Instructions for Developing a Single or Multiple Crop Rotation
"The Easy Way"
08/24/2006

THE FOLLOWING SET OF INSTRUCTIONS IS <u>ONE</u> METHOD OF DEVELOPING A SINGLE OR MULTIPLE CROP ROTATION IN RUSLE2

Overview: From time to time a user may need to develop a single or multi-year crop rotation for a particular farm operation. Specific crop rotations will provide for a more accurate calculation of the RUSLE2 Soil Conditioning Index and Total Soil Loss.

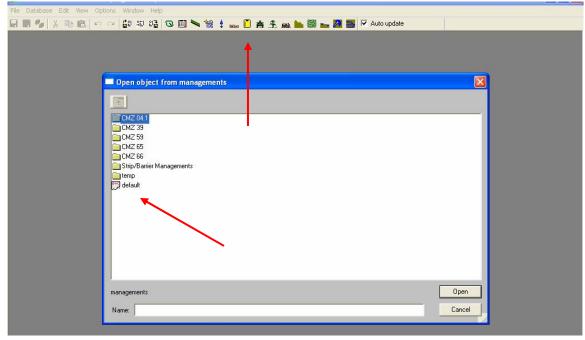## Building a single or multi-year crop rotation

Specific crop rotations will provide for a more accurate calculation of the RUSLE2 Soil Conditioning Index and Total Soil Loss. One method of developing a multi-year crop rotation is provided below with step-by-step instructions. Please note: There are many ways to develop a multi-year crop rotation. This is only one method. I have found this to be the easiest and most error free.

Step 1:   Start by thinking about what type of rotation you want to build. Multi-year crop rotations are usually very similar each year with only a few minor changes associated in the rotation. For this example we will build the following crop rotation:
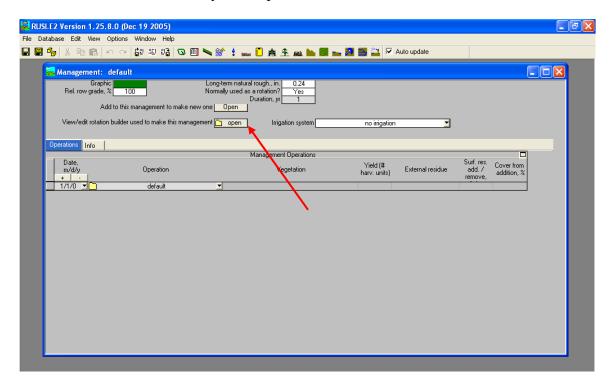
Corn – Grain, chisel plow in the fall with two diskings in the spring before planting.
Wheat – disk once in the fall before planting.
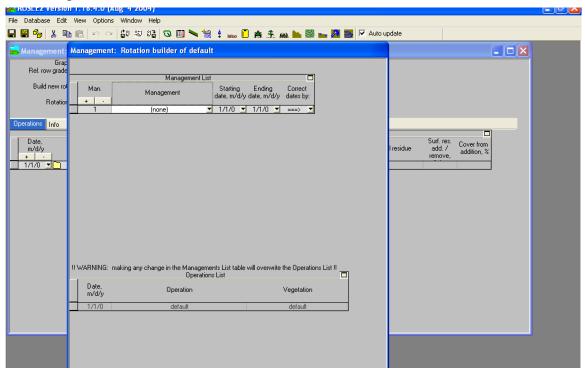Soybeans – Double Crop after wheat, no-tilled.

Start by opening the Crop Rotation Management Screen (yellow folder) and double click on default.
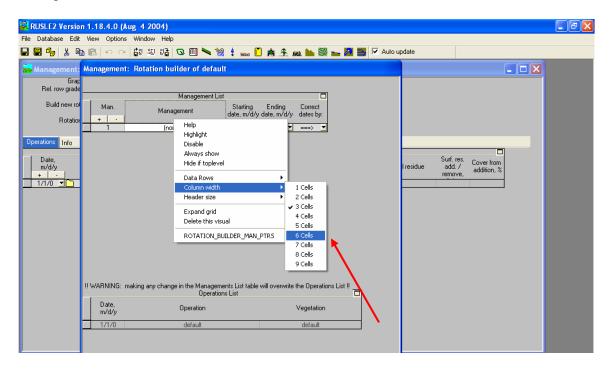
Step 2: This will open up the Crop Rotation Management Screen. From here, click on "View/Edit Rotation builder used to make this management". This will open up the crop rotation builder screen where you complete the actual build.
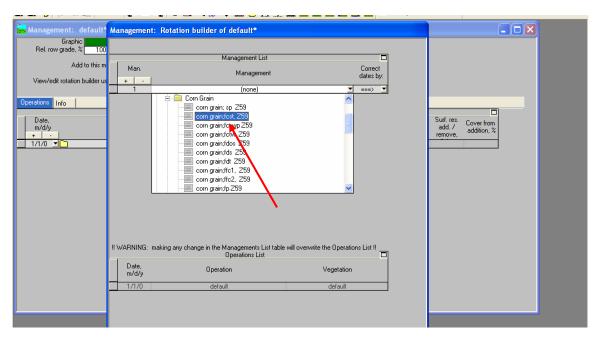

<u>Rotation builder of default</u> screen. This is the screen where you complete the actual build of the crop rotation.
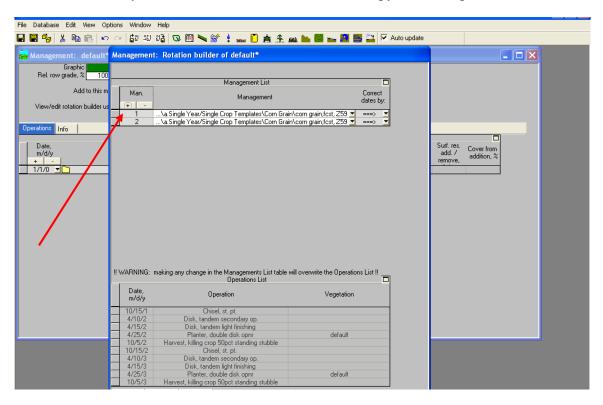
Step 3: Expand the Management List column of this screen so that it will be easier to build the crop rotation and see exactly what you are doing. Do this by moving your cursor just above the Management column (a black down arrow will appear), right click and scroll down to Column width. By default the program column is set to 3 cells. Change this to 6 or 7 cells.
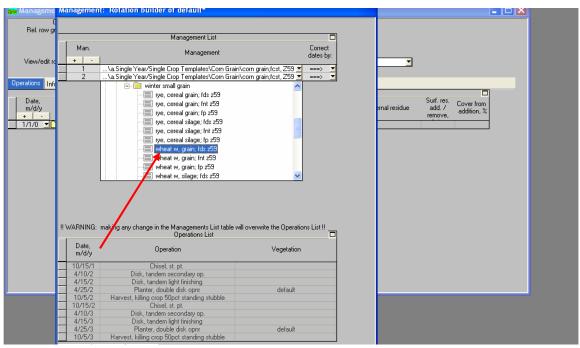

Step 4: Next we will choose our first crop of the rotation. Click on the Crop Management Zone (CMZ) of your choice and choose your first crop. In this example we have chose CMZ 59 / A: folder, Single year; single crop templates / Corn / fall chisel straight shank (corn grain,fcst). Double click on this crop selection.
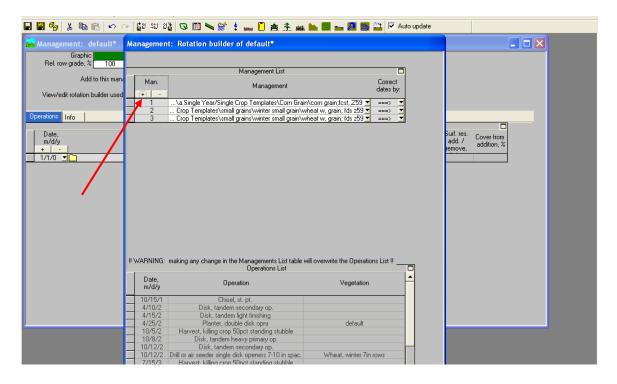
Step 5: Next click on the plus (+) sign under Man column to add another row to the crop rotation. Note: By default RUSLE2 makes and exact copy of the crop selected above.
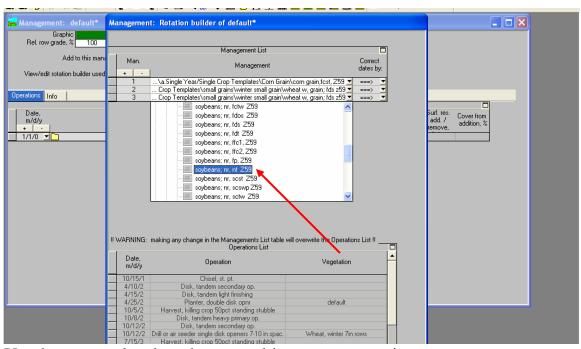

Step 6: Next we will choose our second crop of the rotation. Click on the drop down menu to the right of Management 2. In this example we will choose CMZ 59 / A: folder, Single year; single crop templates / Winter small grain / wheat w, grain; fds, Z59. Double click on this crop selection.

Step 7: Next we will choose our third and final crop of the rotation. Click on the plus (+) sign under Man column to add another row to the crop rotation. Note: Again, by default RUSLE2 makes and exact copy of the crop selected above.
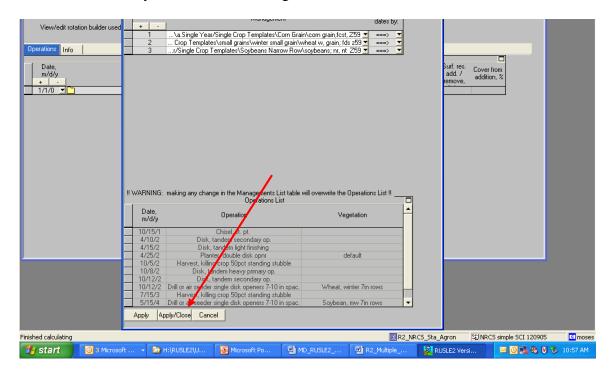

Click on the drop down menu to the right of Management 3. In this example we have chose CMZ 59 / A: folder, Single year; single crop templates / Soybeans Narrow Row / soybeans, nr,nt, Z59. Double click on this crop selection.
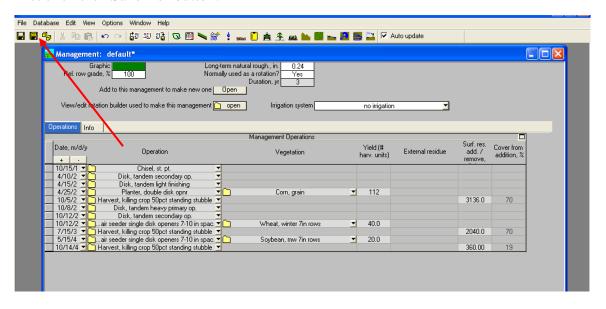

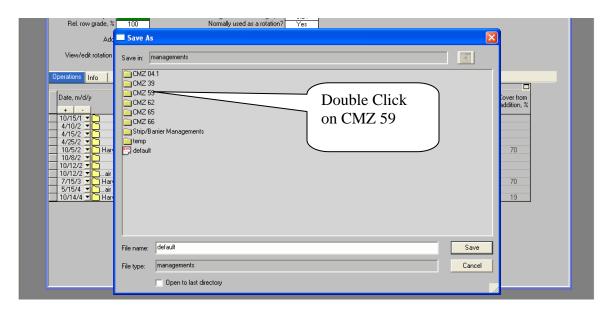You have now developed your multi-year crop rotation.

Step 8: Click "Apply/Close at the bottom of the Management List Screen. This screen will close and take you back to the Management or Results screen.
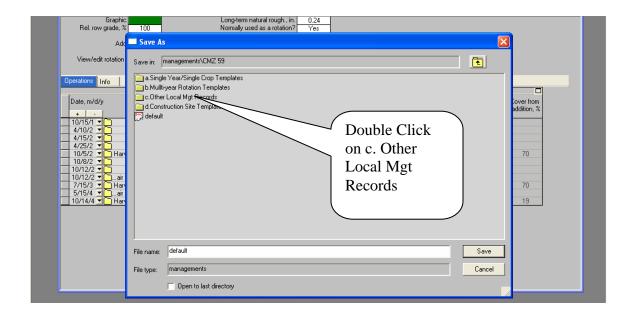

Step 9: Next we will save the rotation in your C: folder and give it a name. You must save crop rotations you built in your C folder of RUSLE2. You cannot save in any other location except the C folder. See screen shots below. For this example we will save it as Example Farm. To save this rotation to your C:folder / Other local management records, first click the "Save As" button.
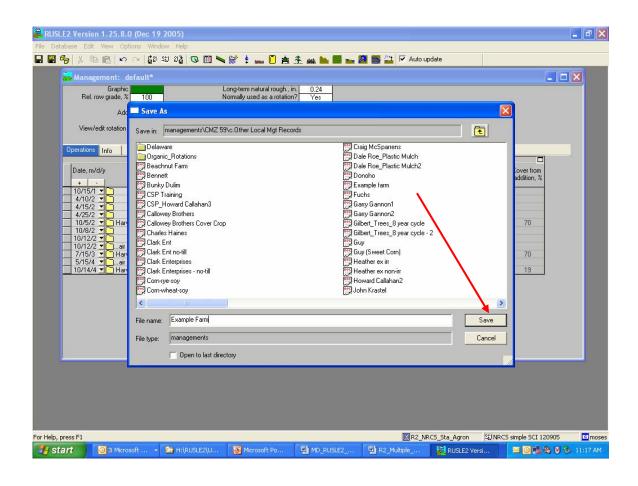
Next navigate to your C folder for the CMZ you wish to save the file in. In this case, since this crop rotation was created using CMZ 59, so we will navigate to its C folder.

Next, name the crop rotation. In this example the name is "Example Farm". Save the rotation as Example Farm to your C:folder / Other local management records.

Step 10: Exit from the Management Screen. You should now have a blank screen. Your crop rotation that you built is now saved for calculating soil loss for a field/farm. See "Applying a single or multi-year crop rotation for calculating soil loss" of this guidance document.