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TREE PRESERVATION BULLETINS NO. 1 & 2

DECEMBER 1935

REVISED & COMBINED MARCH 1938

Clemson University



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PURPOSE AND POLICY



UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

CIVILIAN CONSERVATION CORPS

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TREE PRESERVATION BULLETINS 182
(COMBINED)

PURPOSE
AND
POLICY

BY

A. ROBERT THOMPSON, FORESTER

CIVILIAN CONSERVATION CORPS

ROBERT FECHNER, DIRECTOR



UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON: 1938

TABLE OF CONTENTS

SECTION A

Page

Purpose and Scope of Tree Preservation Bulletins..... 1

Proposed Outline for Tree Preservation Bulletin

Series..... 2

SECTION B

Tree Preservation Policy of the National Park Service. 3

General Policy..... 3

Type I. City Parks, Cemeteries, Highly Developed

Headquarters and Utility Areas..... 4

Type II. Public Campgrounds..... 5

Type III. Roadside Areas..... 5

Type IV. Woodland Areas of Semi-isolated Character... 6

PURPOSE AND POLICY

Chapter I of Tree Preservation Bulletin Series

Section A

Purpose and Scope of Tree Preservation Bulletins

The expansion of the national parks and monuments system during the past few years has brought under the administration of the National Park Service many areas in the East which differ materially in character from the natural areas of the western parks. On such areas as city parks and parkways, national cemeteries, military and historical parks, and certain monuments, the individual tree may possess an importance and value far above that of the ordinary tree, and hence may warrant a more complete program of preservation. It is for assistance in such areas that the Tree Preservation Bulletins will be issued, and not for application to primitive and wilderness areas.

The present conception of tree preservation is of comparatively recent origin, although man has attempted to preserve and repair trees for several centuries. A general understanding of modern tree preservation practice is lacking, due to inadequate published sources and few scattered channels of reliable information.

In order to give those interested in the preservation of National Park Service trees more insight into the modern methods of diagnosis and treatment of mechanical and functional tree disorders, Tree Preservation Bulletins will be issued periodically by the Branch of Forestry. These will be prepared by For-ester A. Robert Thompson, who supervises tree preservation work in areas under the jurisdiction of the National Park Service.

The bulletins should be filed in a separate loose-leaf binder for ready reference. It is anticipated that eventually they will constitute a nucleus for a National Park Service Manual of Tree Preservation.

A tentative outline of the scope of the bulletins follows. It should be understood that they will not necessarily be issued in the order indicated in the outline, but rather will be timed as far as possible with the need. Bulletins should be inserted in the binder according to chapters and subjects as indicated.

In order that these bulletins may be of the maximum value, comments and suggestions are earnestly desired from the field men concerned with the preservation and care of shade trees.

J. D. Coffman,
Chief Forester.

PROPOSED OUTLINEFORTREE PRESERVATION BULLETIN SERIES

CHAPTER I. INTRODUCTORY.

- A. Purpose and Scope of Tree Preservation Bulletins.
- B. Tree Preservation Policy of the National Park Service.

CHAPTER II. SCIENTIFIC BACKGROUND OF TREE PRESERVATION.

- A. Tree Structure and Functions.
- B. Diagnosis of Tree Troubles.
- C. Tree Insects and Their Control.
- D. Tree Diseases and Their Control.
- E. Environmental and Nonparasitic Disease.
- F. Miscellaneous.

CHAPTER III. STANDARD PRACTICES.

- A. Rope, Knots, and Climbing.
- B. Shade Tree Pruning.
- C. Fertilization and Aeration.
- D. Tree Bracing.
- E. Root Treatment.
- F. Lightning Protection for Trees.
- G. General Spraying Practices.
- H. Tree Wounds and Their Treatment.
 - 1. Minor Bark Abrasions.
 - 2. Open Cavity Treatment.
 - 3. Filled Cavity Treatment.
 - 4. Cavity Bracing.
- I. Transplanting. Care Before and After.
- J. Tree Removal.
- K. Miscellaneous Practices.

CHAPTER IV. TREE PRESERVATION EQUIPMENT.

- A. Trucks, Toolboxes, and Crew Equipment.
- B. Small Tools; Storage, Use, Maintenance.
- C. Clothing and Shoes.

CHAPTER V. SAFETY FOR TREE WORKERS.

CHAPTER VI. RECORDS.

- A. Individual Tree Record System.
- B. Narrative Reports.
- C. Time Reports, Purchase Orders, Etc.
- D. Photographs.
- E. Spray Reports.
- F. Annual Insect Report for Eastern Areas.

SECTION B

Tree Preservation Policy of the National Park Service

Excerpt from the Manual of the Branch of Forestry
National Park Service--Pages 34 to 37

Approved July 19, 1935, Arno B. Cammerer, Director.

Where special care must be provided for individual or special trees in intensively used areas such as campgrounds, historical and military parks and monuments, city parks, national cemeteries, parkways, etc., qualified local park foresters or representatives of the Branch of Forestry will maintain inspection of conditions, will prepare plans in cooperation with the park superintendents, and will supervise the work of tree preservation and repair in such fields as pruning, feeding, spraying, bracing, and cavity treatment. The following tree preservation and repair policy has been approved for eastern military and historical parks, monuments, and cemeteries, and it is intended that this policy shall serve as a guide in those exceptional areas of intensive use in other parks and monuments to which it may apply. Close cooperation with the landscape architects and historians shall be maintained in this work to insure the preservation of desirable landscape effects and to insure the preservation of trees of especial historical significance.

General Policy

It is the policy of the National Park Service to provide for such tree treatment as is commensurate with the following factors:

- | | |
|----------------------|-------------------------------------|
| | (Age. |
| 1. General Condition | (General health. |
| | (Soil conditions. |
| | (Location. |
| | (Type and intensity of use of area. |
| | (Species. |
| | (Historical value. |
| 2. Value | (Aesthetic value. |
| | (Expectation of longevity. |
| | (Future development of area. |
| | (Effect of loss of tree. |
| | (Relation to neighboring trees. |
| | (Natural. |
| 3. Hazards | (Artificial. |

In most cases the guiding principle shall be the greatest good for the greatest number of trees. Trees of great value from historical or landscape viewpoints will receive special consideration.

Since the values of the individual trees are vitally concerned with location, it is necessary to state the tree preservation and protection policy for the varied locations involved.

Type ICity Parks, Cemeteries, Highly Developed
Headquarters and Utility Areas

Trees growing in such areas will be accorded as complete preservation and protection as is compatible with the factors stated above, since the replacement and aesthetic values of such trees are comparatively high.

1. The following trees may be removed:

- a. Dead trees.
- b. Dangerous trees.
- c. Trees in poor condition which are doomed due to uncontrollable disease or insect attack.
- d. Trees which are doomed because of natural or artificial hazards.
- e. Trees which are considered undesirable by the Branch of Plans and Design.
- f. Trees which are being crowded out by more valuable neighboring trees.
- g. Trees which are obviously out of place in the site they occupy.

2. Dead wood, intersecting limbs, and unbalanced limbs shall be pruned properly and wounds kept painted with an approved dressing until healed.

3. Constricting roots which interfere with the normal functions of the tree shall be removed and the wounds dressed.

4. Structural weaknesses shall be corrected by mechanical bracing.

5. The perimeters of minor undecayed wounds shall be traced when necessary and the wounds kept dressed until healed.

6. Destructive insects and diseases will be controlled on all trees according to approved practices within budgetary limitations. An annual control schedule for each area will be worked out and followed as soon as practicable.

7. Trees shall be kept in a generally healthy condition by means of periodic feeding or aeration when necessary. General soil improvement by natural means shall be the final objective. Caution must be exercised in the selection and application of chemical fertilizers.

8. Trees growing in a zone of proven danger from lightning should be given protection therefrom by methods approved by the Branch of Forestry.

9. Cavity treatment of a type approved by the Branch of Forestry will be given to trees whose historic or aesthetic

value is such as to warrant treatment where treatment is practicable. Trees of historic value will be designated by the Branch of Historic Sites and Buildings. Trees of aesthetic value will be designated by the Branch of Plans and Design.

Note: A cavity is defined under this heading as that portion of the wood of trunk or limbs which is destroyed by decay. Treatment is justified only when the decay threatens the stability of the tree, when the wound is too large to heal itself, or when the exposed decayed wood impairs aesthetic values.

10. Trees which are not thought to be worth intensive treatment shall be given such first-aid measures as practicable until such time as they constitute a menace or become objectionable and then shall be removed.

Type II

Public Campgrounds

Trees in such areas are high in comparative value and are subjected to many of the artificial hazards of city trees.

1. In newly developed campgrounds the preservation of trees by restricted land use is of paramount importance. Such preservation and protection phases of tree care as placing of barriers, removal of hazardous trees, pruning of dangerous limbs or limbs and foliage over cooking fires to prevent scorching, insect and disease control, aeration and feeding, and a certain amount of wound treatment will be followed. In all pruning operations care shall be exercised so as not to impair shade values where shade is important.

2. Campgrounds on which trees are deteriorating will be allowed periodic rest periods when practicable and the trees given such preservation and protection attention as needed. Special attention in cooperation with the Branch of Plans and Design to soil improvement, insect and disease control, and replanting will be accorded such areas.

Type III

Roadside Areas

1. Roadside areas wherein the trees are of high individual value shall be accorded such phases of tree preservation and protection as described under Type I, with the exception of cavity treatment, which will be accorded trees only after approval in each case by the Branch of Forestry.

2. Roadside areas wherein the trees are of low individual value shall be given only such preservation and protection as necessary to eliminate hazardous conditions which threaten either

life or property. Essential operations under this policy include the removal of fire hazards, removal of dead trees when hazardous or unsightly, pruning of dangerous limbs, bracing of hazardous trees, and insect and disease control.

Type IV

Woodland Areas of Semi-isolated Character

Dependent upon volume of use by the public, tree preservation and protection in such areas shall include the removal of fire hazards and large dead limbs along thoroughfares and essential large-scale disease and insect control to prevent or control epidemics.



