WSRC-TR-94-0133 684742

FALL1993 HARDWOOD SEED COLLECTION PROJECT FOR THE SAVANNAH RIVER SITE (U)

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DOE Contract No. DE-AC09-89SR18035

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684742

UNITED STATES FOREST SERVICE

FALL 1993 HARDWOOD SEED COLLECTION PROJECT

for the

SAVANNAH RIVER SITE

TABLE OF CONTENTS

Section	Title	Page
1.0	INTRODUCTION	. 1
2.0	METHODOLOGY	. 1
3.0	RESULTS	. 3
	<u>Tables</u>	
<u>Table</u>	Title	
1	Combined Weight Data for the Fall 1993 Hardwood Seed Collection Project	
2	Individual Tree Data for the Fall 1993 Hardwood Seed Collection Project	
	Figures	
Figure	<u>Title</u>	
1	Tree Procurement Area	
	Appendices	
Appendix	<u>Title</u>	
A	Tree Locations	
В	Tree Data and Photographs	

1.0 INTRODUCTION

The Fall 1993 Hardwood Seed Collection Project was conducted as an initial step towards regenerating creek habitat on the Savannah River Site (SRS) that was damaged by past plant operating activities. Seed from various hardwood species was collected from the coastal plain of South Carolina (See Table 1). The contract required that seed collected from each tree be kept separate through processing and delivery. Height and dbh measurements and a photograph of each tree were also required. The contract procurement area was expanded eastward in an effort to alleviate problems associated with locating adequate seed sources in and around SRP (See Figure 1).

2.0 METHODOLOGY

Three procurement crews were organized to locate appropriate host trees and to collect the seed. The Summerville, South Carolina crew procured from the eastern edge of the Francis Marion National Forest in Berkeley County. The Florence, South Carolina crew procured from Florence and Marion Counties. The Moncks Corner, South Carolina crew procured from Charleston and Berkeley Counties.

A code was developed to aid in identifying and tracking the seed. The code and an explanation are given below:

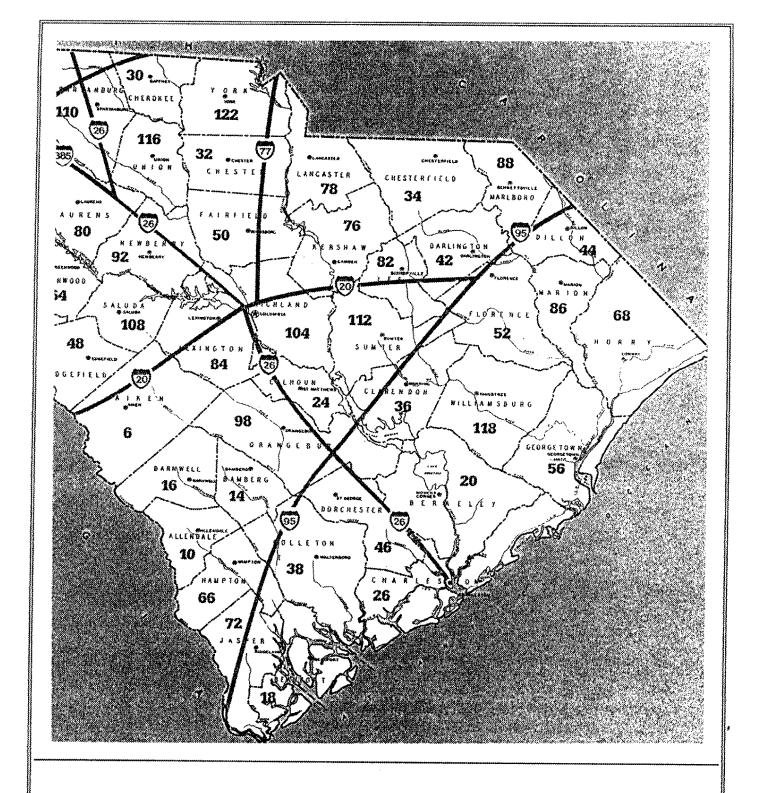
Page - 1

Table 1

Combined Weight Data for the Fall 1993 Hardwood Seed Collection Project

	Swamp	Green	o a a	Swamp	Water	Water	anubia	Cherrybark Oak	Specie
TOTALS	Swamp Chestnut Oak	Ash	Cypress	Tupelo	Tupelo	Hickery	Hickory	bark Oak	
ĊΩ	es es	~	on.	ហ	4	ω	N	↓ ⊷	Specie #
232	20	N	20	25	150	10	O	ហ	Contract Amount
247	#O#	N	22	27	156	80	14	ø	Delivered Amount
699	~O~	4	ယ ဟ	& 5	თ ცა გა	N W	14	თ	Green Weight
		1.63 : 1	1.61 : 1	(13 14 10 10 10 10 10	(1) (2) (3) (4) (4) (4) (4) (4) (4) (4)	jus jus UT «« jus	1.00:1	1.00 : 1	Ratio Green/ Delivered
39		إ سف	. . ≪	1-1 1-1	1 3	-1	j andi.	N	* Trees

CANAL ENVIRONMENTAL SERVICES
Fall 1993 USFS
Seed Collection Project



TREE LOCATION MAP PROCUREMENT AREA

Procurement area = S-1-1 = Individual tree number

S = Summerville ||

F = Florence Specie # (See Table 1)

M = Moncks Corner

Host trees were flagged with the appropriate code written on the flag. Metal ID tags were placed with the seed as it was collected and remained with the seed through processing and delivery.

Seed was collected by picking it up off the ground or collecting it from nets hung under the tree. The ash seed was collected by picking it off the tree with the aid of a bucket truck. The Cherrybark Oak seed was float tested and refrigerated and the other seed was refrigerated as it was collected.

All seed was delivered to the South Carolina Forestry Commission's Niederhof Seed Orchard located north of Tillman, South Carolina for processing and cold storage.

The acorns and hickory nuts were contained in heavy plastic bags and maintained in cold storage until delivery at SRS. The ash and cypress were spread out on screen racks and allowed to air dry. Twigs and other debris were then removed by hand and the seed was maintained in cold storage. The ash was not dewinged. The water and swamp tupelo were run through a macerator and the seeds were recovered by flotation. They were allowed to air dry on racks and maintained in cold storage.

CANAL ENVIRONMENTAL SERVICES Fall 1993 USFS Seed Collection Project Page - 2

3.0 RESULTS

The project was completed and the seed delivered to SRS on December 23, 1993. CES performed very well to the contract by delivering 247 pounds of seed (Table 1). All species were delivered except Swamp Chestnut Oak. It appears that the nut crop for this species was a total failure in our procurement area this year and Pignut Hickory and additional Water Hickory were substituted for it. The tree number limit of 12 was exceeded for Water Tupelo by 1 because it was impossible to procure the contract amount otherwise.

Individual Tree Data for the Fall 1993 Hardwood Seed Collection Project

Savannah River Site

 	1		1		!	<u> </u>		•	***************************************	ţ	·······	··········	1		•	
X-4-5	N-4-4	M-4-3	3-4-2	X	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	M-3-5	X-3-4	M-3-3	M-3-2	X-3-1	F-3-2	# # 3 - 1 # - 3 - 1	S-2-1	# % - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	S-1-1	Tree #
24.2	20.3	20.1	18.3	22.2	18.4	19.2	18.7	23.2	16.5	31.0	18.3		13.4	30.5	24.8	DBH (in)
72	70	65	62	65	40	81	87	72	71	80	60	48	85	66	105	Height (ft)
15.00	11.00	4.00	11.00	9.00	22.00	2.00	1.30	1.90	3.50	2.00	1.10	8.00	14.00	5.70	0.50	Yield (lbs)
Tawcaw	Tawcaw	Tawcaw	Tawcaw	Tawcaw	Johnston	Tawcaw	Tawcaw	Tawcaw	Tawcaw	Tawcaw	Tawcaw	Tawcaw	Meggett	Seabrook	Wahee	Soil Type
Berkeley		Berkeley	Berkeley	Berkeley	Florence	Berkeley	Berkeley	Berkeley	Berkeley	Berkeley	Marion	Marion	Berkeley	Charleston	Berkeley	Location
Berkeley 33~21' 79~47'	33~ 17'	33~ 17'	33~ 17'	33- 17'	34~ 11/	33~ 21'		33~ 21′	33~ 21′	33~ 21′	33~ 50′	33~ 50'	33~ 08'	32~	33~ 09'	Latitude
79~ 47′	79~ 37′	79~ 37'	79~ 37′	79~ 37'	47		471	79~ 47′	79~ 47/	79- 471	79~ 21′	79~ 21'	79~ 48′	80~ 04'	79~ 50′	Longitude

Individual Tree Data for the Fall 1993 Hardwood Seed Collection Project

Savannah River Site

Tree #	DBH (in)	Height (ft)	0	Soil Type	Location	Latitude	Longitude
X-4-6	18.7	85	10.50	Tawcaw	Berkeley	33~ 21'	79~ 47′
M-4-7	27.2	80	10.50	Tawcaw	Berkeley	33~ 21'	79~ 471
M-4-8	16.2	83	14.00	Tawcaw	Berkeley	33~ 21'	79~ 47′
M-4-9	22.0	74	13.00	Tawcaw	Berkeley	33~ 21'	79~ 47'
X-4-10	19.1	76	13.40	Tawcaw	Berkeley	33~ 21'	79~ 471
***************************************	16.3	78	11.00	Tawcaw	Berkeley	33~ 21'	79- 47'
M-4-12	16.0	1.8	12.00	Tawcaw	Berkeley	33~ 21'	79~ 47′
**************************************	14.5	75	0.68	Tawcaw	Florence	34~ 11'	79~ 47′
S-5-1	10.7	70	0.88	Chastain	Berkeley	33~ 13/	79~ 28′
S-5-2	22.5	65	0.66		Berkeley	33~ 13′	79~ 28′
S-5-8	13.8	70	0.40	Chastain	Berkeley	33~ 13*	79~ 28′
35		62	3.74	Rains	Berkeley	33~ 04'	79~ 50'
N-5-2	14.8	67	1.61	Rains	Berkeley	33~ 04'	79~ 50′
**************************************	16.6	66	3.60	Rains	Berkeley	33~ 04'	79~ 50'
M-5-4	16.9		1.36	Rains	Berkeley	33~ 04'	79~ 50'
X-5-5	21.1	64	11.44	Rains	Berkeley	33~ 04'	79~ 50′

Individual Tree Data for the Fall 1993 Hardwood Seed Collection Project

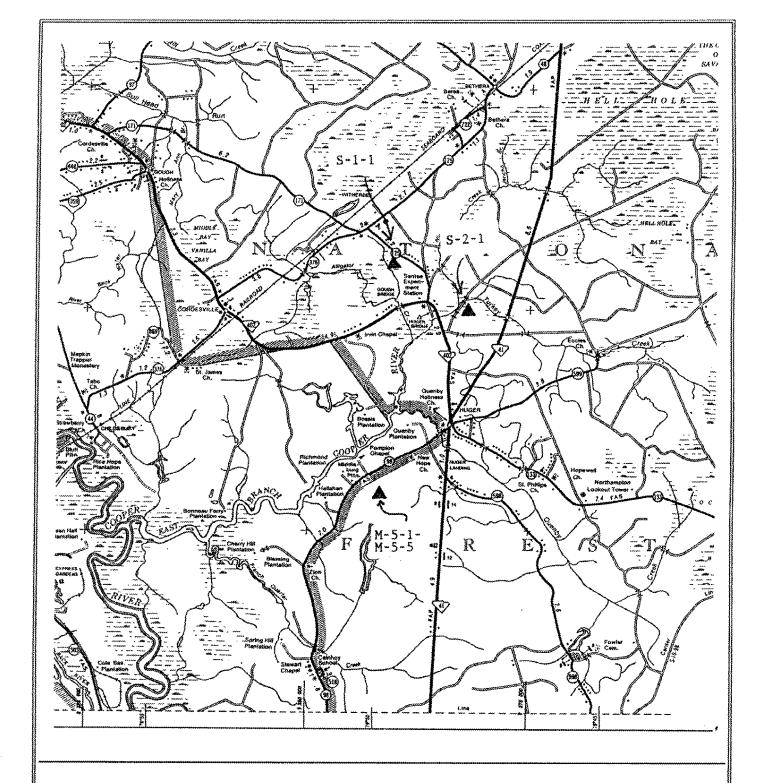
Savannah River Site

				1	***************************************	······································	·			***************************************	***************************************	······································	***************************************	***************************************	***************************************	43
	- 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995 - 1995	0000 0000 0000 0000 0000 0000 0000 0000 0000		V AND	X *** *** *** *** *** *** *** *** *** *	***************************************			F-7-1	X -6-5	X -6-3	M-6-2	M-6-1	M-5-7	M-5-6	Tree #
200 (200) (2	MF cdf 440 990 900, 000, 000, 000, 000, 000, 0	ffer 1660 1660 werp meer meen nicht 1660 1660 dans Gerts d	NAME AND THE	400 day are are the the the the the the the the the th	000 000 OPP OPP OPP OPP OPP OPP OPP OPP	990 1990 -0910 -0510 -0710 -0910 -0440 -0450 -0450 -0450 -0450	der dere dere dere dere der der der der		7.6	12.0	8.2	10.0	8	15.4	14.8	DBH (in)
			AND			## CONTRACTOR CO		***************************************	52	21		1 1 5	24	77	73	Height (ft
*********		**********					*******		N — —		7	6		7	3)
				and a second to the second to	**************************************				2.40	5.00	4.50	8.50	4.00	0.88	1.43	Yield (lbs)
**************************************	est des est est an						***************************************		Tawcaw	Water	Water	Water	Water	Dawhoo	Dawhoo	pe.
			on one one the same one one one one one one one one one on	***************************************		***			Marion	Berkeley	Berkeley	Berkeley	Berkeley	Charleston	Charleston	
						### ## ## ## ## ## ## ## ## ## ## ## ##	***		33~ 50'	33~ 24'	33~ 24'	33~ 24'	33~ 24'	32~ 52'	32~ 52′	Latitude
	· · · · · · · · · · · · · · · · · · ·				***************************************			Sa - Cas,	79~ 21'	80~ 01'	80~ 01'	80~ 01'	80~ 01'	80~ 08′	80~ 08'	Longitude

APPENDIX A

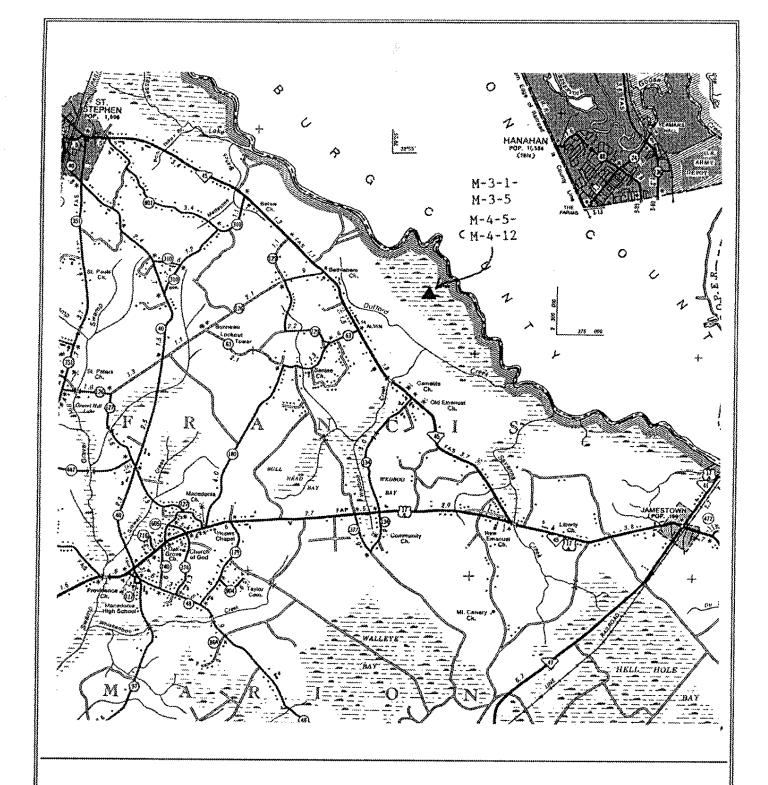
Tree Locations

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Trees:

S-1-1, S-2-1 M-5-1 - M-5-5

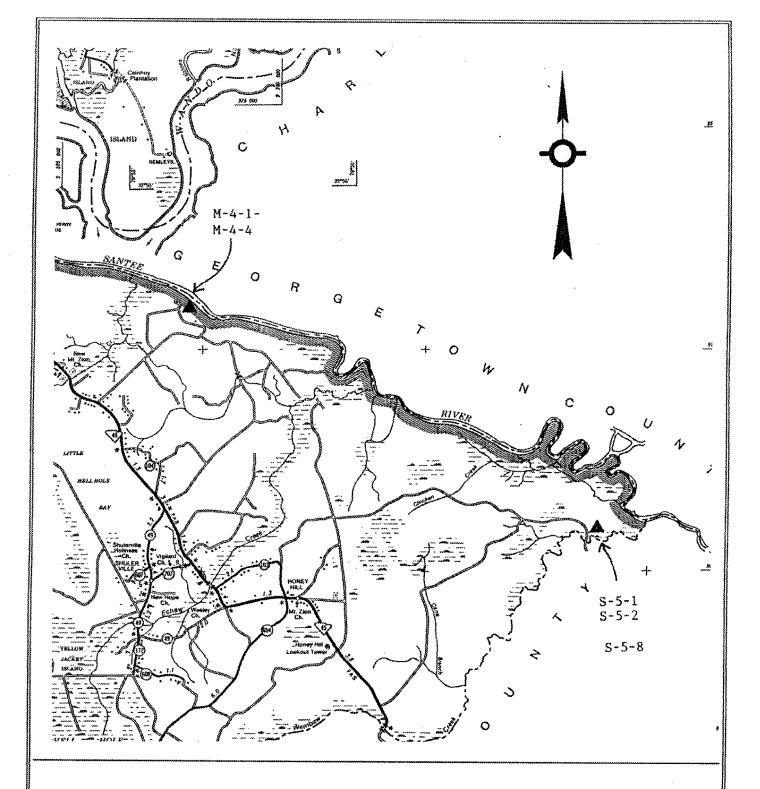


Trees:

M-3-1 - M-3-5

Canal Environmental Services Fall 1993 USFS Seed Collection Project

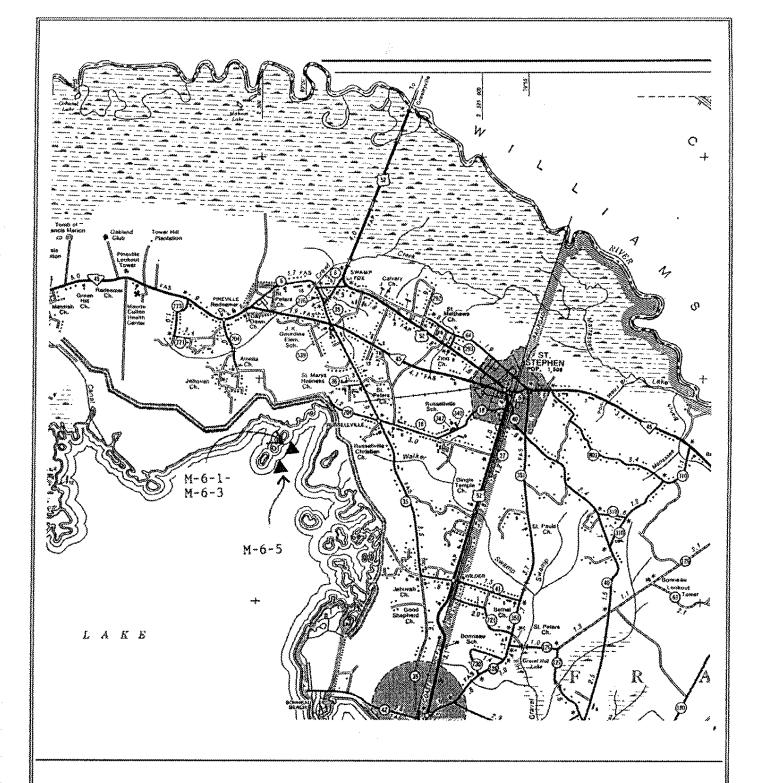
M-4-5 - M-4-12



Canal Environmental Services Fall 1993 USFS Seed Collection Project

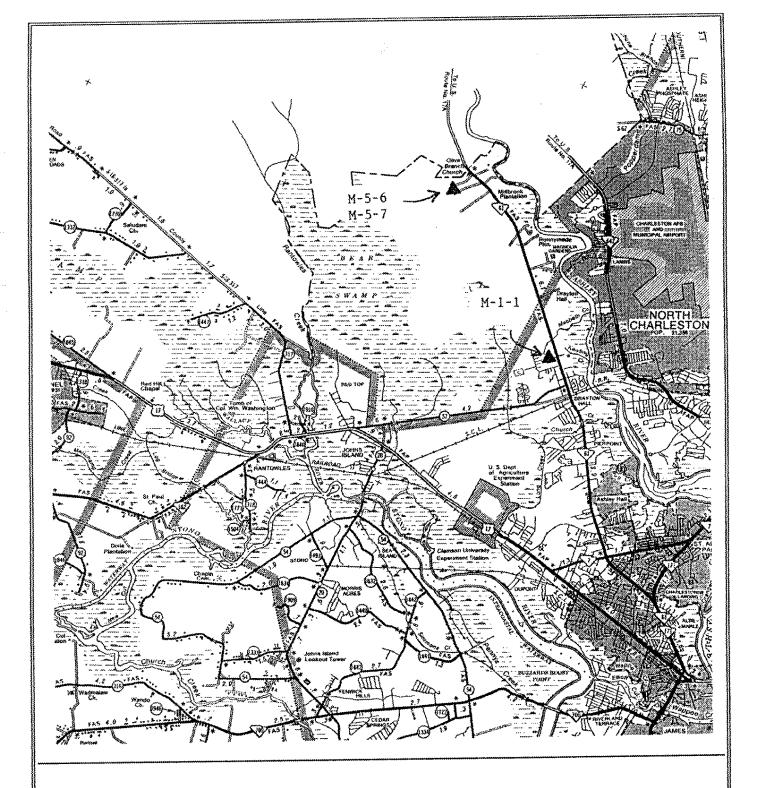
Trees:

S-5-1, S-5-2 S-5-8, M-4-1 -M-4-4



Trees:

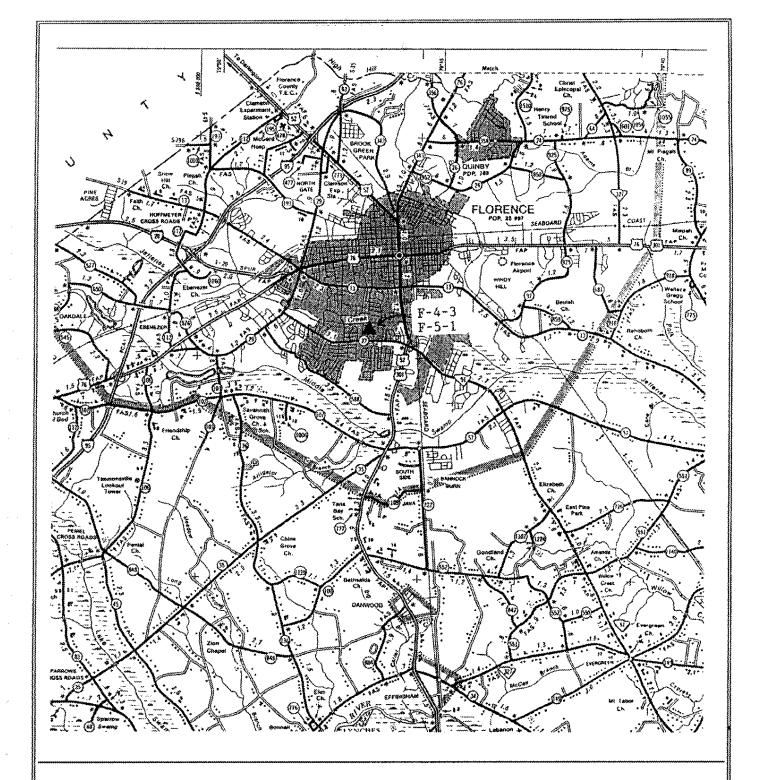
M-6-1 - M-6-3 M-6-5



TREE LOCATION MAP CHARLESTON COUNTY

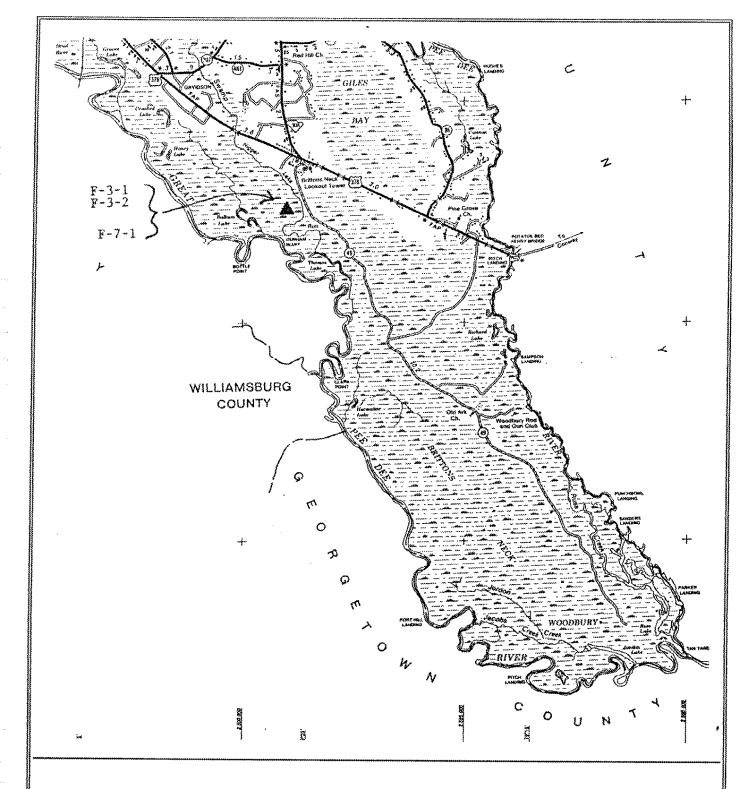
Trees:

M-1-1, M-5-6 M-5-7



TREE LOCATION MAP FLORENCE COUNTY

Trees: F-4-3, F-5-1



TREE LOCATION MAP MARION COUNTY

Canal Environmental Services Fall 1993 USFS

Seed Collection Project

Trees:

F-3-1, F-3-2 F-7-1

APPENDIX B

Tree Data and Photographs





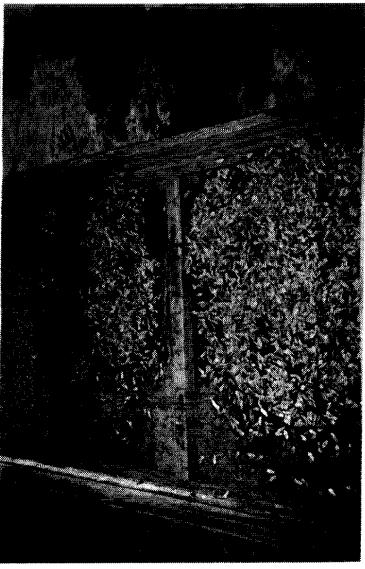
Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: This first picture is of Dr. McKee inspecting the Comments: seed after delivery to the cooler at SRS. Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments: This is a picture of the unprocessed seed being weighed in at the Neiderhof Orchard. Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments: This is a picture of a SCFC employee soaking the seed prior to maceration. Note the macerator at bottom right,

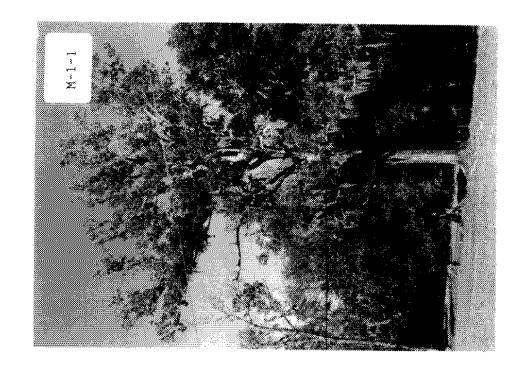
Tree #:	Diameter (in):
Common name:	Height (ft):
Processed	
Seed yield (lbs):	Location:
Comments: This is to maceration.	a picture of water tupelo being soaked prior
Tree #:	Diameter (in):
Common name:	Height (ft):
Processed Seed yield (lbs):	Location:
Comments: This is cleaned.	a picture of water tupelo as it is being
Tree #:	Diameter (in):
Common name:	Height (ft):
Processed Seed yield (lbs):	Location:
Comments: This is racks. Note the swamp	a picture water tupelo drying on the screen tupelo in the background.

.











Tree #: M-1-1

Diameter (in): 24.8

Common name: Cherrybark Oak Height (ft):

Processed

Seed yield (lbs): 5.7

Location:

Charleston

County

Comments: This tree is located on the edge of a cemetary on a Seabrook soil type which has loamy fine sand surface and subsurface layer.

Tree #: S-1-1

Diameter (in): 13.4

Common name: Cherrybark Oak

Height (ft): 105

Processed

Seed yield (lbs): .5 Location: Berkeley

County

This tree is located on Francis Marion National Forest in a wet flat surrounded by planted pine. The soil type is Wahee which has a loamy surface layer and a silty clay loam to silty clay subsoil

Tree #: F-3-1

Diameter (in): 14.1

Common name: Water Hickery Height (ft): 48

Processed

Seed yield (lbs): 8 Location: Marion

County

This tree is located on private land on a first terrace of the Great Pee Dee River. The soil type is Tawcaw which has a silty clay surface layer and a subsoil that progresses from a firm clay loam to a firm clay.

Tree #: F-3-2

Diameter (in): 18.3

Common name: Water Hickory Height (ft): 60

Processed

Seed yield (lbs): 1.1

Location: Marion

This tree is located on private land on a first Comments: terrace of the Great Pee Dee River. The soil type is Tawcaw which has a silty clay surface layer and a subsoil that progresses from a firm clay loam to a firm clay.

Tree #: S-2-1

Diameter (in): 13.4

Common name: Pignut Hickory Height (ft): 85

Processed

Seed yield (lbs): 14.0 Location: Berkeley

Comments: This tree is located in the Francis Marion National Forest on the bank of a small creek. The soil type resembles Meggett which has a loamy surface layer and a firm clay loam to firm clay subsoil.

Tree #:

Diameter (in):

Common name:

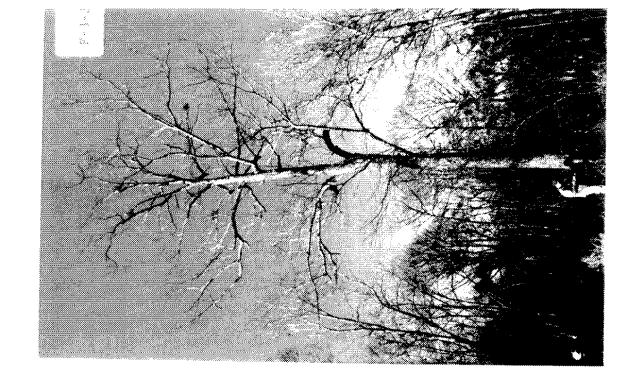
Height (ft):

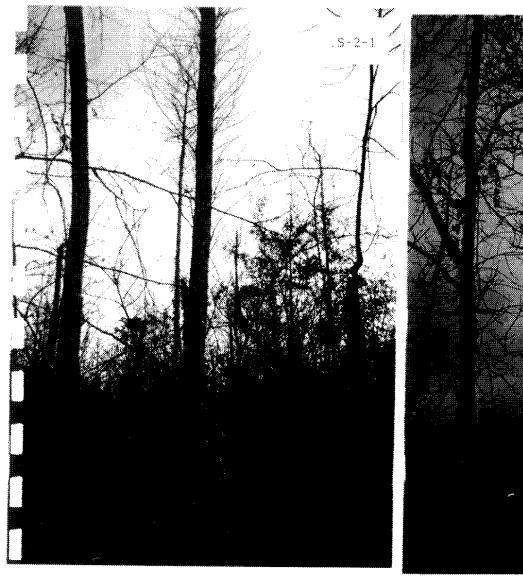
Processed

Seed yield (lbs):

Location:

Comments:







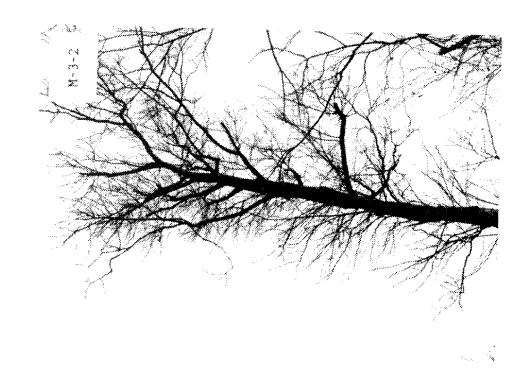


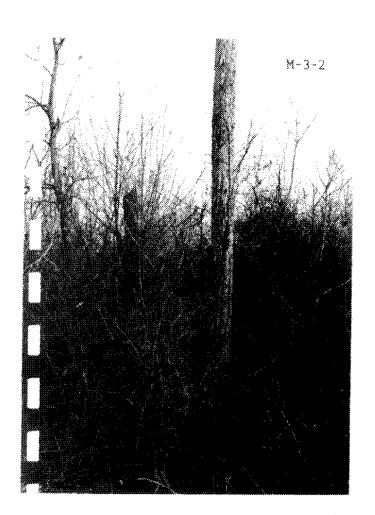




Tree #: M-3-1 Diameter (in): 31.0 Common name: Water Hickory Height (ft): 80 Processed Seed yield (lbs): 2.0 Location: Berkeley Comments: This tree is located in the Francis Marion National Forest on a first terrace of the Santee River. The soil type is Tawcaw which has a silty clay surface layer and a subsoil that progresses from a firm clay loam to a firm clay. Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments: Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments:

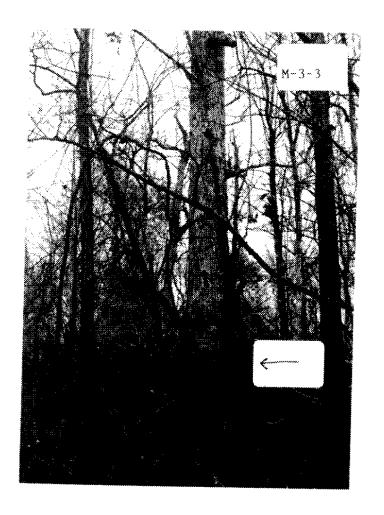
Tree #: M-3-2 Diameter (in): 16.5 Common name: Water Hickory Height (ft): 71 Processed Seed yield (lbs): 3.5 Location: Berkeley Comments: This tree is located in the Francis Marion National Forest on a first terrace of the Santee River. The soil type is Tawcaw which has a silty clay surface layer and a subsoil that progresses from a firm clay loam to a firm clay. Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments: Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments:

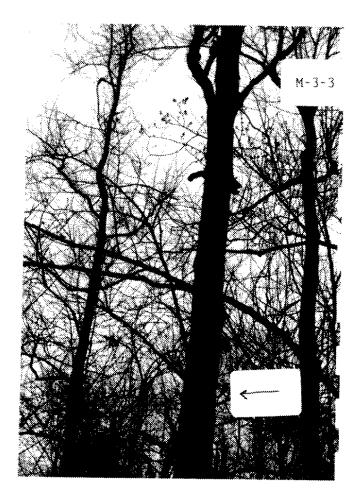










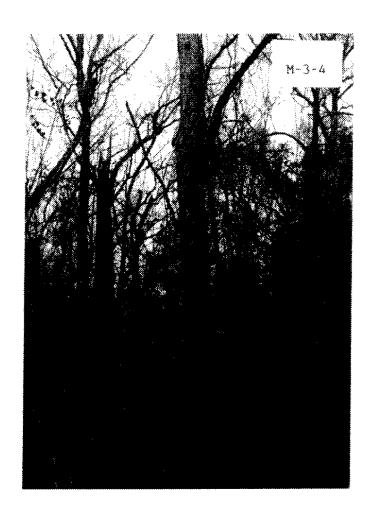


Tree #: M-3-3 Diameter (in): 23.2 Common name: Water Hickory Height (ft): 72 Processed Seed yield (lbs): 1.9 Location: Berkeley This tree is located in the Francis Marion National Comments: Forest on a first terrace of the Santee River. The soil type is Tawcaw which has a silty clay surface layer and a subsoil that progresses from a firm clay loam to a firm clay. Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments: Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments:

Tree #: M-3-4 Diameter (in): 18.7 Common name: Water Hickory Height (ft): 87 Processed Seed yield (lbs): 1.3 Location: Berkeley This tree is located in the Francis Marion National Comments: Forest on a first terrace of the Santee River. The soil type is Tawcaw which has a silty clay surface layer and a subsoil that progresses from a firm clay loam to a firm clay. Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments: Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments:













Tree #: M-3-5 Diameter (in): 19.2 Common name: Water Hickory Height (ft): 81 Processed Seed yield (lbs): 2.0 Location: Berkeley This tree is located in the Francis Marion National Comments: Forest on a first terrace of the Santee River. The soil type is Tawcaw which has a silty clay surface layer and a subsoil that progresses from a firm clay loam to a firm clay. Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments: Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments:

Tree #: F-4-3

Diameter (in): 18.4

Common name: Water Tupelo

Height (ft): 40

Processed

Seed yield (lbs): 22.0

Location: Florence

Comments: This tree is located in Jefferies Creek Park. Its top was damaged by Hugo. The soil type is Johnston which has a mucky loam surface layer and a sandy loam subsoil.

Tree #: M-4-1

Diameter (in): 22.2

Common name: Water Tupelo

Height (ft): 65

Processed

Seed yield (lbs): 9.0

Location:

Berkeley

This tree is located on the Francis Marion National Forest at the south end of Gaillard Lake in the Santee RIver swamp. The soil type resmbles Tawcaw which has a silty clay surface layer and a subsoil that progresses from a firm clay loam to a firm clay.

Tree #:

Diameter (in):

Common name:

Height (ft):

Processed

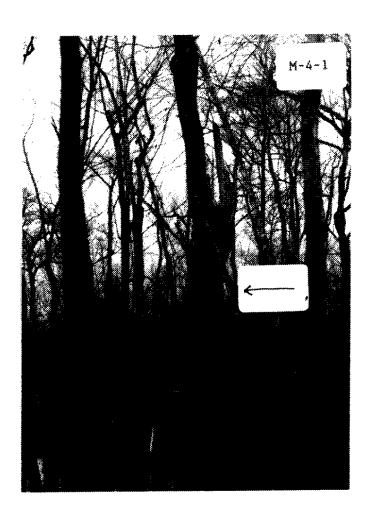
Seed yield (lbs):

Location:

Comments:









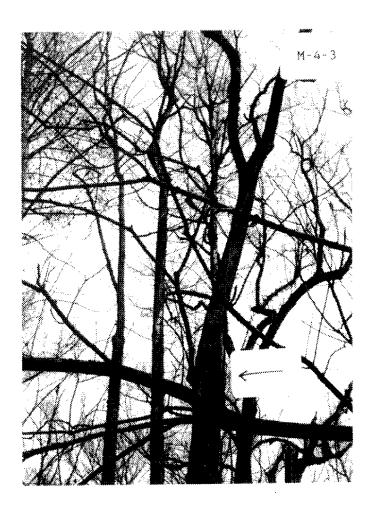




Tree #: M-4-2 Diameter (in): 18.3 Common name: Water Tupelo Height (ft): 62 Processed Seed yield (lbs): 11.0 Location: Berkeley This tree is located on the Francis Marion National Comments: Forest at the south end of Gaillard Lake in the Santee River swamp. The soil type resmbles Tawcaw which has a silty clay surface layer and a subsoil that progresses from a firm clay loam to a firm clay. Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments: Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments:

Tree #: M-4-3 Diameter (in): 20.1 Common name: Water Tupelo Height (ft): 65 Processed Seed yield (lbs): 4.0 Location: Berkeley Comments: This tree is located on the Francis Marion National Forest at the south end of Gaillard Lake in the Santee River swamp. The soil type resmbles Tawcaw which has a silty clay surface layer and a subsoil that progresses from a firm clay loam to a firm clay. Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments: Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments:











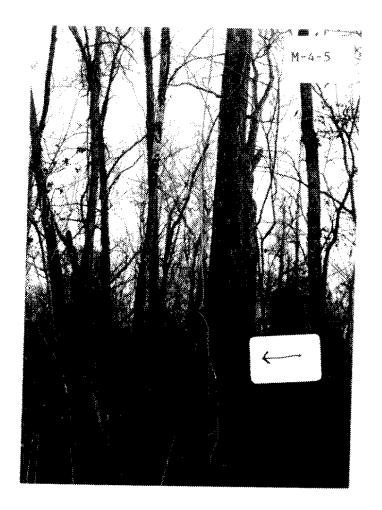


Diameter (in): 20.3 Tree #: M-4-4 Height (ft): 70 Common name: Water Tupelo Processed Seed yield (lbs): 11.0 Location: Berleley This tree is located on the Francis Marion National Comments: Forest at the south end of Gaillard Lake in the Santee River swamp. The soil type resembles Tawcaw which has a silty clay surface layer and a subsoil that progresses from a firm clay loam to a firm clay. Diameter (in): Tree #: Height (ft): Common name: Processed Location: Seed yield (lbs): Comments: Diameter (in): Tree #: Height (ft): Common name: Processed Location: Seed yield (lbs): Comments:

Tree #: M-4-5 Diameter (in): 24.2 Common name: Water Tupelo Height (ft): 72 Processed Seed yield (lbs): 15.0 Location: Berkeley Comments: This tree is located on the Francis Marion National Forest in the Santee River swamp. The soil type resembles Tawcaw which has a silty clay surface layer and a subsoil that progresses from a firm clay loam to a firm clay. Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments: Tree #: Diameter (in): Common name: Height (ft): Processed Location: Seed yield (lbs): Comments:













Tree #: M-4-6 Diameter (in): 18.7 Common name: Water Tupelo Height (ft): 85 Processed Seed yield (lbs): 10.5 Location: Berkeley Comments: This tree is located on the Francis Marion National Forest in the Santee River swamp. The soil type resembles Tawcaw which has a silty clay surface layer and a subsoil that progresses from a firm clay loam to a firm clay. Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments: Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments:

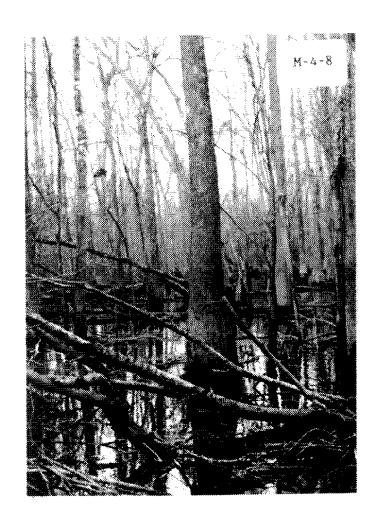
Tree #: M-4-7 Diameter (in): 27.2 Common name: Water Tupelo Height (ft): 80 Processed Seed yield (lbs): 10.5 Location: Berkeley Comments: This tree is located on the Francis Marion National Forest in the Santee River swamp. The soil type resembles Tawcaw which has a silty clay surface layer and a subsoil that progresses from a firm clay loam to a firm clay Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments: Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments:













Tree #: M-4-8 Diameter (in): 16.2 Common name: Water Tupelo Height (ft): 83 Processed Seed yield (lbs): 14.0 Location: Berkeley Comments: This tree is located on the Francis Marion National Forest in the Santee River swamp. The soil type resembles Tawcaw which has a silty clay surface layer and a subsoil that progresses from a firm clay loam to a firm clay. Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments: Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments:

Tree #: M-4-9 Diameter (in): 22.0 Common name: Water Tupelo Height (ft): 74 Processed Seed yield (lbs): 13.0 Location: Berkeley Comments: This tree is located on the Francis Marion National Forest in the Santee River swamp. The soil type resembles Tawcaw which has a silty clay surface layer and a subsoil that progresses from a firm clay loam to a firm clay. Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments: Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments:

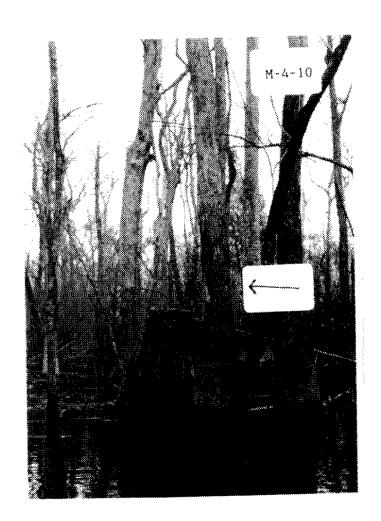


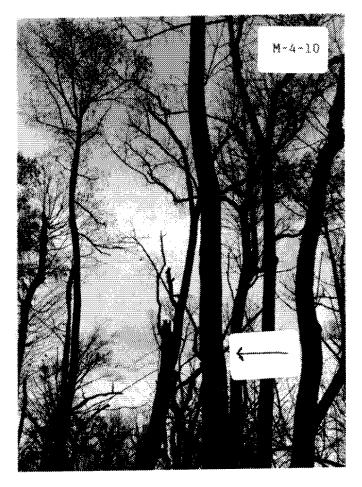










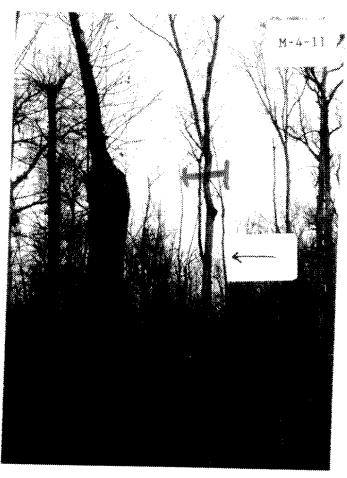


Tree #: M-4-10 Diameter (in): 19.1 Common name: Water Tupelo Height (ft): 76 Processed Seed yield (lbs): 13.4 Location: Berkeley Comments: This tree is located on the Francis Marion National Forest in the Santee River swamp. The soil type resembles Tawcaw which has a silty clay surface layer and a subsoil that progresses from a firm clay loam to a firm clay. Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments: Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments:

Tree #: M-4-11 Diameter (in): 16.3 Common name: Water Tupelo Height (ft): 78 Processed Seed yield (lbs): 11.0 Location: Berkeley Comments: This tree is located on the Francis Marion National Forest in the Santee River swamp. The soil type resembles Tawcaw which has a silty clay surface layer and a subsoil that progresses from a firm clay loam to a firm clay. Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments: Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments:









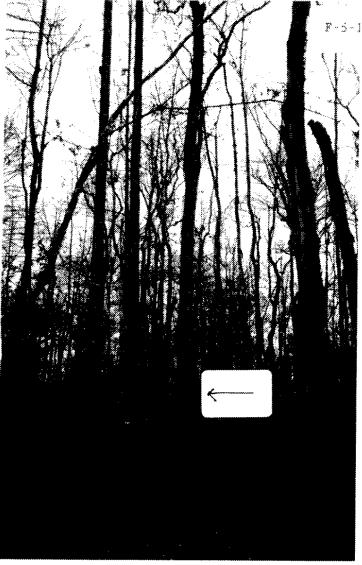




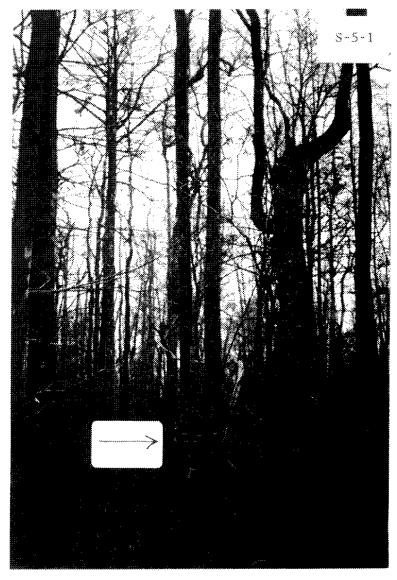
Diameter (in): 16.0 Tree #: M-4-12 Common name: Water Tupelo Height (ft): 81 Processed Seed yield (lbs): 12.0 Location: Berkeley This tree is located on the Francis Marion National Comments: Forest in the Santee River swamp. The soil type resembles Tawcaw which has a silty clay surface layer and a subsoil that progresses from a firm clay loam to a firm clay. Tree #: Diameter (in): Common name: Height (ft): Processed Location: Seed yield (lbs): Comments: Tree #: Diameter (in): Height (ft): Common name: Processed Location: Seed yield (lbs): Comments:

Tree #: F-5-1 Diameter (in): 14.5 Common name: Swamp Tupelo Height (ft): 75 Processed Seed yield (lbs): .68 Location: Florence Comments: This tree is located in Jefferies Creek Park. Its top was damaged by Hugo. The soil type is Johnston which has a mucky loam surface layer and a sandy loam subsoil. Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments: Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments:











Tree #: M-5-1

Diameter (in): 15.4

Common name: Swamp Tupelo

Height (ft): 62

Processed

Seed yield (lbs): 3.74

Location: Berkeley

This tree is located on private property in a gum Comments: pond. The soil type resembles Rains which has surface layer of fine sandy loam and a subsurface layer of fine sandy loam and sandy clay loam.

Tree #: S-5-1

Diameter (in): 10.7

Common name: Swamp Tupelo

Height (ft): 70

Processed

Seed yield (lbs): .88

Location: Berkeley

Comments: This tree is located in a wet flat on the Francis Marion National Forest. The soil type resembles Chastain which has surface layer of silty clay loam and a subsurface layer of silty clay loam and silty clay.

Tree #:

Diameter (in):

Common name:

Height (ft):

Processed

Seed yield (lbs):

Location:

Comments:

Tree #: M-5-3 Diameter (in): 16.6 Common name: Swamp Tupelo Height (ft): 66 Processed Seed yield (lbs): 3.60 Location: Berkeley Comments: This tree is located on private property in a gum pond. The soil type resembles Rains which has surface layer of fine sandy loam and a subsurface layer of fine sandy loam and sandy clay loam. Tree #: S-5-2 Diameter (in): 22.5 Common name: Swamp Tupelo Height (ft): 65 Processed Seed yield (lbs): .66

Comments: This tree is located in a wet flat on the Francis Marion National Forest. The soil type resembles Chastain which has surface layer of silty clay loam and a subsurface layer of silty clay loam and silty clay.

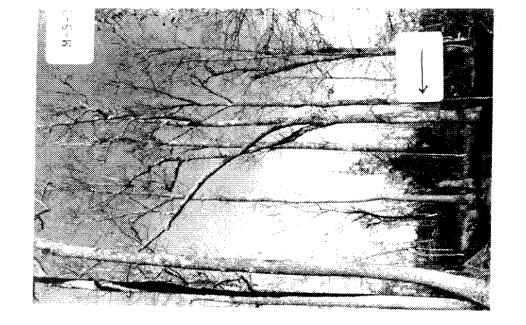
Location: Berkeley

Tree #: Diameter (in):

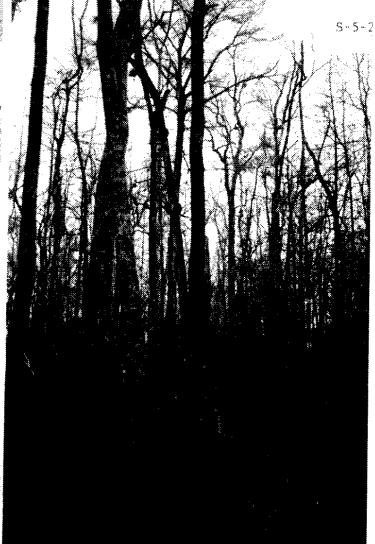
Common name: Height (ft):

Processed Seed yield (lbs): Location:

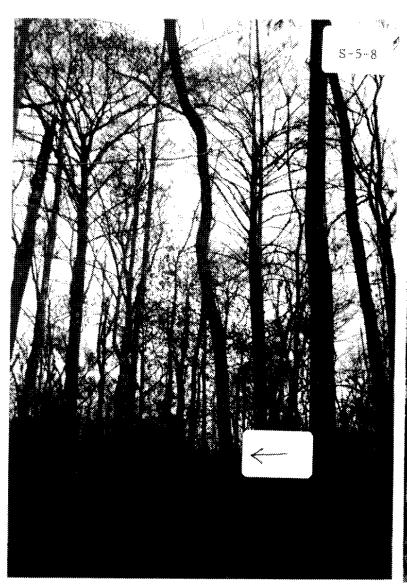
Comments:













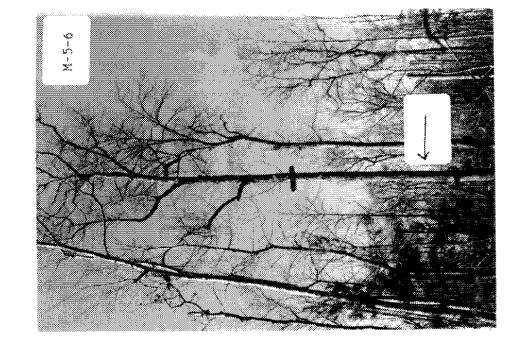
Tree #: M-5-4 Diameter (in): 16.9 Common name: Swamp Tupelo Height (ft): 88 Processed Seed yield (lbs): 1.36 Location: Berkeley Comments: This tree is located on private property in a gum pond. The soil type resembles Rains which has surface layer of fine sandy loam and a subsurface layer of fine sandy loam and sandy clay loam. Tree #: S-5-8 Diameter (in): 13.8 Common name: Swamp Tupelo Height (ft): 70 Processed Seed yield (lbs): .40 Location: Berkeley This tree is located in a wet flat on the Francis Marion National Forest. The soil type resembles Chastain which has surface layer of silty clay loam and a subsurface layer of silty clay loam and silty clay. Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments:

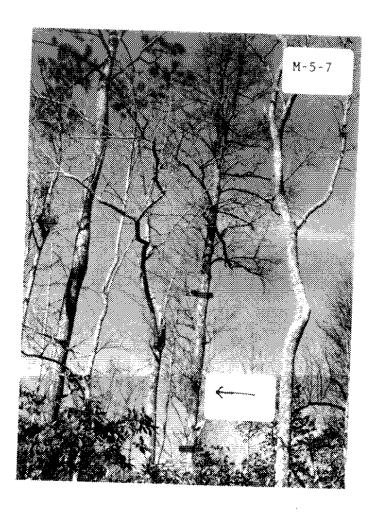
Tree #: M-5-5 Diameter (in): 21.1 Common name: Swamp Tupelo Height (ft): 64 Processed Seed yield (lbs): 11.44 Location: Berkeley Comments: This tree is located on private property in a gum pond. The soil type resembles Rains which has surface layer of fine sandy loam and a subsurface layer of fine sandy loam and sandy clay loam. Tree #: M-5-2 Diameter (in): 14.8 Common name: Swamp Tupelo Height (ft): 67 Processed Seed yield (lbs): 1.61 Location: Berkeley This tree is located on private property in a gum Comments: pond. The soil type resembles Rains which has surface layer of fine sandy loam and a subsurface layer of fine sandy loam and sandy clay loam. Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments:

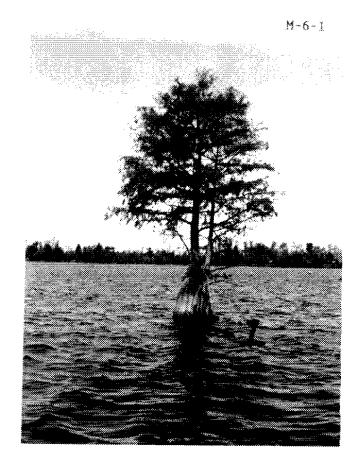












Tree #:

M-5-6

Diameter (in): 14.8

Common name: Swamp Tupelo

Height (ft): 73

Processed

Seed yield (lbs): 1.43

Location: Charleston

This tree is located on private property in a gum Comments: pond. The soil type resembles Dawhoo which has surface layer and subsurface layer of loamy sand.

Tree #: M-5-7

Diameter (in): 15.3

Common name: Swamp Tupelo

Height (ft):

Processed

Seed yield (lbs): .88

Location: Charleston

This tree is located on private property in a gum pond. The soil type resembles Dawhoo which has surface layer and subsurface layer of loamy sand.

Tree #: M-6-1

Diameter (in): 8.1

Common name: Bald Cypress

Height (ft): 24

Processed

Seed yield (lbs): 4.0 Location:

Berkeley

This tree is located in Lake Moultrie and is Comments:

continuously inundated.

Tree #:

M-6-2

Diameter (in): 10.0

Common name: Bald Cypress

Height (ft): 16

Processed

Seed yield (lbs): 8.5

Location: Berkeley

Comments:

This tree is located in Lake Moultrie and is

continuously inundated.

Tree #: M-6-3

Diameter (in): 8.2

Common name: Bald Cypress

Height (ft): 17

Processed

Seed yield (lbs): 4.5 Location:

Berkeley

is

This tree is located in Lake Moultrie and

continuously inundated.

Tree #: M-6-5

Diameter (in): 12.0

Common name: Bald Cypress

Height (ft): 21

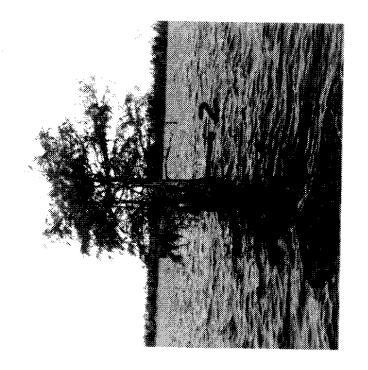
Processed

Seed yield (lbs): 5.0 Location: Berkeley

Comments:

This tree is located in Lake Moultrie and

continuously inundated.









Tree #: F-7-1 Diameter (in): 7.6 Common name: Green Ash Height (ft): 52 Processed Seed yield (lbs): 2.4 Location: Marion This tree is located on private land on a first Comments: terrace of the Great Pee Dee River. The soil type is Tawcaw which has a silty clay surface layer and a subsoil that progresses from a firm clay loam to a firm clay. Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location: Comments: Tree #: Diameter (in): Common name: Height (ft): Processed Seed yield (lbs): Location:

Comments: