

# FieldNotes Plus™

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## USER'S MANUAL



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Manual Part #: 11789-02  
Release Date: June 2001  
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# Section 1



## Introduction



# Introduction

FieldNotes Plus is a software package designed for collecting ground notes on research plots. It runs on the Allegro Field PC and the Pro4000 FieldBook (referred to collectively as Field Computer in this manual) from HarvestMaster. FieldNotes is designed for use by seed researchers, chemical treatment researchers, and anyone collecting notes on replicated plots.

## ▲ Features

FieldNotes Plus features the following:

- Large fonts for easy viewing
- Multiple note taking
- New flexible field map generation with Standard Plot ID's or Range/Row options
- Move function and one key plot skip simplified
- Sub block navigation through larger field



## ▲ **FieldNotes Plus Package**

The FieldNotes Plus Package consists of the following items:

- FieldNotes Plus software
- DataLink for Windows™ software
- User's manual

This manual guides you through the installation process and the procedures to use the FieldNotes Plus software. If you have any questions please contact the HarvestMaster Customer Service Department at (435) 753-1881.



# Section 2



## Software Installation



## Loading the Software

As you go through this section you will be working with a number of programs. Figure 2-1 shows the name of the program to be used, a description of what the program is, and where the program is located.

**Figure 2-1: Programs used in Chapter 2**

Program	Description	Location
FieldNotes Plus	Data Collection Software	Install on Field Computer from PC
DataLink	Communication / File Transfer Program	Install on PC from Disk
FileScout	Communication / File Transfer Program	Factory Installed (Allegro F/PC)
ProShell	Communication / File Transfer Program	Factory Installed (Pro4000)

### ▲ DataLink Communication Program

Before installing FieldNotes Plus, you must first install DataLink for Windows, a communications program that allows your PC and Field Computer to exchange information. You may *upload* data (transfer data from the Field Computer to the PC) or *download* data (transfer data from the PC to the Field Computer) using DataLink.

This program is specifically written for Windows 95, 98, 2000 or NT operating systems. A copy of this program can be found on a 3 ½ inch disk included in your FieldNotes Plus packet.

❖ *Note: FieldNotes Plus requires DataLink for Windows version 2.1 or later in order to function correctly. If you have DataLink already installed, make sure it is version 2.1 or later. If not, uninstall DataLink and reinstall it from the diskette that came with the FieldNotes Plus package.*

Before installing FieldNotes Plus you need to complete the following:

1. Make sure that your Field Computer is adequately charged.
2. Have your communication cable on hand. The cable connects your Field Computer to your PC and allows your Field Computer and PC to communicate.

### **DataLink Installation**

To install DataLink complete the following steps:

1. Insert the DataLink for Windows diskette into your 3 ½ inch disk drive.
2. Click on <Start> to open the Start menu and select the *Run* option.
3. Type in the 3 ½ inch disk drive location and “Setup.exe” (i.e. A:\Setup.exe) and click <Ok>.
4. Read and follow the Windows installation wizard. It will guide you through the remaining procedures for this installation.

The next few pages of this section explain how to use DataLink to install FieldNotes Plus on your desktop PC and your Field Computer.

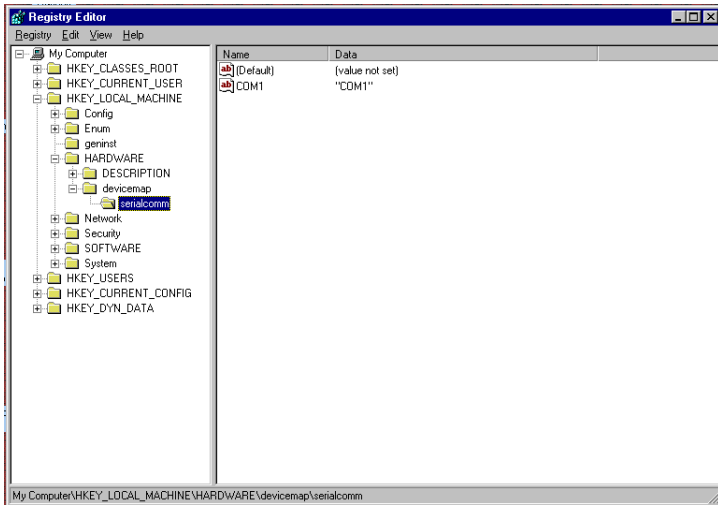
### *Registry Error*

If, after running DataLink, you receive the following message: “Serial Port Information Not Available in Registry,” you need to update the registry on your PC. To update the registry complete the following steps:

1. Click on <Start> to open the Start menu and select *Run...*
2. Type in “regedit” in the *Open* text box. Click on <Ok> to run the *Registry Editor*.

3. Navigate to the following path: *Hardware / Devicemap / Serialcomm*. Figure 2-2 shows how your registry should look. Make sure the items shown on the right side of the screen are listed in your registry.

**Figure 2-2: Registry Edit Navigation Path**



4. If you do not see these items, select the *Hardware* folder, go to the *Edit* menu and click on it. Go to *New* and then click on *Key*. Name the new key “Devicemap” and press <Enter>.
5. Select the new *Devicemap* folder and go to *Edit*, then to *New*, and then to *Key* again. Name this key “Serialcomm.”
6. Open the *Serialcomm* folder then go to the *Edit* menu and choose *New*, then *String Value*. Name the new string “COM1.”
7. Select *COM1* and go to the *Edit* menu and choose *Modify*. Type in *COM1* as your value data.
8. Your registry will now look like Figure 2-2.

## ▲ Installing FieldNotes Plus Software

FieldNotes Plus is installed on your desktop PC from the disk provided in your FieldNotes Plus package. It is then transferred from your PC to your Field Computer.

### Installation onto your PC

Follow the steps below to install the FieldNotes Plus Software on your desktop PC:

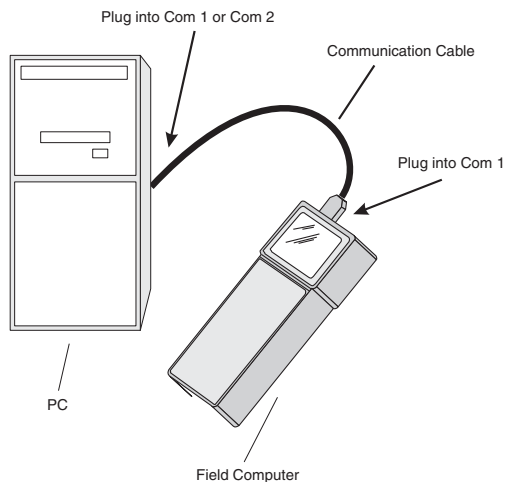
1. Insert the FieldNotes Plus diskette into the 3 ½ inch disk drive on your PC.
2. Click on <Start> to open the Start menu.
3. Go to the *Programs* folder to open its directory window.
4. Go to the *DataLink for Windows* directory.
5. Click on the *DataLink for Windows* program.
6. In DataLink, click the *Application Install* tab, if you are not already there.
7. Select the location where your application diskette is located (e.g. A:\ or B:\ drive) in the *Select Location* box.
8. Click on *Load Application from DISK* and wait as the files are copied to your PC.
9. FieldNotes Plus should now be displayed in the *Select Application* pull down menu.

## Installation onto your Field Computer

To transfer the FieldNotes Plus software from your PC to your Field Computer complete the following steps:

1. Connect the PC to the Field Computer using the communication cable (see Figure 2-3). To do this, plug the communication cable into one of the serial ports on your computer (preferably COM1).

**Figure 2-3: PC to Field Computer Connection**



❖ *Note: DataLink defaults to communicating via the PC's COM1 port. If you have a mouse or other external device connected to COM1, you need to use COM2. If you choose to use COM2 on your PC, go to the DataLink for Windows Comm Port Setup tab and change the Com Port setting (see Comm Port Setup in Section 5).*

2. To prepare the Field Computer to receive the FieldNotes Plus software, turn it on.
3. If you are using an Allegro Field PC, make sure it is booted to DOS mode (see the Allegro User's Manual for detailed information).
  - ❖ *Note: Windows CE will not run DOS programs. Do not attempt to run this application with Windows CE.*
4. On your Field Computer., get into the communication / file transfer utility. At the DOS prompt (e.g. C:\), type “FS” to run FileScout (Allegro F/PC users) or “PS” to run ProShell (Pro4000 users) and press <Enter>. Figure 2-4 shows an example of the FileScout main screen.

**Figure 2-4: FileScout Main Screen**

```

FileScout v1.0      Lynx - COM1
C:\                  Ins=Mark
Files: 22  Used: 7.726M  Free: 12.75M
-----
[DATA]
[DOS]
[NETWORK]
[UTIL]
AUTOEXEC.BAT      435      04-03-00  09:07
CKCOM .EXE      81.39K  03-12-96  10:26
CKMEM .EXE     101.3K  03-12-96  10:26
CKPRO .CER      177      08-02-92  15:34
CKPRO .RPT     6263      08-02-92  15:34
-----
Move   Rename  MarkAll  UnmrkAll  Util
Drives Edit   Copy    MkDir    Xfer

```

❖ *Note: Refer to the Field Computer User's Manual for detailed information about the FileScout or ProShell utilities.*



5. Press <F4> to create a new directory.
6. Type in “FNP” (for FieldNotes Plus) in the highlighted space after the *Name:* prompt in the top left corner of your Field Computer’s screen (this will be the location of the application software) and press <Enter>. 

❖ *Note: If you would like, you can install your application on a PC Card. To do this simply change to drive D: then create the directory as outlined above.*
7. Use the arrow keys to scroll down and highlight the *FNP* directory you have just created and press <Enter>.
8. On your PC, check to make sure FieldNotes Plus is displayed in the *Select Application* box in *DataLink for Windows*. If it is not there, click on the *Select Application* box and select it. 

❖ *Note: The Language box will remain blank, even if you click on it, but the program will be installed in English. If you desire a language other than English, please call HarvestMaster’s Technical Support Team for further instructions.*
9. Click on <Send Application to Handheld>.
10. Wait while the software is transferred to your Field Computer. Once it stops, FieldNotes Plus will be installed on your Field Computer.

### **Booting Directly to FieldNotes Plus**

If you would like the system to boot to FieldNotes Plus automatically, while you are still in FileScout or ProShell, highlight and press <Enter> on the “setbat.exe” file to update your Field Computer’s “autoexec.bat” file.



# Section 3



## Setting Up and Using FieldNotes Plus

**Getting Started with FieldNotes Plus**  
**Setting Up FieldNotes Plus**  
**Collecting Data**  
**Viewing Data**



# Getting Started with FieldNotes Plus

Now that you have successfully installed FieldNotes Plus on your Field Computer, you are ready to begin using the software.

Before you go into the field to take notes, you must set up the software for your application by doing the following:

- Defining note variables
- Creating field maps

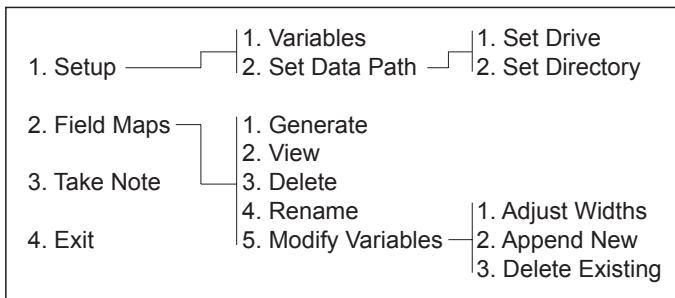
Once you have completed this process, you are ready to go into the field to collect data.

To start FieldNotes Plus, remain in FileScout or ProShell in the FNP directory and complete the following steps:

1. Use the arrow keys to scroll down and highlight the *FNP.EXE* option.
2. Press <Enter>.
3. Press <Enter> again.

You will now be viewing a screen titled *Main Menu*. Figure 3-1 shows FieldNotes Plus menu structure.

**Figure 3-1: FieldNotes Plus Menu Structure**



# Setting Up FieldNotes Plus

Before you can collect data using FieldNotes Plus, you must define your note variables and create a field map. This section guides you through these steps.

## ▲ Setup

### Variables

*Variables* is the first option you will be given in the *Setup* menu. It is here that you will define your note variables. Note variables must be defined before you can begin taking notes. Any previously defined variables will be listed in the center of the screen.

Note variables do not need to be defined before maps are generated. Variables associated with downloaded maps must be defined in DataLink for Windows. Refer to *Section 5 Additional DataLink Information* in the *Transferring Files* section for complete details on this procedure. Figure 3-2 shows the Variable Listing screen and the Add, Delete, and Edit options available on the screen.

**Figure 3-2: Variable Listing Screen**



### *Add Variable*

To add a new variable complete the following steps:

1. Use the arrow keys to scroll to the *Setup* option in the Main Menu screen and press <Enter>.
2. Select the *Variables* option in the *Setup* screen and press <Enter>. You should now be in the *Variables Listing* screen.
3. Press <F2>.
4. Enter the name for the variable (up to eight characters) in the Name field.
5. Use the down arrow key to move to the *Width* field (also up to eight characters) to set the maximum data size that will be collected.

❖ *During note taking the cursor automatically advances to the next note variable once the maximum data width for the current variable has been entered.*

6. Use the down arrow key to move to the *Default* fields for a common data value and type in appropriate values.

❖ *Pressing <Enter> during note taking will write the default number into the data field. You can edit any of the fields by moving to it with the arrow keys, entering a new value, and pressing <Enter>.*

7. Press <Esc> to save the information and return to the *Variables Listing* menu. The name of the new variable should appear on the screen.

### *Delete Variable*

To delete an existing variable complete the following steps:

1. Use the arrow keys to highlight the variable you want deleted.
2. Press <F3>.
3. Press <Y> for yes or <N> for no to complete or cancel the deletion process.

### *Edit Variable*

To edit a variable complete the following steps:

1. Use the arrow keys to highlight the variable you want to edit.
2. Press <F4>.
3. Use the arrow keys to move between the fields and enter the new values you desire.
4. Press <Enter> to save the changes and return to the *Variables Listing* screen.

### **Set Data Path**

*Set Data Path* is the second option you will be given in the *Setup* screen. The *Set Data Path* option is used to determine where to store your maps and notes. If you want your data stored in a location other than where the FieldNotes Plus program resides (on an ATA flash card, for example), you can set the data path to your desired destination. We suggest keeping the data in the same directory as the program to help manage your data better.



### *Set Data Drive*

Use the *Set Data Drive* option to choose the drive to store your data. FieldNotes Plus lists all the available drives on the Field Computer and shows the active one (see Figure 3-3). Using the arrows on the keypad, move the on-screen arrow beside the letter of the drive you wish to select, then press <Enter>.

**Figure 3-3: Drive Selection Screen**

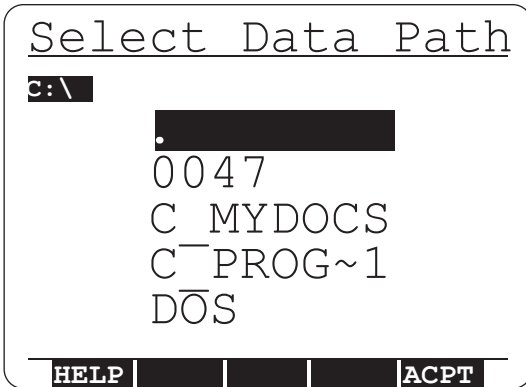


The data drive will show an *Active* label behind it. If the data drive is changed, the data directory defaults to the root of that drive (see below for setting the data directory).

### Set Data Directory

Once you have selected a drive, select *Data Directory* in the *Select Data Path* screen to pick the directory you want your data stored in (see Figure 3-4).

**Figure 3-4: Select Data Path Screen**



The selected drive is shown in a status line above the directory selections in the top left corner of the *Select Data Path* screen. Using the arrow keys, highlight the directory you wish to select, then press <Enter>.

If there are further subdirectories, they will be listed in the *Select Data Path* screen.

Use the arrow keys to highlight the desired directory (the status line shows your directory path).

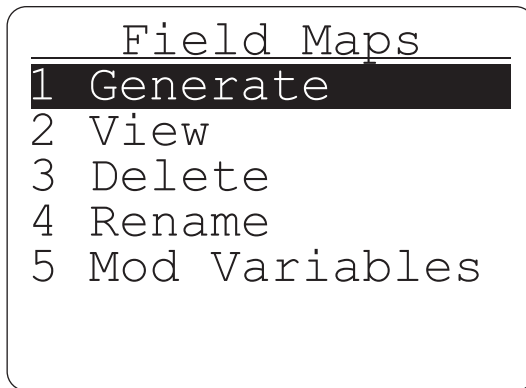
- Press <Enter> to select the desired directory.
- Select the ellipsis ( . ) to move to the previous level of directories.
- A blank screen indicates there are no further subdirectories.
- A period ( . ) indicates you are in the root directory.
- Press <F5> to accept the directory.

- Press <Esc> when finished.
- Press <F1> at any time throughout this procedure for help.

### ▲ Field Maps

Field maps are used for note taking and recording data. The *Field Maps* option in the *Main Menu* screen is used to create and manipulate maps of plots within the Field Computer. Field Maps can also be created on your desktop PC and downloaded to your Field Computer (see Section 4 for more details). For best results, we recommend creating the field map directly in FieldNotes Plus. The Field Maps options are shown in Figure 3-5.

**Figure 3-5: Field Maps Options Screen**



When creating field maps Field Notes Plus automatically sets aside enough memory to collect data for each plot in the map. This eliminates the risk of the Field Computer running out of memory.

## Generate

To generate a field map complete the following steps:

1. Use the arrow keys to highlight *Generate* in the *Field Maps* screen and press <Enter>.
2. You will be presented with the *New Field Map* screen requesting the name of the map to be created. Type in a name for the new map (up to 8 characters long) and press <Enter>.
3. Use the arrow keys to highlight the *Standard Plot ID* or *Range/Row* option in the *Map Type* screen and press <Enter>. (See the descriptions for these options below.)
4. Use the arrow keys to highlight the areas that you need to change. Press <F4> to accept all changes and begin generating the map.

### Map Type

In the *Map Type* screen you are given two options for the type of map you desire, *Standard Plot ID* or *Range/Row*. Figure 3-6 shows an example of each type of map.

**Figure 3-6: Two Map Types**

Standard Plot ID	401	402	403	404		
	301	302	303	304		
	201	202	203	204		
	101	102	103	104	Plot ID	
Range/Row		Row				
		4,1	4,2	4,3	4,4	
		3,1	3,2	3,3	3,4	
		2,1	2,2	2,3	2,4	
		1,1	1,2	1,3	1,4	Range

### *Standard Plot ID Field Map Layout Options*

When you select the Standard Plot ID map type, a map layout screen is displayed with prompts for the number of plots wide as well as ranges deep (see Figure 3-7). Use the arrow keys to move between fields.

**Figure 3-7: Standard Plot ID Screen**

<u>F</u> ield <u>M</u> ap <u>L</u> ayout	
Plots Wide	10
Ranges Deep	3
Start Plot	101
Plot Inc	1
Rep Inc	100
Route Sequential	
HELP     ACPT	

#### *Plots Wide*

This is the number of plots, from left to right, to be represented in the map.

#### *Ranges Deep*

Defines the number of plots from top to bottom that are in the field.

#### *Start Plot*

The plot number to be placed in the lower left corner of the map. The default is usually 101.

#### *Plot Inc*

Plot Increment. Typically 1. It is the counting increment applied to the 1's place as the sequencing advances from one entry to the next in a single replication (e.g. 101, 102, 103, etc).

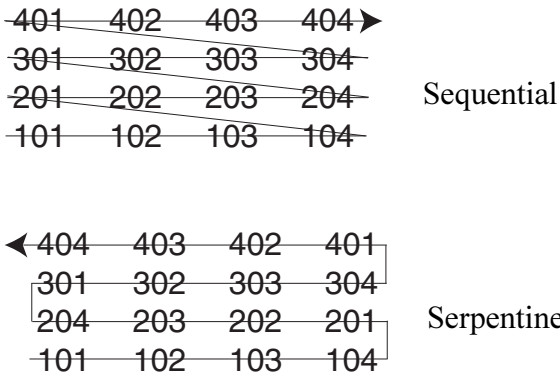
*Rep Inc*

Replication Increment. Typically 100, with the hundreds place denoting replication in the plot number. For example, a Start Value of 101 and Replication Increment of 100 would begin the next replication at 201. However, the Replication Increment may be 1000 if there are more than 99 entries per replication.

*Route*

Route implies the sequencing of plot number sideways across the study field, in the order that plots are usually rated (90 degrees orientation to harvest order, usually). *Sequential* or *Serpentine* are your choices for route patterns. For examples see Figure 3-8.

**Figure 3-8: Sequential and Serpentine Routes**



To select the desired route pattern complete the following steps:

1. Use the arrow keys to scroll down and highlight the *Route* option on the Standard Plot ID *Field Map Layout* screen.
2. Press the arrow key left or right to select *Sequential* or *Serpentine*.
3. Press <F4> to accept the map layout.
4. Press <F1> for help.

### *Range/Row Field Map Layout Options*

When you select the Range/Row map type, a map layout screen is displayed with prompts for the number of rows wide as well as ranges deep (see Figure 3-9). Use the arrow keys to move between fields.

**Figure 3-9: Range/Row Screen**

Field Map Layout	
Rows Wide	10
Ranges Deep	3
Rows Inc	1
Range Inc	1
Start Row	1
Start Range	1

HELP | ACPT

#### *Rows Wide*

Defines how many plots wide the field is from the left to right.

#### *Ranges Deep*

Defines the number of plots from top to bottom that are in the field.

#### *Row Inc*

Row Increment. The counting increment of the Field Row. Should always be 1.

#### *Range Inc*

Range Increment. The counting increment of the Field Ranges. Should always be 1.

#### *Start Row*

The row number the map will begin with. Should always be 1.

### *Start Range*

The range number the map will begin with. Should always be 1.

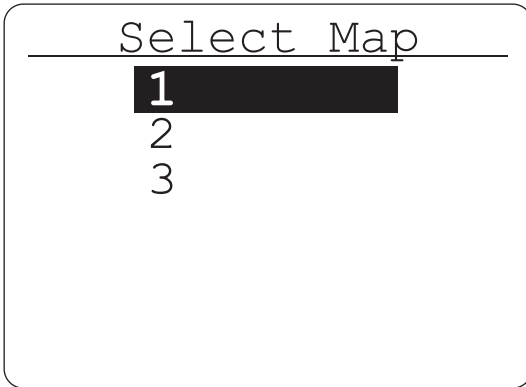
❖ *Note: FieldNotes Plus will notify you if the map to be generated is too large for the Field Computer. If this happens, try again with smaller dimensions.*

### **View**

This option produces an X-Y configuration of the selected field map. To view a map complete the following steps:

1. Use the arrow keys to scroll to and highlight the *View* option in the *Field Maps* screen and press <Enter>.
2. Select the field map you want to view (see Figure 3-10) and press <Enter>.

**Figure 3-10: Select Map for Viewing**





3. Select the portion of the map you wish to see (see Figure 3-11). You may also use <Ctrl> + arrow keys to move all the way to the edges, or <Blue Key> + arrow keys to move twenty plots at a time.

**Figure 3-11: View Range and Row ID**

Rng, Row : 1, 1	
6	6
5	5
4	4
3	3
2	2
1	1
Column :	ID1

❖ *Note: If the identifier is more than 8 alphanumeric characters then the identifier will be broken into groups of 8 characters and placed in multiple identifier holders in the data file.*

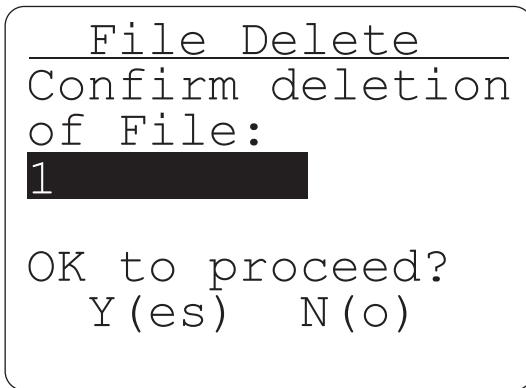
The block on the display points to the current plot position. As you move the arrow right and up to see the other plots, the display will window over the set of available plots in the map. The <Enter> key will allow you to view any other identifiers associated with the maps as well as all note variables. A label on the bottom of the screen identifies what is being displayed.

## Delete

This option permanently removes generated maps from your Field Computer. To delete maps from your Field Computer complete the following steps:

1. Use the arrow keys to scroll down and highlight the *Delete* option in the *Field Maps* screen and press <Enter>.
2. Highlight the field map you want to delete in the *Select Map* screen and press <Enter>.
3. Press <Y> for yes to proceed with, or <N> for no to cancel, the deletion process in the *File Delete* screen (see Figure 3-12).

**Figure 3-12: Proceed with the File Delete Process**



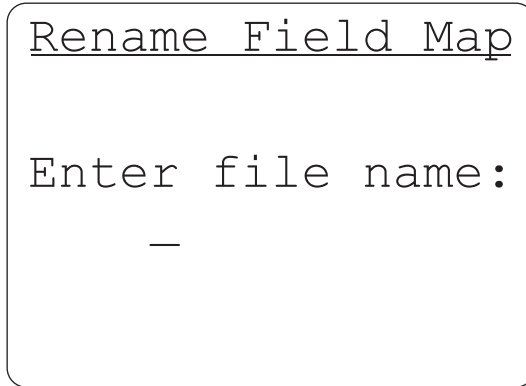
## Rename

This option allows you to rename any selected map in your Field Computer. To rename maps stored in your Field Computer complete the following steps:

1. Use the arrow keys to scroll to and highlight the *Rename* option in the *Field Maps* screen and press <Enter>.
2. Highlight the field map you want to rename in the *Select Map* screen and press <Enter>.

3. Type in the new map name that can be up to 8 characters long (see Figure 3-13) and press <Enter>.

**Figure 3-13: Rename Field Map Screen**



```
Rename Field Map
Enter file name:
—
```

4. Press <Y> for yes to proceed with, or <N> for no to cancel the renaming process. FieldNotes Plus will display the old and new names in the *Rename Field Map* screen.

### **Modify Variables**

FieldNotes Plus allows you to modify the variables associated with a particular map after the map has been generated.

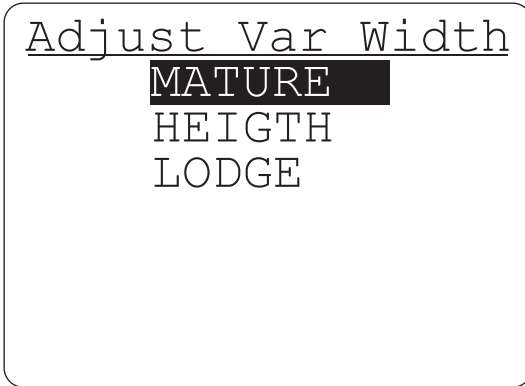
#### *Adjust Widths*

To adjust the widths of a map complete the following steps:

1. Use the arrow keys to scroll to and highlight the *Mod Variables* option in the *Field Maps* screen and press <Enter>.
2. Select the *Adjust Widths* option in the *Modify Variables* screen and press <Enter>.
3. Select the field map you want to edit in the *Select Map* screen and press <Enter>.

4. Select the variable you want to edit in the *Adjust Var Width* (see Figure 3-14) and press <Enter>.

**Figure 3-14: Adjust Variables Width Selection Screen**



5. In the *Adjust Var Width* screen you will be given the name and number of the variable you will be changing. Select a number between 0 and 9 for the new desired width and press <Enter>.
6. Press <Y> for yes to proceed with, or <N> for no to cancel the *Adjust Width* process.

❖ *Note: Downloaded maps default to 8 character wide.*

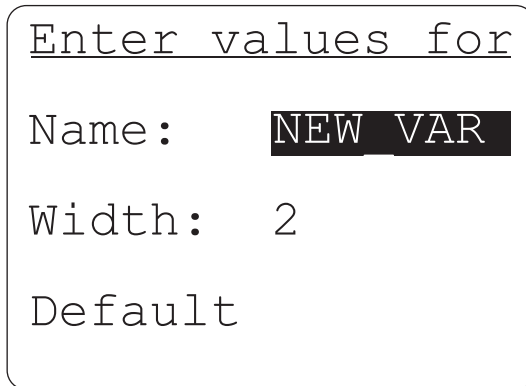
#### *Append New*

This option adds new variables to a map (See the *Setup, Variables* section of this section for more information). To add a new appendix to existing maps complete the following steps:

1. Use the arrow keys to scroll to and highlight the *Mod Variables* option in the *Field Maps* screen and press <Enter>.
2. Select the *Append New* option in the *Modify Variables* screen and press <Enter>.
3. Select the map you want to add a variable to in the *Select Map* screen and press <Enter>.

4. Use the arrow keys to highlight the *Name*, *Width*, and *Default* settings and enter the new information in the *Enter value for* screen (see Figure 3-15) and press <Enter>.

**Figure 3-15: Append New Enter Values Screen**



The screenshot shows a terminal window titled "Enter values for". It contains three input fields: "Name:" with the value "NEW VAR" highlighted in black, "Width:" with the value "2", and "Default:" which is currently empty.

5. Press <Y> for yes to proceed with, or <N> for no to cancel the *Ok to add* process.

❖ *Note: After a map has been created, variables must be added here.*

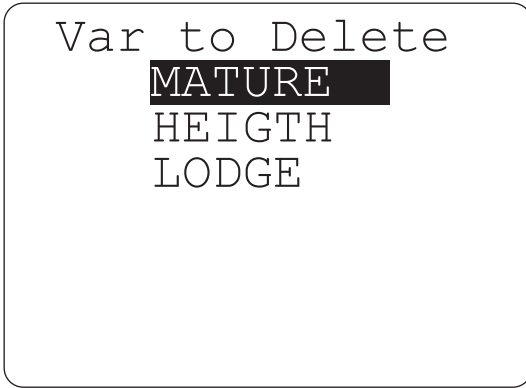
#### *Delete Existing*

To delete existing variables for generated maps complete the following steps:

1. Use the arrow keys to scroll to and highlight the *Mod Variables* option in the *Field Maps* screen and press <Enter>.
2. Select the *Del Existing* option in the *Modify Variables* screen and press <Enter>.
3. Select the field map you want to delete variables from in the *Select Map* screen and press <Enter>.

4. Select the variable you want deleted, in the *Var to Delete* screen (see Figure 3-16) and press <Enter>.

**Figure 3-16: Variables to Delete Screen**



5. Press <Y> for yes to proceed with, or <N> for no to cancel the *Ok to Delete* process.

## Collecting Data

Now that you have defined your note variables and created a field map, you are ready to go into the field and record data using FieldNotes Plus.

To begin taking notes complete the following steps:

1. Use the arrow keys to scroll to and highlight the *Take Notes* option in the *Main Menu* screen and press <Enter>.
2. Select the field map you want to take notes on in the *Select Map* screen and press <Enter>.

If you are taking notes on the selected map for the first time you will be presented with a number of screens to further define the data collection process. Each of these screens is described below.

### Variable Listings

This screen allows notes, defined with the map, to be turned on or off. An X within the brackets beside the variable name signifies that the variable is on. Empty brackets signify the variable is off. Press <F2> to toggle the highlighted variable on and off. If necessary, you can press <F5> to edit the variables in the list.

### Observer Boundaries

The observer boundaries screen allows you to specify whether you are taking notes on the entire field map or a blocked out section of the map. If you want to take notes on the entire field, leave all map boundary settings at the default.

If you are taking notes on a small section of the field, use the parameters on this screen to define the start and stop locations and a travel pattern (see Figure 3-17).

**Figure 3-17: Observer Boundaries Screen**

Observer Boundaries		
Low	Rng:	1
Low	Row:	1
High	Rng:	3
High	Row:	10
Start	Rng:	1
Start	Row:	1 <input type="checkbox"/>

HELP | INFO | ACPT |

*Low Range*

Lowest range that data is to be collected on if creating a sub block for note collecting. Leave at the default value to collect notes on the entire map. (Refer to the Field Maps section for description of Range and Row.)

*Low Row*

Lowest row that data is to be collected on. Leave at the default value to collect notes on the entire map.

*High Range*

Highest range that data is to be collected on. Leave at the default value to collect notes on the entire map.

*Highest Row*

Highest row that data is to be collected on. Leave at the default value to collect notes on the entire map.

*Start Range*

Range that you want to begin collecting on.



Start Row

Row that you want to begin collecting on.

❖ *Note: Whenever you enter this screen the current Range/Row is set to the Start Range and Start Row.*

An example of blocked out note taking is shown in Figure 3-18 and 3-19.

**Figure 3-18: Entered Information for Blocked out Note Taking**

Observer Boundaries

Low	Rng:	3
Low	Row:	3
High	Rng:	7
High	Row:	7
Start	Rng:	3
Start	Row:	3 <input style="width: 15px;" type="text"/>

HELP
INFO
ACPT

**Figure 3-19: The Sub-block from the Entered Values in Figure 3-18**

Map 10 Ranges 10 Rows

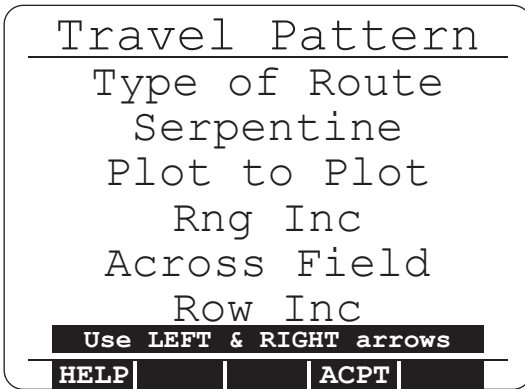
10,1	10,2	10,3	10,4	10,5	10,6	10,7	10,8	10,9	10,10
9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	9,10
8,1	8,2	8,3	8,4	8,5	8,6	8,7	8,8	8,9	8,10
7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	7,10
6,1	6,2	6,3	6,4	6,5	6,6	6,7	6,8	6,9	6,10
5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	5,10
4,1	4,2	4,3	4,4	4,5	4,6	4,7	4,8	4,9	4,10
3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	3,10
2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8	2,9	2,10
1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	1,10

▲ Increasing Range
 Increasing Row
▶

## Travel Pattern

Select the Type of Route, Plot to Plot Travel direction, and Travel Across Field direction. Use <ENTER> or the down arrow key to move to the next travel pattern. Use the left and right arrow keys to choose between options for each travel pattern (see Figure 3-20).

**Figure 3-20: Travel Pattern Screen**



### *Type of Route*

Defines the route through the field the note taker will travel (see Figure 3-7 on page 3-10).

### *Plot to Plot*

The primary direction that is traveled through the field. These choices are the following:

### *Range Inc*

Moves up the field within the same range.

### *Range Dec*

Moves down the field within a range.

### *Row Dec*

Moves to the left through the field across the rows.

### *Row Inc*

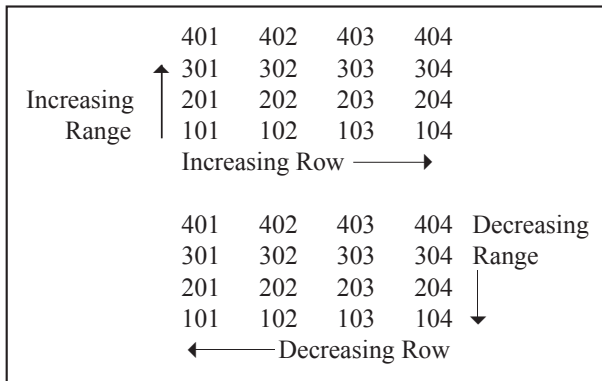
Moves to the right through the field across the rows.

### *Across the Field*

The secondary direction that is traveled the field (see Figure 3-21). The same nomenclature as Plot to Plot travel is used.

❖ *Note: Selecting an invalid direction will prompt you of the error.*

**Figure 3-21: Examples of Across The Field Note Taking**



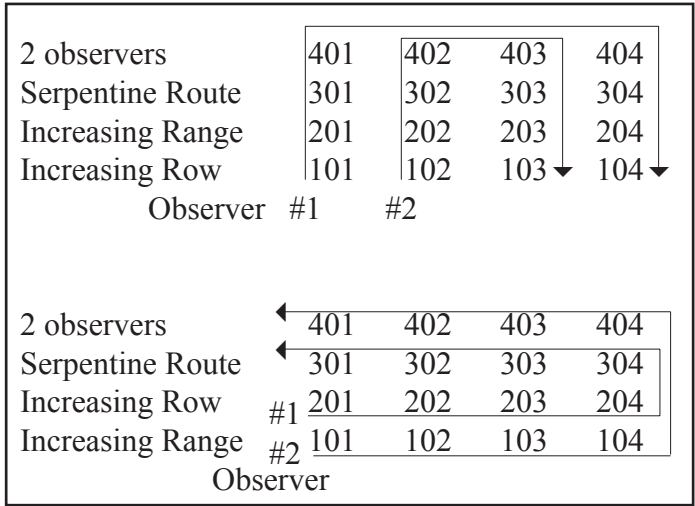
Press <F4> to accept Travel Pattern.

### **Observers**

Multiple observers can walk the field and take notes using only one Field Computer. The software keeps track of the current location for each observer. The maximum number of observers is 10.

Type in the number of note takers, or observers, into the Field Computer. The pattern of travel with multiple observers starts with the first, or #1, note taker on the far left of the field with each successive note taker to his right (see Figure 3-22). The start location for the #1 note taker will be displayed on the top of the screen and will move to #2, then to #3, etc. Press <F4> to accept the number of observers.

**Figure 3-22: Example of Two Observers Using One Field Computer**



**Note Taking**

The current Range/Row or Plot ID will be displayed across the top of the screen. Begin taking notes by typing in the desired traits. The cursor will automatically advance to the next note variable when the variable width is filled with data or when the <Enter> key is pressed. Use the up or down arrow keys to move through the note variables.

After the last note variable has been collected on a plot, the software will beep to signal that it is advancing to the next plot.

On the next plot you can press <Enter> before typing and automatically store the default value into the data field.

Pressing the <Right Arrow> will advance to the next plot in sequence. Pressing the <Left Arrow> allows you to move back to view or edit previous plots (see Figure 3-23).

**Figure 3-23: Note Taking Screen**

Rng, Row: 1, 1	
Mature	25
Height	30
Lodge	1
HELP   IDs   ACTV   MOVE	

From the *Note Collection* screen, you can use any of the following:

*F1 Help*

Displays a list of function keys and tips.

*F2 ID*

Displays all the secondary IDs for each plot. Up to eight are displayed at a time. Use the down arrow key to scroll through the IDs.

*F3 Activate*

Returns to Variable Listing screen and allows you to turn on or off the note variables. When you are done, press <Esc> to return to the Plot ID screen.

#### F4 Move

Allows the user to relocate to another plot for taking notes by typing in a new range and row. The route type and travel direction can be changed or maintained. The Move features are shown in Figure 3-24 and explained in the following:

**Figure 3-24: Move Screen**

```
Move
-----
Current/New Rng:  3
Current/New Row:  3
Type of Route
Sequential
Plot to Plot
Row Inc 
Across Field
Rng Dec
-----
| INFO | | ACPT |
```

#### Current/New Range

Displays the current range. Type in the new range that the note taker is moving to.

#### Current/New Row

Displays the current row. Type in the new row the note taker is moving to.

#### F2 Info

Displays current information about the map including # of ranges and rows.

#### F4 Acpt

Accepts the new location and returns to the note taking screen with the new location displayed.

#### ESC Return

Returns back to the note taking screen without making changes.

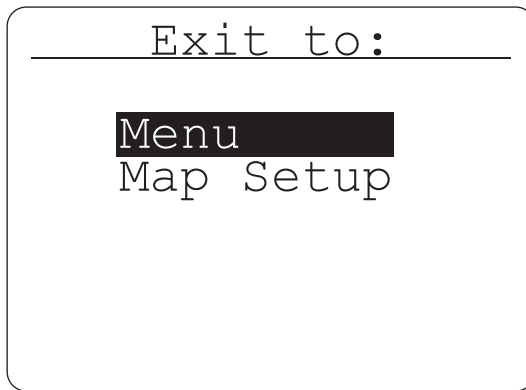
FieldNotes Plus automatically notifies the note taker when he/she has finished a field or block. To change or create a new sub block for Note Taking press <Esc> to back up to the *Observer Boundary* screen. (The current location is always defaulted to Range 1 Row 1 when you enter this screen.)

When entering a map that has been partially finished, FieldNotes Plus bypasses the setup screen and take you to the next plot in sequence. You can change any of the setup parameters by pressing <Esc>. This will take you directly to the *Exit to* screen.

### Exit to

Once you have finished taking notes on a field map you will come to a screen the tells you the navigation through the field map has been completed, and that you should press any key. Figure 3-25 shows the exit screen.

**Figure 3-25: Exit to Screen**



### *Menu*

Selecting the *Menu* option will take you to the *Main Menu* screen.

### *Map Set*

Selecting the *Map Setup* option will take you to the *Observer Boundaries* screen. This will allow you to change the parameters of the map you are currently working on. From the *Observer Boundaries* screen you will go to the *Travel Patten* screen, then to the *Observers* screen, and then the field map navigation screen and navigate through the field map again.

To Exit out of Note Taking, press <F10>. This will skip the *Exit to* screen and take you directly to the *Main Menu* screen.

The Field Computer can also be turned off at any point then turned on and resume in the same location.

### **▲ Exit**

From the *Main Menu* screen, press <Esc> to exit FieldNotes Plus. At the confirmation prompt, press <Y> to exit, press <N> to return to the *Main Menu*.



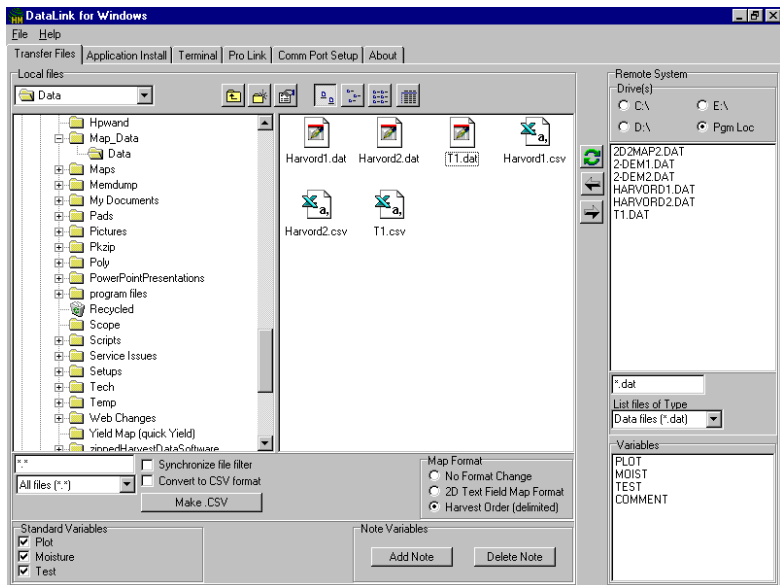
# Viewing Data

Now that you have collected and entered the data into your Field Computer you can now view that information on your PC. This procedure requires the use of DataLink. For a more indepth explanation of this process consult the *Transferring Files* portion of *Section 5*.

## ▲ Transferring Files to your PC


1. Connect your Field Computer to your PC (see *Installation onto your Field Computer* in *Section 2*).
2. Turn Field Computer on and open to the Main Menu screen of FieldNotes Plus.
3. Open the *DataLink for Windows* program on your PC.
4. Go to the Transfer Files tab (see Figure 2-26) and <OK> in the *Locating Remote System* box to connect your PC to your Field Computer.

Figure 2-26: DataLink Transfer Files Tab



5. Make sure the correct drive is selected in the *Remote System* box of DataLink's *Transfer Files* window (for example C:\, E:\, D:\, or Pgm Loc). If you have not changed your current drive in the FieldNotes Plus Program, the default setting will be the program location. To change the drive, complete the following step:

Click on the white circle in front of your desired drive in the *Remote System* section. A dot will appear in the circle of the drive you have selected. Your data files are viewed in the *Remote System* box on the right side of your screen.

6. Highlight the file(s) to be transferred to your PC, and click on the left-pointing arrow  to start the upload process. A file that has been uploaded to your PC can be viewed or edited by highlighting the file and right-clicking on it. This will send the file to your preferred editor.
7. To upload more than one file, highlight the first file, then hold down the <Shift> key and select the last, or use the <Ctrl> key to highlight separate files.

❖ *Note: Refer to the Help option in DataLink for Windows for specific information on transferring files.*

For additional *Transfer Files* window options go to the *ProLink* segment in *Section 5*.

## ▲ Auto Data Viewing

When the *Convert to CSV* option is not selected, the system will upload the data in a standard *Tab delimited Text* format. When the *Convert to CSV* option is selected, the system will automatically open the file with any program you would like.

❖ *Note: Comma separated format files can automatically be imported to Excel. Using "My Computer," it is possible to change the file types (under "VIEW") to allow your system to automatically open the file with any program you would like.*

When you double click on the file that you would like to open, the system should automatically start the program and import the data for you (see Figure 3-27).

**Figure 3-27: Automatic Start and Import to Microsoft Excel**

ID1	ID2	ID3	Plot	Moist	Test	COMMENT	SeqNo
1	1	1	101				
2	2	1	102				
3	3	1	103				
4	4	1	104				
5	1	2	0				
6	2	2	0				
7	3	2	108	31.5	13.8	57.4	5
8	4	2	107				2
9	1	3	201				
10	2	3	202				
11	3	3	203				
12	4	3	204				
13	1	4	0				
14	2	4	0				
15	3	4	208	32.6	14.1	58.2	5
16	4	4	207				3
17	1	5	301				
18	2	5	302				
19	3	5	303				
20	4	5	304				
21	1	6	0				
22	2	6	0				
23	3	6	0				
24	4	6	0				
25	1	7	0				
26	2	7	0				

Viewing data lets you scroll back through a set of collected data using the arrow keys to move from range to range and row to row within the selected field.

To transfer CSV files from your PC to your Field Computer select either *2-D Text Field Map Format* or *Harvest Order (delimited)*, located in the *Map Format* of *DataLink's Transfer Files* window.



# Section 4



## Generating Field Maps on your PC

**Map Formats  
Downloading Maps**



# Map Formats

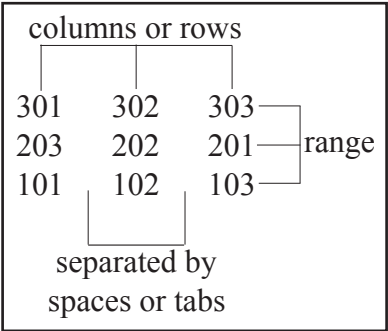
You can create a field map on your PC using a text editor or spreadsheet program and download it into FieldNotes Plus. The file must be saved as an ASCII text file.

The FieldNotes Plus software accepts two distinct ASCII file formats to load as maps to the Field Computer. The first is the Two Dimensional Text Representation. The second is the Harvest Order Space Delimited format. Both of these formats are discussed in this section.

## ▲ Two-Dimensional Text Representation

A two-dimensional (2-D) text map consists of rows and columns of plot identifiers separated by spaces or tabs (see Figure 4-1).

**Figure 4-1: Two-Dimensional Text File**



The identifiers consist of up to 8 alphanumeric characters. If the identifier is more than 8 alphanumeric characters, it will be broken into groups of 8 characters and placed in multiple identifier holders in the data file.

There is no header information included in the file and each row ends with an ASCII carriage return/line feed pair. Each plot may have one or more identifiers. The map to be downloaded should be entered into a text file exactly as it is shown in Figure 4-2 or 4-3.

**Figure 4-2: Field Map with only one Identifier per Plot**

310	309	308	307	306
301	302	303	304	305
210	209	208	207	206
201	202	203	204	205
110	109	108	107	106
101	102	103	104	105

**Figure 4-3: Field Map with more than one Identifier per Plot**

304,study1	303,study1	302,study1	000,study2
203,study1	204,study1	301,study1	303,study2
202,study1	201,study1	104,study1	302,study2
101,study1	102,study1	103,study1	204,study2
304,study3	303,study3	302,study3	203,study2
203,study3	204,study3	301,study3	105,study2
202,study3	201,study3	104,study3	104,study2
101,study3	102,study3	103,study3	101,study2

These maps can be generated using a spreadsheet program such as Microsoft Excel. To do this, place each plot ID in a separate cell, separating more than one ID with a comma. Save the file as a "Tab Delimited" file. Use a text editor (such as NotePad) to check the layout before downloading it. It should look like either Figure 4-2 or 4-3.



After downloading the field map and collecting field data, you can upload the data file back to your PC. When viewed in the text editor on the PC, the data file would look like Figure 4-4.

**Figure 4-4: Uploaded Field Map as viewed in a text editor**

[ID1	ID2	Plot	MoistÖ]
101	study3	14.2	5.4
102	study3	14.4	5.8
103	study3	12.8	4.5
101	study3	17.4	6.5

If there are portions of a field that have border rows or rocks, these should be marked with an easily identified word or group of words. Do not leave holes or unfinished rows in the map. For an example see Figure 4-5.

**Figure 4-5: Complete Map File with Associated Identifiers**

xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
border	301	302	303	304	border
border	201	202	rocks	204	border
border	101	102	rocks	104	border
xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

The incomplete map shown in Figure 4-6 will cause abnormal behavior if loaded.

**Figure 4-6: Incomplete Map File Identification**

301	304			
201	202	203	204	
101		103	104	border
001		003		

## ▲ Harvest Order Space Delimited

The second type of map file is the Harvest Order Space Delimited. It may be generated in Microsoft Excel or a DOS text editor. This is done by entering the plot numbers (and any associated identifiers) in the order that they will be harvested (see Figure 4-7).

**Figure 4-7: Downloaded Field Map from a Harvest Order Space Delimited file**

310	309	308	307	306
301	302	303	304	305
210	209	208	207	206
201	202	203	204	205
110	109	108	107	106
101	102	103	104	105

This file could be generated by typing each plot in sequential order into Microsoft Excel or a text editor. When using Microsoft Excel, enter each identifier into a separate cell. If any identifiers are missing fill in the empty cells with x's. After creating your map in harvest order (from top to bottom), save the file in CSV format. Use a text editor to check the layout before downloading. Figure 4-8 shows the order that the field map in Figure 4-7 was entered.

**Figure 4-8: Harvest order Space Delimited Map as entered into Microsoft Excel or a text editor**

101
110
201
201
301
310
102
109
202
209
etc.

If you are walking in a field that has more than one study (see Figure 4-9), enter the plots with a comma separating the study identifier.

**Figure 4-9: Field Map with more than one Identifier per Plot**

<b>Study 61123</b>					
304	303	302		000	305
203	204	301		303	304
202	201	104		302	301
101	102	103		204	205
<hr/>					
304	303	302		<b>Study 845223</b>	
203	204	301		203	202
202	201	104		105	201
101	102	103		104	103
<hr/>					
<b>Study 799971</b>					
				101	102

**Figure 4-10: Map with Multiple Plot Identifiers as entered into Microsoft Excel or a text editor**

Plot#	Identifier, Study Identifier
	101,799971
	202,799971
	203,799971
	304,799971
	101,611123
	202,611123
	203,611123
	304,611123
	303,611123
	204,611123
	201,611123
	102,611123
	303,799971 (etc.)

### ▲ No Format Change

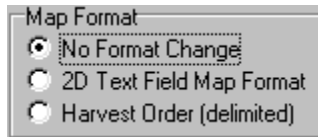
The “No Format Change” option directly transfers a file to the Field Computer. This is generally only used when downloading setup files.

## Downloading Maps

The Field Computer must be running the FieldNotes Plus software and connected to the PC through the communication cable before you can download maps.

You must select a format before downloading a map file into the Field Computer (see Figure 4-11). This tells the FieldNotes Plus software how to interpret the field map file you are about to download.

**Figure 4-11: Map Format Selections**



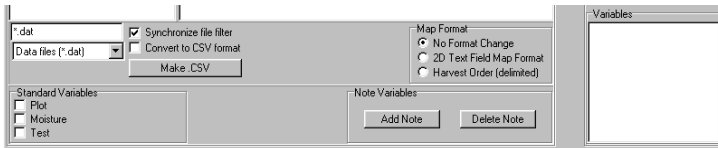
The active variables set on the Field Computer, such as Plot Wt, Moisture, Test Wt, and any note variables will be used to set up the map file during the transfer process to the Field Computer. Any variables that you would like associated with the map will need to be set up before the transfer begins.

To select variables complete the following steps:

1. Open DataLink and select the "Transfer Files" tab.


2. Select the standard variables you wish to record. If you would like to add note variables (such as stand counts), select “Add Note” then type in the name of the desired note. The variable options are shown in the bottom half of your screen (see Figure 4-12).


**Figure 4-12: Variable Options Location**



The variables that you have selected are displayed in the “Variables” box at the bottom right of your screen.

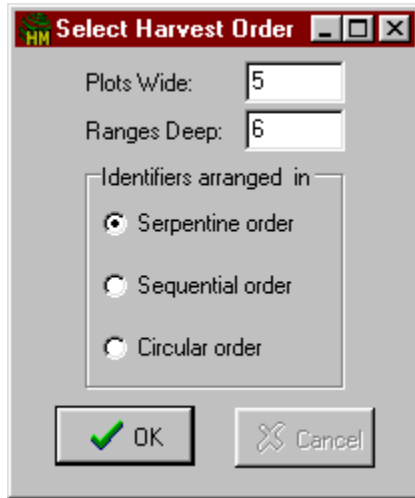
To download a map complete the following steps:

1. Type in the plot numbers and any associated identifiers in Microsoft Excel or a text editor. Type the numbers in either the 2-D Text format or Harvest Order Space Delimited format.
2. Save the map file in Microsoft Excel or the text editor as explained on pages 4-4 to 4-7 of this chapter.
3. Make sure your Field Computer is connected to your PC.
4. Check that you are running the FieldNotes Plus software on the Field Computer.
5. Open DataLink for Windows on your PC and click on the *Transfer Files* tab.
6. Click “OK” on the *Locating Remote* window.
7. Select the proper map file, then click on the right-pointing arrow  to begin downloading.

❖ *Note: If you have already selected the “Transfer Files” tab, press the refresh button  to connect to the remote without exiting and reentering.*

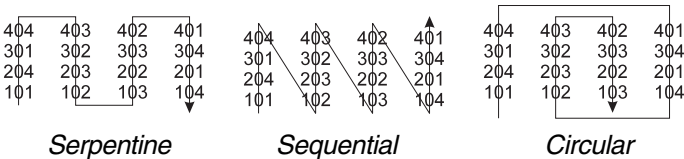
8. If you are downloading a *Harvest Order Space Delimited* map, you will be presented with window in Figure 4-13

**Figure 4-13: Select Harvest Order window**



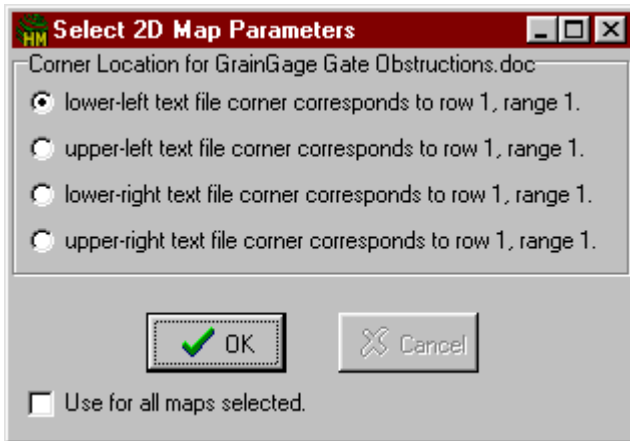
The *Select Harvest Order* window allows you to set up the width of the field, the number of ranges in the field, and the harvest direction or route that you will take when the field is harvested. The three available harvest routes are shown in Figure 4-14.

**Figure 4-14: Available harvest routes**



9. If you are downloading a 2-D map, you will be presented with the window in Figure 4-15. The *2-D Map Parameter* window allows you to specify which corner of the map corresponds to range 1, row 1 of the field.

**Figure 4-15: Select 2-D Map Parameter window**



10. Select the appropriate option and click on <Ok>.
11. Click the right-pointing arrow <➡>, to begin downloading.

❖ *Note: Always view your maps to ensure that they were downloaded correctly.*





# Section 5



**Additional  
DataLink  
Information**



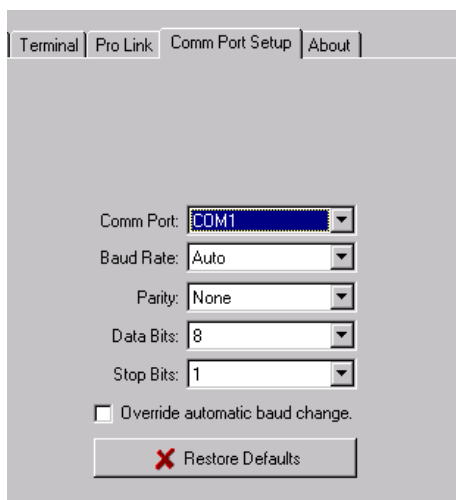
## Other Functions of DataLink

DataLink can be used with a number of other HarvestMaster programs. This section offers additional information about DataLink functions that are both associated and not associated with FieldNotes Plus.

### ▲ Communication Port Setup

If the PC and the Field Computer did not communicate, the communication port settings may need to be changed. To change the communication port settings, click the *Comm Port Setup* tab in DataLink to open the Comm Port Setup window (see Figure 5-1).

**Figure 5-1: Comm Port Setup: Default Setting**



To make the correct selection for your communication setup, change the settings in the *Comm Port Setup* window. For example, if the Field Computer is connected to COM2, select COM2 from the *Comm Port* pull down window.

DataLink automatically sets the optimum baud rate for data and map transfers (9600) and ProLink transfers (115k). If you must use a different baud rate, click the box beside “Override automatic baud change” so a check appears. DataLink will now exclusively use whichever baud rate you select. Click on the arrow at the right end of the *Baud Rate* box to reveal the pull-down menu. Then select your desired setting.

❖ *Note: Changing the baud rate from “Auto” may adversely affect the system communication performance. Use the Restore Defaults button to reset customized settings to their original values.*

For additional help on diagnosing communication problems, refer to *Help* option in your *DataLink for Windows* program.

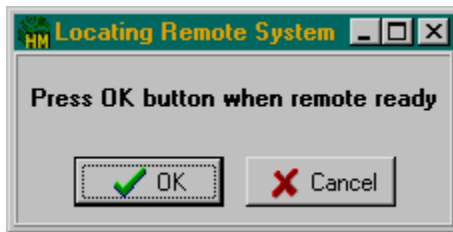
❖ *Note: The ProLink and Terminal sections of this chapter are not associated with FieldNotes Plus but are functions of DataLink. We have included this information for your benefit as a DataLink user manual in case you desire to use these options with other HarvestMaster software you have purchased.*

## ▲ Transferring Files

Using DataLink, you can transfer map files and data files between the PC and the Field Computer with a click of a button. To transfer files to and from the Field Computer complete the following the steps:

1. Make sure your Field Computer is on and in the FieldNotes Plus *Main Menu* screen.
2. On your PC, click on <Start> to open the Start menu.
3. Go to the *Programs* folder.
4. Select the *DataLink for Windows* directory.
5. Click on the *DataLink for Windows* program.
6. Click on the *Transfer Files* tab if it is not already in the foreground.
7. Click <OK> in the *Locating Remote System* box (see Figure 5-2) if the Field Computer is on, connected, and running the application software.

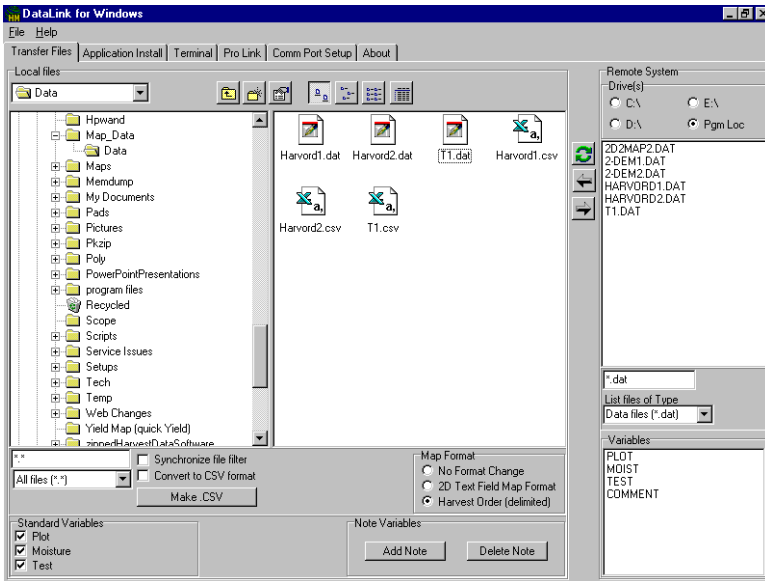
**Figure 5-2: Locating Remote System OK/Cancel Box**



❖ *Note: If you are having problems with communication, check your COM Port setting and communication cables.*

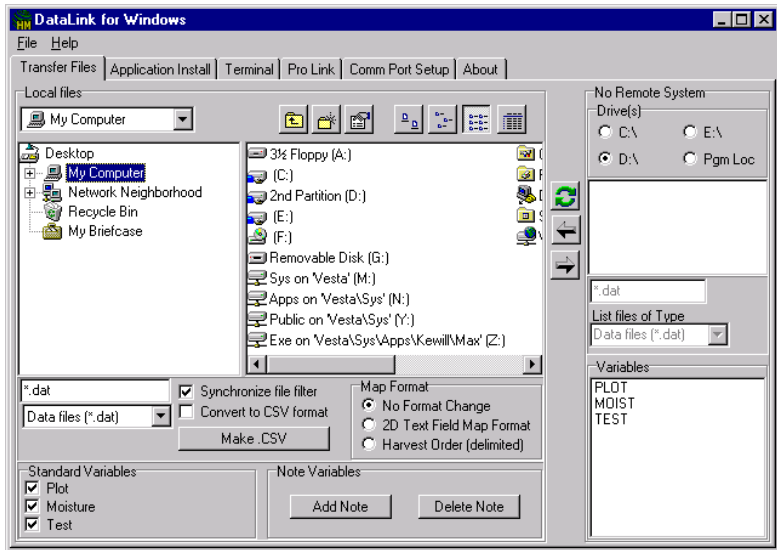
If the Field Computer is connected correctly and the communication setups are set correctly, the files from your Field Computer will be displayed in the *Remote System* box on the right side of the DataLink screen, and your PC directory and files will be displayed on the left side (see Figure 5-3).

**Figure 5-3: DataLink Transfer Files Tab Connected to the Field Computer**



If it does not connect, *No Remote System* will be the title of the box on the right side of the DataLink window (see Figure 5-4). Double check to make sure your Field Computer is running in FieldNotes Plus.

**Figure 5-4: DataLink Transfer Files Tab Not Connected to the Field Computer**



❖ *Note: The “Synchronize File Filter” option will make one file filter active. Disabling this option will allow two filters to be active, one for your PC (left side of screen) and one for your Field Computer (right side of screen).*

8. Select the download format (*Map Format*) to correspond with the type of file you are downloading. See Section 4 of this manual for details on the map download options (i.e. *2-D Text Field Map* format and *Harvest Order (delimited)* format).

❖ *Note: The option, “Convert to CSV format” will convert data files to a comma-separated format which is best used when importing into programs such as Microsoft Excel.*


9. Make sure all the variables you desire are displayed in the *Variables* box in the lower right corner of DataLink's *Transfer Files* window, for example Plot, Moist, and Test. If they are not displayed, complete the steps in the following paragraphs:

Go to the *Standard Variables* section in the bottom left corner of DataLink's *Transfer Files* window to select your desired variables.

Click on the empty white box, in front of the variable you desire, so that a check mark appears. The selected variable(s) will also appear in the *Variables* box in the lower right corner of DataLink's *Transfer Files* window.

❖ *Note: When downloading maps, it is required that you download the variables with it. Once downloaded, you will not be allowed to add or modify any variables associated with that map.*

*To transfer files from your PC to your Field Computer*


10. Highlight the file(s) you would like to transfer to the Field Computer and click on the right-pointing arrow  to start the download process.

*To transfer files from your Field Computer to your PC*

11. Make sure the correct drive is selected in the *Remote System* box of DataLink's *Transfer Files* window (for example C:\, E:\, D:\, or Pgm Loc). If you have not changed your current drive in the FieldNotes Plus Program, the default setting will be the program location. To change the drive, complete the following step:

Click on the white circle in front of your desired drive in the *Remote System* section. A dot will appear in the circle of the drive you have selected. Your data files are viewed in the *Remote System* box on the right side of your screen.



12. Highlight the file(s) to be transferred to your PC, and click on the left-pointing arrow  to start the upload process. A file that has been uploaded to your PC can be viewed or edited by highlighting the file and right-clicking on it. This will send the file to your preferred editor.
13. To upload more than one file, highlight the first file, then hold down the <Shift> key and select the last, or use the <Ctrl> key to highlight separate files.

❖ *Note: Refer to the Help option in DataLink for Windows for specific information on transferring files.*

For additional *Transfer Files* window options go to the *ProLink* section on page 5-9 of this chapter.

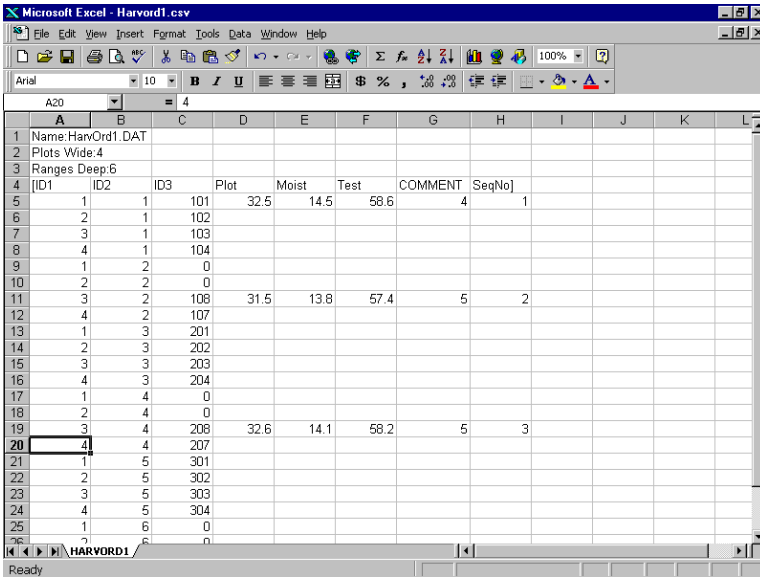
### ▲ **Convert to CSV Option**

When the *Convert to CSV* option is not selected, the system will upload the data in a standard *Tab delimited Text* format. When the *Convert to CSV* option is selected, the system will automatically open the file with any program you would like.

❖ *NOTE: Comma separated format files can automatically be imported to Excel. Using "My Computer," it is possible to change the file types (under "VIEW") to allow your system to automatically open the file with any program you would like.*

When you double click on the file that you would like to open, the system should automatically start the program and import the data for you (see Figure 5-5).

**Figure 5-5: Automatic Start and Import to Microsoft Excel**



Viewing data lets you scroll back through a set of collected data using the arrow keys to move from range to range and row to row within the selected field.

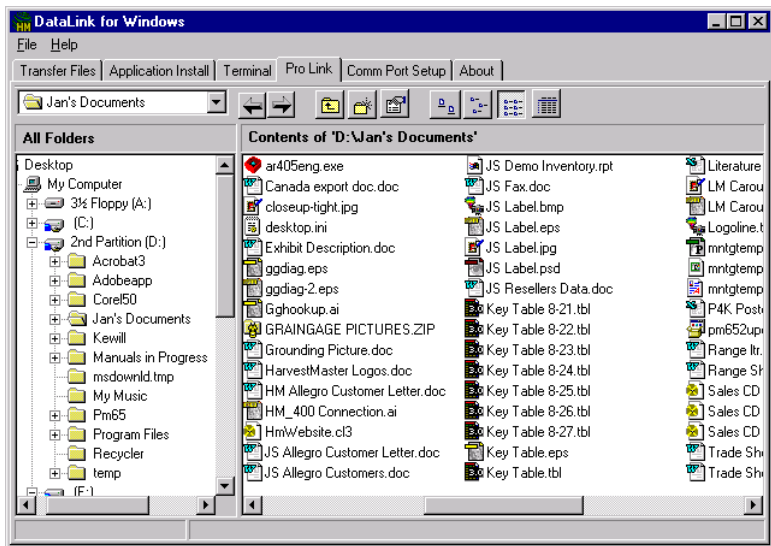
To transfer CSV files from your PC to your Field Computer select either *2-D Text Field Map Format* or *Harvest Order (delimited)*, located in the *Map Format* of *DataLink's Transfer Files* window.

## ▲ ProLink

ProLink is a file transfer program generally used for files not associated with the FieldNotes Plus application software (e.g. custom DOS programs). To start ProLink, choose the ProLink tab in DataLink for Windows (see Figure 5-6).


❖ *Note: This utility can only be used with DOS Field Computers such as the Pro4000 or Allegro Field PC. ProShell (Pro4000) or File Scout (Allegro) must be running on the Field Computer (refer to your Field Computer's User's Manual for details).*

**Figure 5-6: DataLink for Windows ProLink Tab**



To send files to the Field Computer complete the following steps:


1. Select the appropriate drive, on your PC, by clicking on the pull-down menu located above the *All Folders* box.

2. Navigate through the folders in the left-hand *All Folders* box.
3. Double-click on the folder you want to open. Files within that folder will appear in the right-hand window.
4. Select the file(s) you wish to send. To send more than one file, highlight the first file, then hold down the <Shift> key and select the last, or use the <Ctrl> key to highlight separate files.
5. Click the Right Arrow <> to open the *Transmission Progress* window.
6. Click <Send> to initiate communication.
7. The *Transmission Progress* window shows the current file in transit, its progress, and the overall progress. Click <Cancel> to stop the transfer. When finished the *Transmission Progress* will exit and you will be back at DataLink's *ProLink* window.

To receive files from the Field Computer complete the following steps:

1. On the PC, select the appropriate drive from the pull-down menu at the top of the screen.
2. Navigate through the folders in the left-hand *All Folders* box.
3. Double-click on the folder you want to open. Files within that folder will appear in the right-hand window. A received file will be placed in the lowest-ranking open folder.

❖ *Note: Mark multiple files on your Field Computer by using the INS key.*

4. Click the Left Arrow <>. The *Receive File Progress* window will appear.
5. Click <Receive> to initiate communication. (If the files are not sent within 10 seconds, DataLink will time out and the communication transfer will need to be restarted.)

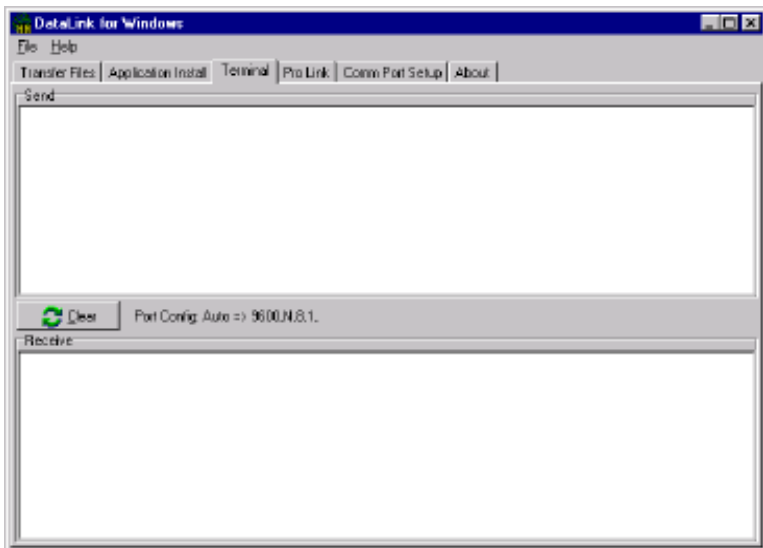
6. The *Transmission Progress* window shows the current file in transit, its progress, and the overall progress. Click Cancel to stop the transfer.

❖ *Note: Make sure the entire file was uploaded before deleting the file on your Field Computer.*

## ▲ Terminal

Terminal is a diagnostic tool used mainly for troubleshooting communication problems between the PC and the Field Computer. In DataLink, select the *Terminal* tab (see Figure 5-7). For this option to work, both DataLink and the Field Computer must be in terminal mode. (Refer to your Field Computer User's Manual for information on how to set it to terminal mode.)

**Figure 5-7: DataLink for Windows Terminal Tab**



To test communication between the Field Computer and the desktop PC complete the following the steps:

1. Connect the Field Computer to the appropriate comm port on the PC using a communication cable.
2. Set DataLink your Field Computer to terminal mode.
3. Type a test message on your PC. The message should appear in the Send window in DataLink and in the Receive screen on the Field Computer.
4. Type a test message on the Field Computer. The message should appear in the Send screen of the Field Computer and in the Receive window of DataLink.
5. If steps 3 and 4 are accomplished successfully, then the Field Computer and desktop PC are communicating.
6. If these messages do not appear as they should, make sure the connections to the PC and Field Computer are correct. Make sure the Field Computer is plugged into the same comm port as shown on the Comm Port Setup screen. You may also refer to your Field Computer User's Manual. Then repeat steps 2 through 4.

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