

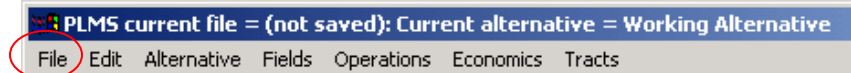
Dairy Farm Tutorial (NOTE: we are building an example dairy farm file).

Check the PLMS Web Site Documentation and Training Resources to open the example files.

A dairy operation is defined by PLMS as a business that includes management systems, facilities, and pastures. The operation is defined in a farm file and may include pieces of land that are not adjacent (tracts), as long as they are managed together as part of the same business. PLMS compares alternative management systems on the farm. Full information is available in the PLMS User's Guide (Help Manual) and at the PLMS Web Site.

Creating a New Dairy Farm File:

1. Choose File > New from the menu toolbar.



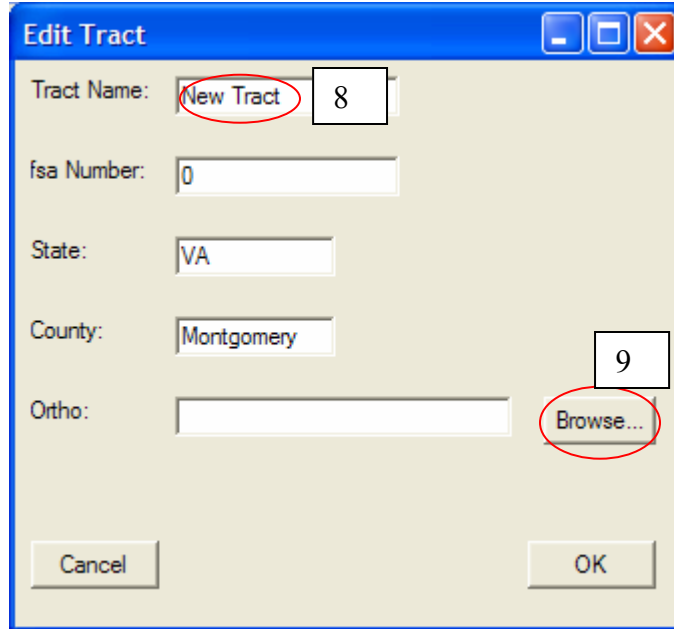
2. Enter the Name and Address of the farm.
3. Change the default farm name, but do not click the "OK" button yet.

4. Get the Climate Data from the nearest climate station in the same hardiness zone as your farm. *NOTE: Enter a single whole number for the average annual minimum winter temperature, not the range.* Write down the season length, average annual minimum winter temperature, and Avg. July temperature. Enter that data in the Edit Farm Dialog box.
5. Click OK.

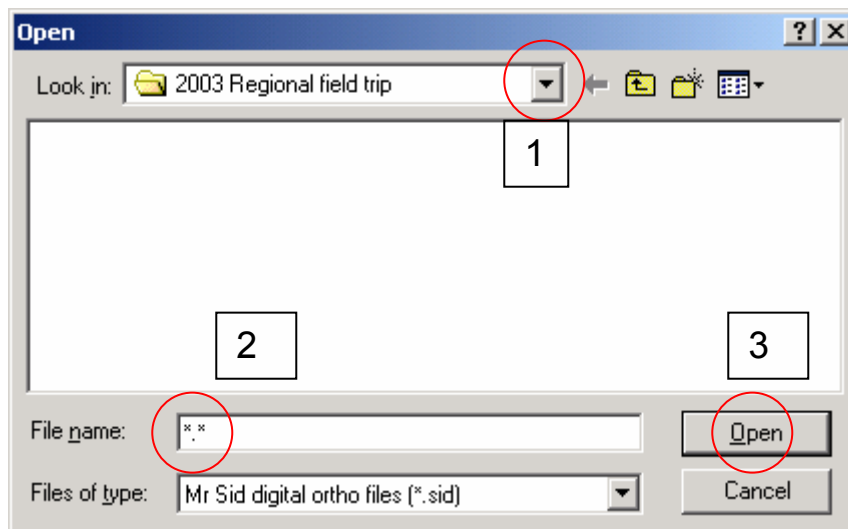
- Choose File > Save As (suggestion: Always use "Save As" so you know where the file is located and what the name is). Be consistent where you save your files and how you name them. Use version numbers as needed.
- Choose Tracts > New > Tracts from the menu toolbar if you want to add a background image of the farm.



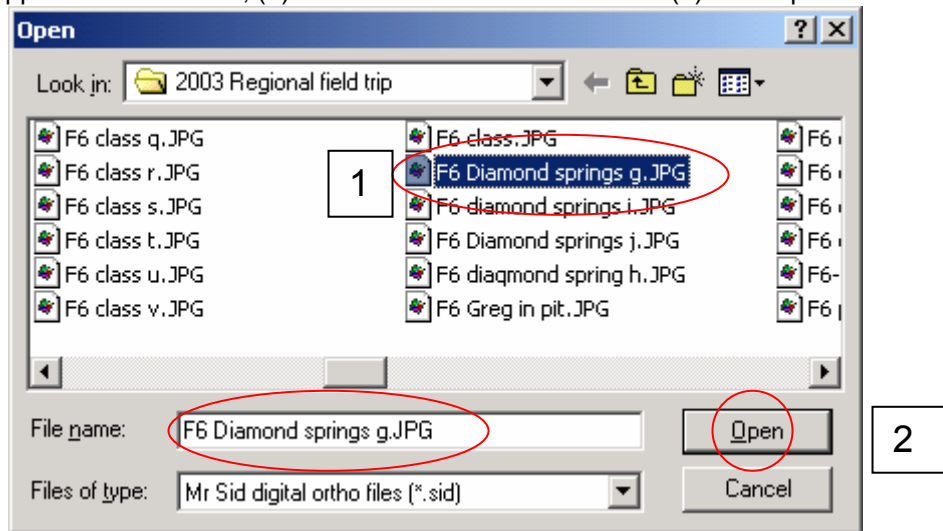
- Enter the name of the Tract.



- To import the background image of the farm, (1) click the "Browse" button and navigate to the file where the background image is stored, using the window below. (2) Type in *.* in the File name: box, (3) click on the "Open" button.

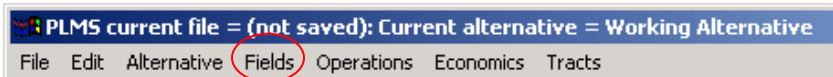


10. When the files appear in the window, (1) select the correct one and then (2) click Open.

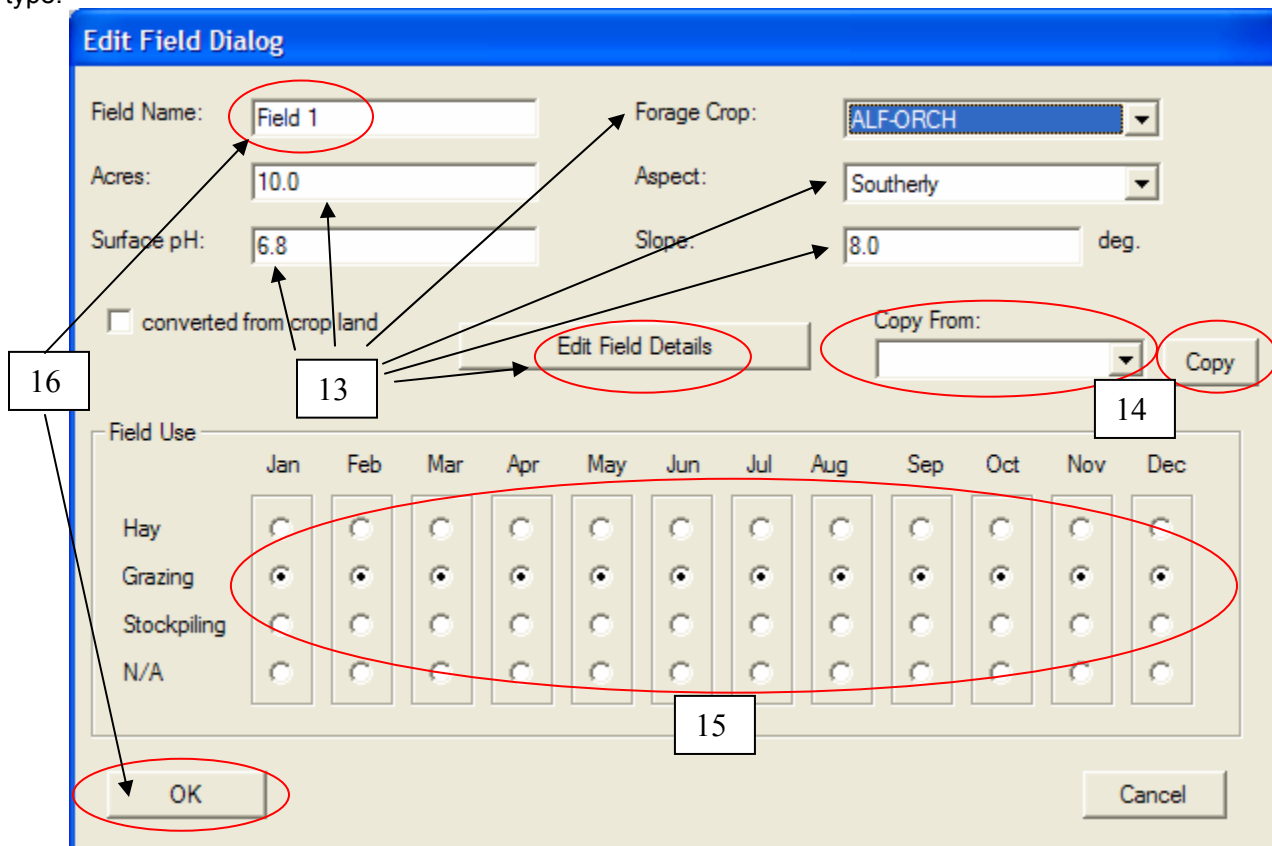


11. On the Edit Tract Dialog Box, click the “OK” button.

12. Choose Fields > New > Field from the menu toolbar to add the first field.



13. Get the Soil Data for the nearest county in the same MLRA as the farm you are entering from the User’s Guide or the PLMS web site. More soils information is found through the Edit Field Details button. Edit the acreage and forage type.

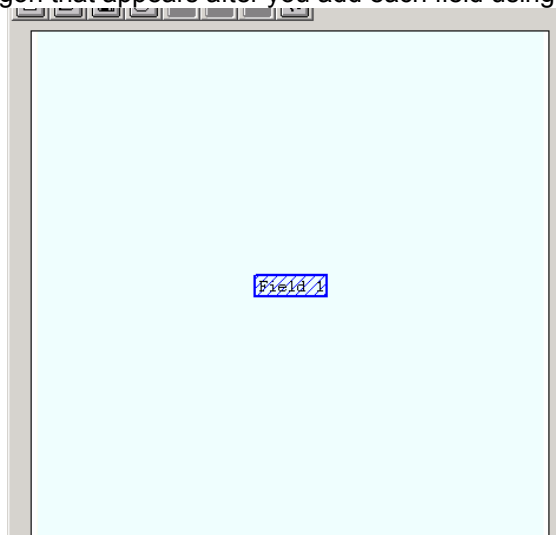


14. If you are duplicating information from a field you have already created, select that field from the dropdown list and then click the “Copy” button.

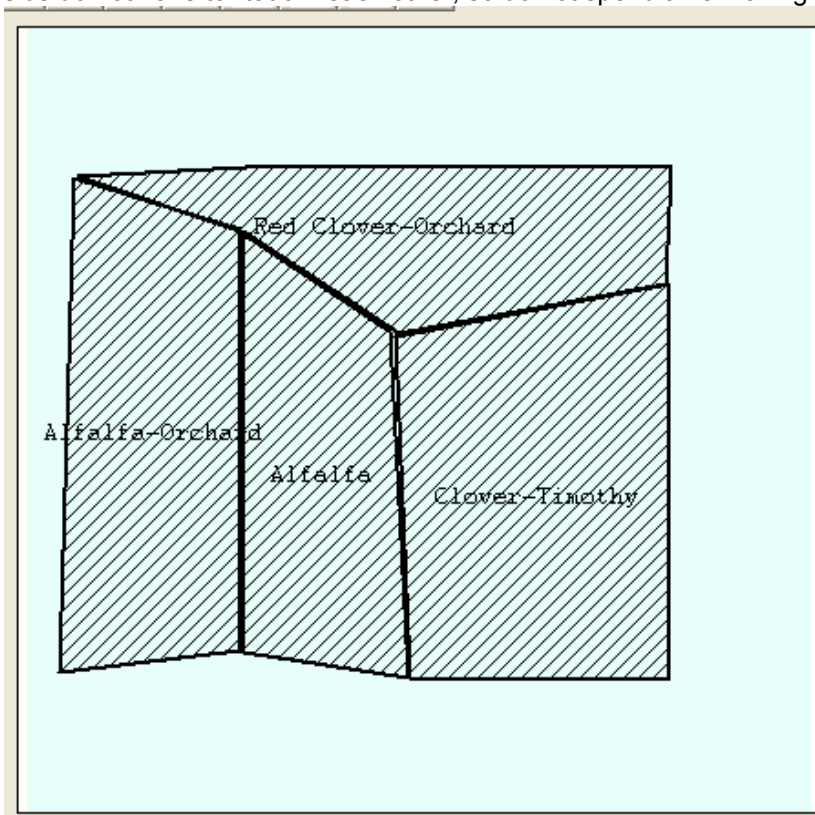
15. Adjust the radial buttons for the Field Use pattern if needed. Refer to the user’s guide for information.

16. Edit the Field name and all other important information, the click OK.

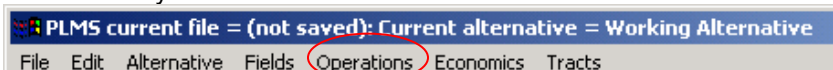
17. Move and resize the default polygon that appears after you add each field using the buttons below the map window.



18. Repeat these steps until all fields are created. The "Copy from" box (see step 14) can be used to save a few steps.
NOTE: Fields do not have to "touch" each other, so do not spend time making the map "perfect."



19. Choose Operation > New > Dairy from the main menu toolbar.



20. Edit the information about the dairy herds assigned to the current grazing system.

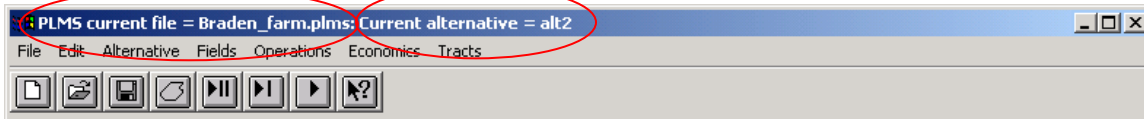
The screenshot shows the 'Edit Dairy Operation' dialog box. The 'Operation name' field is set to 'New Dairy' (callout 22a). The 'Rolling herd avg' is 18000.0 lbs milk./cow/yr, 'Milk fat' is 0.035%, 'days in milk' is 305, 'Cow mature wt.' is 1400.0 lbs., '# Milking Cows' is 100, 'Manure System' is 'liquid/slurry', and 'pct. confined' is 25.0%. The 'Cull Rates' section has three sliders: 'Cows' at 35, '1st Lact' at 15, and 'heifer' at 10 (callout 20). At the bottom, there are buttons for 'Edit Grazing Systems', 'Edit Calving Pattern', 'Supplementation', 'OK' (callout 22b), and 'Cancel'. A red oval groups the 'Edit Grazing Systems', 'Edit Calving Pattern', and 'Supplementation' buttons (callout 21).

21. Edit the Grazing System or Calving pattern as needed. Refer to the Dairy Operation section and the PLMS Web site (<http://cllc.cses.vt.edu/PLMS/>) training and documentation section for more help about the supplementation options.

22a. Edit the Operation name.

22b. Click OK when finished.

23. Choose File > Save As (suggestion: Always use "Save As" to know where your file is being stored and what the name is). The name of the current file and the current working alternative are displayed on the blue program bar at the top of the PLMS window.

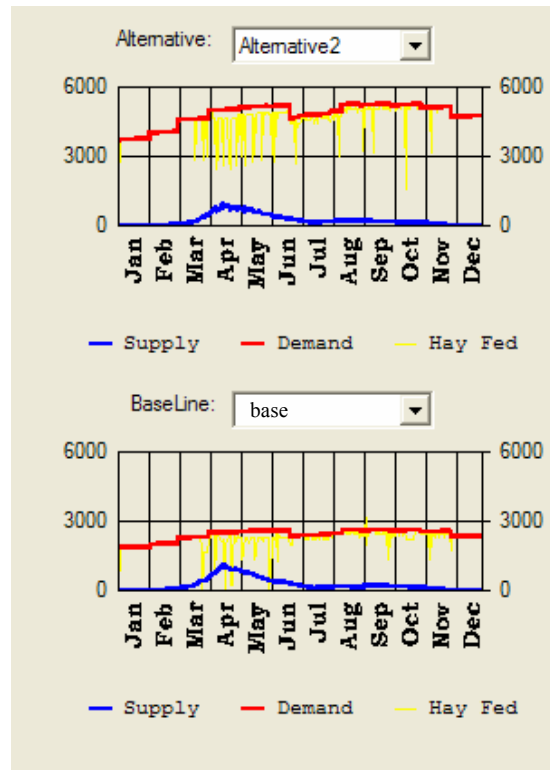


24. This first set of farm management information should contain the basic management and operation system data for your farm, and is called the Baseline set of information by PLMS. Choose Alternatives > Set As Baseline. It is wise to record any default information you changed on an Alternatives Worksheet (available through the User's Guide).

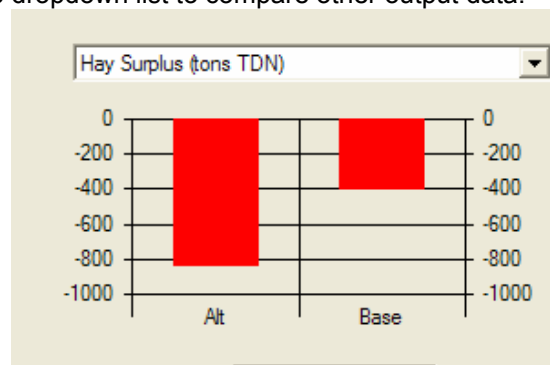


25. The next step is to Choose Alternatives > Set As Alternative. Save the baseline data as an Alternative also for backup purposes. PLMS will automatically compare the Alternative against the baseline system, but they will be identical in this case.
26. Next, create an Alternative farm information system by changing the information that was previously entered for the baseline system or by creating a completely new system. Once the Alternative system is created, choose Alternatives > Set As Alternative. PLMS will automatically compare the new Alternative against the baseline system. It is wise to record the changes you made on an Alternatives Worksheet. Remember, the name of the current working alternative is displayed on the blue program bar at the top of the PLMS window.

27. Observe the comparison in supply, demand, and hay fed on the two graphs. The alternative is at the top, the baseline on the bottom.



28. Choose a bar graph from the dropdown list to compare other output data.



29. Choose File > Save As from the main menu toolbar.

30. Continue to make changes in the farm management and information, record the changes, save the alternatives, and save the program under new versions.

31. Remember that each PLMS farm has at least five files associated with it. The “name of the farm”.plms, the “name of the baseline”.out and “name of the baseline”.sum, the “name of the alternative”.out and “name of the alternative”.sum. If you move the farm file location, be sure to move the associated files with it. Use “Windows Explorer” or “My Computer” to locate the files (search for *.plms, *.out, and *.sum)

32. Refer to the PLMS web site and the User’s Guide for information.