all of whom wished to be graduated with a professional B.S. degree in forestry. This degree would be accepted as such by the U.S. Department of Agriculture's Bureau of Forestry.
Before the College's 1903 Bulletin went to press, Green had worked out such a Curriculum and gotten it properly approved. By the time the College's fall term opened, he had hired Martin L. Erickson and A. Wheeler to assist him in conducting the courses to be initiated that fall.

During the next five years there were added to the School of Forestry staff, as they were needed, Professors E. G. Cheyney, J. P. Wentling, and S. B. DeWiler; and Instructors William T. Cox, Harold Cuzner and Dillon P. Tierney. Thus came about the establishment of the University of Minnesota's School of Forestry, now one of the Nation's oldest schools in that field of specialization. Its establishment must be credited entirely to Professor Green, and classed as one of his greatest accomplishments.

Professor Green believed that several of the required courses in the forestry curriculum should be given "in the woods." His 1900 visit to European forest schools strongly supported this belief. He also just as strongly believed that Itasca Park should be maintained as a Forest Park. In this forest park he would not prohibit the cutting of decadent trees. Rather, he proposed to have each commercial-sized stand of timber in the "Forest Park" gone over periodically and from it removed such trees as were dead or dying; also the windfalls. He would not have any of the healthy larger pines, birch or swamp conifers cut. And he would have reforested, as rapidly as possible, the considerable acreage of existing deforested land present within the Park.

He believed that the college's forestry students could, under the supervision of their instructors, greatly help the Park administration in the protection and development of the Park's forest resources.

With the support of the Minnesota Horticultural Society, the Minnesota Forestry Association and a resolution from the University's Board of Regents, dated October 4, 1906, and addressed to the Legislature (1907 Session) it (the Legislature) was asked to authorize the establishment of a camp upon Itasca State Park lands for the use of the College of Agriculture's forestry students in connection with their education. With the support of others friendly to forestry, the 1907 Session of the Legislature transferred the administration and protection of Itasca Park to the State's Forestry Board.

This Act of the Legislature authorized the Forestry Board to operate Itasca Park as a forest park. The Forestry Board, very shortly after this Act was passed, authorized the establishment in Itasca Park of a forestry camp and the use of such park lands and timber as might be needed in the education of the University's forestry students.

Some time in June, 1907, Professors Green and Cheyney arrived at the present site of the Lake Itasca Forestry and Biological Station, accompanied by several forestry students who were to work through the summer as laborers. Green indicated to Cheyney what he wanted to have done to prepare the former Park Headquarters area for use as a forestry student camp site and then departed. After the clearing of the camp site was com-
pleted, Cheyney used this crew to clear a fire break along the north boundary, and along portions of the east and west boundaries of the Park.

Finding that there would not be enough forestry students to initiate college credit courses at Itasca Park in 1908, Green set up and advertised a six weeks non-college credit nature study program for teachers. Twenty persons registered for this program. They and their instructors, with Professor S. B. Detwiler in charge, arrived at the Park on July 2. Similar six weeks nature study programs were given at Itasca Park in 1909, 1910 and 1911.

Collegiate credit instruction in forestry was initiated at the University’s Lake Itasca Campus on May 6, 1909, with Professor E. G. Cheyney in charge. That year’s session ended on August 27. Eleven students were in attendance during the session.

The initiation of professional forestry instruction in Itasca Park’s forest by Professor Green must also be rated as one of his more important accomplishments. The right of the University of Minnesota to establish a campus within Itasca Park, upon Park land, and to conduct technical forestry education and research upon Park lands, together with the right to carry on other forms of biological collegiate education and research within that Park, is tied to Green’s activities, 1900 to 1910, as a very active and influential member of the State’s Forestry Board.

It also substantiated his belief in the importance of students taking technical forestry education work in the woods. The Lake Itasca Campus, and the educational privileges that go with it, are highly valuable to the University.

And now we come to the story of the Cloquet Forest Research Center — Professor Green’s last major contribution to the University’s School of Forestry, through it, to Minnesota forestry.

By the middle of the 1890’s he had become familiar with Minnesota’s “north woods,” then fast becoming its “cut-over region.” By this time he had become a member of both the Minnesota and the American Forestry Association, also of the Society of American Foresters. And above all else he and General C. C. Andrews had become intimate acquaintances, so much so that they were taking camping trips together in the State’s North Woods.

A close look at the land composing Minnesota’s coniferous forest area must have convinced Green, long before it did most other Minnesotans, that the greater part of that area could not be successfully utilized by agriculture. Hence, it should be kept in forest.

To better guide owners in forest land management, Green felt the University should establish an experimental forest within which both research and demonstration of recommended forest management practices would go on continuously. Green believed such a forest should be near an important sawmill town and located in the northeastern part of the State.

The allotting of part of the lands within the Fond du Lac Indian Reservation to the Indians, and the opening of the rest of the lands within that...
reservation to other forms of land disposal, provided a prime opportunity for the establishment of such a demonstration forest near Cloquet. Professor Green had implanted in the minds of Chief Attorney Henry Oldenberg, of the Weyerhaeuser Companies, Editor Fred Vibert of the Cloquet Pine Knot, Frederick Weyerhaeuser, Sr., and Rudolph Weyerhaeuser, then Manager of the Northern Lumber Company of Cloquet, the desirability of such a School forest.

These men, in 1909, brought about the passage of the necessary legislation by Congress and by the Minnesota State Legislature. They provided the funds necessary for the establishment of the Cloquet Experimental Forest. The St. Louis River Mercantile Company gave the University 2,214 acres. To this area, the University, by purchase, added 447 more acres for Indian allotments. In subsequent years, gifts, together with small additional purchases of land, have increased the present area of the Forest to approximately 3,750 acres.

Activation of the Forest began in the Spring of 1910. During that year, the greater part of the merchantable white and Norway pine within the Forest was cut by the St. Louis River Mercantile Company under the supervision of the Indian Service. However, Professor Green succeeded in purchasing about two million board feet of the merchantable pine. This timber, together with the jack pine, aspen, spruce, balsam and tamarack, which in 1910 were unmerchantable, provided a fine foundation for both a demonstration and a research forest. Professor Green spent the Thursday preceding his death at this Forest conferring with its Superintendent, Dillon P. Tierney. During this conference, they discussed the plans which Green had formulated in his mind for the work to be carried on at the Forest. He also spent considerable time telling Tierney about the difficulties he had encountered in bringing about the establishment of the station.

How Professor Green felt about forestry during the last few years of his life is best expressed by himself in an address which he delivered at the annual meeting of the Minnesota State Forestry Association on December 5, 1907; quote: "The people of Minnesota are handling their enormous forest wealth, and they handled it, like spendthrifts; they have fooled away a large part of this great resource. It is of the greatest importance that we take care of our remaining forest wealth, because it has contributed so much and may contribute so much more to our prosperity if properly handled. But we foolishly work our forest wealth as we do our iron mines. We should work our forests as we do a farm crop, with the idea that there is going to be another one. . . . This is a serious matter to me. I have put my life work into it, and after I am dead..."
Last year, the Minnesota Conservation Department's Division of Forestry observed the planting of the 400th millionth tree seedling raised in division nurseries for reforestation programs! Above, a South Washington county "Tree Farm" site.

If it can be truly said that I got this forestry matter in Minnesota well started and helped it along effectively, I do not know of anything that would please me more.112

The above quotation indicates how deeply he had become interested in Minnesota's forestry problems. But we foresters must not forget that he was still deeply interested in horticulture and its problems, so deeply interested that he was serving the Minnesota Horticultural Society as its president when he died and had been doing so since 1907.

At the turn of the century, while working very hard for the establishment of a forestry research station in northeastern Minnesota, Green was also working just as hard for the acquisition by the Department of Horticultural "Science and Fruit Breeding Farm." Such a farm would provide that Department with better soil and a larger area upon which to carry on its fruit breeding activities than on land available to it in the neighborhood of the St. Paul Campus.

After several years of effort, in which he was effectively assisted by the Minnesota State Horticultural Society, the 1907 Session of the Legislature authorized the acquisition of such a farm. Sufficient money was appropriated to acquire approximately 80 acres of land, lying about four miles west of Excelsior. Later additions of 30 and 120 acres account for its present size of 230 acres. It has


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become one of the nation's leading fruit breeding experiment stations.

At the June, 1910, meeting of the University's Board of Regents, the forestry unit, which had been a specialization in the College of Agriculture's Department of Horticulture, was separated from that College and its Department of Horticulture. A separate College of Forestry was created. Actually, at the time this action was taken, there were almost as many college rank students in forestry as there were in agriculture. At the same time that the College of Forestry was established, Green was raised to the rank of Dean and appointed its administrative head. But, as a College, Forestry was in a weak position. It did not have the supporting divisions in the experiment station that the College of Agriculture had. Hence, quite soon after Green's death, the College of Forestry was quietly reduced to a Department in the College of Agriculture.

During the great 1900 to 1920 boom in agricultural land values, most Minnesotans believed that all of Minnesota's "cut-over" lands would ultimately go into family-sized farms. According to that line of thinking, there would be no place for forestry in the future utilization of land in Minnesota. Twenty-five years were to pass before Green's estimate of the need for forestry and foresters would really begin to materialize. Perhaps it is fortunate for his peace of mind that he died when he did.

On Tuesday, July 5, 1910, Green, who some weeks previously had been confined to his bed by what he called "acute dyspepsia", said he was feeling as well as usual, while conferring with his intimate acquaintance, Secretary A. W. Latham, of the Minnesota State Horticultural Society, of which Green was president. But to Latham, he did not look as well as usual.28

On Saturday of that week, July 9, Green and Mrs. Green journeyed by train to Park Rapids. On Sunday, the couple drove in a light two-horse rig to the forestry camp on Lake Itasca. They had supper with the forestry students. Professor E. G. Cheyney, who was in charge of the camp, did not know that Green was coming. Hence, he was quite surprised when Green appeared at his cottage door. He and Cheyney spent a long evening together, discussing problems pertaining to the new College and its students. During the conversation, Green asked Cheyney to teach him how to play tennis. This Cheyney promised to do.

The next morning Green, apparently in good health, had breakfast with the students. Shortly after breakfast, he met John Stillwell, the carpenter in charge of construction of a large barn being built at the forestry camp. As Green and Stillwell were looking over construction progress and work still to be done on the barn, Green, then inside the barn, stumbled and sank without a word to the floor.

Stillwell thought he had merely stumbled and stooped to help him up. But he had to call two workmen to assist him. By the time Cheyney arrived, they had Professor Green outside the barn. He had walked fairly

Stillwell tried to persuade him to go to his nearby cottage to rest. But he insisted that he was all right and shook them off. He did not seem to realize that he had been down at all. He said: "This is a pretty good barn you are building, Stillwell." Stillwell looked up at the barn, and Professor Green fell forward into his arms. This was at 8:45 A.M. He never spoke again.

Stillwell was trying to revive him by putting cold cloths to his head when Cheyney arrived. As Cheyney arrived he gasped once or twice. Cheyney could find no pulse. Thus had Professor Green passed away.

As they met that morning, John Stillwell had mentioned to Professor Green that he was not looking as well as he had looked a year previously. Green replied that that was not important; that he was feeling very well.

Although the nearest telephone was at the Itasca Lodge, four miles away, and the service from there to Park Rapids was very uncertain, Cheyney succeeded in reporting, before noon, Green's death to Dean A. F. Woods of the University's Department of Agriculture. Woods immediately reported it to Secretary Latham of the Minnesota State Horticultural Society. Dean Woods and Mr. Elwell of the Horticultural Society, and Elwell's wife, met Mrs. Green and the body of Professor Green the next morning at Park Rapids. They accompanied the sad party back to St. Paul.

Professor Green's funeral was held in the St. Anthony Park Congregational Church. The Rev. Davies officiated at the funeral. His discourse was followed by a memorial address, in which President Northrup of the University summed up Green's character, personality and contributions to the University as follows:

"A great sorrow has come upon us all. The friend whom we loved, the man whom we honored, the scientist on whose knowledge and skill we relied, and the executive whose forceful and wise carrying out of plans gave the fullest assurance that everything committed to his management would be most successfully done, has been stricken down in a moment, when apparently he was in the full vigor of virile strength, in the very flower of healthy manhood. . . . Green came to us . . . in the early days of the agricultural department when the future of agricultural education was very uncertain.

"He had a noble ambition, the statement continues, "to lift the College of Agriculture and make it as truly an agency for higher education as any of the other colleges in the University. . . . So far as the College of Agriculture is concerned, Professor Green was the man who molded it into its present shape. . . . He became interested in forestry, and his vision of future forest reserves, and the work to be done in connection therewith, the training of masters of forestry, . . . the enrichment and beautifying of large regions. . . . His vision of all these things was so clear that his hand was outstretched to grasp them. . . . A man of restless energy, never happy
What would happen on this earth if 800 million Chinese suddenly began driving automobiles?

The impact on this planet, according to scientists, could be devastating. At the present time, the exhaust from American automobiles is estimated to make up from 50 to 90 per cent of the "smog" which is choking urban life.

But, Meteorologist Morris Neiburger indicates, the air flowing across the Pacific ocean from Asia is clean when it reaches the west coast of the United States. Here the trouble begins.

The air mass "sweeps up" a great load of pollution from the coastal states. The rocky mountains updrafts perform a partial cleansing job again. But the pollution load zooms as the air mass churns toward the eastern seaboard.

"Imagine the smog that would accumulate," meteorologist Neiburger speculates, "if every one of the 800 million Chinese drove a gasoline-powered automobile — as every Angeleno (Los Angeles resident) does."

Even without the Chinese, or perhaps the potential motorists in India, Neiburger fears that air pollution will increase beyond the capacity of the atmosphere to cleanse itself.

Smog, he theorized, would then encircle the earth. All civilization will pass away — not from a sudden cataclysm, but from gradual suffocation by its own effluents.
coming to St. Paul. When, in 1907, he learned that a 4.5 acre tract of land surrounding a small pond in a deep depression was tax delinquent and likely to pass into very irresponsible ownership, he talked his neighbors into contributing enough money to buy it and donate it to the City of St. Paul as a park.

Not all of those who contributed to this project were happy about it afterwards. Anyhow, the city became the owner of College Park, at one time known as "Green's Folly." In the winter, it is now heavily used by the neighborhood children and teenagers for sledding and skiing. While he was still living, Green had some Colorado blue spruce planted in it. Shaded by a group of such spruce is a red granite boulder, carrying an 8 by 12 inch bronze plaque which states, "This Park and these trees perpetuate the memory of Samuel B. Green, 1859-1910."

To advance the interests of horticulture and forestry, Sam Green established a wide acquaintance with the membership of the State Legislature. During legislative sessions, he was in frequent contact with the members of the legislative committees dealing with matters of importance to horticulture and forestry. Often he took the members of such committees out to lunch or dinner. He provided the transportation, as well as the food. For this purpose, he maintained a fine pair of driving horses, a sleigh and carriage.

While Green served as chairman of the State Board of Arbitration, the Board was called upon to arbitrate a railroad switchmen's strike. He was so impartial and unbiased in his handling of this difficult assignment that he won the commendation of both sides.

Both he and Mrs. Green were deeply religious, but not ostentatiously so. In religious matters, they clearly were direct descendants from their Puritan ancestors. For several years, he was chairman of the St. Anthony Park Congregational Church's board of trustees and, for several years, that Church's Sunday School superintendent.

He was temperate in his habits, not even using tobacco. He never used profanity. He never told vulgar stories. In groups of people, although the real leader, he constantly sought a background position. He stepped into the limelight only when he was pushed into doing so. With reference to getting work done, he was a man of tireless energy. He fought hard for whatever he wanted, or believed was the right solution to a problem. But once a decision was made, he was not resentful if he lost.

This is the story of Samuel Green — a man whose life's work was a source of inspiration and example to the citizens of the State of Minnesota.