

Resources Inventory Branch

Data Collection System GyHost/GyHand Version 7.0

User's Manual

**Growth and Yield Section
May 1997**

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Ministry of Forests
Resources Inventory Branch

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Chapter 1: Set-up Procedures

Setting up the Host PC

Memory and RAM Disk Requirements

The minimum memory required on the Host PC is in the order of 500 KBytes. While most desktop or laptop PCs are configured with the standard 640 KBytes, this lower requirement allows other Terminate and Stay Resident modules to occupy some of the RAM.

The free disk space requirement depends on the volume of data to be kept on-line. However, over and above this, five megabytes are required at run-time for the GyHost program to run efficiently.

Directory SetUp

The GyHost program should reside in a directory named GyHost. This directory may be on the root of a disk drive or be a sub-directory of another directory. All the files required to run both the GyHost and GyHand (now called Gy) programs reside in the GyHost directory with the exception of DOS or other utility programs. A sub-directory named HandHeld is required under GyHost to act as a repository for data to be transferred to and from the physical HandHeld computer. If this directory is not present, it will be created when GyHost is started up. The contents of the HandHeld directory are not maintained and are only relevant during the UpLoad or DownLoad processes. At all other times, this directory's contents are irrelevant.

The steps required to create the Host PC directory and load in the system from the system distribution diskette are:

- Make the directory under which the GyHost directory is to reside the current directory (this will likely be C:\)
CD
- Create the GyHost directory thus:
MD GyHost

- Make GyHost the current directory:
CD GyHost
- Insert the distribution diskette which contains the complete system (GyHost7.ZIP, Install.CFG, Install.EXE) into the A (or B) drive. Install the GyHost system by typing: **A:Install** and hit the Enter Key.

The GyHost directory together with the necessary files and sub-directory has now been set up. The contents of GyHost can be compared to the lists given in the following sub-section. However, some of the files named in the following sub-section may not be present since they are created when the GyHost and/or Gy systems are used.

Minimum File Requirements:

The files listed below are the minimum requirements for running GyHost. The **(O)**ptional ones do not have to exist when GyHost is invoked, but may be generated by GyHost during its execution. **(R)**equired files, are necessary at all times for the correct execution of the GyHost and the Gy programs. Those files indicated as **(D)**ata files contain pertinent data for the collection activity. Those files indicated as **(P)**rogram files exist to support the correct execution of the GyHost program.

List of minimum files for running GyHost:

File Name	Size (Appr.)	(R)eq'd (O)pt'l	(D)ata (P)rog	Purpose
ACCESS.DBF	~	R	D	Access Notes database table.
ACCESS.NTX	~	O	D	Access Notes database table index
ACCESS2.NTX	~	O	D	Access Notes database table index
BATHCOM.BAT	5552	R	P	Host/Handheld communication
CMDHCOM.CFG	20	R	P	Host/Handheld communication
CMDHCOM.EXE	44081	R	P	Host/Handheld communication
CMDHCOM.LOG	11040	R	P	Host/Handheld communication
COLORS.DBF	1835	R	D	Colours database table
COLORS.NTX	2048	O	D	Colours database table index
DOT.DBF	~	R	D	Dot Count database table
DOT.NTX	~	O	D	Dot Count database table index
DT_STD_C.DBF	~	R	D	Dead Tree Tally Diameter Classes database table
DT_STD_C.NTX	~	O	D	Dead Tree Tally Diameter Classes database table index
DT_TALLY.DBF	~	R	D	Dead Tree Tally database table
DT_TALLY.NTX	~	O	D	Dead Tree Tally database table index
EPSL_FIZ.DBF	61453	R	D	FIZ lookup table from EPSL
EPSL_FIZ.NTX	96256	R	D	FIZ lookup index from EPSL
GROUP.DBF	~	R	D	Group database table
GROUP.NTX	~	O	D	Group database table index

File Name	Size (Appr.)	(R)eq'd (O)pt'l	(D)ata (P)rog	Purpose
GY.BAT	102	R	P	GyHand execution BAT file
GY.RP1	123904	R	P	GyHost Report definitions
GY_HAND.EXE	328352	R	P	GyHand program executable
GY_HOST.EXE	545536	R	P	GyHost 'Dual' mode program executable
GY_HOSTR.EXE	483616	R	P	GyHost 'Real' mode program executable
GYHAND.BAT	104	R	P	Alternate GyHand execution BAT file
GYHOST.BAT	169	R	P	GyHost 'Dual' mode execution BAT file
GYHOSTEX.FMT	135	R	D	SiteTools format definition
GYHOSTR.BAT	113	R	P	GyHost 'Real' mode execution BAT file
HANDHELD	<DIR>	R		HandHeld sub-directory
HANDMESS.DBF	10419	R	D	HandHeld messages database
HANDMESS.NTX	9216	O	D	HandHeld messages database index
HCOM.CFG	52	R	P	Husky 'PC <> HandHeld' Communications
HCOM.EXE	100303	R	P	Husky 'PC <> HandHeld' Communications
HCOM.HLP	3950	R	P	Husky 'PC <> HandHeld' Communications
HCS.COM	4352	R	P	Husky 'PC <> HandHeld' Communications
HOSTMESS.DBF	36951	R	D	Host messages database table
HOSTMESS.NTX	9216	O	D	Host messages database table index
LOOKUP.DBF	3161	R	D	Code Lookup database table
LOOKUP.NTX	8192	O	D	Code Lookup database table index
MESSAGES.DBF	45521	R	D	All Messages database table
MESSAGES.NTX	9216	O	D	All Messages database table index
PLOT.DBF	~	R	D	Plot database table
PLOT.NTX	~	O	D	Plot database table index
PSPMEAS.DBF	~	R	D	Previous measurement's Sample Measurement database table
PSPMEAS.NTX	~	O	D	Previous measurement's Sample Measurement database table index
PUBLIC.DBF	2095	R	D	Internal GyHost GyHand database table
RR.CNF	725	R	P	Report Writer configuration file
RRPRINT.PCF	73792	R	P	Report Writer Printer configuration file
RRPRINT3.PCF	33106	R	P	Report Writer Printer configuration file
RRSETUP.EXE	197934	R	P	Report Writer Printer setup utility
RRUN.EXE	515622	R	P	Report Writer runtime executable
RRUNIN.DBF	38154	O	P	Report Writer incoming report request
RRUNOUT.DBF	293	R	P	Report Writer outgoing report status
RRUNTIME.EXE	15789	R	P	Report Writer runtime executable
RULES.DBF	15303	R	D	Validation Rules database table
SAMPLE.DBF	~	R	D	Sample database table
SAMPLE.NTX	~	O	D	Sample database table index
SITETOOL.EXE	252110	R	P	Site Index calculation executable
SP_MEAS.DBF	~	R	D	Current measurement's Sample Measurement database table

File Name	Size (Appr.)	(R)eq'd (O)pt'l	(D)ata (P)rog	Purpose
SP_MEAS.NTX	~	O	D	Current measurement's Sample Measurement database table index
SPECIES.DBF	~	R	D	Species composition database table
SPECIES.NTX	~	O	D	Species composition database table index
SPECIESH.NTX	~	O	D	Species composition database table index
SPECIESL.NTX	~	O	D	Species composition database table index
SPECIESS.NTX	~	O	D	Species composition database table index
TR_MEAS.DBF	~	R	D	Tree measurement database table - measurement sensitive data for current and previous measurements
TR_MEAS.NTX	~	O	D	Tree measurement database table index - measurement sensitive data for current and previous measurements
TR_MEAS2.NTX	~	O	D	Tree measurement database table index - measurement sensitive data for current and previous measurements
TR_MEAS3.NTX	~	O	D	Tree measurement database table index - measurement sensitive data for current and previous measurements
TREE.DBF	~	R	D	Tree database table - non measurement-sensitive data
TREE.NTX	~	O	D	Tree database table index - non measurement-sensitive data
TREE_SEQ.NTX	~	O	D	Tree database table index for sequencing ingrowth - non measurement-sensitive data
TREESEC.NTX	~	O	D	Tree database table index by sector - non measurement-sensitive data
VALID.DBF	38210	R	D	Validation steps database table
VALID_HA.NTX	27648	O	D	Validation steps database table index for HandHeld
VALID_HO.NTX	27648	O	D	Validation steps database table index for Host PC
WINDOW.DBF	547	R	D	Screen windows database table
WINDOW.DBT	512	R	D	Screen windows database table memos

DOS StartUp Files:

CONFIG.SYS

The CONFIG.SYS file on the Host PC must contain the following two lines:

buffers=24

files=109

The buffers parameter should be a multiple of 8 (necessary for some versions of DOS) and be at least 24.

The files parameter should be an ODD number and be at least 109.

AUTOEXEC.BAT

There are no specific statements to put in the AUTOEXEC.BAT file.

Setting Up in a LAN Environment

To Be Supplied

Setting up the HandHeld PC

Memory and Disk Requirements

The Husky FS/2 HandHeld Computer has a basic memory of 655,360 bytes and must be equipped with 2 MBytes of RAM Disk. The RAM Disk, drive C: is initially set up with a sub-directory named 'DOS' which contains many DOS utility programs in read-only memory. These programs cannot be deleted.

A sub-directory GY must be created on the C: drive. This will be the directory in which GyHand will operate and in which all of the Growth & Yield specific information is to be kept. If this directory does not exist, carry out the following procedures:

CD This makes the root directory on the current drive the current directory.

MD GY This creates the GY directory.

CD GY This makes the directory GY the current directory.

The GY directory receives the sample data from the host PC for field work, maintains the samples through the GyHand program, and is the source of the data sent back to the host PC upon completion of the field work. With the necessary programs and program files set up in the GY sub-directory, but with the databases essentially empty, there should be available in excess of 643 KBytes of RAM Disk.

Keyboard Requirements:

In addition to the normal number and alpha keys, GyHand requires the following keys:

<Esc> Normally used for escaping from the current to the previous screen without updating . Exceptions are some Browsing screens.

<F1>, <F2>, <F3>, <F4>, <F5>, <F6>
These are the Hot-Keys, single key operation of that would be desirable. The Husky FS/2 has single key for F1 - F4; F5 and F6 are available by pressing the Paw Key + the '5' or '6' key.

Lower case alpha, and, if required by the user, upper case as well.

Minimum File Requirements:

At Initial Start-up after Down-Load:

R = Required D = Data O = Optional P = Program

File	Size	(R)eq'd (O)pt'l	(D)ata (P)rog	Notes
COLORS.DBF	1835	R	D	Colours database table
COLORS.NTX	2048	O	D	Colours database table index
DOT.DBF	~	R	D	Dot Count database table
DOT.NTX	~	O	D	Dot Count database table index
DT_TALLY.DBF	~	R	D	Dead Tree Tally database table
DT_TALLY.NTX	~	O	D	Dead Tree Tally database table index
FLAG.TMP	102	R	P	Re-index indicator
GROUP.NTX	~	O	D	Group database table index
GROUP.DBF	~	R	D	Group database table
GY.BAT	102	R	P	GyHand execution BAT file
GY_HAND.EXE	328368	R	P	GyHand program executable
HANDMESS.DBF	10443	R	D	HandHeld messages database
HANDMESS.NTX	9216	O	D	HandHeld messages database index
LOOKUP.DBF	3161	R	D	Code Lookup database table
LOOKUP.NTX	8192	O	D	Code Lookup database table index

File	Size	(R)eq'd (O)pt'l	(D)ata (P)rog	Notes
PLOT.DBF	~	R	D	Plot database table
PLOT.NTX	~	O	D	Plot database table index
PSPMEAS.DBF	~	R	D	Previous measurement's Sample Measurement database table
PSPMEAS.NTX	~	O	D	Previous measurement's Sample Measurement database table index
PUBLIC.DBF	2095	R	D	Internal GyHost GyHand database table
RULES.DBF	15303	R	D	Validation Rules database table
SAMPLE.DBF	~	R	D	Sample database table
SAMPLE.NTX	~	O	D	Sample database table index
SP_MEAS.DBF	~	R	D	Current measurement's Sample Measurement database table
SP_MEAS.NTX	~	O	D	Current measurement's Sample Measurement database table index
SPECIES.DBF	~	R	D	Species composition database table
SPECIES.NTX	~	O	D	Species composition database table index
SPECIESH.NTX	~	O	D	Species composition database table index
SPECIESL.NTX	~	O	D	Species composition database table index
SPECIESS.NTX	~	O	D	Species composition database table index
TR_MEAS.DBF	~	R	D	Tree measurement database table - measurement sensitive data for current and previous measurements
TR_MEAS.NTX	~	O	D	Tree measurement database table index - measurement sensitive data for current and previous measurements
TR_MEAS2.NTX	~	O	D	Tree measurement database table index - measurement sensitive data for current and previous measurements
TR_MEAS3.NTX	~	O	D	Tree measurement database table index - measurement sensitive data for current and previous measurements
TREE.DBF	~	R	D	Tree database table - non measurement-sensitive data
TREE.NTX	~	O	D	Tree database table index - non

File	Size	(R)eq'd (O)pt'l	(D)ata (P)rog	Notes
TREE_SEQ.NTX	~	O	D	measurement-sensitive data Tree database table index by sector - non measurement- sensitive data
TREESEC.NTX	~	O	D	Tree database table index for sequencing ingrowth - non measurement-sensitive data
VALID.DBF	38210	R	D	Validation steps database table
VALID_HA.NTX	27648	O	D	Validation steps database table index for HandHeld
WINDOW.DBF	~	R	D	Screen windows database table
WINDOW.DBT	~	R	D	Screen windows database table memos

DOS StartUp Files - Config & Autoexec:

CONFIG.SYS

The CONFIG.SYS file on the HandHeld PC must contain the following 2 lines:

```
buffers=24  
files=69
```

The buffers parameter should be a multiple of 8 (necessary for some versions of DOS) and be at least 24. The files parameter should be an ODD number and be at least 69.

AUTOEXEC.BAT

The AUTOEXEC.BAT file on the Husky HandHeld PC must contain the following line:
path c:\;c:\dos

Editing on the Husky FS/2:

The editing process is discussed in the *Husky System Developers Guide* - Chapter 12 but an outline is included here for reference:

For modifying a text file named CONFIG.SYS:

CD Changes to the Root Directory

EDIT CONFIG.SYS Invokes the Text Editor

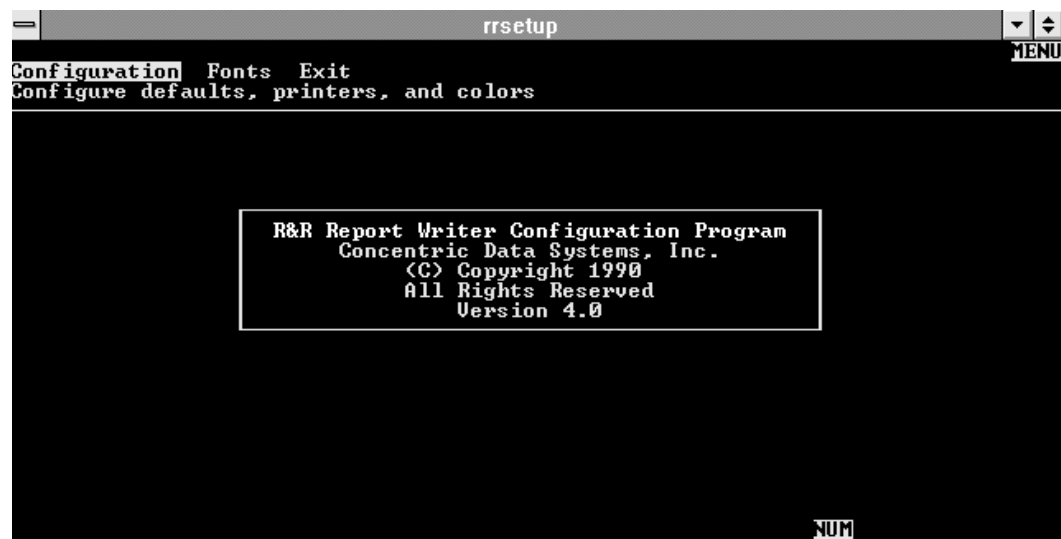
- Use the arrow keys and character keys to position in the text and add/change values. The left arrow key does not delete characters as it moves left, to do this use the left arrow over the Clr key. The editor is in the insert mode when it begins operation, this means that all typed characters are inserted BEFORE the one highlighted by the cursor.

<F1> Saves the File

<F2> Exits the editor

Setting up the Printer

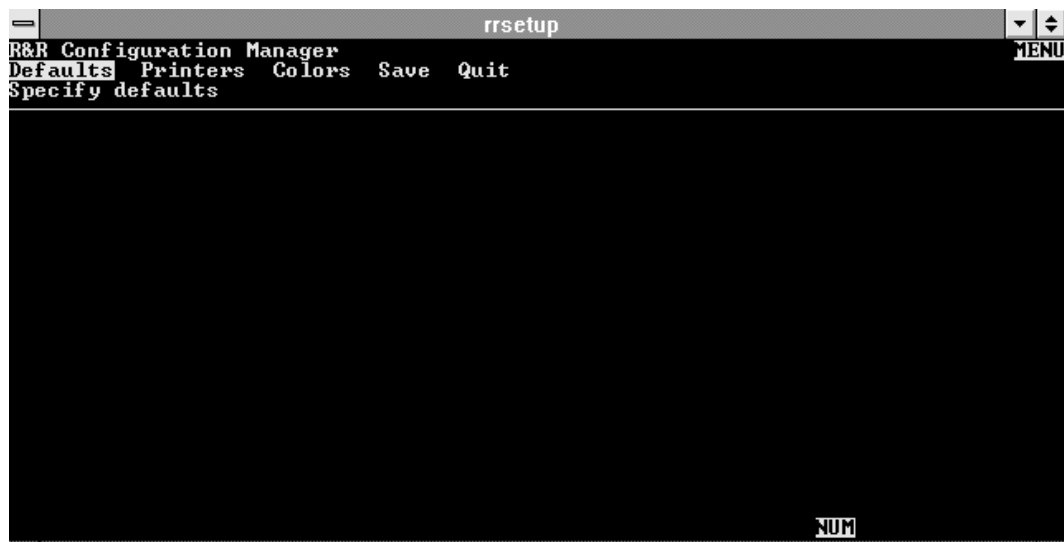
<Esc> to GyHost directory (i.e. in DOS), enter the command "rrsetup". A screen with three options (configuration, fonts, exit) is then displayed.



<Enter> with the cursor on configuration.

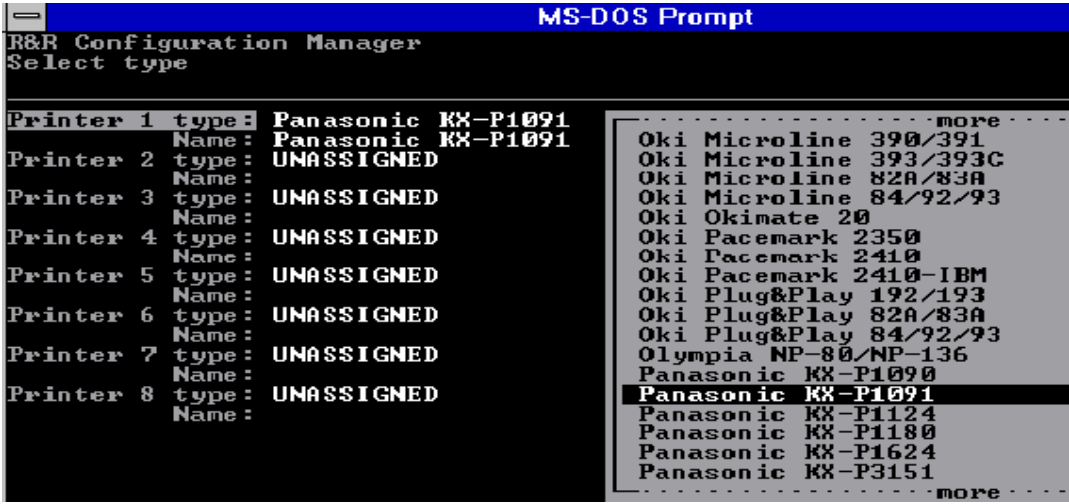


<Enter> with the cursor on "RR.CNF" A screen with five options (defaults, printers, colors, save, quit) is then displayed.



Scroll to **Printers** and <Enter>. A screen with several printers is then displayed.

With the cursor on Printer 1 <Enter>. A list of printers is then displayed. Cursor to the printer, you want to select and <Enter>. Note that the standard printer used successfully in the past is the "Panasonic KX-P1091".



```
MS-DOS Prompt
R&R Configuration Manager
Select type

Printer 1 type: Panasonic KX-P1091
                Name: Panasonic KX-P1091
Printer 2 type: UNASSIGNED
                Name:
Printer 3 type: UNASSIGNED
                Name:
Printer 4 type: UNASSIGNED
                Name:
Printer 5 type: UNASSIGNED
                Name:
Printer 6 type: UNASSIGNED
                Name:
Printer 7 type: UNASSIGNED
                Name:
Printer 8 type: UNASSIGNED
                Name:

Oki Microline 390/391
Oki Microline 393/393C
Oki Microline 82A/83A
Oki Microline 84/92/93
Oki Okimate 20
Oki Pacemark 2350
Oki Pacemark 2410
Oki Pacemark 2410-IBM
Oki Plug&Play 192/193
Oki Plug&Play 82A/83A
Oki Plug&Play 84/92/93
Olympia NP-80/NP-136
Panasonic KX-P1090
Panasonic KX-P1091
Panasonic KX-P1124
Panasonic KX-P1180
Panasonic KX-P1624
Panasonic KX-P3151

more
more
```

Cursor to **Quit** and <Enter>

<Esc>

Cursor to **Save** and <Enter>

Cursor to **Quit** and <Enter>

Cursor to **Exit** and <Enter>. This will take you back to the GyHost directory

Chapter 2: Functional Overview

Data Collection System Overview

The Sample Data Collection System for the Growth and Yield Database comprises a Desktop Personal Computer system, a HandHeld Computer system, and the necessary communications processes to link these and the Ministry Growth and Yield Database together.



All the database files used in this system are flat ASCII files termed 'SDF' (System Data Format) with fixed length records, each record being delimited with a 'return/linefeed' character pair.

The smallest unit of data that is handled externally to the GyHost and GyHand programs is the Sample. Samples may be moved between the Ministry database and the GyHost system or between the GyHost system and the HandHeld PC system.

The flow of data through the system depends on whether the Samples are re-measurement or establishment, each of these two cases will be discussed separately here to aid in understanding the process.

Data-Flow for Establishment Samples:

- No data is received from the Ministry for these samples.
- The Samples would normally be created using the GyHand system. No tree information can be originated using GyHost.
- The HandHeld system is used to identify the trees in the sample and record the measurement data.
- Upon completion of the collection activity, the establishment data is uploaded to GyHost using the UpLoad option and specifying the samples to be uploaded. The UpLoad facility will first delete those records on GyHost relating to the samples to be uploaded, and then perform the UpLoad.
- The uploaded samples can be reviewed with GyHost.
- If the sample data is to be returned to the Ministry at this time, it can be exported to diskette in ASCII format.

Data Flow for Re-Measurement Samples:

- The previous measurement data together with non-measurement specific data is received from the Ministry in ASCII format. There will not be any records in the Current Sample Measurement database (SP_MEAS.DBF). There will, however, be one record for each previously measured sample in the Previous Sample Measurement database (PSPMEAS.DBF).
- The Data Import option is used to bring the previous measurement information into the working directory on the GyHost system in Clipper database format.
- The remeasurement database is downloaded to the HandHeld system using the GyHost DownLoad option and specifying the samples to be downloaded. All data relating to each selected sample is downloaded.
- The HandHeld system is used to identify the trees in the sample and record the remeasurement data.
- Upon completion of the collection activity, the establishment and re measurement data is uploaded to GyHost using the UpLoad option and specifying the samples to be uploaded. The UpLoad facility will first delete those records on GyHost relating to the samples to be uploaded, and then perform the UpLoad.
- The uploaded samples can be reviewed with GyHost.
- If the sample data is to be returned to the ministry at this time, it can be exported to diskette in ASCII format.

The External Interface between GyHost and the Ministry's Standard Edit Format

The files comprising this interface are as follows:

ACCESS	DOT	SP_MEAS	TR_MEAS	SAMPLE
PLOT	PSPMEAS	TREE	SPECIES	

They have a three character extension, the first character of which will indicate the sample type (G, T, I etc.). The second and third characters are numeric and indicate multiple diskettes (i.e., 01, 02, 03 etc.).

Using the HandHeld System

Starting GyHost

With the current directory as GyHost, type: **GyHost<Enter>**

This will invoke the GyHost program and present the Main Menu to the user.

Refer to the GyHost Section of this Manual for instructions on how to use GyHost.

Operational notes

Note the following when using the GyHost system:

- GyHost automatically reindexes the databases when necessary following Upload, Download and DataTran data transfer so the user does not have to be concerned with this.
- The batch file for executing GyHost is GyHost.BAT. Following the running of GyHost, the batch file deletes all files that have no extension (i.e. ABCDEF.). This is a precautionary step but means that the user must not rely on any user files with no extension being retained in the GyHost directory.
- It may be required to remove all the samples in the GyHost directory. To do this the program is invoked as follows:
GyHost PURGE<Enter>
******Caution: this will erase all samples from the GyHost directory ******

Chapter 3: GyHand - The HandHeld PC System

Introduction

The sequence of the HandHeld (H/H) software was designed to imitate, as much as possible, the logical sequence of data collection in the field. Therefore, the sample and plot identification must be entered before any tree can be measured. In the same way, a sub-plot tree cannot be measured before the sub-plot size is known.

It is recommended that the logical sequence built into the software be followed in order to take full advantage of it.

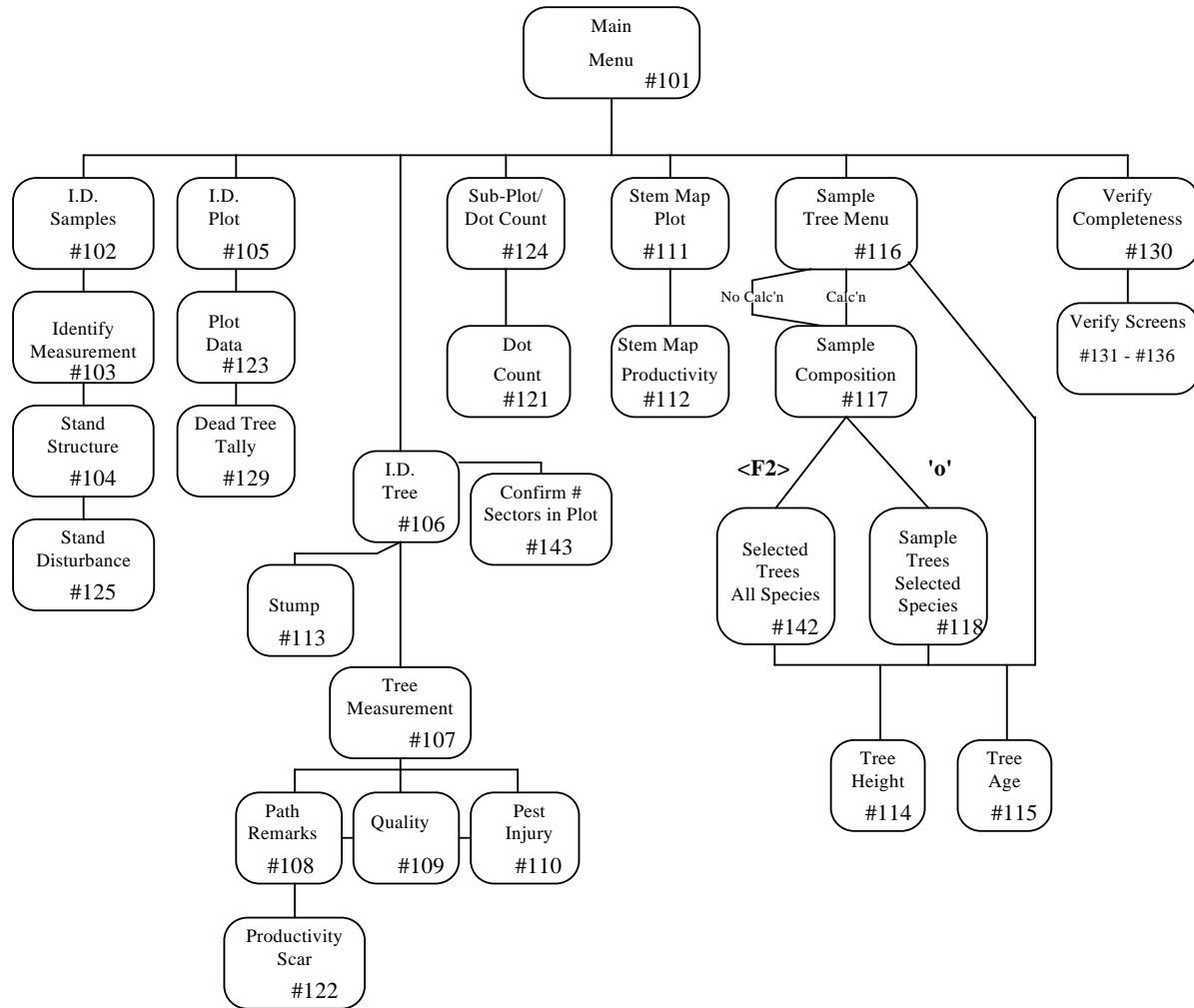
The H/H normally retains information that was last entered in some fields. Therefore, when first turned on, one may find the region, compartment, etc of a sample completed days before. To override this, simply enter the new data to change the identity for the sample required.

Other features:

- <Esc> Normally used for escaping from the current to the previous screen without updating. Exceptions are some browsing screens.
- < Y > will save the data of an active screen when the message Screen O/K appears. < N > will access the first field in the screen.
- < ↑ or ↓ > up and down arrows will allow movement around the screens.

Normally screen and version numbers do not appear on the HandHeld. If this information is required, use “PAW” and “DOWN ARROW” on the Husky FS2

**Growth and Yield Sample Data Collection System
HandHeld PC Screen Structure Chart
Version 7.0 (97.04.06)**



Function Keys

- F1** Sample Measurement or Tree Measurement Comments.
- F2** Display Mapped Trees - from screen #111
Tree Hot Key-Class/Path-Tree Measurements - from others.
- F3** Dead Tree Tally - establishment
Display Previous Measurements - re-measurement
- F4** Tree Hot Key - from screen #121, 124
Height Hot Key - from id tree sub-system
- F5** Display Incomplete (re)measurements - from id tree subsystem
- F6** Go to Stem Map (#111 or #112 - from id tree subsystem)

Screen #101

Vers: 7.0 MAIN MENU

1. Identify Sample
2. Identify Plot
3. Measure Trees
4. Sub-Plot/Dot Cnt
5. Sample Trees
6. Stem Map
7. Verify Complete

As seen	Notes
<ol style="list-style-type: none">1. Identify Sample2. Identify Plot3. Measure Trees4. Sub-Plot/Dot Cnt.5. Sample Trees6. Stem Map7. Verify Complete	<p><i>** Generally, it is recommended that these screens be accessed and completed in the same order as they appear so that full advantage can be taken of the editing capabilities of the software.**</i></p> <ul style="list-style-type: none">• Use the 'up' and 'down' arrows to choose the desired screen and then <Enter>• <u>Verify Complete</u> should only be used after all measurements have been done.

User Notes:

Screen #102

```

                ID SAMPLE
Reg Cmp L Ins Sam Tp
  73  96    0  1  G
      Csamp
Dia? 1.3 Y or 1.37 N
TagLim 4.0 Dia/Ht D
L/S? N SpecProg? N
Screen OK (Y/N)?:Y
    
```

As seen	Meaning	Default	Valid	Notes
Reg	Region No.	-	1 - 88	Unique provincial numbers
Cmp	Compartment #	-	1 - 206	Unique provincial numbers
L	Comp. Letter	-	∅ or A - Z	Some coastal compartments have a letter
Ins	Installation	-	1 - 99	-
Sam	Sample Number	-	1 - 999	-
Tp	Sample Type	-	GIMPRST	G (natural), I (intensive forestry), M (productivity), P (photo), R (experimental), S (temporary) or T (silviculturally treated) Prompts: "create Y/N at establishment" "N" - will close screen, return to screen #101 "Y" - will create, measurement #0
Csamp	Company Sample	-	-	Character or Alpha if applicable
Dia? 1.3	Diameter at 1.3	Y	Y or N	Applies to the whole sample
or 1.37	Diameter at 1.37	N	Y or N	Applies to whole sample
TagLim	-	-	-	Break between plot and subplot ≥0.3 for (I), ≥1.3 for (T), 4.0 for all others
Dia/Ht	DBH or Height	D	D or H	-
L/S?	Lean or Sweep	N	Y or N	For some samples. Applies to whole sample
Spec Prog?	Special Program	N	Y or N	Used for special projects only
Screen OK(Y/N)	-	-	Y or N	Y - saves and moves to next screen N - returns to Csamp ↑ - returns to last field in the screen

User Notes:

Screen #103

```

<F13>          ID MEAS
Measurement    2
Date          97.03.24
Stem Map?     N
Select Logged? N
Special Site   0.0
DBH Ref. Point PoG
Screen OK (Y/N)? :Y
  
```

As seen	Meaning	Default	Valid	Notes
<F13>	Hot Keys	-	Anytime	F1 - Accesses area for sample remarks
Measurement	Meas. No	-	-	F3 - At remeas., displays prev. measurement
Date	-	-	-	Entered automatically; check accuracy at remeas.
Stem Map ?	-	N	Y or N	Automatic for establishment, change at remeas.
Select Logged	-	N	Y or N	If "Y" all trees must be stem mapped
Special Site	-	0.0	0.0, or 5-50	Y - if in selectively logged areas in complex stands
DBH Ref. Point	-	-	-	If age and height not representative
Screen OK(Y/N)	-	Y	Y or N	Automatically. PoG for samples <1991 or UpH if >1990 Y - saves and moves to next screen N - returns to beginning of screen ↑ - returns to last field in the screen

User Notes:

Screen #104

```

<F13>      STND STRUCT
Stand Structure      1
C.Clsr% :Lyr1      50
                :LyrV      5
Stems/Ha            0
Spacing Type        S
Screen OK (Y/N)?:Y
  
```

As seen	Meaning	Default	Valid	Notes
<F13>	Hot Keys	-	Anytime	F1 - Accesses area for sample remarks
Stand Struct.	-	-	1,2 or 3	F3 - At remeas. - displays prev. measurement
C.Clsr%:Lyr1	Crown Closure	0	10 - 100	Std. Struct. 1 -simple, 2 -complex, 3 -multi-layer
:LyrV	CC layer V	0	0 - 5	If "3" which is primary layer? - "1" or "2"
Stems/Ha	-	0	1 - 99999	If "1" or "2" there is layer 1 and "V" layer
Spacing Type	-	S	S or T	In increment of 10's
Screen OK(Y/N)	-	Y	Y - N	Vet layer must have a crown closure of <6%
				For (S) samples in young stands
				Normally (S)quare but can be (T)riangular
				Y - saves and moves to next screen
				N - returns to begining of screen
				↑ - returns to last field in the screen

User Notes:

Screen #105

```

<F1>          ID PLOT
Plot#  1 CtrStk OK?Y
Plot Radius   11.28
      Area     0.0400
Ln   0.00 Wth  0.00
BA Factr  0.000
Screen OK (Y/N)? :Y
  
```

As seen	Meaning	Default	Valid	Notes
<F1>	Hot Key	-	Anytime	F1 - Accesses screen for sample remarks
Plot #	No. of plot	1	1 - 10	(I) samples 1-10 or 1-5, (G,T) '80-88 est. 1-3
CtrStk OK?	Centre Stake ok	Y	Y - N	Prompt 'Create (Y/N)'
Plot Radius	-	-	5 - 30.9	"Y" - will create Meas. '0'
Area	-	-	-	"N" - will close screen, return to screen #101
Ln	Length	0.0	-	"N" if repairs made to plot centre stake
Wth	Width	0.0	-	-
BA Factor	basal area factor	-	-	Automatically done if circular, enter if square
Screen OK(Y/N)	-	Y	Y or N	Enter if missing (R samples only)
				Enter if missing (R samples only)
				For prism (S) samples
				Y - saves and moves to next screen
				N - returns to beginning of screen
				↑ - returns to last field in the screen

User Notes:

Screen #106

```

<F123456 TREE P1# 1
Tree 109 D?N Spc FD
D13: 35.7 D137: 0.0
Stmp:? Sec: 6 M/D:
Nat/Plant: InPlot:Y
TagOK:Y NrTree 108
PrvHt: * NxTree 110
Screen OK (Y/N)? :Y
  
```

As seen	Meaning	Default	Valid	Notes
<F123456	Hot Keys	-	Anytime	F1 - Accesses screen for tree remarks F2 - Recalls trees out of sequence - enter tree number, <enter> choose option - tree class/path or tree measurements F3 - Establish. - accesses dead tree tally - Remeas. - displays previous meas. data F4 - Accesses screen 114 to measure heights F5 - List of trees incompletely measured F6 - Accesses stem map screen
Tree	Tree Number	-	-	Entered automatically. Change if out of sequence
D?	Delete tree?	N	Y or N	Accessed by arrowing back Y - will delete data for that tree
Spc	Species	-	-	See Appendix 8-14 for species symbols
D13:	DBH at 1.3m	-	-	Accessed if chosen for sample - screen 102
D1.37	DBH at 1.37m	-	-	Accessed if chosen for sample - screen 102
Stmp?	Is it a stump?	∅ N	Y/N	Accessed only if selectively logged chosen If selectively logged, then (Y)es or (N)o
Sec:	Sector number	-	1 - 16	Will remain the same until changed at establishment Displays number at remeasurement
M/D	Missed/Dropped	∅	M,D or ∅	Missed trees at prev. meas. or dropped at remeas. Accessed with the up arrow key
Nat/Plant:	Natural/Planted		N or P	"T" samples only
InPlot:	Inside plot?	Y	Y or N	N - for trees measured outside plot. ie for ages
TagOK:	Is tree tag okay?	Y	Y or N	N - if nail was missing (tag missing for 'M' sample)
NrTree	Near tree No.	0	#	Used to identify location of ingrowth or subplot trees
NxTree	Next tree No.	0	#	Appears automatically at remeasurement
ScreenOK(Y/N)	-	Y	Y or N	Y - saves and moves to next screen N - returns to beginning of screen ↑ - returns to last field in the screen

User Notes:

Screen #107

```

<F123456   TREE# 109
Tree Cl 2  Crown Cl 1
Lv Crown% 5  Layer
DBH (1.3M)      35.7
DBH (1.37M)
Height(Est/Meas) 0.0
PrvHt: *  NxTree 110
Screen OK (Y/N)? :Y
    
```

As seen	Meaning	Default	Valid	Notes
<F123456	Hot Keys	-	Anytime	F1 - Accesses screen for tree remarks F2 - Recalls tree number out of sequence - enter tree number <enter> and choose option - tree class/path or tree measurements F3 - Establish. - accesses dead tree tally - Remeas. - displays previous meas. data F4 - Accesses screen 114 to measure heights F5 - Lists trees incompletely measured F6 - Accesses stem map screen
Tree Cl	Tree Class	-	1 - 6	Only TC 2,3,4 and 5 will access path screen
Crown Cl	Crown Class	-	1- 6	If TC5 entered, CC will get a 5 and layer V
Lv Crown	Live Crown%	-	1 - 10	LC in 10's. 10=100
Layer	Stand Layer	∅	∅ ,1,2,V	∅ assumes single layer
DBH(1.3m)	DBH at 1.3m	-	2.0-125.0	Previous DBH displayed at remeas.: enter new DBH
DBH(1.37m)	DBH at 1.37m	-	2.0-125.0	As above if (Y) set in screen #102
Height(Es/Mes)	Ht.(Est/Meas)	0.0	-	Accessed only in V layer or for small tree height
PrvHt:	Previous Ht	∅	-	An * will appear if a previous height exists
NxTree	Next Tree No.	-	-	Given at remeasurement
ScreenOK(Y/N)	-	Y	Y or N	Y - saves and moves to next screen N - returns to begining of screen ↑ - returns to last field in the screen

User Notes:

Screen #108

```

<F123456 PATH:Tr 109
Fk/Ck  0  Scar  0
FrostC 0  D/B Top 0
Conk   0  Msltoe 0
B.Conk 0  Rot Br  0
St/Dwn   BrknTop 0
      Ht to Break 0
Screen OK (Y/N)?:Y
    
```

As seen	Meaning	Default	Valid	Notes
<F123456	Hot Key		Anytime	F1 - Accesses screen for tree remarks F2 - Recalls tree number out of sequence - enter tree number <enter> and choose option - tree class/path or tree measurements F3 - Establish. - accesses dead tree tally - Remeas. - displays previous meas. data F4 - Accesses screen 114 to measure heights F5 - Lists trees incompletely measured F6 - Accesses stem map screen
Fk/Ck	Fork/Crook	0	0 - 7	Must be => than previous at remeasurement
Scar	-	0	0 - 7	Must be => than previous at remeasurement
Frost C	Frost Crack	0	0 - 7	Must be => than previous at remeasurement
D/B Top	Dead/Broken	0	0 - 3	For sample types "I" and "M", dead/brkn top become two separate
Conk	-	0	0 - 7	fields. If brkn top occurs, a height to break is required
Mistletoe	-	0	0 - 7	Must be => than previous at remeasurement
B.Conk	Blind Conk	0	0 - 7	Must be => than previous at remeasurement
Rot Br.	Rotten Branch	0	0 - 7	Must be => than previous at remeasurement
St/Dwn	Standing/Down	∅	S or D	Must be => than previous at remeasurement
Brkn Top	-	0		For dead trees only
Ht to Break	Ht to Break	0		For dead trees only
Screen OK(Y/N)		Y	Y or N	For dead trees only if broken top entered Y - saves and moves to next screen N - returns to beginning of screen ↑ - returns to last field in the screen

User Notes:

Screen #109

```

<F123456 QLTy:Tr# 1
Sweep 0 Lean 0
Spiral 0
1st Live Limb 0
1st Stub 0
Knot 1st 5M 0
Knot 2nd 5M 0
ScreenOK(Y/N)?:Y

```

As seen	Meaning	Default	Valid	Notes
<F123456	Hot Key	-	Anytime	F1 - Accesses screen for tree remarks F2 - Recalls tree number out of sequence - enter tree number <enter> and choose option - tree class/path or tree measurements F3 - Establish. - accesses dead tree tally - Remeas. - displays previous meas. data F4 - Accesses screen 114 to measure heights F5 - Lists trees incompletely measured F6 - Accesses stem map screen
Sweep	-	0	0 - 2	For 'M' samples, lean and sweep are combined.
Lean	-	0	0 - 2	As above.
Spiral	Spiral grain	0	0,1	-
1st Live Limb	-	0	0 - 7	Log (5M) no. which has the base of the live crown
1st Stub	-	0	0 - 7	Log (5M) no. that has first dead branch or stub
Knot 1st 5M	-	0	0 - 5	Consider ≥ 10 cm diameter inside bark
Knot 2nd 5M	-	0	0 - 5	Consider ≥ 10 cm diameter inside bark
Screen OK(Y/N)	-	-	-	Y - saves and moves to next screen N - returns to beginning of screen ↑ - returns to last field in the screen

User Notes:

Screen #110

```

<F123456 PEST/INJURY
      Tree# 109
Pest/Injury (Y/N)? Y
Type D Spc SG Sev 1
Suit For Height: Y
PrvHt:* NxTree 110
Screen OK (Y/N)? :Y
    
```

As seen	Meaning	Default	Valid	Notes
<F123456	Hot Key	-	Anytime	F1 - Accesses screen for tree remarks F2 - Recalls tree number out of sequence - enter tree number <enter> and choose option - tree class/path or tree measurements F3 - Establish. - accesses dead tree tally - Remeas. - displays previous meas. data F4 - Accesses screen 114 to measure heights F5 - Lists trees incompletely measured F6 - Accesses stem map screen
Tree #	Tree Number	-	-	Must be ≥ 1
Pest/Injury	-	∅	Y or N	(Y)es or (N)o
Type	Damage type	∅	-	If yes, enter A,D,I,M,N,T,U or V
Spc	Species	-	-	If No, will skip balance of screen
Sev	Severity	-	-	See codes in Appendix 8-30
Suit for Ht.	Suitable for Ht	-	Y,N,C,F	See codes in Appendix 8-30
PrvHt: *	Previous Ht.	Y	-	Yes,No,Could be, Flagged
NxTr#	Next Tree No.	∅	>0	The * indicates that a previous height was taken Appears automatically at remeasurement
Screen OK(Y/N)		Y	Y or N	Y - saves and moves to next screen N - returns to beginning of screen ↑ - returns to last field in the screen

User Notes:

Screen #111

```

<F1>
STEM MAP, PLOT:      1
Offset?              N
Tree #                201
Bearing from PC     20
Slope %              0
Slope Dist          0.80
Screen OK (Y/N)?:Y
  
```

As seen	Meaning	Default	Valid	Notes
<F1>	Hot Key		Anytime	F1 - Sample remarks when on "offset"
Plot: 1	-	1	1 - 10	Tree remarks otherwise
Offset?	Offset center	N	Y or N	At remeas. 1-10 for I , 1-3 for G & T otherwise '1'
Tree #	-	-	1 or >	Y - will prompt screen No.123
Bearing from PC	-	-	1-360	Must be ≥ 1
Slope %	-	-	0 or >	360 is north
Slope Dist	-	-	-	-
Screen OK(Y/N) ?		Y	Y or N	Cannot exceed the plot radius Y - saves and moves to next screen N - returns to beginning of screen ↑ - returns to last field in the screen

User Notes:

Screen #112

```

<F1>
STEM MAP: PRODUCTVTY
Tree #           1
To Tree# Distance(M)
1     5           0.95
2     4           1.10
3    22           0.30
Screen OK (Y/N)?:Y
  
```

As seen	Meaning	Notes
<F1>	Hot Key	F1 - Accesses screen for tree remarks
Tree #	Tree Number	Number of tree that is being stem mapped
To Tree #	To Tree Number	Number of tree to which the new tree is being mapped to
Distance	-	Distance between the two trees (center to center)
Screen OK	-	Y - saves and moves to next screen N - returns to beginning of screen ↑ - returns to last field in the screen

User Notes:

Screen #113

<pre> <F123456 STUMP Tree # 1 Diameter cm 12.5 Height m 0.3 New/Old N/O 0 Screen OK (Y/N)? :Y </pre>	
---	--

As seen	Meaning	Default	Valid	Notes
<F123456	Hot Keys	-	Anytime	F1 - Accesses area for tree remarks F2 - Recalls tree numbers out of sequence - enter number and choose option - tree class or tree measurement F3 - Accesses dead tree tally F4 - Accesses screen 114 to measure heights F5 - List of trees incompletely measured - Accesses stem map screen F6
Tree #	Tree No.	∅	∅	Not accessible or applicable
Stump	-	-	900 - 979	Use only numbers.900 to 979
Diametre cm	-	0.0	7.4-125cm	Stumps of merchantable trees only
Height m	-	0.0	-	-
New/Old	-	∅	O or N	New <10 years: old >10 years

User Notes:

Screen #114

```

<F123>      Plot#: 1
  Height Tree# 103
Prev Ht 24.5 Ht 25.3
Top% 75 Bot% -5
SlDist:30.0 Sl%: 5
Ht Corr 1.30 Ht 25.3
Top Height (Y/N)? Y
Screen OK (Y/N)? :Y
  
```

As seen	Meaning	Notes
<F1>	Hot Key	F1 - Accesses area for tree remarks
Plot #:1	Plot Number	F2 - Accesses screen for TC and Path
Height Tree #	Tree Number	F3 - Accesses previous remeasurements
Prev Ht	Previous Height	Comes up automatically; check accuracy if more than one plot in sample
Ht.	Height	Number of tree being measured
Top %	Top reading %	Previous height if available - at remeasurement only
Bot %	Bottom %	Enter height directly.;or will calculate when all information is entered
SlDist:	Slope Distance	Top reading in per cent
Sl%:	Slope %	Bottom reading in per cent. Minus (-) must be entered; plus(+) is assumed)
Ht Corr	Ht Correction	Slope distance in meters to one decimal place
Ht	Total Height	Assumed equal to bottom reading; change if not
Top Height(Y/N)	-	Assumed 1.3 meters; change if not Calculated height comes up automatically. To redo height measurements, cursor to the top of screen and zero the Ht. Default is Y if tree was chosen as 'top height'; otherwise N Y - saves and moves to next screen N - returns to beginning of screen ↑ - returns to last field in the screen

User Notes:

Screen #115

```

<F12>   Pl  2   Tr 103
PrvBHAge:  0   Age: 40
Mean Age (Y/N)?      Y
Boring Ht           1.30
Pith?                Y
RI1  10  RI2         15
In Plot? Y
Screen OK (Y/N)? :Y
  
```

As seen	Default	Notes
<F12>		F1 - Accesses area for tree remarks
Pl	Current number	F2 - Accesses TC and Path screen
Tr	-	Plot number that tree is in
PrvBHAge	Previous age	Tree number selected for age measurement
Age	-	- Previous breast height age if applicable
Mean Age(Y/N)	Y/N	- Current BH age
Boring Ht	1.3m	- Will have Y/N depending on tree status
Pith?	∅	- Should be and is assumed to be 1.3 m: change if not
RI1	0	- Was pith hit? Y (yes), N (no) or R (rotten)
RI2:	0	- Length of last 10 years in mm
In Plot?	Y	- Length of last 20 years in mm
Screen OK (Y/N)?	Y	Is tree inside plot
		Y - saves and moves to next screen N - returns to beginning of screen ↑ - returns to last field in the screen

User Notes:

Screen #116

SAMPLE TREE	
1	ID Sample Trees
2	ID SmpTrees-NoCalc
3	Measure Height
4	Measure Age
Choose and <Enter>	

As seen	Notes
1. ID Sample Trees	Calculates species composition and systematically allows for selection and measurement of sample trees.
2. ID SmpTrees-NoCalc	- Same as above but does not calculate species composition.
3. Measure Height	- - - - Use only if no trees have been added or deleted - - - -
4. Measure Age	Accesses screen #114 for height measurements Accesses screen #115 for age measurements

- Use the '**up**' and '**down**' arrows to choose the desired screen and then <Enter>
- *This screen should only be used after all trees have been measured.*

User Notes:

Screen #117

SAMPLE COMPOSITION				
L	SP	BA%	QMD	NT
	FD	53.3	24.1	12
	CW	33.4	24.6	9
	HW	12.8	26.5	3
	DR	0.4	3.8	1
Layer , Den:		13.52		
F2=Selected; O=Other				

As seen	Meaning	Notes
L	Layer	- If single layer, will appear as blank - If Vet layer, will display a 'V' - If double layer, will display '1' or '2'
SP	Species	
BA%	Basal Area %	
QMD	Quadratic Mean Diametre	
NT	Number of Trees	

Note: To take full advantage of the software, it is recommended that the following procedure be used **and only** after all trees have been measured.

Arrow **up** (↑) or **down** (↓) to access other species or layer.

1. < F2 > To access screen #142 which will now list all sample trees chosen by plot in an ascending order of tree number.
2. < O > To access screen #118 to view and choose trees for height measurement. These will be listed by species and in descending order of DBH. The top height trees will already be identified with a 'T' or 'N' as identified in screen #110

Return to screen #117 by < esc > once back

Repeat step '2' for each major species present

User Notes:

Screen #118

ALL SAMPLE TREES:FD					
?	PL	TREE	S	DBH	P
H	1	109	6	35.7	
H	1	111	8	33.4	*
T	1	103	2	32.1	*
R	1	110	7	31.2	*
#TopHt: 4 #Others: 5					
S,A,R,T,O,P,F2,Esc					

ALL SAMPLE TREES:FD					
S	DBH	P	TC	CC	
6	35.7		2	1	
8	33.4	*	1	1	
2	32.1	*	2	1	
7	31.2	*	1	2	
#TopHt: 4 #Others: 5					
S,A,R,T,O,P,F2,Esc					

As seen	Meaning	Notes
?	Status previously assigned	- Entered when tree was measured as answer to suitable for Ht?
-	-	(Y)es,(N)o,(C)ould be and (F)lagged
PL	Plot Number	- If tree already measured it will show a (T)opHt or (O)ther
Tree	Tree Number	-
S	Sector Number	-
DBH	DBH	-
P	Previously Measured	-
TC	Tree Class	- If tree was previously measured an '*' will appear
CC	Crown Class	<u>The following will appear by cursoring to the right</u>
#TopHt:	Number of Top Heights	- Will appear as 1,2, or 5 for Vets
#Others:	Number of Other Heights	- Will appear as 1,2,3,4, or 5 for Vets
S	Select	- Running tally of 'top heights' measured or selected by species
A	Age	- Running tally of 'other heights' measured of selected by species
R	Reject	Select for height measurement
T	Top Height	Select for age measurement
O	Other Height	- Reject for height measurement
P	Path	- Automatically chosen as a 'top height'
F2	Hot Key	- Chosen as 'other height'
Esc	Escape	- Accesses path screens - Displays all selected trees for the species Escapes to Screen 117 - Sample Composition

User Notes:

Screen #121

<F4>	DOT COUNT			
SP	D-0	D-1	D-2	D-3
FD	2	3	0	0
CW	1	2	0	0

Blank Spc. to Delete
DotCt:Esc when Done

As seen	Meaning	Default	Valid	Notes
<F4>	Hot Keys	-	Anytime	F4 - Accesses tree measurements (screen 106)
SP	Species	∅	-	See Appendix 8-14 for species symbols
D-0	DBH class '0'	0	-	0.30 - 1.3 metres in height
D-1	DBH class '1'	0	-	0.1 to 1.9cm in DBH
D-2 to D-10	DBH classes	0	-	<u>For Intensive Forestry Samples Only</u>
D-11	DBH class	0	-	In 2.0cm classes (2.0-3.9, 4.0-5.9,etc) All trees greater than 20.0cm in DBH

User Notes:

Screen #122

```

-PRODUCTIVITY SCAR--
      TREE#      1
Base      0
Mid       0
Top       0
Screen OK(Y/N)?: Y
  
```

As seen	Meaning	Default	Valid	Notes
Tree #	Tree No.		1 - 1000	-
Base	-	0	0 - 8	Base is from germination point to 1.3m
Mid	-	0	0 - 8	Mid is the lower half from 1.3m to top
Top	-	0	0 - 8	Top is the upper half from 1.3m to top
Screen OK(Y/N)	-	Y	Y or N	Y - saves and moves to next screen N - returns to beginning of screen ↑ - returns to last field in the screen

User Notes:

Screen #123

```

<F1>      P1DATA:P1# 1
Aspect180 Slope% 10
Elev 400 Sl Pos M
----- STEM OFFSET? N
Bearing to PC      0
Slope%             0
Slope Dist        0.00
Screen OK (Y/N)? :Y
  
```

As seen	Meaning	Default	Valid	Notes
<F1>	Hot Key	-	Anytime	Accesses area for sample remarks
Aspect	-	0	0-360	If slope is >0, then aspect must also be >0
Slope %	-	0	0 - \pm 100	If aspect is >0, then slope must also be >0
Elev	Elev. in metric	-	1 - 2500m	Elevation in metric system
Sl Pos.	Slope Position	-	-	Valid codes are C,D,F,L,M,T and U
Stem Offset?	-	N	Y or N	- C(rest), D(epression), F(lat), L(ower),
Bearing to PC	-	0	1 - 360	- M(id-slope), T(oe), and U(pper-slope)
Slope %	-	0	-100 - 100	Accessed only if screen #103 had Y for stem map.
Slope Dist	Distance in 'm'	0.00	1 - 9	Bearing from compass location to plot center
Screen OK(Y/N)		Y	Y or N	Slope from compass to plot center Slope distance from compass location to plot center Y - saves and moves to next screen N - returns to beginning of screen ↑ - returns to last field in the screen

User Notes:

Screen #124

<pre> <F14> SbPlot/DtC 1 Sub-Plot Rad. 5.64 Area 0.0100 BA Factr 0.000 S screen OK (Y/N)?:Y </pre>	<pre> <F14> SbPlot/DtC 1 Sub-Plot Rad. 5.64 Area 0.0100 +-S-Plot/Dot Count-+ Meas S-Plot Trees Do Dot Count +-----+ Screen OK (Y/N)?:Y </pre>
---	---

As seen	Meaning	Default	Valid	Notes
<F14>	Hot Keys	-	Anytime	F1 - Accesses area for sample remarks
Sb-Plot/DtC	SubPlot No.	1	1-10	F4 - Accesses area for tree measurement
Sub-plot Rad.	Sub-Plot Radius	None	-	-Entered for establishment -Present at remeasurement otherwise must be entered
Screen OK(Y/N)		Y	Y or N	-Area will come up automatically -Enter BA Factor only for 'S' samples [for (I) samples an ingrowth radius comes up and must be entered] Y - saves and prompts: - S-Plot/Dot Count box Toggle for: - Meas S-Plot trees or Do Dot Count N - returns to beginning of screen ↑ - returns to last field in the screen

User Notes:

Screen #125

```

<F13>  Stnd Disturb
Compl/Partl/Blank  P
Year              0
Type              I
Pest Responsible  DW
Degree(Intensity) L
Screen OK (Y/N)? :Y
  
```

As seen	Meaning	Default	Valid	Notes
<F13>	Hot Key	-	Anytime	F1 - Accesses area for plot remarks
Compl/Partl/Blank	-	-	C,P or \emptyset	F3 - Establish. - accesses dead tree tally
Year	-	0	0 or year	- Remeas. - displays previous meas. data
Type	-	-	-	(C)omplete/(P)artial/or (\emptyset)no disturbance
Pest Responsible	-	-	-	If (\emptyset), curser will skip to Screen OK (Y/N)
Degree(Intensity)	-	-	-	Enter year of disturbance if known
Screen OK (Y/N)	-	Y	Y or N	See appendix 14
				See appendix 14
				See appendix 14
				Y - saves and moves to next screen
				N - returns to beginning of screen
				\uparrow - returns to last field in the screen

User Notes:

Screen #129

DeadTreeT'ly				
Spc	D01	D02	D03	D04
FD	0	0	0	2
HW	0	0	1	0
Blank Spc. to Delete				
DTTally:Esc if Done				
Screen #129 93.02.25				
Vers 4.0: 94.02.06				

As seen	Meaning	Default	Valid	Notes
Spc	Species	-	-	See Appendix 8-14 for species symbols
D01	5.0cm DBH class	0	>0	Class 4.0cm to 7.5cm
D02	5.0cm DBH class	0	>0	Class 7.6cm to 12.5cm
D11	5.0cm DBH class	0	0>	Class \geq 55.6cm
<p>Use up/down arrows to move around the screen and <Enter></p>				

User Notes:

Screen #130

Verify Complete

1. Trees Stem Mapd?
2. Pest/Injury OK?
3. Selct Logged OK?
4. Sample Trees
5. Trees in Sample?
6. All Trees Measd?

As seen	Notes
1. Trees Stem Mapd?	If the sample was stem mapped, will list trees not stem mapped. Otherwise will give a warning if less than three trees were stem mapped.
2. Pest/Injury OK?	Checks that if pest/injury information is entered for the sample, at least one tree has information; or vice versa.
3. Selct Logged OK?	Checks that if Selct. Logged was chosen for sample, at least one stump was entered.
4. Sample Trees	Summarizes the number of height trees taken by species and by type - top height or other.
5. Trees in Sample?	Summarizes the number of trees in the sample and sub-sample. The latter will be further sub-divided into dot count and others. A warning is given if there are less than 110 trees.
6. All Trees Remes?	There are two screens: the first will advise if all trees have been remeasured, the second will advise if all trees chosen for height measure were taken.

- Use the '↑' and '↓' arrows to choose the desired screen and then <enter>
- ***'Verify Complete' should only be used after all measurements have been done.***

User Notes:

Screen #142

ALL SELECTED TREES					
? Pl	Tree	S	DBH	Sp	
O 1	102	1	30.3	FD	
T 1	103	2	32.1	FD	
M 1	104	2	12.2	FD	
H 1	105	3	29.8	FD	
M 1	106	4	20.2	FD	
Press S, R, Esc Exit					

All SELECTED TREES					
?Pl	Tree	Prv	TC	Lyr	
O 1	102	*		1	
T 1	103	*		2	
M 1	104			1	
H 1	105	*		1	
M 1	106	*		2	
Press S, R, Esc Exit					

As seen	Meaning	Notes
?	Status	T - chosen as a 'top height' tree O - chosen as an 'other tree'
Pl	Plot Number	H - measured 'top height tree'
Tree	Tree Number	M - measured 'other tree'
S	Sector Number	Usually '1' unless a multi plot sample
DBH	-	In ascending order by plot
Sp	Species	-
Prv	Previously Taken	DBH
TC	Tree Class	-
Lyr	Layer	<u>The following will appear by cursoring to the right</u>
S	Select	An '*' will appear if height taken during previous measurement
R	Reject	-
Esc	Escape	If single layer: blank or 'V': otherwise '1' or '2' Will access screen #114 for measuring tree Will remove tree from selected height tree status Closes screen and accesses screen #117

User Notes:

Screen #143

```
SPECIFY SECTORS
Plot#: 1
No of Plot Sect: 8
Correct total number
of Sectors in Plot?
Screen OK (Y/N)?:Y
```

As seen	Meaning	Valid	Notes
Plot#	Plot Number	1 - 10	- will show the plot number being worked on
#Sectors in Plot	Number of sectors in plot	1 - 16	- will default to highest sector number that was worked on for the plot indicated. <u>Make sure this represents the total number of sectors in the plot - even if one sector is empty</u>

User Notes:

Chapter 4:

GyHost - The Host PC System

Introduction

GyHost is designed to be run in one of the following ways:

- Under DOS in either Real or Protected mode.
- In a Windows environment.

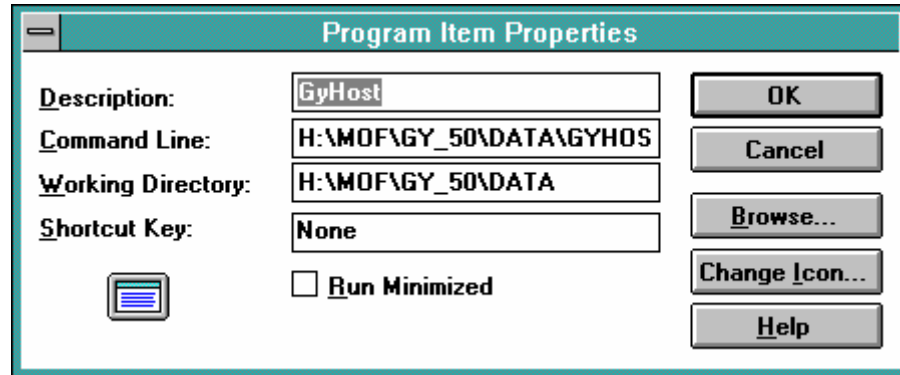
Running in a DOS environment

GyHost may be run in a DOS environment in either a Real Mode or Protected Mode. If you have at least 2 MBytes of RAM, **GyHost** should be used whether or not you have the capability of running in protected mode. The program will determine this and execute in the most appropriate way.

If you have less than 2 MBytes of RAM, **GyHostR** should be run (Please note the 'R' at the end signifying the (R)real mode executable).

Running in a Windows Environment

With version 7.0, GyHost may now be run in a Windows environment. The Program Group should be selected as normal with Windows programs and the Properties option is selected from the File menu. The following need to be identified:-

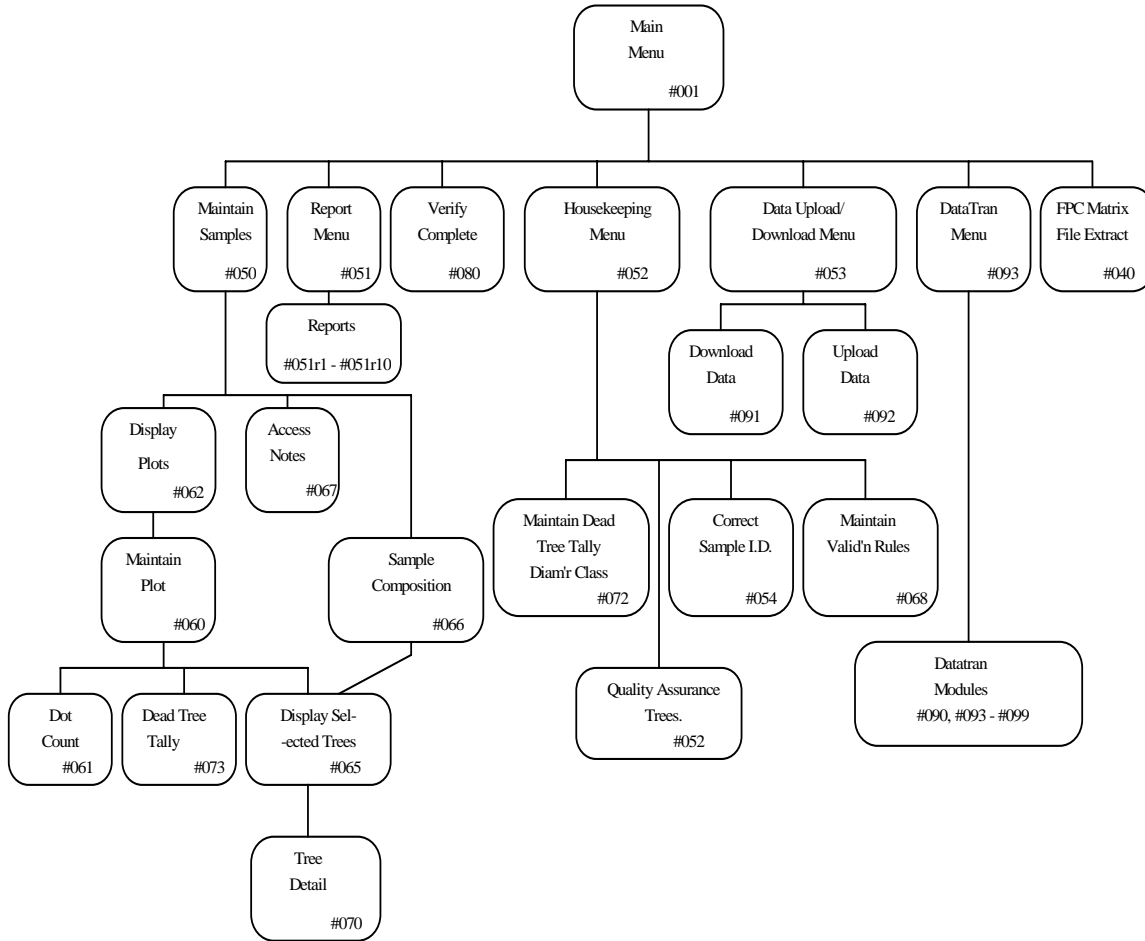


1. Description: 'GyHost' or as required.
2. Command Line: <Path>\GYHOST.BAT
3. Working Directory: <Path>
4. Shortcut Key: Whatever you choose.

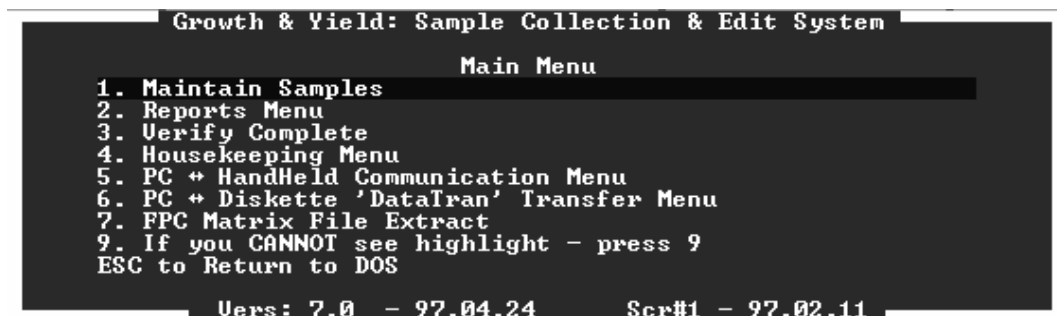
The icon that shows may be changed as usual using the Change Icon button. When complete, press [OK] to return to the program manager.

GyHost may now be selected in the same way as your other Windows programs. It does, however, run as a DOS program and does not have mouse handling.

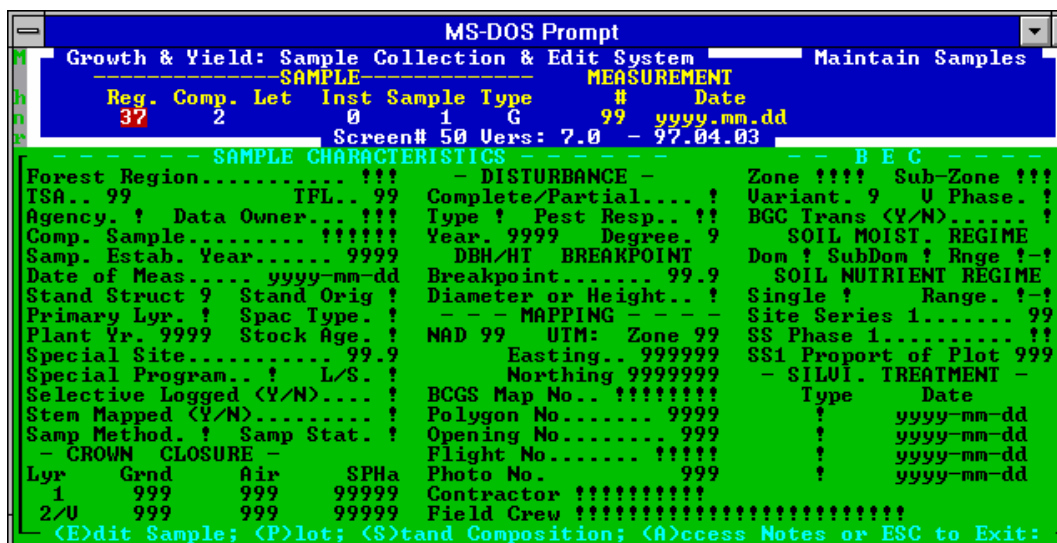
**Growth and Yield Sample Data Collection System
Host PC Screen Structure Chart
Version 7.0 (97.04.06)**



1. Maintain Samples



<Enter> “1. Maintain Samples” and the following screen appears requesting sample identity. By pressing <Tab> while the cursor is on Region, a list of samples in the Database appears. Cursor to the desired sample and <Enter>.



Once the sample identity is entered, this option allows the user to view and edit the data using the following:

(E)dit Sample Header

Data entry should be limited as this utility is not very efficient for this purpose.

Note that if data are entered in any of the maintain sample screens the user must go through all of the fields in the screen to the last field for data to be saved.

(P)lot

This option allows the user to:

(A)dd new plot or <Enter> to:

(T)rees to edit, delete or view tree attributes

(D)ot count to view or edit

(E)dit plot header data

Dead tree tall(Y) to edit or view dead tree tally

(S) tand composition

Calculates the stand composition for the sample and allows editing as in (T)rees above.

(A) ccess Notes

Allows the user to enter and edit access notes data.

2. Reports Menu

```
Growth & Yield: Sample Collection & Edit System
                                     Main Menu
1. Maintain Samples
2. Reports Menu
3. Uerify Complete
4. Housekeeping Menu
5. PC + HandHeld Communication Menu
6. PC + Diskette 'DataTran' Transfer Menu
7. FPC Matrix File Extract
9. If you CANNOT see highlight - press 9
ESC to Return to DOS
Vers: 7.0 - 97.04.24          Scr#1 - 97.02.11
```

<Enter> “2. Reports Menu” to view the data in one of the ten predetermined report formats. These reports are intended to aid in determining the quality of data collected. Data cannot be edited in these reports.

Note: If printer is not already selected go to “Setting up the Printer” on Page 9.

```
All Samples?      -----Sample-----      Measurement
<Y>es/<N>o        Reg. Comp. Let Instl Sample Type      <C>urrent/<P>rev
      N          37      2          0          1      G          C
<P>rinter. <S>creen. <F>ile: $  Filename: GYREP...
```

Having selected the Reports Menu from the Main Menu (screen #1) the user is then given the option of selecting reports for all samples (Y) or one (N) sample in the database.

Note that when the <Tab> key is pressed with the cursor on Region that a window displays the samples in the database. Select the desired sample.

Select the (C)urrent or (P)revious Measurement. Select the report destination as (P)rinter, (S)creen, or (F)ile.

Select the individual report desired or the “All Reports (except report 4)” option.

1. **Access Notes Report** - Describes the route to the permanent sample.
2. **Remeasurement Exception Report** - *Exception reports are only produced for remeasured samples, not establishments.* This report displays the most important

collected variables that were beyond the edit range. Values outside this range are identified by an *. The system checks for species, dbh, tree class, and height.

3. **Sample Header Detail Report** - This report displays header data, dot count, and dead tree tally (only for establishments) data.
4. **Comprehensive Tree Detail Report** - This report displays all tree detail data for each tree in the sample
5. **Key Tree Information Report** - This report displays the key tree detail data for each tree in the sample plus a minor amount of header data. This report may be used in the field as a hard copy.
6. **Tree Range, Ingrowth, Missed/Out of Plot Trees Report** - This report displays the range of tree numbers used in the sample and should be used to avoid duplicating tree numbers. It also displays ingrowth trees larger than 15 cm, trees suspected of being missed at previous measurement(s), and trees to be dropped because they were found to be outside the plot boundary at remeasurement.
7. **Trees/Sample, Species Composition, Sample Tree Report** - This report displays the number of trees (by species) in the sample above and below the tagging limit with the diameter ranges present. It also displays the number of height sample trees taken and their range of diameters by species. This report aids in determining if the correct number and correct range of trees were measured for height. This report also displays the sample trees in detail and the largest diameter tree of each major species in each top height sector group.
8. **Quality Assurance Information Report** - This report displays randomly chosen trees for the purpose of field checks.
9. **Data Collection Platform Report** - This report displays the number of trees and the platform (HH or PC) where the trees were last modified.
10. **All Reports (except Reports 4, 8, 9)** - Select this option to print all reports of one sample or all reports of all samples in the database.

3. Verify Complete

```
Growth & Yield: Sample Collection & Edit System
                                     Main Menu
1. Maintain Samples
2. Reports Menu
3. Verify Complete
4. Housekeeping Menu
5. PC + HandHeld Communication Menu
6. PC + Diskette 'DataTran' Transfer Menu
7. FPC Matrix File Extract
9. If you CANNOT see highlight - press 9
ESC to Return to DOS

Vers: 7.0 - 97.04.24      Scr#1 - 97.02.11
```

<Enter> “**3. Verify Complete**”. This option will allow the user to view the six verify complete reports for one sample or all samples in the database with the destination to printer, file or screen.

1. **Trees Stem Mapped?** - This report checks that either three trees per plot were stem mapped (stem mapping centre stake) or all trees in the sample (if the stem map code is “Y” for the sample).
2. **Pest/Injury OK?** - This report checks that if pest/injury is recorded for one or more trees in the sample, that the header also contains pest/injury data and vice versa.
3. **Selectively Logged OK?** - This report is to check that at least one stump exists in the sample if it is a selectively logged sample.
4. **Sample Trees** - This report lists the species composition and the number of top height trees and other trees measured for height and age.
5. **Trees in Sample?** - This report provides a summary of the number of trees in the sample (i.e. plot, sub-plot, and dot count).
6. **All Trees Measured?** - This report provides a list of trees not completely measured for the new measurement or at establishment.
7. **All of the Above** - This option allows the user to report on all of the verify complete reports for one sample or for all samples in the database.

4. Housekeeping Menu

```
Growth & Yield: Sample Collection & Edit System
Main Menu
1. Maintain Samples
2. Reports Menu
3. Verify Complete
4. Housekeeping Menu
5. PC + HandHeld Communication Menu
6. PC + Diskette 'DataTran' Transfer Menu
7. FPC Matrix File Extract
9. If you CANNOT see highlight - press 9
ESC to Return to DOS
Vers: 7.0 - 97.04.24 Scr#1 - 97.02.11
```

<Enter> “**4. Housekeeping Menu**” The housekeeping menu allows three types of functions:

1. **Maintain Dead Tree Tally Diameter Class** - This section allows the changing of diameter class limits for dead trees. Note that this function is only available to the Branch.
2. **Correct Sample ID** - This function allows the user to change (at establishment only) the Reg., Compt., Let., Inst., Sample number. **The sample type cannot be changed.**
3. **Maintain Validity Checks** - This function allows viewing or modification of the validation rules and warning messages. Note that this function is only available to the Branch.
4. **Quality Assurance Trees** - This function allows viewing and modification of number of trees used for quality assurance.

Error! Hyperlink reference not valid.

1. **FPC Matrix File Extract Error Report** - Prepares a list of any missing data encountered which can be printed or seen on the screen.