

23 November 1956

Mr. O. F. McCrary
State College Station
Raleigh, North Carolina

Dear Mr. McCrary:

I have asked Mr. Pate to confer with you about the project recently completed in which you placed names on trees on our campus. I wish to commend you and those who helped with this enterprise.

I do not consider the naming of these trees as the only possible accomplishment of the committee appointed several years ago, of which you were designated chairman. With a change of secretaries in this office we have not been able to find the original correspondence with you designating the committee and outlining its objectives. If you are interested in working further along the line of having our campus be a sort of arboretum, I shall be glad to have you confer sometime next week at our mutual convenience.

In the meantime, I have asked Mr. Pate to talk with you about the scope of the project recently completed and to prepare a news release so that both our students and the people of Raleigh will know about it.

Sincerely yours,

Carey H. Bostian
Chancellor

CHB:ho
cc: Rudolph Pate

O. F. McCRARY

STATE COLLEGE STATION

RALEIGH, N. C.

October 6, 1956.

Chancellor C. H. Postian,
State College Station,
Raleigh, N. C.

Dear Sir:

On Friday afternoon
October 5th, four forestry
students and I started
putting names on the
campus trees.

We used the glass-
covered name plates, and
the plastic plates, and
completed about one-
half the job.

We expect to com-
plete nailing up all of the
tags next Friday afternoon,
October 12th.

Very truly yours, O. F. McCrary

September 20, 1955

Mr. O. F. McCrary
State College Station
Raleigh, North Carolina

Dear Mr. McCrary:

Since receiving your letter of August 18 saying that your committee is ready to start naming trees on our campus, I did not identify a source of funds to pay for the labels until a few days ago.

We shall make available to Mr. J. McCree Smith, Director of Maintenance and Operations, \$125 to be used for the purchase of appropriate labels and materials. Please confer with Mr. Smith about the labels to be used. I share with him some concern about the desirability of using labels covered with glass. I fear that too many of our own students, not to mention younger boys who walk over the campus, will take delight in breaking the glass covers.

The time and efforts of your committee are appreciated, and we are pleased that you are now ready to begin labeling the trees and shrubs on our campus.

Sincerely yours,

Carey H. Bostian
Chancellor

CRB:cw

cc: Mr. J. McCree Smith
Mr. J. G. Vann

P. S. to Mr. Vann:

I suggest that we use \$125 of our "Scholarship Matching Fund" to buy these labels. If you have another suggestion, please let me know.

O. F. MCCRARY, B.S., M.S.
AGRICULTURIST, BOTANIST, ROCKHOUND

STATE COLLEGE STATION
RALEIGH, NORTH CAROLINA

August 18, 1955.

Chancellor C. H. Bostian,
State College Station,
Raleigh, N. C.

Dear Chancellor:

On June 18th, I sent
you a report on progress
being made in naming
the trees on our State Col-
lege Campus.

Our committee is ready
to start naming trees as
soon as the labels are
available.

I shall be glad to
discuss this matter with
you at your convenience.

Very truly yours,
O. F. McCrary.

North Carolina State College
Raleigh

SCHOOL OF FORESTRY

June 18, 1955

Chancellor C. H. Bostian
Holladay Hall
Campus

Dear Chancellor Bostian:

I am submitting a report of progress being made in naming the trees on our State College Campus.

A preliminary survey has been made by Messrs. George K. Slocum, L. A. Whitford, O. F. McCrary, and Mr. Charles Webb, a student in the School of Forestry. A total of 73 species was found. Fifty-eight species are natives of North Carolina, and fifteen species are exotic.

Tags bearing numbers for each species were nailed on about 185 trees. Only trees located near walks where there is considerable travel were tagged. Many more trees should be tagged and named in the future. Common names and scientific names will be placed on trees that have been tagged.

Our very limited survey shows that less than half the trees native to North Carolina are found on our State College Campus. Twelve species of oaks were found. It appears that willow oak and pin oak are our most common trees. It is hoped that shrubs on the campus can be named, after the trees are named.

Aluminum labels, placed in metal holders, and covered with glass appear to be suitable for naming the trees and shrubs. These labels may be purchased at \$17.50 per hundred FOB factory; or in lots of 1000 at ~~\$112.50~~, less 2% for cash in ten days. It looks like we shall need at least 1000 labels in order to name a sufficient number of trees and shrubs now on the campus, and to take care of additional specimens as they are added in the future.

Very truly yours,

O. F. McCrary
O. F. McCrary, Chairman⁵
Arboretum Committee

DOES NORTH CAROLINA NEED AN ARBORETUM?

I find that there are approximately 168 species of trees growing in North Carolina. To this number "could be added a dozen or more hawthorns, and a dozen shrubs that occasionally reach the size of small trees", to quote Coker.

The 168 species include a few trees not native to North Carolina. They are china-berry tree, mimosa, Kentucky Coffee tree, Ailanthus, Osage Orange, white mulberry, paper mulberry, white poplar, weeping willow, catalpa, and Paulownia.

Only 49 species are found on Capitol Square.

The following species growing on Capitol Square are not native to North Carolina, and are not included in the state total: Japan Pagoda tree, Flowering Cherry, European Linden, Chaste tree, Cork Oak, Hedge Maple and Ginkgo tree (not Ginkgo).

There are about 37 species of trees native to North Carolina growing on Capitol Square, which leaves 131 species not found there.

In other words, only 22 trees out of each one hundred found in North Carolina, are found on Capitol Square. Does this not point to the need for a real North Carolina Arboretum?

The trees on Capitol Square were never intended to be a State Arboretum; there is not enough room, though the location on U. S. 1 is excellent.

I call your attention to the poor representation of some species on Capitol Square, (N. C. - North Carolina; C. S. - Capitol Square):

	<u>N. C.</u>	<u>C. S.</u>		<u>N. C.</u>	<u>C. S.</u>
Oaks	24	11	Birch	4	0
Pine	9	1	Magnolia	6	2
Hemlock	2	0	Holly	5	1
Willow	5	0	Maple	7	2
Hickory	10	0	Basswood	7	1
					(European)

Where should a State Arboretum be located? One person has suggested that the entire campus of State College be made into an arboretum, another suggested Biltmore.

Where do you readers think it should be located?

O. F. McGrary
- O. F. McGrary

DOES NORTH CAROLINA HAVE AN ARBORETUM?

Webster defines arboretum as a place where trees and shrubs are cultivated for scientific or educational purposes, a botanical garden of trees.

The only one I know anything about is on Capitol Square in Raleigh. I have heard that the Southeastern Forestry Experiment Station is starting one at Bent Creek, in Buncombe County. Chapel Hill had one, but most of the names have been removed from the plants and trees. Duke University may develop one later on.

I understand that the area of Capitol Square is 6.2 acres. Of the 6.2 acres it is possible that trees and shrubs take up about 4 acres.

I have heard that over a period of years, the trees on the Square have been named and tagged at least three times. Names were recently placed on all trees, but the shrubs were not named.

One hundred and eighty-one trees have been named on Capitol Square, according to State Forester, F. H. Claridge.

Southern Sugar Maple leads with 24 trees; White Oak is next with 23 trees. The number of other trees follows in this order: Magnolia 13; American Elm 10; American Holly 7; Pecan 7; Mimosa 7; Laurel Oak 6; Black Walnut 6; Swamp Chestnut Oak 5; White Ash 5; Live Oak 4; Japan Pagoda Tree 4; Willow Oak 4; Hawthorn 4; Crab Apple 3; Post Oak 3; Dogwood 3; Flowering Cherry 3; Northern Red Oak 3; Water Oak 2; Pin Oak 2; Red Maple 2; Redbud 2; Kentucky Coffee Tree 2; Sycamore 2; Catalpa 2; Black Oak 2; Horse Chestnut 1; Buckeye 1; Ginkgo 1; Cucumber Tree 1; Sweet Gum 1; European Linden 1; Black Cherry 1; Carolina Cherry 1; Chaste Tree 1; Chinaberry 1; Cork Oak 1; Winged Elm 1; Ailanthus 1; Hedge Maple 1; Paulownia 1; Southern Red Oak 1; Longleaf Pine 1; Yellow Poplar 1; American Beech 1; Red Mulberry 1; Carolina Poplar 1.

Mr. Claridge says in a footnote: "All the redbuds, dogwoods, and flowering cherries were not counted or labelled. There are a few trees of other species which were too small to label satisfactorily which were not counted either."

I give the list, not for the number of species it contains, but rather for the number of species it does not have.

How could we expect to get more plants than we now have to grow on 4 acres? Will have more to say about arboretums later.

O. F. McCrary

1/22/54.

DOES NORTH CAROLINA NEED AN ARBORETUM?

An arboretum is a botanical garden of trees.

In my first article entitled "Does North Carolina Have An Arboretum?", the common names of one hundred and eighty-one trees growing on Capitol Square were listed. Some of these trees were not originally native to this state.

The following statement was made in the same article: "I give the list, not for the number of species it contains, but rather for the number of species it does not have."

The common names of native trees of North Carolina not growing on Capitol Square are shown below. They are taken from a list prepared by Professors George K. Slocum and William D. Miller of the North Carolina State College Forestry Department: Pine, 7 species (White, Shortleaf, Pitch, Pond, Scrub, Loblolly, Table Mountain); Southern Balsam; Red Spruce; Hemlock, 2 species (Canadian and Carolina); Red Cedar; Bald and Pond Cypress; Southern White Cedar; Arborvitae; Poplar, 5 species (Large Tooth Aspen, Swamp Cottonwood, Balm of Gilead, White and Lombardy); Willow, 5 species (Black, Harbison's, Black Coastal, Pussy Willow, Weeping Willow); Butternut; Hickory, 8 species (Bitternut, Water, Shagbark, Southern Shagbark, Bigleaf Shagbark, Mockernut, Piedmont Pignut, Mountain Pignut); Wax Myrtle; Blue Beech; Hop Hornbeam; Birch, 4 species (Black, Yellow, River and Paper); Black Alder; Beech; Chestnut; Chinquapin, 2^s species (Mountain and Coastal); Oak, 13 species (Shumard Red, Scarlet, Turkey, Bear, Black Jack, Blue Jack, Shingle, Margaret's, Overcup, Swamp White, Chestnut, Yellow, and Dwarf Chinquapin); Slippery Elm; Planer Tree; Hackberry, 3 species (Hackberry, Sugarberry and Georgia Hackberry); Osage Orange; Magnolia, 4 species (Sweet Bay, Bigleaf, Umbrella Tree and Mountain); Pawpaw; Red Bay; Sassafras; Witch Hazel; Crab Apple, 2 species (Crab Apple and Sweet Crab Apple); Mountain Ash; Service Berry; Prunus, 6 species (Wild Plum, Black Sloe, Pin Cherry, Sour Cherry, Sweet Cherry and Choke Cherry); Honey Locust;

Yellow Wood; Locust, 2 species (Black and Clammy); Hercules Club; Hop Tree; Sumac, 4 species (Staghorn, Dwarf, Poison, and Smooth); Swamp Ironwood (Cyrilla); Titi; Holly, 4 species (Dahoon, Yaupon, Winterberry, Mountain); Wahoo; Bladdernut; Maple, 5 species (Mountain, Striped, Sugar, Silver, Box Elder); Buckeye, 3 species (Ohio, Georgia, Yellow); Yellow Buckthorn; Linden, 7 species (Veiny, Florida, Gray, White Basswood, Carolina, White Linden, Mountain Linden); Loblolly Bay; Gum, 3 species (Black, Swamp and Tupelo; Blue Dogwood; Rhododendron; Laurel; Sourwood; Tree Huckleberry; Persimmon; Horse Sugar; Silverbell; Ash, 2 species (Water and Red); Fringe Tree; Devil Wood and Black Haw.

Dr. W. C. Coker states that "there are one hundred and sixty-six kinds of plants that normally grow to tree size in North Carolina, to which could be added a dozen or more hawthorns, and a dozen shrubs that occasionally reach the size of small trees".

Only Florida and Texas are ahead of North Carolina in the number of species of trees, Florida having three hundred and twenty-eight species and Texas having one hundred and ninety-eight species, according to Coker.

I shall have more to say about arboreta later.

O. F. McCrary
O. F. McCrary
1/22/54.

FUNCTIONS OF AN ARBORETUM OR BOTANICAL GARDEN

According to Dr. Donald Wyman, "An arboretum or botanical garden is an ample area set aside for the growing and effective display of growing ornamental trees, shrubs, vines, and other plants which can be grown in a given area, their maintenance, proper labeling, and study. It does not necessarily have to include all of the plants that can be grown in a region, nor does it necessarily have to include formal beds or borders of annuals and perennials.

An arboretum differs from a botanical garden in that the emphasis is placed on the growing of woody plants in the arboretum, whereas in the botanical garden emphasis is not placed on the growing of any particular kind of plant, but all types are grown, large rock gardens and expensively operated rose gardens are frequently found in an arboretum or botanical garden, but these are not essential parts of either.

Both differ from a park in that in the former a serious effort has been made to plant an extensive collection of labeled plants not only for the purpose of display but also for critical examination and scientific study. Many parks are planted without the labeling of any plants and with the use of only a small number of locally available plant species. Both a park and an arboretum or botanical garden can be used for recreational purposes; but the arboretum or botanical garden go beyond the park in that they become highly educational to many of their visitors, demonstrating by means of labeled specimens what species are available for planting in a given area or can be grown indoors.

Some of the most important functions of an arboretum or botanical garden might be: (1) To grow 'the best' plants hardy in an area in order that home owners may become acquainted with their names, their ornamental characteristics, and the proper methods of culture. (2) To show a completed selection of all that is considered best from an ornamental standpoint among the woody plants (if an arboretum, or among the perennials, annuals, bulbs as well if a botanical garden) that it is possible to grow in the areas. (3) To serve as a means of introducing new plants into the area, regardless of the source from which they come. (4) To disseminate knowledge of plants to the public. This would include information on the culture, pruning, fertilizing and possibly a continual study under local conditions of just what varieties are 'the best' including cooperation with schools, garden clubs, and other organizations. (5) To test the hardiness of untried varieties. (6) To provide a laboratory for students of botany, horticulture and nature study. (7) To increase the productivity, economic importance and beauty of an area, by intelligent and interesting planting, and to introduce plants not grown there before. (8) To provide recreational stimulus to the public by means of walks, drives, and beautiful displays, flower shows, etc., and to stimulate the pleasure of learning to know new plants which might be adapted to planting on private property."

O. F. McCrary
- O. F. McCrary
State College Station
Raleigh, N. C.

March 24, 1954

O. F. McCRARY

STATE COLLEGE STATION

RALEIGH, N. C.

November 27, 1956.

Chancellor C. H. Boston,
State College Station,
Raleigh, N. C.

Dear Sir:

I have your letter of November 23, and in reply will say that we are planning to complete removing the campus trees on next Friday afternoon, November 30th. Will let you know when the job is completed.

I hope to confer with you next week. I probably have the records you referred to.

Sincerely yours,
O. F. McCrary

20 December 1956

Mr. Francis W. Holmes
Assistant Professor
Shade Tree Laboratories
University of Massachusetts
Amherst, Massachusetts

Dear Prof. Holmes:

Since the establishment of North Carolina State
College, all freshmen and sophomores, unless excused because
of physical disability, have been required to take R.O.T.C.,
and the regulation is still in effect.

Very truly yours,

Carey H. Bostian
Chancellor

CHB:ho



SHADE TREE LABORATORIES

The Commonwealth of Massachusetts
University of Massachusetts
Agricultural Experiment Station
Amherst

December 14, 1956

Dr. J. H. Furks, President
University of North Carolina
Raleigh, North Carolina

Dear Sir:

As part of a report for our College of Agriculture's Course of Study Committee, I am surveying land-grant institutions in the United States to determine which ones satisfy the requirements of the Morrill Act by merely offering an optional course or courses in R.O.T.C. or other military training, and which ones require their students to take such military courses.

Would you be so kind as to have someone at your institution send me a note or postcard indicating which alternative to follow?

Sincerely,

A handwritten signature in dark ink that reads "F. W. Holmes". The signature is written in a cursive style with a horizontal line underneath the name.

Francis W. Holmes,
Assistant Professor

FWH:km

NORTH CAROLINA STATE COLLEGE

OF AGRICULTURE AND ENGINEERING

OFFICE OF THE CHANCELLOR

OF THE UNIVERSITY OF NORTH CAROLINA

RALEIGH

June 14, 1956

Mrs. E. P. Metcalf
315 Forest Road
Raleigh, North Carolina

Dear Mrs. Metcalf:

We are very greatly pleased to learn of your desire to give Dr. Metcalf's books and collection to the College as a memorial to him. This is a most generous act on your part and we accept with sincere appreciation. We shall strive to use book plates and other markings to identify the memorial in a proper and fitting way.

It is my understanding that Mr. Brown is having prepared several designs of book markers which will be submitted to you after you return to Raleigh around the first of August.

I am suggesting to Dr. Smith that he investigate the availability of small markers, metallic or plastic, which could be placed on each of the boxes containing the collection.

The books will all be catalogued by the Library and the majority of them will be kept in the Library at Gardner Hall where they will be more accessible to the graduate students and members of the staff who will use them.

The collection of insects will be kept in the space allocated to Entomology, probably for an indefinite period in the room where they are now located. It shall be our aim and desire to have you approve all of the arrangements which will be made in having the books and collection serve as a fitting memorial to Dr. Metcalf.

Most gratefully and cordially yours,

Carey H. Bostian
Chancellor

CHB:H

cc: Mr. Harlan Brown
Dean D. W. Colvard
Dr. D. B. Anderson
Dr. Clyde F. Smith

EAST CAROLINA COLLEGE
GREENVILLE, N. C.

OFFICE OF THE PRESIDENT

May 23, 1956

Governor Luther H. Hodges
State Capitol
Raleigh, North Carolina

Dear Governor Hodges:

According to a survey made by McGraw-Hill Publishing Company, as released in a bulletin: "After the Great Ford Foundation Gift... What Still Remains To Be Done To Provide Decent Faculty Pay", college faculty members are woefully underpaid. From 1940 to 1954, real income before taxes was five percent less for faculty members and 10 percent more for lawyers; 48 percent increase for industrial workers and an 80 percent advance for physicians.

We are having a very difficult time holding our faculty members this year and a more difficult time in securing replacements when one resigns. This is due to the bargaining power of teachers throughout the United States, since the demand is becoming greater than the available supply.

Various states are raising faculty salaries considerably and are able to induce the available talent. Therefore, I sincerely trust that these conditions will be thoroughly understood and some remedy provided in the recommendations made to the 1957 General Assembly.

Sincerely yours,

J. D. Messick, President

cc: Members of the Budget Commission
Board of Higher Education

C
O
P
Y

DEPARTMENT OF ENGINEERING RESEARCH

N. C. State College, Raleigh, N. C.

Date *6/12/54*.....

THE ATTACHED PAPERS ARE REFERRED

To Mr. *C. H. Bostain*.....

By Mr. *M. H. Conner*.....

For the purpose indicated by the check:

- Please note and file.
- Please note and return to me.
- Please note and see me about this, ... A.M. ... P.M.
- Please answer, sending me copy of your letter.
- Please prepare reply for my signature.
- Please take charge of this.
- To be filed.
- To be signed.
- To be checked.
- To be approved.
- To be distributed.
- Immediate action desired.
- For your information.
- Your comments, please.

Remarks:

NORTH CAROLINA STATE COLLEGE MINERALS RESEARCH LABORATORY

Advisory Committee Minutes of Meeting May 25, 1956

Held in the Laboratory at Asheville, North Carolina

Members Present:

John E. Boyd
John V. Hamme
L. L. McMurray
Scoop W. Enloe
W. R. Hudspeth, Jr.
Charles E. Hunter
Carroll P. Rogers
Jasper L. Stuckey
N. White Conner
Mason K. Banks

Members Absent:

None

Visitors Present:

N. O. Johnson, Mgr., Foote Mineral Company

The meeting was called to order at 9:30 A.M. by Mr. Conner. An agenda, outlined below, was followed for the order of business.

- I. Report on Laboratory activities - Mason K. Banks
 - II. Report of Committees
 - III. Selection of new Committee members
 - IV. Report on Geological Survey - Dr. J. L. Stuckey
 - V. New Business
 - VI. Adjournment
-
- I. Laboratory Activities - M. K. Banks

Un-sponsored Project.

Olivine Beneficiation - To begin as soon as pyrophyllite stops.

Sponsored Project.

Beneficiation of Hillsboro Andalusite.
To be completed by June 15.

Service Requests.

1. Sericite Beneficiation - J. I. Fields, Sanford, N. C.
2. Marl Beneficiation - Dixie Chemical Corp., New Bern, N. C.

3. Reagent Testing - National Aluminate Corp., Chicago, Ill.
4. Spodumene Drill Cores - Lincoln Lithium Corp.,
Lincolnton, N. C.
5. Mica Grinding - Farnam Mfg. Co.

To be handled as time permits.

Dr. Stuckey commented that the marl beneficiation seemed like a good project, and that his office had information indicating Dixie Chemical had control of a considerable tonnage of marl.

II. Committee Reports

A. Industry Development. Carroll P. Rogers

Written report furnished last meeting on Industry Development in North Carolina. No new developments to report. Mr. Rogers endorsed and explained Governor Hodges' Small Business Committee, whose \$1,000,000 worth of stock has been sold. Loans of \$10,000 to \$25,000 are made by this organization.

B. Scholarship Committee. W. R. Hudspeth

Lack of interest in establishing scholarships at State College. However, interest shown by industry in helping Asheville laboratory. Twenty-five names submitted as speakers for groups interested in minerals (such as high schools, etc.).

Mr. Conner stated interest must be created in students for geology and the mineral industry.

III. Selection of new Committee Members.

Mr. Conner requested that the members decide upon three names of mineral people from which he could choose two new members of the advisory committee to replace Mr. Rogers and Mr. McMurray as of July 1, 1956. The following names were chosen by the entire Advisory Committee membership:

1. Paul Lancaster, Kings Mountain Mica Co.
2. C. W. Gilchrist, Charlotte Chemical Laboratory
3. W. H. Powell, Jr., Bourne Associates.

IV. Report on Geological Survey - J. L. Stuckey

Dr. Stuckey reported on the progress of the new \$35,000 effort on the part of North Carolina to obtain a better geologic map than is now in existence. As State Geologist, he will head up this program.

After obtaining the support of the U.S.G.S. and commitments for their help in an advisory capacity, Dr. Stuckey has outlined 14 months of field work by Dr. Parker of State College, Drs. Mann, Ingram and White of Chapel Hill, and Dr. Herron of Duke.

Plans call for completion of the manuscript by July 1, 1957.

V. New Business.

1. Several questions regarding I.E.P. were asked Mr. Conner. Mr. Hunter and Mr. McMurray wanted to know how it was supported and what fields it covered. Mr. Conner then explained the function and operation of I.E.P.

Mr. Enloe commented on the English practice of a common research effort in a given industry.

2. Mr. Conner canvassed the advisory members for suggestions for improvements of the laboratory. He asked whether or not the laboratory was serving the best interests of North Carolina from the standpoint of its stated functions.

Mr. Hudspeth felt that the laboratory needed more publicity for its accomplishments and suggested more papers and talks by the staff at technical meetings, etc. Mr. Boyd and Mr. Enloe agreed that moderate publicity would be a good thing.

Mr. McMurray pointed out that such efforts on the part of the laboratory staff would take considerable time and effort away from the laboratory work. His view was supported by Mr. Hunter.

Mr. Banks felt that some enlargement of technical staff would be necessary if he were to spend much time publicizing the laboratory.

Mr. Conner then appointed a committee on Laboratory Publicity composed of:

W. R. Hudspeth, Chairman

Scroop Enloe

John Hamme

He asked this committee to make a study of all phases of publicity and bring in a report of their findings at the next meeting.

Mr. Conner next appointed a committee on Laboratory Expansion and Growth composed of:

John Boyd, Chairman

Charles Hunter

J. L. Stuckey

This committee was charged with the task of making a comprehensive evaluation of the laboratory and to make recommendations regarding future growth and possible expansion.

The meeting was adjourned around 12:00 noon. Next meeting was expected to take place in August or September.

Respectfully submitted,

Mason K. Banks
Secretary