M2- T3 - Understanding the Management Tree

Once the data has been loaded into SMS, the growers you created will be listed in the management tree.

The Management Tree allows you to select, manage, and view the data that is stored in the management system. It provides a visual interaction with your data when deciding what data that you would like to work with since your selection(s) is tied to what is displayed in the Preview Window.

Instructions:

- M2- T3 - Understanding the Management Tree Outline
- Video: Understanding the Management Tree
- Video: Creating a basic map
- Video: Legends and attributes
- Video: Main Tool Bar

Activity

- Working with the Management Tree
- Setting the Map Display
- Edit Legends
- Reviewing the Main Toolbar

| Instructions	Screenshots
Open SMS software if you closed after the last session. **Review Video:** *Understanding the Management Tree* After downloading the 2012 Harvest Data you will **now see two growers listed**: SCC and Southeast. 1. **Expand the tree** by *clicking on the plus sign* to the left of the grower name to display the farm, and field names. 2. Or use the arrows (Above management tree) to expand or collaspe the management tree. **Note:** It's very important that you name your growers, farms and fields the same thing every year. If not you will run into the problem you see here. If you expand the growers list (click on the plus sign by the growers) you will see there are two SCC Farms listed.	
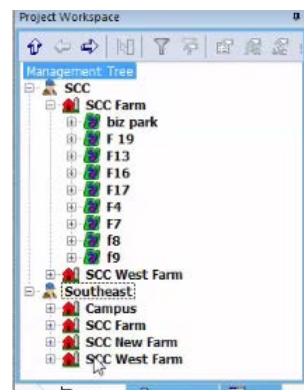
3. **Note** the levels and icons used for the tree

As you can see there are multiple growers and farms. Under each farm are the separate fields that data has been collected.

Grower (SCC) has entered data about its Farms: SCC Farm.

**Click on** the plus by *biz park* you will see the various operations that have happened on the fields.

Directly below the biz park is 2012 which is the date of the operation; under that you may see fertilizer, spraying, or planting information.

Under Grain Harvest look at the variety of products (soybeans) and the Operational Instance or how many times have you been out in that field? (Harvest would be one instance but if you spray there may be more than one instance.

Directly below that is the **number of loads**.

The field data includes the specific **Field** data; the **Year** it pertains to; the type of **Operation**; the specific **Product** and **Instance** and the resulting **Dataset**.

1. **Collapse** your management tree.
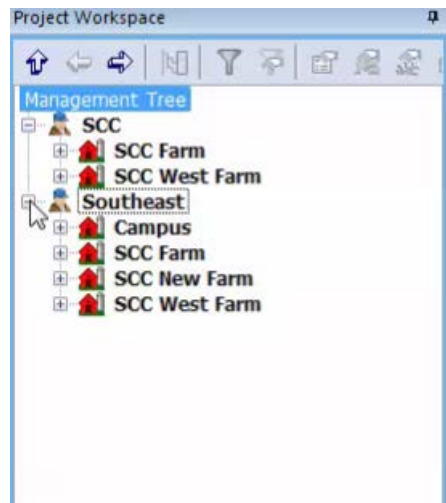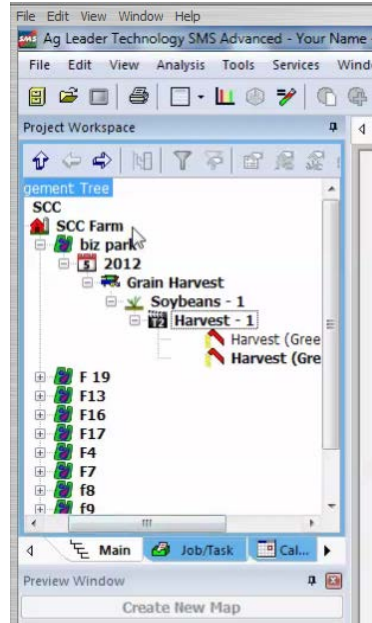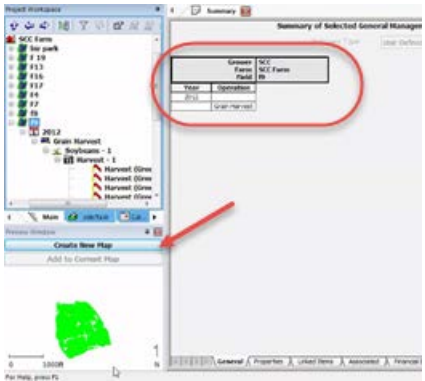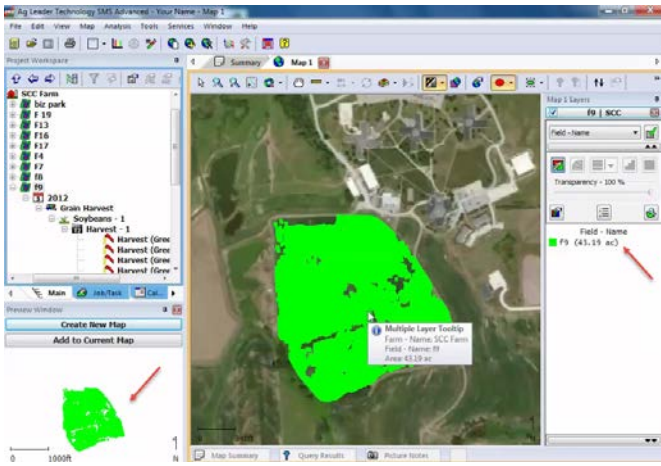
Management Tree - Creating a new map

The map automatically opens with the satellite imagery and road maps. The aerial images provide a visual reference to users. With this map you will be able to draw new boundaries for areas you may not have data for in your software. With the boundaries you can input in data from other sources such as soil survey data. You can also change the source of the images along with the ability to clear maps to force the software to download the most current.

Instructor Videos

- **Review Video:** Creating a basic map

Activity

- Create a new map on SCC Farm > Field 9

Instructions	Screenshots
4. **Select** Grower *SCC* > Farm - *SCC Farm* > Field - *F9* F9 is our pivot located here south of the campus. After clicking on the field name you will see a green colored map in the bottom left hand corner. This map will tell you where the field is located and the field boundary.	 **Note** the summary of the field on the top right side. This gives you the general information of that field.
Once we create a new map we can start to work on this map. 5. **Select** Create New map. 6. **Review** the Legend on right side. After you create a new map, you will see on the right hand side of your screen is the ***Legend or a summary of the field***. Field name is f9 and how many acres there are.	
7. **Close** the map	

8. **Select** the Grain Harvest under f9 > 2012

Grain Harvest is your yield map you have collected from the previous year(s) harvest.

On the right hand side there is a summary of the harvest. (When data was collected, average yield data, Est. volume, etc.)

9. **Create** a new map.

Continue on next page

Management Tree - Legends Setting the Map Display

After creating a map, there are several items on the right-hand side of the screen that can be used to change and save the look of the map: Legend and Attributes.

Review Video: *Legend and attributes*

Activity: Review Legend and attributes; set map display parameters.

| Instructions	Screenshots
Once we have created a new map; we are going to go through the Legend and different attributes available. Once you create a new map (Grain harvest) it automatically defaults to Estimated Volume (dry). By clicking on the arrow you can select what attributes to look at. *Moisture* which will show us moisture levels; *Speed* will show us how fast the combine went through the field; or *People* would show us who was driving the combine at that time. 1. **Select Estimated Volume (dry) t**o view the variety of attributes available. (The **Attribute list** shows the different items that can be mapped for the layer.) 2. **Review** Moisture, Speed, and People attributes to see the results in the map.	
Now we are going to look at the icons listed below Estimate Volume. 3. **Select** *Estimated Volume Dry* to review the icons 4. **Review** the *Base Map.* This shows your GPS points that have been collected.	
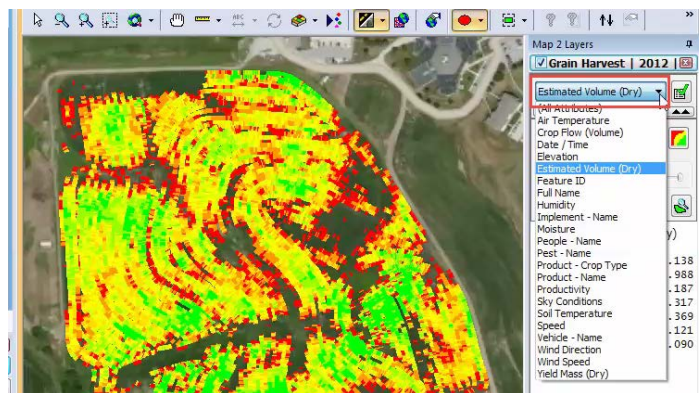
5. **Review** *the Swath map.*
   This is the default view for Grain harvest. Each one of the swaths is a swath through the field.
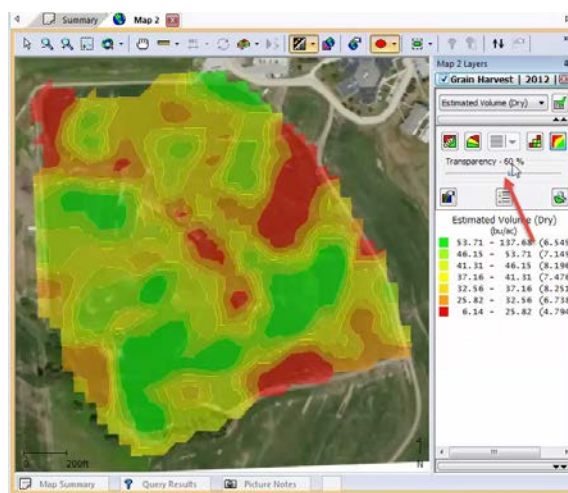
6. **Review** Grid and Contour Maps.
   As you can see as you move from grid to contour the edges start to smooth out.
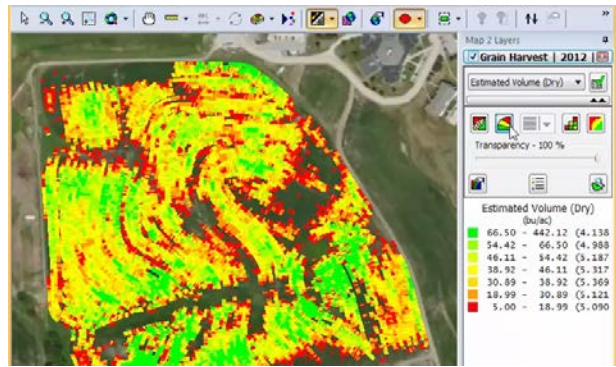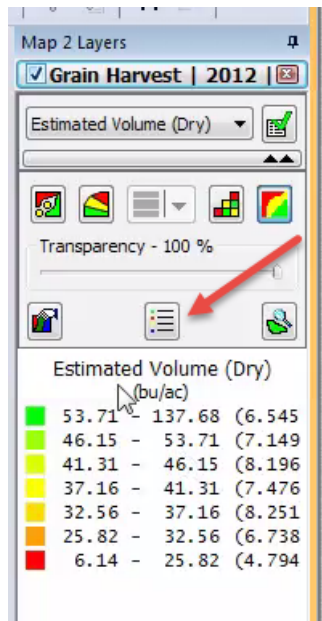

7. **Review Transparency**
   Transparency will be used when we do our prescriptions for pivots.

Edit Legends

Below Transparency is Edit Legends. We can select the button or we can double click inside the legend.

The Legend defaults to 7 ranges.

Continue on to the next section on Legends.

Management Tree - Edit Legends

This window displays the legend for the currently selected layer. It is a part of the Layer window, and each mapped layer in the window has its own legend. Go to the Edit Legend dialog by double-clicking the left mouse button on any of the legends in the Legend Window, or by clicking the Edit Legend button over the legend window.

The Legend Window includes the legends for the attributes values that are mapped and can be used to change the settings for map and sub-layer legends. You can load and save legends you create and also set your legends as defaults for a particular layer or operation.

There are different variations of the Edit Legend dialog based on the type of data that the legend is for. This means for some data the Legend may display fewer selections.

Review Video: *Legend and attributes*

Activity: Change the map according to the settings listed.

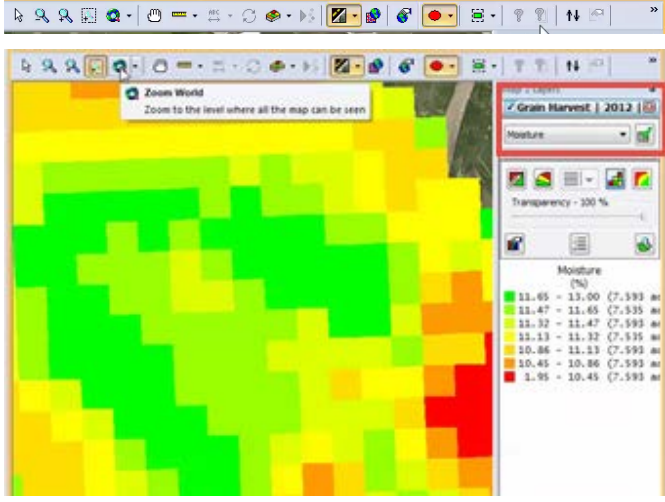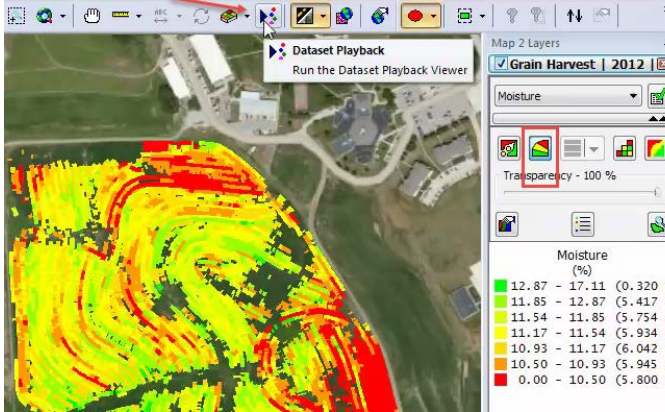| Instructions	Screenshots
1. Have the Legend open 2. **Review** Setting ranges, set range to 4. 3. **Select** your color range. We usually use Single or Dual Hues however stay away from Rainbow, Random and Fixed Colors. 4. **Set** a Sticky Range > Select Apply > View what a sticky range does. 5. **Reset** Sticky Range.	
6. **Set** *Descriptions* your choice or (bad, ok, good and very good). 7. **Set** *Ranges Values Only.* *(Review other settings and what the maps will look like.)* 8. **Select** *Apply* 9. **Select** *Okay*	
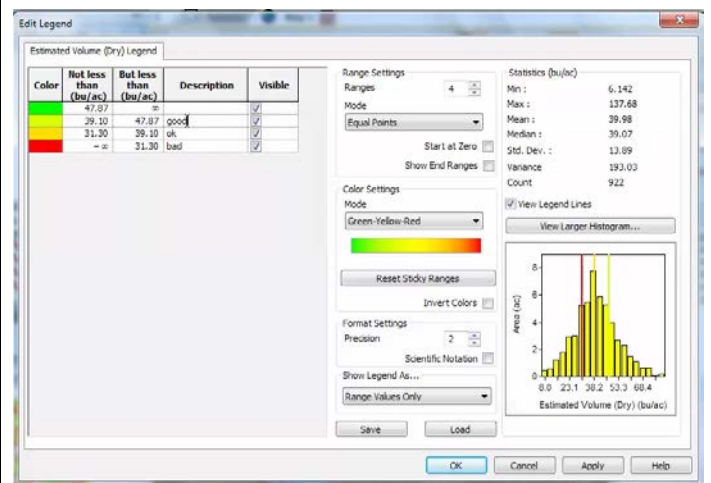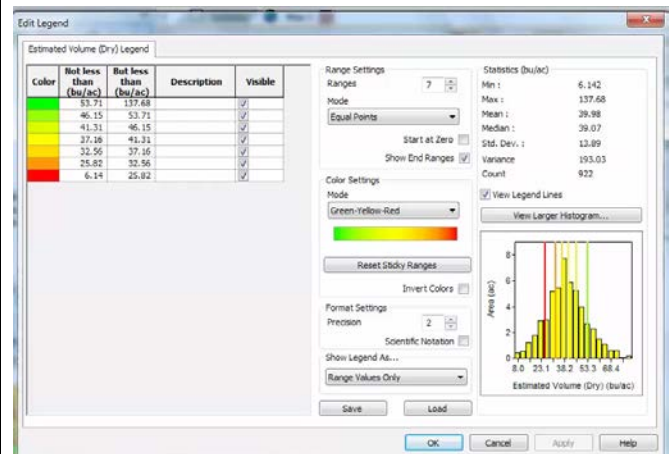
Management Tree - Reviewing the main tool bar

In this activity students will review the Tool Bar and its features.

Review Video: *Main Tool Bar*

Activity: Review the Tool Bar and its features.

Instructions	Screenshots
1. **Select** Moisture attribute for Grain Harvest 2012. 2. **Review** the tools: Zoom in, Zoom Out, Zoom World and Pan. 3. **Select** the Measuring Tool to calculate the distance across the field. 4. **Review** the Aerial/Road Combination. **Select** *Road and Aerial*.	
Dataset playback 1. **Reset** your map to *Swath Map*. 2. **Select** the *Dataset Playback.*	

3. **Select** *Play.*

4. **Change** Playback Speed to 20.

5. **Use** the *Time Control* to view the field's progress.

6. **Select** *Pause* to stop the Playback.

7. **Select** *Close* to get out of the Dataset Playback.

Save your work

Save your map on the N drive then proceed to next activity.