



REDWOOD YIELD RESEARCH COOPERATIVE
DATA SET DOCUMENTATION
GROWTH PLOTS

I. INTRODUCTION

This document provides a description of growth plot data assimilated during the heyday of the Redwood Yield Research Cooperative. It is organized as follows:

Part II. Provides a description of the structure of standard files (in terms of formatting and coding conventions).

Part III. Short description of data sets and 5 letter set designator.

Part IV. List of where all the data is stored and in what form (other than what is contained in this binder).

Following are twelve sections (one for each data set) with detailed documentation on the data.

II. STANDARD FILE STRUCTURE

Most of the growth plot information is in a form called a Standard File (SF). These files were constructed from internal files of an obsolete database management system implemented on the CDC 6400 computer. All of the information is formatted in eighty characters/record image to be compatible with punched cards. The structure of these files are:

[Plot information]

[tree cards - Meas 1]
[tree cards - Meas 2]

⋮
⋮

[tree cards - Meas i]

and repeats for subsequent plots.

A. Plot Information - Structure

Plot information is composed of 5 card images. The variable list and formats for each card are presented below. Definitions are in section B. Variables noted as "VAR(n)" Denote vectors of length "n", all of which are dumped.

Card Image(s)	Variable List/format
1	IPLOT, IOWN, SERIES, KMEAS (I5, A5, A5, I5)
2	IASP, PTYP, ISHP, GEOG, IMJA, IMNA, IMJDBH, IMNDBH, ISLP, IPOS, TRS, IELV, AT, IST, INSE (A1, A3, I1, A10, 4I4, I3, I1, A10, I4, A2, I1, I1)

3	LPSR, IRS50, IDS50, IRA, IDA (5I5)
4	M1, Iy1, M2, IY2, ----MKMEAS, IYKMEAS (20I2)
5	IB10(10), ILOG(10), KREC(10) 10I3, 5X, 10I1, 5X, 10I3

B. Plot Variable Definitions

IPLOT	- Standard assigned plot number
IOWN	- Owner's nominal plot number
SERIES	- Plot series code
KMEAS	- Number of sequential measurements on the plot. The first is plot establishment. The last (KMEAS) measurement is the last recorded.
IASP	- Aspect code B = Flat Bench R = Ridgetop V = Valley Bottom or Alluvial Flat N = North Aspect S = South Aspect E = East Aspect W = West Aspect - = Unknown F = Flat (level)
PTYP	Three letter plot type code 1. R = Research C = CFI I = Inventory

- 2. T = Temporary Growth Plot
P = Permanent Growth Plot
I = Inventory Plot - one measurement only
 - 3. G = General Purpose/Inventory
T = Thinning Plot
F = Fertilizer Plot
H = Herbicide Plot
A = Annual Damage Plot
- A blank is used for not coded.

- ISHP - Plot shape code
1 = Rectangular or Square
2 = Circular
3 = Variable Plot
- GEOG - Geography code
Currently - Last character is either
I = Interior
C = Coastal
S = In between
U = Unknown or Unclassified
- IMJA - Major plot area in thousandths of acres
- IMNA - Subplot area in thousandths of acres (0 if no subplot)
- IMJDBH - Minimum DBH in inches x 100 recorded on major plot
- IMNDBH - Minimum DBH in inches x 100 recorded on subplot (0 if no subplot)
- ISLP - Slope percent (20 = 20%); 999 if not taken
- IPOS - Slope position code
0 = Not taken

- 1 = Ridgetop
 2 = Upper Slope
 3 = Midslope
 4 = Bottom Slope
 5 = Flats
 6 = Bench
- TRS - Township, range, section, 40; blank if unknown.
- IELV - Elevation in feet above sea level; 0 if unknown.
- AT - Age/type class
 OG = Old Growth
 RH = Residual/Hardwood Understory
 RY = Residual/Conifer Understory
 YY = Young Growth Conifer
 YH = Young Conifer/Hardwood
 HH - Hardwood
 HY = Young Hardwood/Conifer Young
 YU = Young Growth - Unclassified Further
 RU = Residual - Unclassified Further
 HU = Hardwood - Unclassified Further
 -- = Unclassified
- IST - Status Code
 1 = Active Permanent
 2 = Destroyed Permanent
 3 = Discontinued Permanent
 4 = Temporary
- IUSE - Use Code
 0 = Unchecked
 1 = Checked - Usable for Growth Analysis
 2 = Checked and Unusable (i.e., inadequate buffers, animal damage, fire, etc.)

- LPRS - Lindquist-Palley redwood site index 100 year age base; 0 if unknown
- IRS50 - Krumland/Wensel 50 year age base redwood site index; 0 if unknown
- IDS50 - King's 50 year age base Douglas-fir site index; 0 if unknown
- IRA - Average breast high age of dominant redwoods at plot establishment; 0 if unknown
- IDA - Same as above but for Douglas-fir
- M1, IYR1, etc. - Month and year of each of the Kmeas measurements
- IBIO(10) - Biological years x 10 between measurements (e.g., IBIO(2) is the years between measurements 1 and 2).
- ILOG(10) - 1 if logging took place, 0 otherwise (e.g., if ILOG(2)=1, the plot was logged between measurements 1 and 2).
- KREC - Number of tree records for each measurement (e.g., KREC(1) is the number of tree record for measurement 1. One tree per card image).

C. Tree Information - Structure

Each tree has 25 fields for individual tree information at each measurement. Some of these fields are standard items for all plot series. Others are variable as different people have recorded different items. The card image format for each tree measurement record is:

(I3, A5, I3, I1, I5, I3, I4, I1, I1, I1, I3, I1, I2, I2, I2, I2, I6, I2, I3, I3, 4I4, I4)

with the underlined character fields being occupied by standard items, the definitions of which follow.

D. Tree Information - Definitions for Standard Items

<u>Field/format</u>	<u>Definition</u>
1. (I3)	Standard tree number
2. (A5)	Field I.D. on tags or temporary plot tree number - right justified.
3. (I3)	Species/age code

Species are identified as a three (3) digit code. The first digit is a one if the tree is a residual old growth. Otherwise it is a zero (0) or a blank. The last two digits are species codes.

0 1	Redwood (<i>Sequoia sempervirens</i>)
0 2	Douglas-Fir (<i>Pseudotsuga menziesii</i>)
0 3	White Fir (<i>Abies grandis</i>)
0 4	Sitka Spruce (<i>Picea sitchensis</i>)
0 5	Western Red Cedar (<i>Thuja plicata</i>)
0 6	Western Hemlock (<i>Tsuga heterophylla</i>)
0 7	Port Orford Cedar (<i>Chamaecyparis lawsoniana</i>)
1 1	Beach Pine (<i>Pinus contorta</i>)
1 2	Bishop Pine (<i>Pinus muricata</i>)
1 3	Monterey Pine (<i>Pinus radiata</i>)
2 1	Cypress (<i>Cupressus</i> sp.)
2 2	Nutmeg (<i>Torreya californica</i>)
2 3	Yew (<i>Taxus brevifolia</i>)
2 9	Other Conifers
3 1	Red Alder (<i>Alnus rubra</i>)
3 2	Bigleaf maple (<i>Acer macrophyllum</i>)
3 3	Tanboak (<i>Lithocarpus densiflora</i>)
3 4	Golden Chinquarin (<i>Castanopsis chrysophylla</i>)
3 5	Madrone (<i>Arbutus menziesii</i>)
3 6	True Oaks (<i>Quercus</i> , sp.)
3 7	Willow (<i>Salix</i> , sp.)
3 8	California Bay (<i>Umbellularia californica</i>)
3 9	Dogwood (<i>Cornus nuttallii</i>)

- 4 0 Eucalyptus (*Eucalyptus*, sp.)
 5 9 Other Hardwoods
4. (I1) Plot/subplot location for trees
 0 = No Subplots - or not coded
 1 = Subplot - but no delineation other than through
 expansion factors (partial)
 2 = Tree is on major plot only
 3 = Tree is within subplot boundaries
5. (I5) DBH in hundredths of inches
6. (I3) Total height in feet
7. (I4) Tree weight/acre in tenths
8. (I1) Status of tree at time of measurement
 1 = Survivor - Live Standing Tree on establishment or Live
 Tagged Tree on remeasurement of plot.
 2 = Logged - Tagged Tree removed in logging.
 3 = Ingrowth - Tree of measurable size tagged on
 remeasurement - Live
 4. Mortality - Dead Tagged Tree
- 9-10. (I1) Variable
11. (I3) Breast high age in years (0 if not taken)
12. (I1) Crown Class
 0 = Not Taken
 1 = Dominant
 2 = Codominant
 3 = Intermediate
 4 = Suppressed
 5 = Residual Old Growth
13. (I2) Percent Defective

14. (I2)	Clump number: 0 if not recorded or nonsprouting species.
15-16. (2I2)	Variable
17. (I6)	Standard plot number
18. (I2)	Variable
19. (I3)	Height to crown base in feet
20. (I3)	Variable
21-24. (4I4)	Variable
25. (I4)	Measurement number

E. Tree File Commentary

1. Ingrowth trees are always at the end of measurement set. Hence, if $KREC(3)=51$ and $KREC(2)=47$, the number of ingrowth trees at measurement 3 is 4. Ingrowth trees can "grow" onto both major and subplots.
2. The records for cut and dead trees are always maintained for subsequent measurements; e.g., if a tree with standard number 47 died at measurement 2, it will still appear as a dead tree with number 47 at all subsequent measurements.
3. Standard numbers are all sequential, in order, and with no gaps in the sequence. Standard tree numbers do not change with different measurements.
4. The remaining nonstandard fields in the tree records are filled with various items intrinsic to each data set. An attempt was made to encode all field information, regardless of how relevant it was to growth studies, and to place such items in nonstandard or auxiliary fields.

F. The next page is a tree sheet that appears with all data sets with standard file formats. If the tree item is standard as explained in section D, an "S" will appear after the field number (1-25). If nothing was stored in the field (designated by storing a "0") a "-" will appear after the field number. If a nonstandard item was stored in the field, a brief

description will appear on the line next to the field number. If one line is not enough, a code of the form

[XX/YY/ZZ] will appear where

XX = field number

YY = measurement number

ZZ = description number.

An additional page(s) will follow the standard sheet giving further details of what was stored.

Sheet D Form (blank) - Grope Files - Tree Storage Definitions/Remarks

III. PLOT SERIES

There are twelve plot data sets that have usable growth information. The following is a list of the plot series codes, a brief description of the data, and the manner in which it is stored. Storage codes are:

- F - field sheets
- RC - Raw data punched on cards
- RT - Raw data - card transfer to tape
- SF - Standard file (edited) on tape

<u>Series</u>	<u>Description</u>
1. SPCFI	Simpson Timber Co. CFI plots. App 120 plots. Storage: RC (partial), SF (partial)
2. SPCRP	Simpson Timber Co. Cheney release plots. 12 plots, 4 unthinned, 8 thinned. Storage: F.
3. UNGRO	Union Lumber Co. (Georgia Pacific). 20 plots. Established in 1952 - around Fort Bragg. Storage: F, RC (partial), RT (partial).
4. PALGR	Lindquist and Palley redwood temporary growth plots. Used for their growth and yield study. 163 plots. But only about 40 encoded off of microfilm. Storage: F (microfilm), RC (partial), RT (partial).
5. GPCFI	Georgia Pacific CFI plots - Ft. Bragg. 230 plots. Storage: RC, SF.
6. LPGRO	Louisiana Pacific growth plots - Big Lagoon. 20 plots. Storage: F, SF.
7. LPFRT	Louisiana Pacific-Humboldt State Univ. Douglas-fir redwood precommercial thinning/fertilization installation. Big Lagoon. 30 plots. Storage: RC.

8. TMP76 Temporary growth plots for redwood coop. Mendocino Co. taken in 1976. 50 plots. Storage: F, RC, ST.
9. JSCFI Jackson State Forest CFI plots. 144 plots. Ft. Bragg. Storage: F (partial), SF.
10. SMSGR Simonson Timber Co. growth plots. 20 plots. Storage: F (partial), SF (partial).
11. GPTHP Georgia Pacific temporary thinning plots. 24 plots. Ft. Bragg. Storage: F, SF.
12. ARWON Arcata City Park plots (4) and Wonder plot (1). Storage: RC (partial), RT (partial).

MASTER TAPES

Three master tapes (1 original and 2 copies) were made in June 1982 with 14 plot data files. This tape contains all of the growth plot data with the following exceptions.

- 1) Cheney Release Plots - Simpson Timber Co. (These were never encoded.)
- 2) Louisiana Pacific fertilizer plots (LPFRT) - these are on cards (3 boxes) and stored in the loft in Room 236.
- 3) The 1977 remeasurement on Simpson CFI plots. The raw data for the '69, '75 and '77 measurements are stored in boxes in the loft of 236 Mulford. A standard file of the 69 and 73 measurements are taped.

Each of the 14 data files were loaded into the CDC 6400 as a common fileset. Each file was then copied onto a master tape with write options compatible with the IBM CMS tape support utility.

The master tapes are 7 track, external formats written at 800 CPI. The 6400 control statement for the tape mount was:

Request, Tape, HY, X. Reel Number

The three reel numbers for the master tapes were:

3112	PW = Krumland
3122	PW = Krumland
3203	PW = Sequoia

Fourteen sequential writes were made forming a master tape with 14 files. If the 6400 common file is called "INFILE" and the master tape is called "TAPE" the following copy statement was used:

COPYFBF, I=INFILE, O=TAPE, N=1, ORL=80, OBL=4000, L, LNR=20

This gives a file with a record image of 80 characters and a block size of 4000 characters. Tape write day files are in the back of this section. The first 20 records (card images) of each file is also displayed. The data files have the following order:

<u>File</u>	<u>Series</u>	<u>Description</u>
1	UNGRO	Union Plots - file 1 - Nonstandard fmts
2	UNGRO	Union Plots - file 2 - Nonstandard fmts
3	PALGR	Lindquist & Palley Temporary Plots - Partial - Nonstandard fmts
4	ARWON	Arcata - Wonder Plot - Nonstandard fmts
5	LPGRO	Louisiana Pacific Growth Plots - Standard file
6	SPCFI	Simpson Timber Co. - CFI Plots - 69-73 measurements - Standard file
7	SMSGR	Simonson Growth Plots - Standard file
8	GPTHF	Georgia Pacific Temporary Thinning Plots - Standard file
9	GPCFI	Georgia Pacific CFI plots - 66-71-75 - Standard file
10	TMP76	U.C. Temporary Plots - Standard file
11	JSCFI	Jackson CFI Plots (59-64-69-74) - Standard file
12	GPCFI	Georgia Pacific CFI Plots 60-71-75 - Partial. Plots checked in 1976 as o.k. - supplementary measurements included - Standard file.
13	JSCFI	Jackson CFI Plots (59-64-69-74-79) - Standard file. Partial set - includes only plots checked in 1976 as o.k.
14	JSCFI	Jackson CFI Plots (59-64-69-74-79) - Standard file. file - includes plots <u>not</u> checked in 1976.

NOTE: Series codes were accidentally switched for TMP76 and GPTHF.

Simpson Timber Co. CFI Plots - SPCFI

Simpson Timber Co. originally put out about 120 CFI plots on a grid in 2 or 3 townships in Humboldt Co. in 1969. These plots are remeasured on a four year cycle and have been measured in 1973, '77, and '81. A second series of plots were started in 1977 but no information is available here at Cal.

These plots have undergone a series of upgrading in their measurement standards due to the efforts of Ken Stumpf at Simpson. The raw data for the 1969, 1973 and 1977 measurements are on cards. This card set has been edited with corrections made on the cards. Card formats, plot layouts, and measurement standards are in the documents at the end of this section. The 1969-73 measurements were encoded, edited, and converted to a standard file. This file however is not completely compatible with the card set because of edits made in 1977.

It is suggested that if any work is to be done with this plot set, Ken Stumpf (or his replacement) at Simpson Timber Co. be contacted and the most up-to-date copy of all measurements be procured.

Sheet D Form (filled) - Grope Files - Tree Storage Defnitions/Remarks with Miscellaneous data

Simpson-Cheney Release Plots - SPCRP

This plot set is located on Simpson Timber Co. lands in Humboldt County. There are 12 plots, 4 controls and 8 thinned. Data from these plots were never encoded. Copies of field sheets and measurement specifications are in a manila folder marked Simpson-Cheney Release Plots.

Union Lumber Co. Plots - UNGRO

In 1953 several (about 20) $\frac{1}{5}$ acre growth plots were established on property now belonging mostly to Georgia Pacific. Some of these plots are also on Louisiana Pacific Property (North Spur area). The plots were established in typical stands without any real design. These plots were bored for 10 year part increment. Most plots were remeasured in both 1957 and 1958.

Plots 3 and 4 were converted to GP CFI plots in 1971. A measurement was reconstructed to 1966 by boring. The plots were remeasured as CFI plots in 1975. The original 1953 measurements were on all trees ~ 5 " DBH and larger. However, the "conversion" resulted in establishing a major plot of $\frac{1}{5}$ acre (trees > 11.0 " DBH) and a $\frac{1}{40}$ acre subplot (trees > 3.0 " DBH). By "detective" (sic) work, the whole measurement sequence was adjusted to be on the basis of the original plot design.

Of the remaining plots, about 12 were found during the summer of 1976 and remeasured. The remainder had been destroyed (roads were punched through the middle of two of them) or had been hammered so badly as to be unusable. The plots that were found had several trees with missing tags. These were matched up with past measurements on the basis of borings and trial and error.

Further field location and remeasurement of these plots will be met with severe difficulties.

There are at most six measurements on these plots plus the 10 year radial growth measurement taken at plot establishment. There are two files of this data.

FILE I

This file has the raw data taken off of field sheets. For each plot there is a header card followed by one card per tree.

Header card format

<u>Field</u>	<u>Format</u>	<u>Definition</u>
1	I3	Plot number
2	I1, 2x	No. of measurements plus one
3-8	6(2I2)	Mo./yr of measurements
9	I3	Number of tree records

Tree card formats

<u>Field</u>	<u>Format</u>	<u>Definition</u>
1	I4, 1x	Tree no.
2	I1	Species: 1=redwood, 2=whitewood
3	I2	Clump number (redwoods)
4	I3	Ten year outside bark; DBH growth (1943-1953) in hundreths.
5-28	6(3I3, I1)	For each measurement; DBH in tenths of inches, total height in feet, breast high age and status (blank is alive, 4 is dead).

FILE II

This file has been constructed from the raw data tape and has some additional information plus estimated heights for all trees at all measurements. There are four header cards/plot followed by one card/tree. The 10 year radial growth has been converted so it is now the first measurement.

Header card format

	<u>Field</u>	<u>Format</u>	<u>Definition</u>
(1)	1	I3	Plot number
	2	I3	Number of tree cards
	3	I2, 1x	Number of measurements (denoted as IMEAS)
	4-5	2F5.0	Redwood and Douglas-fir 50 year site index
	6-7	2F5.0	Redwood and Douglas-fir terminal breast high age of dominants.
(2)	1-12	6(I3, I2)	Mo/year of measurements
(3)	1-12	1x, 12F5.0	First IMEAS are redwood breast high ages of dominants, second IMEAS are for Douglas-fir.
(4)	1-12	1x, 12F5.0	Same as above only estimated average total height of dominants.

Tree card formats

	<u>Field</u>	<u>Format</u>	<u>Definition</u>
	1	F3.0	Tree no.
	2	6(F5.1, F4.0, F2.0)	DBH in inches, total height in feet, and status (0. or --, is alive, 4. is dead) for each of the IMEAS measurement.

Lindquist and Palley Temporary Plots - PALGR

This plot set was used by Lindquist and Palley for their redwood growth and yield studies. The raw data is on microfilm. Supposedly, this data was punched on cards and stored in the loft of room 230 Mulford Hall in 1968 when the old redwood project disbanded. However, it was never found.

Some of these plots were encoded (about 40) and are stored on cards and have been taped. There is one header card/plot followed by the tree cards (one/tree). End of the tree cards is signified by a "99" in columns 1-2.

Header card format

<u>Field</u>	<u>Format</u>	<u>Definition</u>
1	I3	Plot number
2	I2	County code
3	I1	Slope code
4	I1	Aspect code
5	I2	BAF (there are variable radius plots)
6	I3	Map scale: feet/inch

The trees were stem mapped (maps are also on microfilm) on a series of concentric circles having radii of 1, 2, 3, 4, and 5 inches. The map scale is the corresponding ground distance.

Tree card formats

<u>Field</u>	<u>Format</u>	<u>Definition</u>
1	I2	Species codes. USFS - forest survey standards.
2	I4	DBH in hundredths of inches

3-4	2I3, 3x	Two 5 year radial increments (taken on opposite sides of tree).
5-6	2I3, 3x	2-10 year radial increments.
7	I3	Breast high age if taken
8	I1	Crown class (1-4, 5=residual)
9	I3	Total height if taken
10	I1	Status: 0=live, 4=died in ten years prior to measurement
11	I1	Clump number - redwoods
12	I2	Tree number
13	I2	Circle number (from stem map)

Georgia Pacific CFI Plots - GPCFI

In 1970 Georgia Pacific (then Boise Cascade) established a CFI plot system on their holdings in Mendocino Co. Plot centers were laid out on a grid in the office. In field establishment however, plot centers were moved to nearest road and then two plots were established 2-5 chains off the road on both sides. The idea here was that the plots would be easy to relocate.

A 1966 "measurement" was constructed from increment borings taken at 1971. Mortality from 1966 to 1971 was also estimated for the 1971 measurement but it is suspected to be low. Some of these plots (an unknown number) were also logged between 1966 and 1971. Consequently, the 1966-1971 growth measurements may be suspect and should probably not be used.

Raw data for the 1966, 1971, and 1975 measurements on these plots are on cards in boxes marked Georgia Pacific CFI plots with the appropriate dates. Formats and field measurement procedures are appended to the end of this section for the raw data. The raw data should be used as back up only as there are numerous keypunch errors and other blunders.

Two standard files were constructed after substantial data edits; one file (GPCFI-1) is composed of all plots and has only a Lindquist and Palley redwood site index. File 2 (GPCFI-2) is a partial set and is composed of plots that have been field checked in 1976 and certified as being usable for growth. File 1 has about 230 plots; file 2 about 50.

A listing at the end of this section shows which plots were 1) checked and found OK for growth studies; 2) checked and found unusable; and 3) unchecked.

Sheet D Form (filled) - Grope Files - Tree Storage Definitions/Remarks with Miscellaneous data

Louisiana Pacific Growth Plots - LPGRO

This plot set was established by Hammond Lumber Co. personnel in about 1954. There are about 20 ¹/₅ acre growth plots. Standards are in the documentation at the end of this section. Most of the measurements up to about 1970 have been encoded. Some subsequent measurements on some of the plots have been made. Contact the Big Lagoon office (Craig Newman or Chris Rowney) for more details.

These plots have been situated in areas that were considered to be "better-than-average" stands, so they aren't totally representative.

Some of the plots have been thinned. The thinnings were not production cuts. Rather, they were done very carefully to leave the best possible residual stand.

With the exception of plots in the McKay tract in southern Humboldt Co. all of the plots are in LP's Big Lagoon land block.

Sheet D Form (filled) - Grope Files - Tree Storage Definitions/Remarks with Miscellaneous data

Louisiana Pacific Fertilizer Plots - LPFRT

This plot set was established by personnel from Humboldt State Univ. See Gene Thornburgh for more details. The installation is around LP property at Big Lagoon. The plots were all put out in reproduction stands of predominantly Douglas-fir with some redwoods. The area was reportedly clearcut in about 1953-1954 and regeneration was natural. Initially, plots were thinned to various residual spacings and measurements were taken after thinning. Somebody overlaid a poor fertilizer study on top of the original design making the results suspect.

In general, the plots had three measurements taken between 1970 and 1974. Currently, the plots are no longer maintained. About $\frac{1}{2}$ of them are currently in the Redwood Park and it is reported that most of them have been infested with Black Stain (VW). Exact ages and site indices are unknown. Their utility for growth studies is marginal.

Data Location

This data currently resides on cards and is in three boxes marked "Redwood Yield Coop - L.P. Fert Plots" $\frac{1}{3}$, $\frac{2}{3}$, and $\frac{3}{3}$. Formats for each plot set is as follows.

A. Header card with plot number in C3-4 (I2)

B. Measurement header

C3-4 (I2) - Plot number

C8-9 - Measurement number

C13-15 (I3) - No. of tree cards

C. Measurement Date

C3-4 (I2) - Plot number

C7-9 (A3) - Month

C10-11 (I2) - Day

C12-13 (I2) - Year

D. Tree Cards - 1 card/tree

C1-3 - Tree number

C6 (I1) - Species code: 1=Redwood; 2=Douglas fir, 5=Sitka Spruce;
6=Hemlock

C7-14 (F8.2) - DBH

C15-22 (F8.2) - Total height (all measured with telescoping poles)

C27-28 (I2) - Plot number

B-D are repeated twice for the remaining two plot measurements. No trees apparently died.

The following codes indicate the status of each plot T=thinned, F=fertilized, D=destroyed (no measurements). Each of these codes is preceded by the reciprocal of the plot size. Plots with no status codes are "control."

1. 5-T	7. 5-TF	13. 5-TF	19. 5-T	25. 20	31. 5-T
2. 5-T	8. 20-F	14. 5-TF	20. 5-TF	26. D	32. 5-T
3. 20	9. 5-TF	15. 5-TF	21. 5-TF	27. 5-T	33. 5-T
4. 20	10. 5-TF	16. 5-T	22. 5-TF	28. D	
5. 5-TF	11. 5-TF	17. 20-T	23. 5-T	29. D	
6. 20-F	12. D	18. 20-T	24. 5-F	30. 5-TF	

Redwood Coop 1976 Temporary Plots - TMP76

In the summer of 1976, about 35 temporary plots were located in pole timber and young saw timber stands in Mendocino County. Available permanent plots in this county were largely in older saw timber stands and sampling was intended to fill in gaps in the data base. Lands were sampled that belonged mainly to Harwood, Masonite, and Louisiana Pacific.

A writeup of sampling procedures is appended to the end of this section. The data for each plot was reconstructed into a standard file of 3 measurements. The last measurement was the measured plot inventory in 1976. The first measurement set was based on ten year radial increments and the record was from 5 year radial increments. Trees that had height and crown base measurements taken in 1976 were the only trees that were bored. Borings were adjusted to overbark measurements for these trees and a species specific regression model was constructed from each plot sample to back date the diameters of the unbored trees. Hence, only trees with height measurements on measurement number three are usable for individual tree growth analysis.

Sheet D Form (filled) - Grope Files - Tree Storage Definitions/Remarks with Miscellaneous data

Jackson State Forest - CFI Plots - JSFCFI

The Jackson State Forest CFI plots were established in 1958-1960. 144 plots were laid out in a grid over the whole forest. A field instruction manual gives all of the pertinent information. Plots are measured on a five year cycle with remeasurements during the summers of 1964, '69, '74, and '79.

Of the 144 plots initially established, two of them were lost due to a land exchange with GP. Five plots by the west end of the forest were not encoded because they contained large amounts of cypress and pines.

During plot establishment, a large subsample of trees on each plot had total height measurements and some were bored for 5 year radial increment. In the summer of 1976, some of the plots were visited and some additional heights and ages were taken. These measurements are stored with the 1974 data. In 1979 some additional heights and crown ratios were taken with the regular remeasurement.

There are three JSF standard files:

1. All growth plots up to the 1974 (4th) measurement.
2. Some growth plots checked as OK in 1976 with the supplementary measurements stored with measurement 4 plus the 1979 measurement.
3. Plots unchecked in 1976 plus the 1979 measurement.

In 1976 several plots were visited and checked to see if they were usable. Some were rejected because a) too many untagged hardwoods less than 11.0" DBH, b) in the pygmy forest, c) landings or roads within the plot.

The listing at the back of this section indicates if the plots were checked/rejected.

Field sheets are available for the 1979 measurement only.

Attempts to add trees to these files will be met with some problems because of the way lost tags were replaced: trees were given new numbers (tags). In adding measurements to this plot set, the new tree numbers were changed to the originals in the file. As a consequence, succeeding measurements have more and more trees with mismatched numbers (all of the old ones plus the current trees with replaced tags). Rematching is facilitated by having the field sheets because trees were recorded and measured based on a specific ground pattern.

Raw data (punched on cards) is stored at CDF in Sacto. Field sheets are in Ft. Bragg.

Plot Notes:

- JSF plot nos. 1608 and 1707 belong to plots traded to Georgia Pacific in a land exchange.
- Plot 306 is missing a 1974 meas.
- Plot 2301 is missing from 1974 meas.
- Plots 2105 (69 & 74 measurements) and plot 308 (1974 meas.) were discarded because of excessive field luck yrs.
- Plots less in number than 203 were never encoded.

Sheet D Form (filled) - Grope Files - Tree Storage Definitions/Remarks with Miscellaneous data

Simonson Growth Plots - SMSGR

Simonson growth plots (now part of Arcata Redwood Co.'s holdings) were established subjectively in "interesting" areas. About 10 plots were established. Many of the plots are in sapling stands 5-15 years of age. Plots are 1/10 acre and trees down to 1/2 inch DBH were measured. The following documentation gives more detail.

The plots were encoded into a standard file format and are on tape. Not all of the measurements were encoded due to manpower limitation and the ongoing nature of the reinventory. The personnel who established and maintained the plots (Bob Graton and Walt Decker) no longer work at Simonson (Arco). It is unknown if ARCO will continue to maintain the plots.

Sheet D Form (filled) - Grope Files - Tree Storage Defnitions/Remarks with Miscellaneous data

Georgia Pacific Thinning Plots - GPTHP

In 1967, about 24 temporary plots, either one acre or one-half acre in size, were established in cutover stands on what is now Georgia Pacific property around Ft. Bragg. Trees 11.0 inches DBH and larger were bored for 5 and 10 year radial increment. A few heights were taken on some of the plots. Log heights were taken. Jackson State CFI vigor codes were also assigned to each tree.

An attempt was made in 1976 to relocate the plots but it was unsuccessful. Tree numbers had been painted on and most of them washed off. Some site trees were taken in the area where the plots were thought to be established. This forms the basis for the standard file sites and ages. They are suspect.

Radial increments were converted to past DBH overbark and the plot set was encoded into a standard file with three measurements.

There is a binder with diagrams of all increment cores on all plots. There is also a running commentary on disease/damage for each tree. This binder may have been returned to GP.

Sheet D Form (filled) - Grope Files - Tree Storage Definitions/Remarks

Arcata City Park and Wonder Plot - ARWON

Four half acre plots (two thinned, two unthinned) were established in the Arcata City Park in about 1923. The Wonder Plot (one acre) was also established about this time on an alluvial flat of the Big River in Mendocino Co. These plots have been measured on a 10 year cycle. The Arcata plots were established in 1923 and measured in '33, '45, '53 and '63. [The Wonder plot was (I think) established in 1922 and measured up to 1962.] There have been more measurements on these plots but we don't have them. Jerry Allen at HSU has more information. It is rumored that one of the Arcata plots was partially destroyed by a parking lot.

These data are stored on cards and is in a nonstandard format on tape. The first card image for each plot is A, B, C, D (Arcata plots) or W (wonder plot) in Column 1. Thereafter, the plot files consist of a measurement header card followed by tree records, one/card.

Header card format

<u>Field</u>	<u>Format</u>	<u>Definition</u>
1	I3	No. of tree cards
2	F6.1,7x	No. of years between measurements
3	F3.1, 2x	Reciprocal of plot size
4-5	2I2	Measurement years for the following plot measurement set (i.e., 2333 is 1923 to 1933).

NOTE: Wonder plot has only field 1. It's/acre in size and was measured every ten years.

Tree card formats

<u>Field</u>	<u>Format</u>	<u>Definition</u>
1	8x, I2	Tree number
2	I4	Species: 1=redwood, 2=Douglas-fir, 3-5 is grand fir, hemlock and sitka spruce.
3	I4	Status: 0=live, 4=dead
4	I4	Crown class: 1-4, 5 is for residuals
5	F7.1	Initial DBH
6	F7.1	Terminal DBH
7	F7.1	Initial height
8	F7.1, 7x	Terminal height
9	F4.1, 1x	X coordinate
10	F4.1,	Y coordinate

NOTE: Fields 9-10 are for Wonder plot only which was stem mapped. Reference point is a corner of the plot.

GROPE FILES - TREE STORAGE DEFINITIONS/REMARKS

Numerical Series: 5000Plot Series: SPCFI

- 1) Standard I.D. S
- 2) Owner I.D. S
- 3) Species/Age Code S
- 4) Plot Delineator S
- 5) DBH (1/100) S
- 6) Height (ft) S (PARTIAL - some trees)
- 7) Expansion Factor S
- 8) Status Code S
- 9) ~~DBH Index~~ -
- 10) Height Index a "2" IN THIS FIELD MEANS NO TOTAL HEIGHT TAKEN
- 11) BREAST HIGH AGE 0 if none
- 12) CROWN CLASS - S
- 13) S
- 14) -
- 15) SIMPSON MERCH CODE
- 16) -
- 17) Standard Plot No. (assigned) S
- 18) -
- 19) Ht. to Crown Base S
- 20) -
- 21) QUADRANT NUMBER
- 22) -
- 23) -
- 24) -
- 25) Meas. No. (assigned) S

Coop/Project: Redwood

Sheet D

Measurement No. ALL

file 1 - ALL PLOTS

GROPE FILES - TREE STORAGE DEFINITIONS/REMARKS

Numerical Series: 2000

Plot Series: GPCFI

- 1) Standard I.D. S
- 2) Owner I.D. S
- 3) Species/Age Code S
- 4) Plot Delineator -
- 5) DBH (1/100) S
- 6) Height (ft) S PARTIAL
- 7) Expansion Factor S
- 8) Status Code S
- 9) DBH Index -
- 10) Height Index 2 - No Heights for this tree/meas
- 11) -
- 12) Crown class - S
- 13) % Defect - S
- 14) -
- 15) -
- 16) -
- 17) Standard Plot No. (assigned) S
- 18) -
- 19) Ht. to Crown Base S
- 20) -
- 21) Log Height - Merst trees only 71-75 meas.
- 22) -
- 23) -
- 24) -
- 25) Meas. No. (assigned) S

Coop/Project: Redwood

Sheet D

Measurement No. ALL

FILE 2 - PARTIAL SET - ONLY PLOTS CHECKED AS OK IN 1976

GROPE FILES - TREE STORAGE DEFINITIONS/REMARKS

Numerical Series: 2000

Plot Series: GPCFE

- 1) Standard I.D. S
- 2) Owner I.D. S
- 3) Species/Age Code S
- 4) Plot Delineator -
- 5) DBH (1/100) S
- 6) Height (ft) S (PARTIAL)
- 7) Expansion Factor S
- 8) Status Code S
- 9) DBH Index -
- 10) Height Index 2 if no total Height
- 11) -
- 12) CROWN CLASS - S
- 13) Defect - S (PARTIAL)
- 14) -
- 15) -
- 16) -
- 17) Standard Plot No. (assigned) S
- 18) -
- 19) ~~Ht. to Crown Base~~ TOTAL Height - Some trees - MEAS. IN 1976 - STORED WITH 1975 MEASUREMENT
- 20) -
- 21) Log Height
- 22) BREAST High Age in 1976 - STORED WITH '75 MEAS.
- 23) -
- 24) Height to crown BASE 1976 - STORED WITH '75 MEAS.
- 25) Meas. No. (assigned) S

Coop/Project: Redwood Sheet D

LOUISIANA PACIFIC - HAMMOND Measurement No. ALL
GROWTH PLOTS

GROPE FILES - TREE STORAGE DEFINITIONS/REMARKS

Numerical Series: 4000 Plot Series: LPGRO

- 1) Standard I.D. S
- 2) Owner I.D. S
- 3) Species/Age Code S
- 4) Plot Delineator S
- 5) DBH (1/100) S
- 6) Height (ft) S (PARTIAL)
- 7) Expansion Factor S
- 8) Status Code S
- 9) ~~DBH~~ Index -
- 10) ~~Height~~ Index -
- 11) BOLST. High AGE - S (PARTIAL - 1st MEAS. ONLY)
- 12) CROWNCLASS - S
- 13) -
- 14) -
- 15) -
- 16) -
- 17) Standard Plot No. (assigned) S
- 18) -
- 19) Ht. to Crown Base -
- 20) -
- 21) -
- 22) -
- 23) -
- 24) -
- 25) Meas. No. (assigned) S

Coop/Project: Redwood

Sheet D

Measurement No. 1, 2, 3

GROPE FILES - TREE STORAGE DEFINITIONS/REMARKS

Numerical Series: 7000

Plot Series: TMP26*

- 1) Standard I.D. S
- 2) Owner I.D. S
- 3) Species/Age Code S
- 4) Plot Delineator —
- 5) DBH (1/100) S
- 6) Height (ft) S (PARTIAL MEAS = 3 ONLY)
- 7) Expansion Factor S
- 8) Status Code S
- 9) ~~DBH Index~~ —
- 10) ~~Height Index~~ —
- 11) BREAST High Age - PARTIAL M = 3
- 12) —
- 13) —
- 14) CLUMP NUMBER - S
- 15) —
- 16) —
- 17) Standard Plot No. (assigned) S
- 18) —
- 19) Ht. to Crown Base S (IN TENTHS) PARTIAL M = 3
- 20) —
- 21) —
- 22) —
- 23) —
- 24) —
- 25) Meas. No. (assigned) S

* NOTE: SERIES CODES ON DATA SAY OPTM - THIS IS A BOARDS

Coop/Project: Redwood

Sheet D

Measurement No. 2-2-3-4

ALL PLOTS 1959-74

GROPE FILES - TREE STORAGE DEFINITIONS/REMARKS

Numerical Series: 1000

Plot Series: JSCFI

- 1) Standard I.D. S
- 2) Owner I.D. S
- 3) Species/Age Code S
- 4) Plot Delineator —
- 5) DBH (1/100) S
- 6) Height (ft) S (PARTIAL 1st MEAS ONLY)
- 7) Expansion Factor S
- 8) Status Code S
- 9) ~~DBH Index~~ —
- 10) Height Index 2 = No Heights
- 11) —
- 12) CROWN CLASS - S (some erroneous "S" in crown and growth)
- 13) — [field entries are screwy]
- 14) —
- 15) JSF ABNORMALITY CODE
- 16) JSF Defect Code
- 17) Standard Plot No. (assigned) S
- 18) JSF DISPOSITION CODE
- 19) Ht. to Crown Base —
- 20) JSF Vigor Code
- 21) JSF MERCH CLASS CODE
- 22) 5 YEAR PAST RADIAL INCREMENT - Some trees MEAS 1 only
- 23) % Defective in 3rd & 4th MEASUREMENTS
- 24) —
- 25) Meas. No. (assigned) S

Coop/Project: Redwood

Sheet D

Measurement No. 1-2-3-4-5

UNCHECKED PLOTS S MEASUREMENTS

GROPE FILES - TREE STORAGE DEFINITIONS/REMARKS

Numerical Series: 1000

Plot Series: JSCFI

- 1) Standard I.D. S
- 2) Owner I.D. S
- 3) Species/Age Code S
- 4) Plot Delineator -
- 5) DBH (1/100) S
- 6) Height (ft) S PARTIAL M=1, 5 ONLY
- 7) Expansion Factor S
- 8) Status Code S
- 9) ~~DBH Index~~
- 10) Height Index 2 = TOTAL Heights NOT TAKEN
- 11) -
- 12) CROWN CLASS - S
- 13) - (SLOWLY)
- 14) ON MEAS 5 ONLY - CROWN RATIO (PARTIAL)
- 15) JSP ABNORMALITY CODE
- 16) JSF Defect Code
- 17) Standard Plot No. (assigned) S
- 18) JSF Disposition Code
- 19) Ht. to Crown Base -
- 20) JSF Vigor Code
- 21) JSE Merch Class Code M=1-4 / M=5 15% defective
- 22) -
- 23) % Defective M=3, 4
- 24) -
- 25) Meas. No. (assigned) S

Coop/Project: Redwoods

Sheet D

Measurement No. 1-2-3-4-5

CHECKED PLOTS AS OK IN 1976 (59) (64) (69) (74) (79)

GROPE FILES - TREE STORAGE DEFINITIONS/REMARKS

Numerical Series: 1000

Plot Series: JSCFI

- 1) Standard I.D. S
- 2) Owner I.D. S
- 3) Species/Age Code S
- 4) Plot Delineator -
- 5) DBH (1/100) S
- 6) Height (ft) S (Some in MEAS 1 (59) AND MEAS 5 (79))
- 7) Expansion Factor S
- 8) Status Code S
- 9) DBH Index -
- 10) Height Index 2 = TOTAL HEIGHTS NOT TAKEN
- 11) -
- 12) CROWN CLASS - S
- 13) - (SCREWY)
- 14) - ON MEASUREMENT 5 = CROWN RATIO (55% = 35) - PARTIAL
- 15) JSF ABNORMALITY CODE
- 16) JSF DEFECT CODE
- 17) Standard Plot No. (assigned) S
- 18) JSF DISPOSITION CODE
- 19) Ht. ^{TOTAL HEIGHT} ^{SUPPLEMENT} ~~to crown~~ ~~BASE~~ MEAS 4 ONLY - HEIGHT (feet) IN 1976
- 20) JSF VIGOR CODE
- 21) JSF MERCH CLASS CODE (M=1-4) % DEFECTIVE M=5
- 22) BREAST HIGH AGE - 1976 (M=4) ONLY
- 23) % DEFECTIVE (MEAS = 3 & 4 ONLY)
- 24) HEIGHT TO CROWN BASE (MEAS = 4) FOR 1976
- 25) Meas. No. (assigned) S

2-77
FST

X = 76 Supps

1/5

CFI Site Trees 1959

JACKSON STATE FOREST

Plot No.	SP	DBH	Ht.	AGE	Plot No.	SP	DBH	Ht.	Age		
0101	YR	20.8	129	140	-	0307	YD	29.1	159	74	01016
	YR	20.2	114	68		70	28.3	108	89		
0102	YD	30.5	158	72	-	0308	Cypress	14.0	42	56	
	YD	34.5	147	68		"	15.0	34	54		
0103	YD	35.7	141	82	-	0309	DB	24.0	110	126	
	YR	27.8	93	78		00	24.0	105	190		
0201	YD	14.0	100	63	-	0401	YD	27.0	147	52	X
	YR	19.0	85	50		YD	?	144	34		
0202	YR	17.2	98	73	-	0402	YD	25	142	79	X
	YR	19.3	92	80		YD	24	150	65		
0203	YR	30.7	94	77	01006	0403	YR	22.8	112	51	0102
	YD	31.9	130	65		YR	23.5	111	51		
0204	YD	22.0	123	70	X	0404	YD	22.0	140	47	01026
	YD	28.0	162	73		YD	16.0	124	43		
0205	YD	15.0	107	45	01008	0405	YD	19.4	102	39	01023
	YD	16.0	100	40		YD	21.0	138	45		
0206	BP	15.0	60	48		0406	YD	25.0	162	77	X
	BP	16.0	63	49		YD	28.0	156	75		
0301	YD	22.0	132	61	X	0407	YD	27.3	135	72	01025
	YD	?	139	56		YD	26.3	152	72		
0302	YD	27	141	55	01011	0408	YD	18.0	111	35	01026
	YD	23	147	55		YD	18.0	105	33		
0303	YR	23.7	117	77	01012	0501	WF	26.0	175	97	
	YR	23.2	106	90		0502	YD	21.0	135	62	*
0304	YD	15.0	107	47	01013	YD	21.0	139	63		
	YD	17.0	125	42		0503	YD	19.0	85	35	01029
0305	YD	20.8	133	37	01014	YD	19.0	84	40		
	YD	23.1	144	59		0504	YD	28.3	152	67	X
0306	YD	29.4	160	62	01015	YD	30.1	181	70		
	YD	30.4	144	60							

JSF CFI SITE TRFPL
1959 & 60

Plot No.	SP	DBH	Ht	Age	Plot No.	SP	DBH	Ht	Age	
0505	YD	25.7	132	55	01031	YD	24	134	52	
	YD	23.0	146	61		YD	27	132	52	
0506	YD	28.0	144	68	X	0703	YD	25	147	49
	YD	34.0	171	74		YD	15	121	44	
0507	YD	22.0	162	61	01032	0704	YD	12.3	132	47
	YD	16.0	157	63		YD	21.1	147	48	
0508	YD	17.4	93	33	X	0705	YD	17.4	108	43
	YD	13.4	77	34		YD	26.5	100	52	
0509	YD	18.0	72	31	X	0706	YD	11.7	79	27
	WF	15.0	85	37		YD	16.5	84	31	
0601	WF	30.7	120	90		0707	YD	22	94	29
	YD	19.3	135	63		YD	22	96	41	
0602	YD	28.0	140	80	X	0708	YD	19	98	40
0603	YD	22.1	105	63	01038	YD	16.4	73	52	
	YD	19.7	138	45		0709	YD	24.1	87	70
0604	YD	19.1	120	40	X	YD	29.2	134	60	
	YD	18.3	135	43		0801	YD	23.7	138	45
0605	YD	18.9	111	58		YD	22.5	123	46	
	YD	18.7	77	39		0802				
0606	YD	16.4	87	29	X	0803	YD	30	114	48
	YD	17.4	85	29		0804	YD	23.6	140	45
0607	YD	12.0	43	32	01042 X	YD	21.1	138	43	
	YD	19.0	67	30		0805	YD	21.6	118	57
0608	YD	18.0	88	30	01043	YD	24.3	116	44	
	YD	12.0	73	26		0806	YD	20	101	56
0609	YD	24.0	85	45	X	YD	19	121	44	
	YD	18.0	83	40		0901	YD	19.3	81	32
0701	YD	23.2	123	43	X	YD	17.6	94	42	
	YD	17.8	117	31		0902	YD	24.2	106	50
						YD	29.6	105	53	

JSF 3FI SITE TREE: 1957 #100

Dist 10. SP DBH Ht Age
Site in
511-
out
substrate
Shrub

Plot No.	SP	DBH	Ht	Age		Dist 10.	SP	DBH	Ht	Age	
0902	YR	24.2	106	50	°1061	1103	YD	24	112	40	°1076
	YR	29.6	105	49			YR	23	129	37	
0903	YD	32.4	131	44	°1062	1104	YR	25.1	100	39	°1077
	YD	22.6	124	38			YD	15.7	107	39	
0904	YR	22.6	106	33	°1063	1105	YD	26	115	61	°1078
	YR	25.8	106	32			YD	24	117	40	
0905	WF	24	114	44		1106	YD	26	160	63	°1079
	YR	24	118	42			YR	36	143	66	
0906	YD	23	110	38	°1065	1107	YD	23.8	98	38	*
	YD	28	133	44			YD	16.7	85	36	
0907	YD		66	27	°1066	1108	YD	15.7	76	26	°108
	YD		66	27			YR	21.8	107	23	
1001	YD	26.6	98	36	*		YD	20.2	98	29	
	YR	30.8	87	45		1201	YR	15.7	73	41	°1082
1002	YD	23.1	122	62	°1068		YR	25.2	79	42	
	YR	22.8	114	50		1202	YD	27.1	98	32	*
1003	YD	27.0	115	49			YD	13.4	97	37	
1004	YD	26.5	95	41	*		YR	12.6	65	33	
	YD	27.9	93	42		1203	YD	17.5	107	35	°1084
1005	YR	19.4	96	33	*		YD	14.9	92	38	
	YR	28.8	115	36		1204	YD	14.7	79	30	°1085
1006	YD	22	151	45	*		YR	16.1	69	32	
	YD	26	102	42		1301	YR	13.9	68	35	°1086
1007	YD	30.2	74	39	°1073		YR	16.3	70	35	
	YR	20.2	91	38		1302	YD	23.2	95	33	°1087
1101	YD	14.1	80	37	°1074		YD	21.7	98	40	
	YD	22	119	40		1303	YD	12.8	83	40	*
1102	YD	15.6	76	39	°1075		YD	21.5	86	40	
	YR	22.6	85	46		1304	YD	19.3	83	36	°1088
							YD	20.5	90	35	
							YR	15.7	74	34	

JBF CFI SITE TREES
1959 & 60

Plot No.	SP	DBH	Ht.	AGE		Plot No.	SP	DBH	Ht.	AGE	
1401	VD	20.2	94	32	°1090	1607	YD	36.5	171	160	
	YR	17.5	66	22		1608	VD	17.0	120	69	°1105
1402	VD	16.9	102	32	°1091		VD	17.0	134	52	
	YD	14.0	79	32		1701	<hr/>				
1403	YD	13.2	99	31	°1092	1702	<hr/>				
	YD	17.8	87	34		1703	<hr/>				
1404	<hr/>					1704	YD	19.0	112	110	
1405	<hr/>						OD	25.1	110	239	
1501	YR	14.1	81	32	x	1705	VD	20.6	118	56	°1114
	YR	12.9	60	30			YD	17.6	93	57	
	YR	12.5	70	32		1706	<hr/>				
1502	VD	23.8	97	39	x	1707	VD	14.1	75	43	°1116
	YD	18.1	106	52			YR	17.4	70	58	
1503	VD	14.5	83	32	°1097	1801	<hr/>				
	YD	16.4	93	32		1802	OD	26.9	118	195	
1504	YD	15.3	84	34	x		OR	41.0	135	251	
	YD	17.9	88	35		1803	OD	28	123	161	
1505	OR	32.1	116	276		1804	OR	34.9	127	220	
	YD	26	121	76		1805	<hr/>				
1506	<hr/>					1806	YD	26.5	117	50	°1121
1507	YR	13.1	72	22	°1101		YD	25.7	65	53	
	YR	14.7	69	24			YR	24.8	100	53	
1601	<hr/>					1807	OR	73.0	182	1480	
1602	<hr/>						OR	31.0	112	418	
1603	OR	23.6	105	178		1901	YD	16.7	112	54	
	YR	19.8	72	114		1902	<hr/>				
1604	<hr/>					1903	YD	35.0	147	120	
1605	OR	-	193	405		1904	<hr/>				
	YR	-	46	14		1905	YR	17.0	69	58	
1606	<hr/>					1906	<hr/>				

8-2-77
POT

05/15

J8F CFI SITE TREES
1959-60

Plot No	SP	DBH	Ht.	Age	
2001					
2002	VD	27.4	127	75	
	VD	32.5	130	108	
	OR	27.5	108	169	
2003					
2004	VD	18.4	115	88	01133
	VD	23.1	110	71	
2005	VD	22.4	119	68	
	VD	19.0	112	51	01134
2101	VD	-	75	30	
	VD	-	150	20	
	VE	-	121	24	
2102					
2103	VD	29.3	97	106	
	VD	30.2	84	102	
2104					
2105					
2106	VE	37.0	156	657	
	VE	49.0	183	1132	
2201	VD	12.9	78	43	01141
	VD	15.6	80	40	
2202	VD	24.7	134	93	
2203					
2301	VD	36.5	178	82	

Coop/Project: REDWOOD

Sheet D

SINCLAIRSON Growth PLOTS

Measurement No. ALL

GROPE FILES - TREE STORAGE DEFINITIONS/REMARKS

Numerical Series: 3000

Plot Series: SMSGR

- 1) Standard I.D. S
- 2) Owner I.D. S
- 3) Species/Age Code S
- 4) Plot Delineator - (NONE - ALL 1/10 Acre PLOTS)
- 5) DBH (1/100) S
- 6) Height (ft) S (PARTIAL - ZEROS FOR NO MEASUREMENTS)
- 7) Expansion Factor S
- 8) Status Code S
- 9) ~~DBH Index~~ "-"
- 10) ~~Height Index~~ "-"
- 11) BREAST High Age - S (PARTIAL) - 1ST MEASUREMENT ONLY
- 12) CROWN CLASS - "-"
- 13) -
- 14) CLUMP No. - S (MOST TREES CLASSIFIED) - 1ST MEAS ONLY
- 15) -
- 16) -
- 17) Standard Plot No. (assigned) S
- 18) -
- 19) Ht. to Crown Base S (PARTIAL - "0" FOR NO MEASUREMENT)
- 20) -
- 21) -
- 22) -
- 23) -
- 24) -
- 25) Meas. No. (assigned) S

GROPE FILES - TREE STORAGE DEFINITIONS/REMARKS

Numerical Series: 6000Plot Series: GPTHP*

- 1) Standard I.D. S
- 2) Owner I.D. S
- 3) Species/Age Code S
- 4) Plot Delineator -
- 5) DBH (1/100) S
- 6) Height (ft) S - A few on Meas 3
- 7) Expansion Factor S
- 8) Status Code S
- 9) DBH Index -
- 10) Height Index 2 - No Heights
- 11) -
- 12) CROWN CLASS - S MEAS 3 ONLY
- 13) -
- 14) -
- 15) % Defective - S
- 16) -
- 17) Standard Plot No. (assigned) S
- 18) -
- 19) Ht. to Crown Base JACKSON STATE CROWN VIGOR CODE - MEAS 3 ONLY
- 20) -
- 21) LogHT₀ (8" top) IN TENTHS - MEAS TREES ONLY - M = S ONLY
- 22) RECIPROCAL OF FRACTION OF BARK REMOVED IN LOGGING - PARTIAL - M = S ONLY
- 23) - (for 22 - if the code is "1" it means the top WAS BUSTED OUT
- 24) RADIAL INCREMENT - MEAS 1 ONLY - PAST INCREMENT [before Logging] IN TENTHS OF INCHES
1951-1956
- 25) Meas. No. (assigned) -

* NOTE - Series codes in the data - AT TAMP76 - THIS IS A BOOBOO