

Farm Works Software®
For Windows™

Farm Trac Mate

For version 10.0 and higher

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Farm Trac Mate

Besides using the Farm Trac Mate manual, be sure to always check the Tutorial and Program Helps for the most recent updates on how to use all Farm Works Software

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About Farm Works Software

Farm Works Software features a complete line of farm management tools for today's producer. The seven packages: Farm Trac+, Farm Fund\$, Farm Site, Farm Stock, Farm Trac Mate, Farm Site Mate and Guide Mate offer the farmer an integrated approach to farm management.

Farm Trac+ is a basic field-mapping package that allows you to map your farm and then keep field histories and chemical records by farming the map with icons that represent your people and equipment. **Farm Trac Mate** integrates with Farm Trac+ to provide field record keeping for pocket and handheld PCs running Microsoft Windows™ CE or Pocket PC™ as well as with laptop computers with Windows™ 98 or higher. Trac Mate takes the hassle out of field record keeping and allows you to spend more time in the field and less time in the office. **Farm Fund\$** adds a full-featured farm accounting program that includes both cash and accrual books. **Farm Stock** adds detailed livestock records. With Farm Stock, you can keep genealogical and health records on an animal-by-animal basis. **Farm Site** brings your maps into the 21st century by adding an unlimited number of layers that may be geo-referenced. Farm Site can import yield data from most yield monitors and can be used for recording soil tests and mapping features such as soil types. **Farm Site Mate** works with pocket and handheld PCs running Microsoft Windows™ CE or Pocket PC™ as well as with laptop computers with Windows™ 98 or higher. Site Mate works with a GPS receiver and offers three integrated modules for basic mapping, scouting, and variable rate control. The program works with ArcView Shape Files so that data may be used with any geographic information system. **Guide Mate** provides an easy-to-use guidance solution that works with Farm Site Mate.

Layout of this Manual

This manual is designed to give you explanations of how your Farm Trac Mate program works and what you need to do to use the program successfully. This manual is not designed to give you in-depth instructions on how to complete certain tasks. Refer to the on-line help for detailed descriptions of how to enter information into Farm Trac Mate. The on-line helps can be accessed by selecting **Help Topics** from the **File** menu in Farm Trac Mate. This manual is designed so that you can sit down, read it in an evening, and have a good idea of how Trac Mate works and what you will need to do to get started.

Overview of Farm Trac Mate

Farm Trac Mate works with hand-held PCs running the Windows™ CE or Pocket PC™ operating system, as well as laptops and other computers using Windows™ 98 or higher. Farm Site Mate works with a GPS receiver for mapping, scouting, and controlling many commonly used variable rate applicators. By combining Site Mate, Trac Mate and a reasonably-priced Windows™ CE device, farm producers finally have a low cost solution to meet their needs.

Farm Trac Mate works with Farm Trac+ and Site Pro to provide you with the ability to enter crop and chemical records while in the field. Trac Mate includes the following features:

- Works with Farm Trac+ and Site Pro so information, such as field names, equipment, personnel, and supplies, may be downloaded from your desktop computer into Trac Mate.
- Includes an easy to use configuration process for adding new fields, personnel, equipment, and supplies while away from your desktop computer.
- An integrated time clock can calculate hours worked by each person on an operation.
- Use the on-screen keyboard or the handwriting features of Pocket PCs to enter information. Trac Mate has been designed to minimize the amount

of required data entry. Most information is easily entered by selecting items from a list of choices on the screen.

- Use the metered feature to keep track of items such as tach hours. Simply enter the meter reading at the start of the operation and again after the operation is completed. Trac Mate will calculate the amount used on this operation as well as default the starting value for the next operation.
- Detect possible calibration problems in the field by entering the total quantity of each supply used and have Trac Mate calculate the actual rate applied for each supply.
- Record field and weather conditions at the time of application for required chemical reporting.
- Use the Notes area to enter information such as observations about broken tiling, weed or insect problems, or anything that will help you manage your farm more efficiently.
- Updates permanent records by simply plugging the device into your desktop computer and starting the synchronization process from Farm Trac+ or Site Pro. All of your field histories, EPA records, and enterprise statements will be updated. If you are using Farm Fund\$, this will even update your supply inventories.

Using a Windows™ CE Device



If using Farm Trac Mate with a Windows™ CE device (Pocket PC or handheld PC running Windows™ CE), you will need configure your CE device and desktop computer to work with Trac Mate. The appropriate software must be installed and a partnership between the CE device and the desktop must be created. If installing to a laptop/desktop platform, skip to the *Installing Farm Trac Mate* section of this manual.

NOTE: There are frequent model changes for CE devices, due to supply factors from suppliers. Though every attempt has been made to have these instructions as comprehensive as possible, it may be necessary to reference the CE device user manual for some instructions.



Creating a partnership between the CE device and the desktop computer / laptop

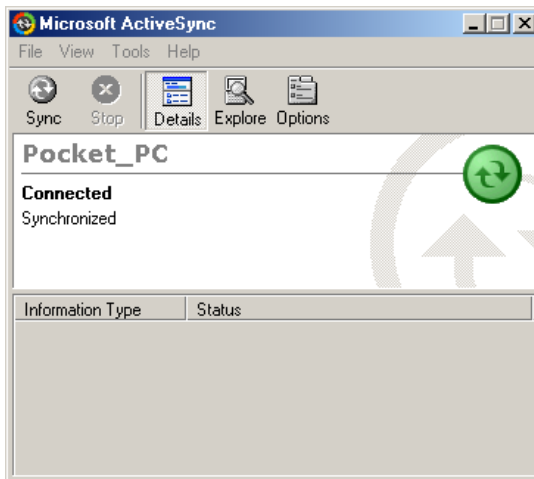
Creating a partnership allows the desktop computer and the CE device to communicate back and forth to each other. This communication is how the two computers will exchange information and how software will be installed onto the CE machine. A new partnership must be created before the CE device may be used with a desktop computer. The following are the basic steps for creating a partnership:

1. Connect the cradle (also known as a docking station or dock) of your CE device to your desktop computer or laptop. This will normally plug into a serial or USB port on the back of the desktop computer. Depending on your computer, an adapter may be required.
2. Install Microsoft Windows™ CE Services from the Microsoft Windows™ CE CD ROM. This CD should be packaged with your CE device. This

program will run a setup wizard that will step you through installing the necessary applications. You may also need your original Windows installation CD.

3. After Windows™ CE Services has been installed, you will be prompted to restart your desktop machine. After it has restarted, place your CE device into the cradle. The **New Partnership Wizard** should now appear. Enter additional information such as a *Device Name* for your CE device. The device name is how your CE device will be identified in Windows™. After entering this information, the partnership will be complete.

Each time you put your CE device into the cradle, a message window will be displayed that indicates that Windows™ is connecting to the CE device. This process will be important since it is what allows communication between the desktop/laptop and the CE device.



Re-Setting the CE Device

If at anytime the software “locks-up” and the CE device will not respond to any of the buttons, use the stylus and press the soft reset button.



SOFT RESET BUTTON



SOFT RESET BUTTON



SOFT RESET BUTTON



Getting Started

Installing Farm Trac Mate

Farm Trac Mate will be installed using the CD-ROM on your desktop or laptop machine regardless of whether the program will be run from desktop, laptop or from a CE device. If Trac Mate will be run from a CE device, the CE device must be synchronized with the desktop machine throughout the installation process.

Following is a list of hardware and software required when installing to a CE device:

- Pocket, hand-held, or professional PC.
- Microsoft ® Windows ™ CE or Pocket PC version 2.0 or higher.
- 4 megabytes or more of available memory.

Following is a list of hardware and software required when installing to a laptop or desktop computer:

- Personal Computer with a Pentium processor or higher.
- 8 megabytes or more of RAM.
- Microsoft ® Windows ™ 98 (or higher) installed.

There are two important notes before you start installing your software:

- The files on all Farm Works installation CDs are compressed, so you cannot install Farm Works by copying the files.
- Choosing **Cancel** during installation halts the process and Farm Works will not be properly installed on your computer.

Installation Procedures

1. Insert the Farm Works CD into the appropriate CD ROM drive. Windows™ will automatically begin the installation process for you. If the installer does not start itself, choose **Run** from the **Start** menu and then type **D:\Setup** in the box under the command line (where “D” is your CD drive). Select **OK**.
2. Select the “Install Farm Works Mate Programs” from the installation screen, and then select the programs that you wish to install. Some programs will require a code in order to be installed. Code numbers will default to those previously entered if the selected programs have been installed in the past, but can be changed if necessary. These codes are found on cards that are packaged with each program.
3. Follow the instructions on the screen to complete the installation process.
4. After the program has been successfully installed, a message will appear that says, “Farm Works successfully installed.” You may now close the installation window.
5. Exit Windows™ and reboot the computer.

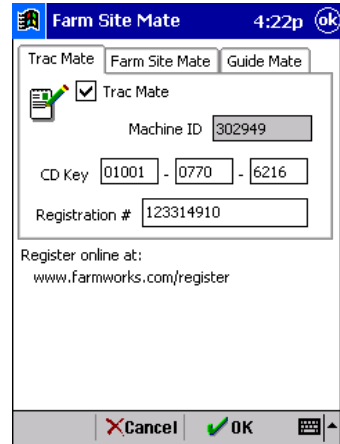


Registering Your Software

To protect your copy of Trac Mate and to receive information on future upgrades to the program, you must register it under the owner's name with a number provided by Farm Works. Registration takes just a few moments to complete and there are two options available for receiving registration numbers.

A. On-line Registration

1. Go to www.farmworks.com/register.
2. Select the programs you have installed.
3. Enter the Machine ID that is displayed on your screen, along with your product code numbers and select **Submit**.
4. Fill in your contact information, the place of purchase and select **Submit Registration**. If you have completed the information correctly, you will receive an e-mail containing your registration numbers within an hour.



B. Call Farm Works Software

1. Call 1-800-225-2848 Monday – Thursday 8 AM –8 PM EST
Friday 8 AM – 6 PM EST
Saturday 8 AM – Noon EST

NOTE: Indiana does not observe Daylight Savings Time

2. Make sure to have the Machine ID number ready or have the Registration window brought up before calling.

NOTE: If the registration window does not appear upon opening Trac Mate, it may be located by going to **File>About Farm Site Mate-Registration Info** within the Farm Trac Mate program.

When you receive the registration number, enter it in the Farm Trac Mate Registration box and choose **OK**. Be sure to write the Machine ID as well as the registration number somewhere, such as on the inside front cover of your software manual, so that you will always have it. As long as the machine ID number stays the same, the registration number will work for future installs.



Synchronizing Data

Once Farm Trac Mate has been installed and registered, the information that has been entered in Farm Trac+ or Site Pro must be added to Trac Mate. This chapter is designed explain the synchronization process and prepare you for entering data in the field. As always, refer to the program helps in Trac Mate for more details on using the program.

Synchronizing between Trac Mate and Farm Trac+

The process of exchanging data between Farm Trac Mate on the CE device or laptop and Farm Trac+ on the desktop is called “synchronizing”. This process updates your permanent crop records in Farm Trac+ with those entered in the field, as well as the mobile CE unit with any new items added to the list of fields, equipment, or supplies. Any planned jobs that have been created in Farm Trac+ are also updated. Farm Trac Mate adds the option of synchronizing more than one project. To synchronize more than one project, you will have to complete the synchronization process while in each project.

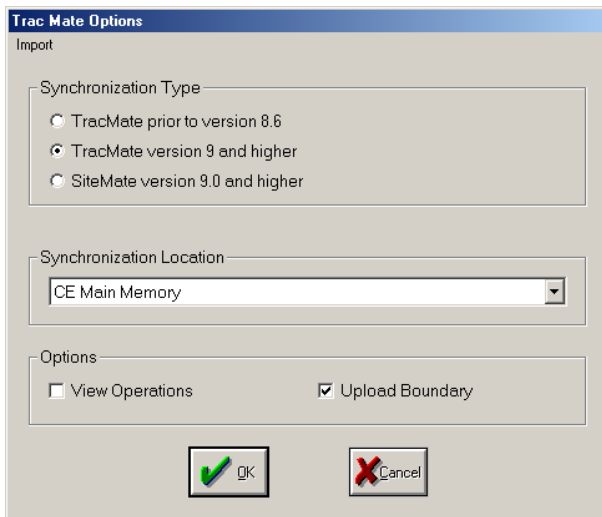
Synchronizing between Trac Mate and Site Pro

The process of exchanging data between Farm Trac Mate on the CE device or laptop and Site Pro on the desktop is called “synchronizing”. This process updates your permanent crop records in Site Pro with those entered in the field, as well as the mobile CE unit with any new items added, such as fields or supplies. Any planned jobs that have been created in Site Pro are also updated. Farm Trac Mate allows the synchronization of more than one client's information. To synchronize a client make sure a layer, preferably the Main Layer, for the desired client is active prior to completing the synchronization process.

Synchronization Process

During the synchronization process, differences between the lists kept on the Trac Mate program and the desktop are reconciled. This makes it possible to add items in the field and on the desktop without worrying that the items will be duplicated when the two machines are synchronized. When synchronizing begins, you will be given the opportunity to match, or **Link**, new items from the Trac Mate program with those already on the desktop. This means that it is possible to be adding new supplies in the field with Trac Mate while someone else is using Farm Fund\$ to record purchases of the same supplies.

Before records can be synchronized, each farming action should be marked as finished in Trac Mate. Only finished actions can be synchronized with Farm Trac+ or Site Pro.

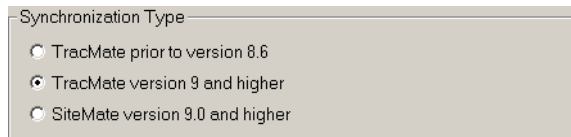


To begin synchronization:

1. Make sure Farm Trac Mate is closed by selecting **File-Exit** within the Trac Mate program.
2. If using a CE device, make sure it is in the cradle and that it is connected and synchronized with the main computer.
3. Select **Sync Trac Mate** from the **File** menu in Farm Trac+ or Site Pro. There will be several options available within this window.

Synchronization Type

Select the version of Trac Mate that you are using.



Synchronization Type

TracMate prior to version 8.6

TracMate version 9 and higher

SiteMate version 9.0 and higher

Synchronization Location

Refers to the location of installation for the Farm Trac Mate program. Select the appropriate location from the dropdown list.

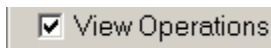


Synchronization Location

CE Main Memory

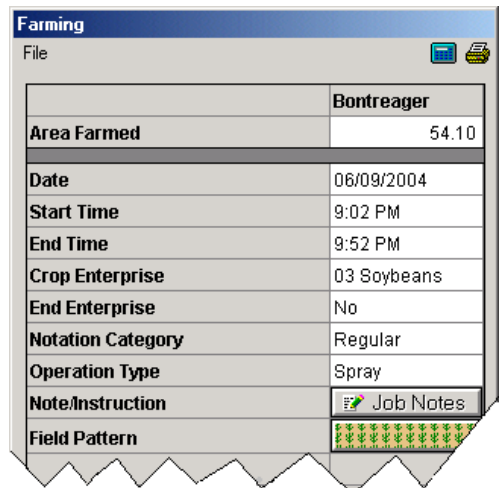
Options

• View Operations



View Operations

Select this option if you want to be able to view or edit the operation before the synchronization process is complete. If selected, the **Farming** box will be displayed, allowing you to view or edit the farming operation.



Farming

File

	Bontreager
Area Farmed	54.10
Date	06/09/2004
Start Time	9:02 PM
End Time	9:52 PM
Crop Enterprise	03 Soybeans
End Enterprise	No
Notation Category	Regular
Operation Type	Spray
Note/Instruction	Job Notes
Field Pattern	

• **Upload Boundary** Upload Boundary

Checking this box allows you to view field boundaries while working in Farm Trac Mate when it is used with Site Mate.

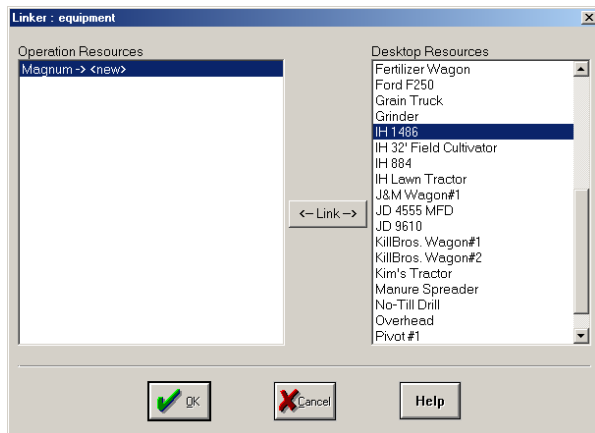
4. The Trac Mate synchronization screen will show the progress of the sync process. Each of the items will be marked with a check mark as they are completed.
5. After the synchronization process is finished, you will get a message that the synchronization is complete.

Linking New Information

The synchronization process allows information that has been added to the CE unit while in the field to be linked to existing items on the desktop. Alternatively the items may be added to the desktop.

To Link information:

1. Complete synchronization steps #1-3 as discussed previously. If new items have been added to Trac Mate, the **Linker** window will appear.
2. Highlight the new item on the left. This will be the item that was added to Trac Mate.
3. Highlight the desired desktop resource on the right side of the window. If the item should be added as a completely new item highlight **<new>** on the right. If the item should be linked to an existing item in the list, highlight the appropriate item.



4. Select the **Link** button.
5. Select **OK**.
6. Complete the link process for each item that was added to Farm Trac Mate by repeating steps 2-5 for each item.
7. Select **OK** at the Synchronization Complete window.

If people or equipment were linked as **<new>**, you will be prompted to enter the properties for each item as well as select an icon.

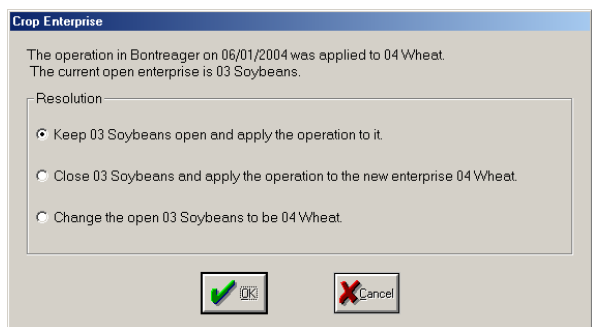
The properties of new supplies will be entered during the synchronization process. If using Farm Fund\$, an account will have to be assigned to new supplies.

Once the synchronization process is complete, the new people, equipment and supplies will be available on the equipment and supplies tab, respectively. New fields are added to Farm Trac+ and Site Pro as deleted items. New field names can be selected from the drop-down list when they are defined on your map.

NOTE: If synchronizing with Site Pro, equipment will be linked to **<new>** the first time they are used.

If the crop enterprise was changed in Trac Mate, the **Crop Enterprise** window will appear during synchronization. There will be three options available:

A. *Keep 'current enterprise' open and apply the operation to it* - This will keep the current enterprise on the field, and add the operation to the field. The result is that the change in Trac Mate will be



ignored.

- B. *Close 'current enterprise' and apply the operation to the new enterprise* – this option will close the current enterprise, open the new enterprise and apply the farming operation to the new enterprise.
- C. *Change the open 'current enterprise' to be 'new enterprise'* – Select this option if you want the current enterprise to be changed to the new enterprise name. All farming operations that were recorded under the 'current enterprise' will now be recorded under the new enterprise.

When data is synchronized several things will happen:

- All field records (Jobs and Regions) that were marked as **Finished** with Trac Mate will be loaded into Farm Trac+ or Site Pro. This will result in the updating of notations, crop histories, chemical records, and enterprise statements (with Farm Funds). The field patterns on your map will also reflect the farming actions that have been recorded. For example, a field that had a planting operation recorded in Trac Mate will receive the pattern of the seed that was used.
- Any items such as fields, equipment, people, supplies, and crops that have been added to Farm Trac+ or Site Pro since the last time that you synchronized data will be added to the lists in Trac Mate. This process ensures that your Trac Mate program is always using an up-to-date list of items for your farm.
- All of the field records that were marked as **Finished** will be removed from Trac Mate. Jobs marked as **Incomplete** will be left in Trac Mate to be finished later.

If using Farm Site Mate as well:

- An updated map that includes all field boundaries will be uploaded to Trac Mate, if the *Upload Boundaries* box has been checked.
- Job logs (GPS Maps) that were created in Trac Mate/Site Mate will be imported into Farm Site or Site Pro and placed on new layers.

The process of synchronizing can be done as often as you like, however, remember that there are limits to the amount of data that a CE device can hold and there are risks to storing too much data on the CE device. The data on the main memory of the CE unit will be lost if the unit loses battery power or is destroyed. It is recommended the programs be synchronized at least once a week and, preferably, daily.

Saving information and preventing data loss

Information is saved as it is entered and is kept even after the unit is turned off. However, if the main batteries go dead and the backup battery is dead, all data in all programs on the unit will be lost. Some units also have a “hard reset” option that will remove all programs and data from RAM. Refer to your unit’s documentation for details on proper care and maintenance.

If your Windows™ CE Device has the capability of using a removable storage card (Compact Flash or Secure Digital cards), you can protect your data by saving to the storage card. Please refer to the owner’s manual of your Windows™ CE device for more details on making a full system back up or transferring files to a storage card. You can also choose to synchronize Trac Mate data directly to a card by choosing “CE Card” for the Synchronization Location.

Viewing Data after Synchronization

Once the operations have been synchronized, there are several ways that the data that was entered in Farm Trac Mate can be view in Farm Trac+ or Site Pro.

1. The information will be part of the notations for each of the fields. If using Site Mate along with Trac Mate there will be an **Op Map** button in the Notations window. This will display the layer that was created by the Site Mate log as the active layer.
2. Data may also be viewed is by selecting **History-Operations-Maintenance**. Select the field operation (limit the number of jobs that appear in the list by using the Sort features to the left). After the operation is selected, click on the **Print** button and you will get a report that includes all of the information

that was entered for that job.

NOTE: If using Site Pro, Operations Maintenance is available from the field's right click menu on the client's Main Layer.

Note: If you have Farm Site Mate, a coverage map was created. That map can also be viewed at this point by clicking on the View Map button found within the Operation Maintenance screen.



Quick Start – First Time Users

1. Install Farm Trac Mate onto the appropriate platform. If installing to a CE device, a partnership will have to be established before installation can be completed.
2. Register the software.
3. Synchronize information from the Farm Trac+ or Site Pro program to the Trac Mate program by going to **File-Sync Trac Mate** within the appropriate Farm Works desktop program.
4. Open Trac Mate and select the **Trac Mate Job** button from the start up screen. The New Job screen will appear.
5. Make sure the correct project is selected. If not, select the **Change** button and highlight the appropriate project name.
6. Enter the requested information – Field, Crop, Type and Date. If you want to use the same setup as the last job, check the box for 'Same Setup as Last Job'.
7. Select **OK**. The **Job Setup** screen will appear.
8. Select the People, Equipment and/or Supplies that will be used for this job.
 - a. If desired, enter the correct initial quantity and expected application rate for each supply selected.
 - b. Make sure the implement width is correct.
9. Select **OK**. You will return to the Job tab and all selected information will be displayed.

10. Begin your farming operation.

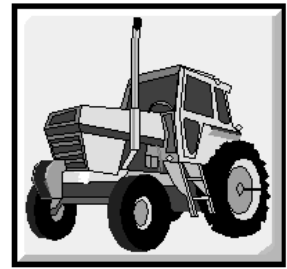
- a. Select **Change** to edit the operation in any way, i.e. changing the person, equipment or supplies.
- b. If it is necessary to fill the implement within the same job, select the supply to be filled on the farming screen. Select **Fill** and enter the amount added to the implement.

Note: If using Site Mate and GPS:

- a. Select **Go** to begin recording the farming operation.
 - b. Select **Stop** anytime during the operation that the actual operation has been halted.
 - c. Select **Stop** and **Change** to edit the operation in any way, i.e. changing the person, equipment or supplies.
 - d. If it is necessary to fill the implement within the same job, select **Stop** and then select the supply to be filled on the farming screen. Select **Fill** and enter the amount added to the implement.
11. When the operation is complete, tap on the **Finish** button. Select Finished if the operation is completed or select Incomplete if you will be returning to that operation during the same day.
12. People, equipment, supplies and other items can be quickly added, edited or deleted by going to the Config tab and opening the Trac Mate heading.

For more detail on the above items, refer to the following sections of this manual.

Using Farm Trac Mate



Once Farm Trac Mate has been installed and registered, you may start entering field records. This chapter is designed to give you the basics on how to use Trac Mate for entering field records while having the choice to create coverage or application maps. As always, refer to the program helps in Trac Mate for more details on using the program.

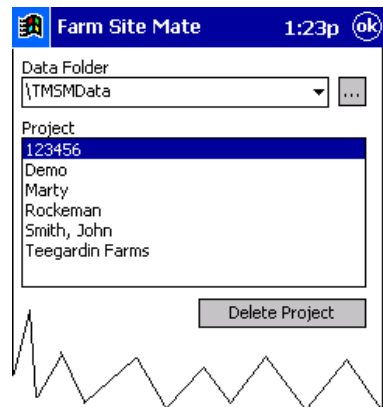
Selecting a Project

The first time Trac Mate is opened, you will be prompted to select a project or client. However, projects/clients can be changed at any time by selecting the **Change Project** button.

If multiple projects/clients have been synchronized with Trac Mate, make sure the desired project/client has been selected before recording farming operations.

To select/change a project:

1. Select the **Trac Mate Job** or **Unfinished Jobs/ Workorders** button.
2. Select the **Change** button. The Data Folder box will display the location of the project files. The **Project** box will display all projects and/or clients that were synchronized from Trac+ or Site Pro to Trac Mate.
3. Highlight the desired project/client.
4. Select **OK**.

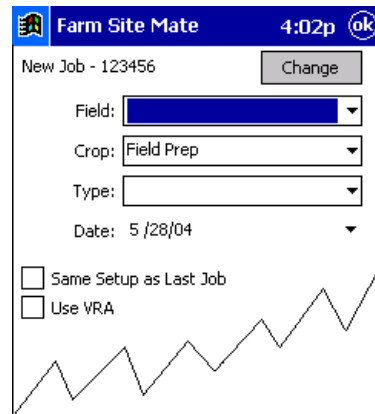


Unwanted projects may be deleted from this screen by highlighting the unwanted project name and selecting **Delete Project**.

New Job Screen

This screen allows you to select the field, crop, type and date for a Trac Mate job.

- **Field** – The farming operations will be performed on the field selected here. All fields entered on the desktop will be available for selection from the drop down lists.
- **Crop** – The current crop in the field. Once the field is selected, the corresponding crop will be displayed based on what was entered on the desktop. This value can be changed if needed.
- **Type** – The Type item describes the farming operation that will be recorded. A Job cannot be started until a Type has been entered.



NOTE: There will be an Add/Edit option available for each of the above items. This allows new information to be added to Farm Trac Mate. Along with creating new data, there will be an option to edit and delete previous information already displayed. New or edited information will be linked to or will update information within the appropriate project on the desktop.

- **Date** – Date of the farming operation. Defaults to the current date, but can be changed.
- **Same Setup as Last Job** – Check this box if duplicating the last farming operation. This will save time if using the same people, equipment, supplies, etc. as the previous operation.
- **Use VRA** - If Trac Mate has been installed with Farm Site Mate –VRA and an *As Applied* map is desired, check this box.

Job Setup Screen

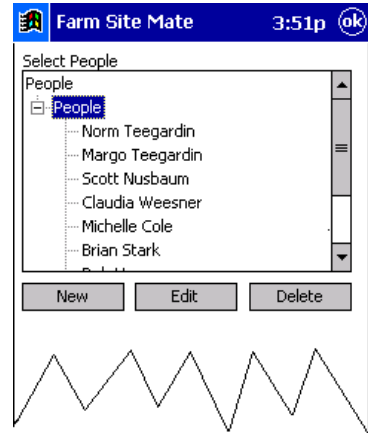
Items that will be used for the Trac Mate Job are selected at this screen.

People

Tap on the **People** button to select the person(s) that will be used in this job. People that have already been entered on the desktop prior to synchronization will be displayed in the list. Highlight the desired person and select **OK**.

To add people to Trac Mate:

1. Select the **People** button from the Job Setup screen.
2. Select the **New** button.
3. Enter the *Name*, *EPA License #*, if applicable, and select an *Icon Group*.
4. Select **OK** to save the information.



People can also be edited or deleted at this screen by selecting the appropriate person and selecting the **Edit** or **Delete** button, respectively.

Equipment

To use equipment in a Trac Mate job, select the **Equipment** button. Previously entered equipment will be available from the list. Simply highlight the desired equipment and select **OK**. Equipment must be added to a job before supplies can be added

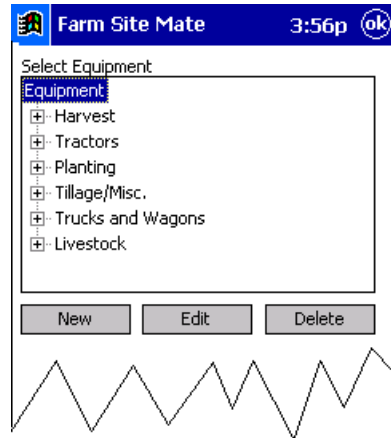
To add equipment to Trac Mate:

1. Select the **Equipment** button on the Job Setup screen.
2. Select the **New** button.
3. Enter the *Equipment Name*, select the correct *Charge By*, *Action* and *Icon*

Group.

4. Enter the correct width of the equipment in feet.
5. Check the box **Metered** if you would like to be able to enter the Starting and Ending Units for equipment.

Highlighting the desired piece of equipment and selecting the **Edit** button will allow you to edit properties for existing equipment.



Deleting a piece of equipment can be completed in Trac Mate by highlighting the unwanted piece of equipment and selecting the **Delete** button.

Supplies

A piece of equipment must be selected before supplies can be added to a job.

To use a supply in an operation, select the equipment, then select the supplies button. Open the desired *Supply Type* and highlight the desired supply name for this operation. All supplies entered prior to synchronization will be available for selection. Highlight the desired supply and select **OK** to add the supply to the job.

To add a supply to Trac Mate:

1. Select the **New** button.
2. Enter a description in the *Supply Name* box and select the appropriate *Supply Type*.
3. Tap on the **Units** button to enter a *Purchased* and *Distributed* unit. The conversion will need to be entered for the difference between the *Purchased* and *Distributed* units.

4. Select **OK** to save the information. You will return to the Supplies window.

5. To have the option to enter detailed information (Weather, Field Conditions, and other E.P.A. data.) for a chemical supply, check the box **Keep chemical records**. This will display two extra buttons - **Carrier** and **Pests**.

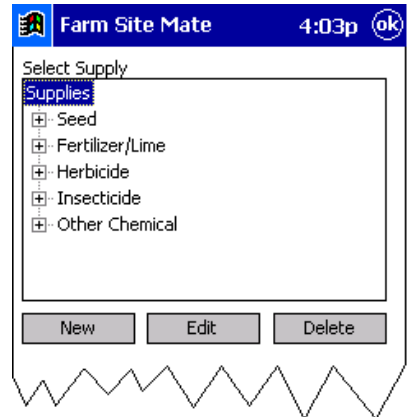
a. Use the **Carrier** button to select the carrier that this supply will be applied with.

b. Use the **Pest** button to select a list of pests that the supply will control.

Select the **OK** to save the information.

6. Check the box **Restricted Use Pesticide**, if applicable.

7. Select **OK** to save this information.



Existing supplies can be edited or deleted from Trac Mate by selecting the **Edit** or **Delete** button, respectively. Simply highlight the desired supply and select the appropriate button.

Once the desired supply has been selected, the *Initial Qty.* and the *Expected Rate* may be entered. The *Initial Qty.* can be for the entire field or for just one batch or tank mix. When you enter the *Expected Rate*, the *Expected Area* of coverage will be automatically calculated.

The **Fill** button will allow you to create additional batches using the same rate for the next tank mix.

NOTE: The *Initial Qty.* and *Fill* options are not required. They should only be used if you wish to use Trac Mate to track the quantity of each supply that you have at any time during an operation.

If selecting a chemical supply there will be a **Carrier** and **Pests** button available.

Selecting the **Carrier** button will allow you to enter the quantity of carrier for this job. To change the carrier name, select the **Add/Edit** option from the drop down list. Enter the rate and charge unit for the carrier. Select **OK** to save the information.


Change controlled pests by selecting the **Pest** button. Select **OK** to save the information.

Once a supply has been added to the Job Setup screen, its properties may be changed by highlighting the supply name and making the appropriate changes.

Harvested Crop

Select the **Harvested Crop** button to select the type of crop to be harvested. If the crop has been harvested before, simply highlight the desired crop to be harvested and it will be added to the Trac Mate job. If it is the first time this crop has been harvested, the new crop will be setup at this time.

The harvested crop should be added to any operation that involves a harvest operation. Selecting this option will allow you to enter scale tickets or the total yield for an operation.

 Items can be removed from the Job Setup screen by highlighting the unwanted item and selecting the **Delete** button.

To save the Job Setup information select **OK**. A dialog box will appear to enter the *Application Width*. This can be changed or left blank if desired.

To start over for the Job Setup, use the **Cancel** button.

The Job Tab

Once all of the desired information for a Trac Mate job has been selected on the Job Setup window, the selected items will be displayed in the Job tab.

Line 1: Displays the name of the project that you are working in and the date of the operation.

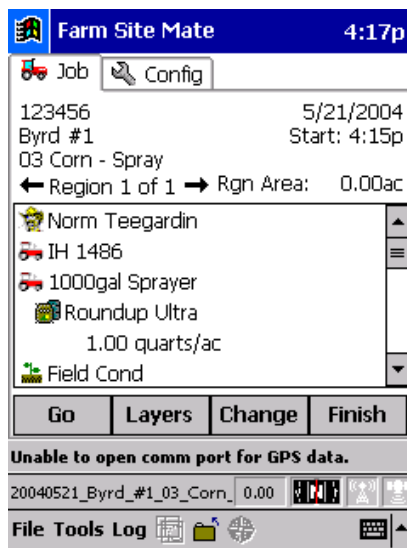
Line 2: Displays the field name and the start time.

Line 3: Displays the current enterprise on the field and the operation Type.

Line 4: Displays the Region(s) and the Region Area.

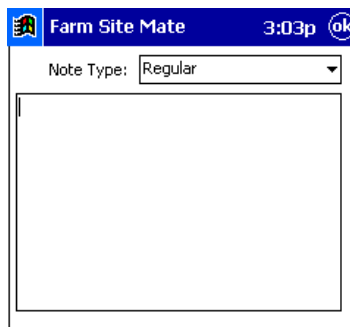
The large box in the middle of the screen displays the people, equipment and supplies that will be used for the operation.

For all operations there will be a **Notes** item listed in this box. By selecting **Notes** you will be able to enter a notation for this operation (in addition to the notation that is generated by the farming operation itself). This will be useful for noting any broken field tiles, weed problems or insect problems. Upon

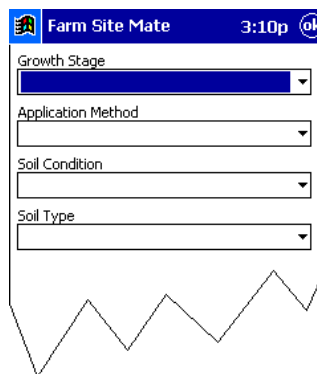
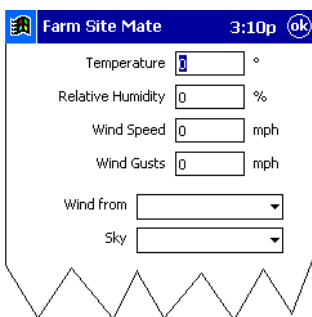


synchronization, any notes entered in Trac Mate will be added to the Notations Report for the respective field on the desktop.

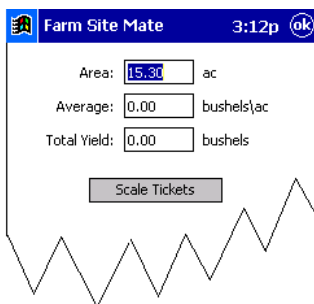
Any time that a chemical is used in a farming operation, and that chemical is set to 'Keep Detailed Chemical Records', you will be able to enter **Weather** information as well as **Field Conditions**.




Weather information includes temperature, relative humidity, sky conditions and wind speed, gusts and directions.


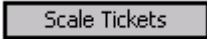


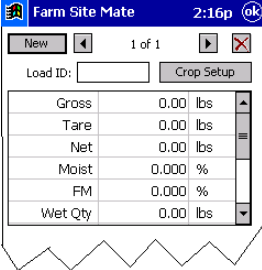
Field Conditions includes growth stage, application method, soil condition and soil type. There is a pre-set list for each of these items but there is also an Add/Edit option available so that users may add their own options.



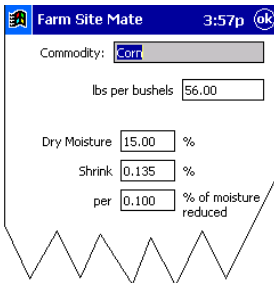
Whenever Harvested Crops is added to an operation, the harvested crops icon  followed by the crop to be harvested will appear in this box as well. This will allow you to enter total yield or scale tickets for the current operation. To enter harvest information, simply select the harvested crop icon from the Job tab and enter the average or total yield or the scale tickets for the current field.

Entering Harvest Data with Scale Tickets:

1. Select the Harvested Crop icon  on the Job tab.
2. Tap on the **Scale Ticket** button. 
3. To add a new scale ticket, select the **New** button.
4. Enter a Load ID along with the Gross and Tare weights, as well as the Moisture and FM percentages.
5. Select **OK** to accept this scale ticket or select the **New** button to add another scale ticket.



Gross	0.00	lbs
Tare	0.00	lbs
Net	0.00	lbs
Moist	0.000	%
FM	0.000	%
Wet Qty	0.00	lbs



Commodity:

lbs per bushels

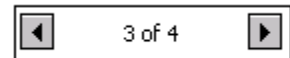
Dry Moisture %

Shrink %

per % of moisture reduced

Selecting the **Crop Setup** button within the scale ticket window will allow you to view/edit the pounds per harvested unit, as well as the shrink schedule for that crop.

Scale tickets may be viewed/edited by selecting the Scale Ticket button and using the arrow buttons to scroll to the desired scale ticket.



A scale ticket may be deleted by selecting the Scale Ticket button, scrolling to the undesired ticket and selecting the Delete button. You will be prompted to confirm the deletion.

Entering Yield Data without Scale Tickets

Yield data may also be added to Trac Mate using the average yield or total yield for the current operation. To enter yield data without scale tickets:

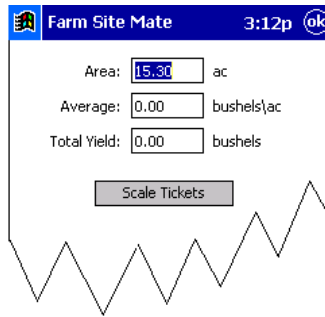
1. Select the Harvested Crop icon from the Job tab.
2. Enter the area harvested.

3. Enter the Average yield and the Total Yield will be automatically calculated.

OR

Enter the Total Yield and the Average yield will be calculated for you.

4. Select **OK** to record the harvest information.



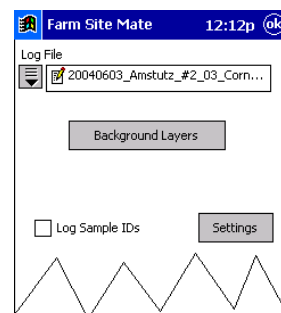
Beneath this box you will see several buttons - Go, Layers, Change and Finish.



Go - Once selected will change to **Stop**. If Site Mate is being used along with Trac Mate, this button will tell Site Mate to start/stop logging.

Layers – Available only if you are using Site Mate. This button will display the log file currently being created in Site Mate and will allow you to load a background layer. This is useful if you wish to display another map such as a soil type or yield map.

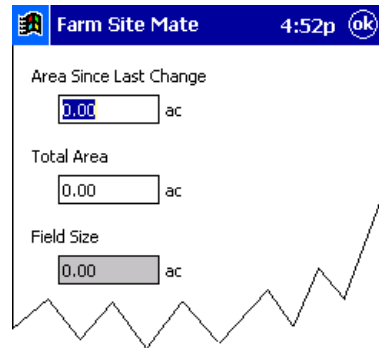
Change – Allows you to add or remove people, equipment and supplies from a job. Selecting this button creates a new region for the job. Selecting **Change** will prompt the **Change Operation** screen to appear and you will be asked for the following information:



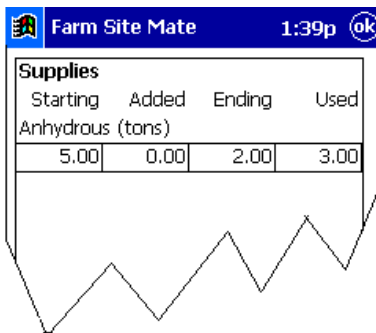
Area Since Last Change - area covered since you started the operation or since you made the last change. This becomes the area of the region completed. This will be automatically calculated if using Site Mate with GPS.

Total Area - sum of all areas including the area entered in the Area Since Last Change.

Field Size - total acreage of the field. This is the same acreage that is used for the Actual Area in the properties of the field.




Removing a supply from a current job



1. Highlight the unwanted supply by tapping on the name of the supply.
2. Select the **Delete** button. The Units Charged screen will appear.
3. The Units Charged screen will display the quantity used of the supply. This value may be changed, if necessary.

Adding a New Supply to a Current Job

1. Select the equipment to be used with the supply.
2. Select the **Supplies**  button at the bottom of the screen. This will bring up the list of supplies currently available in the project.
3. Select the desired supply from the list. If the supply is not in the list, add the new supply by selecting the **New** button at the bottom of the screen.
4. Select **OK** to add the supply to the job.
5. Enter the *Expected Rate* for the supply.

6. Select the **Fill** button to enter the amount of the supply loaded into the implement. Select **OK** to save this information.
7. Select **OK** to save the information for the supply.
8. Select **OK** to add the supply to the job.

Finish – Gives the option to mark a job as Finished or Incomplete.

Finished - tells the program the operation is complete and ready to synchronize to the Farm Trac+ project or Site Pro client. You will not be able to view this operation until it has been synchronized.

Incomplete – Tells the program the operation is not complete. This operation will be available as an Unfinished Job/Work Order. An incomplete job will not synchronize to the main project.

NOTE: It is recommended that jobs that will be completed on a different date or have other jobs performed in the meantime should be marked as Finished.

By marking the job as **Finished**, you will be prompted to enter the charge units for the people, equipment and supplies for the job.

The Change Operation screen displays the following information:

Area Since Last Change - area covered since you started the operation or since you made the last change. This becomes the area of the region completed. This will be automatically calculated if using Site Mate with GPS.

Total Area - sum of all areas including the area entered in the Area Since Last Change. This will be automatically calculated.

Field Size - total acreage of the field. This is the same acreage that is used for the Actual Area in the properties of the field.

The next screen will ask you to enter the charge units for the equipment and people as well as the quantity of supplies used.

The **Charge Units** screen will display the units charged for the people, equipment and supplies as well as the quantities for each of these items. This information will be linked to the information entered previously, but can be edited here as well.

People – typically charged by the hour, this is the total time spent on the job. Trac Mate will compute the total hours worked starting when you select the **Trac Mate Job** or **Unfinished Job/Workorder** button in the Job tab. The time will end when you select the **Finish** button in the Job tab. When an unfinished job is selected, the program will add to the number of hours previously logged.

Equipment – If equipment was set up as *metered*, the starting quantity will already be displayed on this screen. You will also be able to view the starting and ending meter entries. If you are not using the metered option for this equipment, the total units will have to be entered.

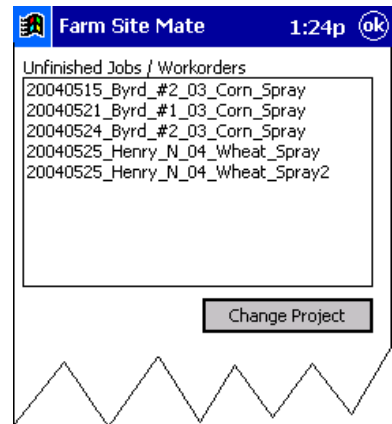
Supplies – This screen will display the starting, ending and total quantities used for each supply as well as any amount added throughout the job. These values will already be displayed if using Site Mate, but can be edited here as well.

Charge Units				
	Starting	Ending	Used	
Brian Stark (hours)			<input type="text" value="5.11"/>	
Anhydrous Applicator (acres)			<input type="text" value="0.00"/>	
Supplies				
	Starting	Added	Ending	Used
Anhydrous (tons)	<input type="text" value="0.00"/>	<input type="text" value="0.00"/>	<input type="text" value="0.00"/>	<input type="text" value="0.00"/>

Unfinished Jobs/Workorders

There are two different ways to have farming operations display under the **Unfinished Jobs/Work orders** button.

1. Planned Jobs –Planned jobs that are created in Farm Trac+ or Site Pro can be exported and made available as a Workorder. Planned jobs are exported from the **Editing and Executing** option on the **Planning** menu found within the desktop software. When the Trac Mate synchronization process is completed, the Planned Jobs will be found as Work Orders in Trac Mate. This operation can then be completed in Trac Mate. Your Farm Trac+ or Site Pro manual has more information on creating plans/workorders.



2. Incomplete Trac Mate Job - When a Trac Mate job has been started and marked as **Incomplete**, the operation is saved to be re-opened at a later date for completion.

To Open an unfinished job or work order:

1. Select the Unfinished Job/Workorder button.
2. Highlight the desired unfinished job/workorder.
3. Select **OK**.

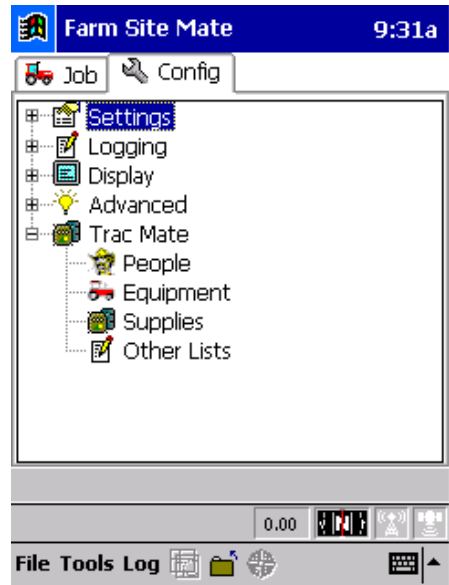
NOTE: If you do not see the desired workorder/unfinished job, make sure the correct project is selected by tapping on the **Change Project** button. See the *Selecting a Project* section of this manual for detailed steps on changing projects.

4. Once the Unfinished Job or Work Order has been opened, the Job Tab will display the operation. The selected job may be edited. Refer to the *Job Tab* section of this manual for detailed instructions.

The Config Tab

There is an additional feature on the Config tab to add, edit or delete items in Trac Mate.

Go to the Config tab and open the Trac Mate heading. There will be options for People, Equipment, Supplies and Other Lists.



Selecting **People** will allow you to add, edit or delete people from the current project.

The **Equipment** section will allow you to add, edit or delete equipment from the current project.

The **Supplies** area will allow you to add, edit or delete supplies from the current project.

For detailed steps for adding people, equipment and supplies see the *Job Setup* section of this manual.

The **Other List** option will add or edit any lists used in the Trac Mate program. Items include fields, equipment actions, pests, application methods, sky conditions as well as several other options. Simply highlight the list you would like to change and select the **Add/Edit** button.

NOTE: Any items added to the Config tab will not be linked to Farm Trac+ or Site Pro until that item has been used in a completed Trac Mate job.

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