What’s New in SnapPlus / Release Notes
Version 15.1
December 22, 2015

Changes from 15.0 to 15.1

Version 15.1 is a maintenance release that includes updated soil data, fixes for a few problems, and some extra documentation. In particular:

- Returns yield potentials for Kewaunee, Manawa, and Hochheim soil map units to their 2014 values. See Kewaunee, Manawa, and Hochheim soil map unit yield potential designation Dec. 14, 2015 for details.

- Includes sample geospatial data (shapefiles) for the sample farm so that you can try it out with SnapMaps. The files are in the “Import” subfolder of the MySnapPlusData folder.

- Fixes some minor bugs

Version 15.0

SnapPlus 15.0 has a number of new features and improvements. This page gives an overview of those changes and you can find more details in Help or at snapplus.wisc.edu. This document is available within SnapPlus 15.0 at Help | Reference Docs (N to Z) near the bottom of the list.

New features

- **SnapMaps**: You may now import or draw your field boundaries and add various conduits to ground water on the SnapMaps website. After your fields are drawn, the data may be imported to SnapPlus to populate much of the data on the Fields Screen, and print out maps for your nutrient management plan.

- **Cropping Grid**: Allows you to see and edit all of your fields’ crop data for the selected year.

- **Cropping Screen**: Insert and delete crop years in the middle of your rotation. When doing either, will also be given the option to move your application.

New Crops

- Alfalfa to annual cover crop
- Alfalfa to small grain cover crop
- Alfalfa/Grass to annual cover crop, Alfalfa/Grass to small grain cover crop
- Corn grain, baled stalks, to small grain cover crop
- Corn seed
- Sorghum forage
- Soybean forage
- Winter Rye (grain) to annual cover crop
- Winter Rye (grain+straw) to annual cover crop
• Winter Rye (grain) to interseeded red clover

Renamed Crops

These crops were rename so the crops lists on the Fields Screen sorted properly. In most cases the grain and grain + straw variations were changed to be a uniform (grain) and (grain+straw). Other crops where no grain designation existed (grain) was added to the name.

- Wheat spring (grain)
- Wheat spring (grain+straw)
- Wheat spring (grain+straw) to Late Summer Direct Seeded Legume Forage
- Wheat spring (grain) to Late Summer Direct Seeded Legume Forage
- Wheat spring (grain) with interseeded legume cover crop
- Winter Rye (grain)
- Winter Rye (grain+straw)
- Winter wheat (grain)
- Winter wheat (grain+straw) to Late-Direct Seeded Legume Forage
- Winter wheat (grain+straw) to Small grain silage
- Winter wheat (grain+straw)
- Winter wheat (grain+straw) to annual cover crop
- Winter wheat (grain+straw) to radish cover crop
- Winter wheat (grain) to annual cover crop
- Winter wheat (grain) to radish cover crop
- Winter wheat (grain) with interseeded red clover cover crop
- Winter Triticale (grain)
- Winter Triticale (grain+straw)

**Warning:** Because of the new and renamed crops in 2015, if farms are created or were opened in the Beta or Release versions of Version 15.0, subsequently opening them in the 2015 Alpha and earlier versions of SnapPlus may cause data losses.

Tillage changes

Additions:

Vertical tillage options were added to Alfalfa Seeding Fall; Alfalfa Seeding Spring; Alfalfa/Grass Seeding Fall; Alfalfa Grass Seeding Spring; Barlage w/ Red Clover Seeding Spring; Barlage w/ Alfalfa Seeding Spring; Barley w/Alfalfa Seeding Spring; Barley w/Alfalfa/Grass Seeding Spring; Barley w/Red Clover Seeding Spring; Lima Beans; Oatlage w/ Alfalfa Seeding Spring; Oatlage w/ Alfalfa/Grass Seeding Spring; Oatlage w/ Red Clover Seeding Spring; Oats w/ Alfalfa Seeding Spring; Oats w/ Alfalfa/Grass Seeding Spring; Oats w/ Red Clover Seeding Spring; Peas; Peas to Snap Beans; and Red Clover seeding Spring.

Renamed:
Soil survey and soil map unit information updated

Soil survey and soil map unit information have been updated to correspond with Soil Survey updates by the Natural Resource Conservation Service (NRCS). All of the soil map symbols in the following counties have been replaced so that planners will need to reenter the soils for existing databases in those counties: Buffalo, Juneau, Monroe and Trempealeau. Many other counties have had changes to their soil survey, and we recommend that planners check SnapMaps to be sure that the soil map units for all fields are still correct.

The NRCS has also updated their databases on the properties of soils. The erodibility factor (K) for many soils has changed for many soils due to a reassessment of soil properties, and this will result in changes to calculated soil loss. Soil loss tolerance (T) has also changed for many soils. In addition, the Soil Group, Yield Potential, Fall N Restriction and/or CAFO Manure Prohibition (W and R) designations have changed for a lesser number of soils due to the soil property update. For the most up-to-date information on Wisconsin soils and SnapPlus, see the “Soils Details – 2015” page on our website.

Warning: Because of the changing soils in 2015, if farms are created or were opened in the Beta or Release versions of Version 15.0, subsequently opening them in the 2015 Alpha and earlier versions of SnapPlus may cause data losses.

P Index database updates

Planners may notice small differences in the Soluble P Index calculations. Some of the difference may be a result of the soil characterization changes described above, but part will also be because the precipitation databases used for calculating runoff volume have been updated to include more recent rainfall records and expanded to include records for each county. In addition, the coefficient used to relate soil test P to estimated runoff P concentration was adjusted to use the current A2809 Soil Groups rather than the older Subsoil Fertility Groups. For more information, see the Wisconsin P Index website. [http://wpindex.soils.wisc.edu/](http://wpindex.soils.wisc.edu/)

General fixes

Import Excel files – The import data no longer has to be on a worksheet named Sheet1 and it doesn’t have to be the first worksheet in the file.

Fields – Mixed alphanumeric field names starting or ending with numbers now sort as you would expect them to. For example the field names 31.A, A4, 08, 03, 08A, 3B sorted are:
Cropping

- Uses Dual Crop Yield Goal Input for Crop followed by Late Seeded Legume Forage
- Should now have yield2 - Oat-Pea Forage to Direct Seeded Legume Forage
- Crops Grass Reed Canarygrass yields now found pre-2013
- Insert/Delete year in middle of the rotation

**Note:** Using the new delete '-' button on the first year in a rotation will delete that crop year with no option to move your applications. By first adding a previous year to the rotation you’ll be able to delete that year and move the applications.
- P Rotation setting
Main Menu - View

- Show Duplicate Farms
  - Will pop-up an alert when a farm file has been opened in more than one location.
  - Upon closing, will prompt you to list all farm files (*.snapDb) on your computer.

- Cropping Grid Edit (discussed under Cropping)
Fields Tab

**Added SnapMaps sub-tab** – Can be Un-pinned (see SnapMaps sub-tab)

**Fields sub-tab**
- Field restrictions – Distinguish CAFO W and R soils from 590 W & R. A checkbox was added to record whether a Field drains to 303 (d) or outstanding/exceptional waters. Selecting a restricted soil in either restriction section may affect the Code in the other panel.

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CAFO W & R definitions

NR 243.14(2)(b)(7) - Requires that CAFO manure or processed wastewater may NOT be applied on areas of the field with depth to groundwater or bedrock of less than 24 inches.

NOTE: The 'W' soils depth to groundwater may vary seasonally.
Groups sub-tab – Added application criteria for searches. If there is more than one rate for the selected source you will be prompted to select a rate. If you do not select a rate all field applications using the selected source will be returned.
SnapMaps sub-tab – This tab allows access to the SnapMaps website where you may draw your field borders and various conduits to ground water, automatically populating much of the information in the Fields tab. See the SnapMaps website documentation for more detailed information about the website.

- Clicking this Pin will disconnect this screen from the application (as shown). Clicking again will return it to the SnapMaps tab within the application.
- Upload – Sends a subset of your field data to the website
- Website – Opens your default Web browser (shown behind the SnapPlus windows) to display the map, with previously-uploaded or -drawn field borders and any other points that you added.
- Download – Turns green if you draw field boundaries on the map (or, generally, change any data there); click it to retrieve the changes into the SnapMap Fields grid.
- Display rows – Declutters the display. Click Differences Only to show only the rows with data different from that in the Fields tab. You can also use groups or sub-farms to minimize distracting data.
- Import to SnapPlus – Data downloaded from the website are kept in a “holding area” on the SnapMaps Fields tab (similar to the way Import Soil Test works). Click
the button to import the highlighted cell data into SnapPlus proper. You may want to do a **Save Snapshot** before taking this action.

**SnapMap Fields** - The grid holds the data retrieved from the website using the Download button. Cells with data different from that on the **Fields Screen** are highlighted for import.

- The data highlighted in the grid is calculated when you click **Download**. Note that it is not saved on the web server.
- Hint - Hover the mouse over a highlighted cell to display the value from the Fields Screen.
- You can choose which data are to be imported. All downloaded data are selected initially; toggle individual cells with Ctrl-click.

**SnapMap Soils** – All of the soils in each field are listed here for informational purposes only. These soils are used to determine the County, Dominant Critical soil and the Agronomic soil shown on the SnapMap Fields tab. **ES** is the **Erosion Sensitivity** of the soil and is used to determine the Dominant Critical soil.
SnapMap Restrictions – List any restrictions intersected by the field boundaries and conduits to groundwater. When you click the Import to SnapPlus button (on any SnapMap sub-tab), these restrictions are imported to the field along with the soil maps symbols and other data.
**SnapMap Features** – The user drawn conduits to ground water are listed here for informational purposes only. These features are passed back to the website to be drawn when you click on **Upload**.

<table>
<thead>
<tr>
<th>Name</th>
<th>Code</th>
<th>Feature Type</th>
<th>Notes</th>
<th>Geometry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home</td>
<td>4</td>
<td>Drinking Well 50 ft</td>
<td></td>
<td>PONT (-9531...)</td>
</tr>
</tbody>
</table>
Nutrient Sources sub-tab

- You may now change the **Known Annual Volume** from a positive number to zero.
- The biosolids data entry box no longer closes when you hit **Enter** while entering the data.

Manure Production Estimator sub-tab

- Added an **Add All Beef button**

Rotation Wizard

- The last year of a rotation is no longer overwritten if the start year is past the end of the existing data.
- A yield goal entry is not asked for when the second crop is a seeding crop.
- The maximum rotation start year selections are **1–8** versus 1-7 before. The actual range is now based on the number of years in the rotation you selected.

Reports

- **Narrative and Crop** - The Farm Narrative and Concentrated Flow notes are now showing up on the report. That is a limitation of the Microsoft Report Viewer. It can only display the simple text not any of the formatted text or images.
- **Spreading and Nutrient Management Sorted by Crop** – This report no longer has duplicate applications and it again displays fields with no applications. This also affected the **CAFO Nutrient Management Plan**.
- **Application Data dump** - Report daily log rates and applied acres.
- **Compliance** - Added CAFO W and R manure restrictions
Nutrient Application Planner (NAP) has a new feature. On the NAP window you can navigate through the fields for the same year using the navigation buttons or the drop-down list in the upper right.

Some notes now accept rich text format. The farm narrative and concentrated flow notes along with the field and season notes have changed from simple text to rich text. A pop-up menu now appears when you Right Mouse Click in the text box that will allow some of the standard editing functions. You may continue to use the Ctrl shortcuts.
Save Snapshot is now more prominent. In addition to the menu selection, we added a button at the top and center of the main screen. The text will turn red 10 minutes after the last snapshot.

**Cropping Grid Edit [NEW]**
The Cropping Grid Edit option under the View menu toggles between the standard Cropping screen and the view below. This view displays all fields planned for the selected crop year in an editable grid. You may also sort any column by clicking on the column header.

![Cropping Grid Edit](image)

**Daily Log** – There are additional options to remove your planned applications when using **Send to Applications**.

**Send to Applications**

**Unchecked only** - When you use **Unchecked only** and **Send to Applications** you will see a new dialog box that will allow you to replace some of your planned applications. This will help you maintain your T, soil loss and recommendation data by season as you make applications. You can now track which fields still need applications by season.
If you select **No** above, the log entries will be added and you may have duplicate Planned and Actual entries. If you select **Cancel**, the import is cancelled.

If you select **Yes**, the applications for the fields in the **Field Name** column of the unchecked rows may have their planned applications replaced. The applications being replaced must have the same **Field**, **Crop Year**, **Source** and **Season**. If an application field, crop year, source, and season match is found, that application is removed and the daily log entry will replace it.

After replacing your applications in a season you can go to **Import/Export** | **Planned applications** and export an Excel file by selecting **To File**. Remember to click on the save as file button to set the file name and location. Then set the rest of the appropriate data highlighted in the image below.
The log entries in that file will only be the remaining planned applications for the selected season. This file could be printed and given to a hauler before spreading and have your hauler verify or enter the actual spreading rate on each field. Now you have a record of your actual applications that you can import into SnapPlus.

At the end of each season you can select **Send All** and **Send to Applications** to remove all planned applications that are left for that season. Then **Tools | Update all fields** to see where your plans stand for the year to date.

You could follow the same process for fertilizer and lime applications.
Send to Applications (continued)

**Send All** – When you use Send All to send your applications the same dialog box appears as before.

When you select **Cancel** it will cancel the import.

When you select **OK** it will continue to the same dialog box as before but now you’ll have the option to delete your planned applications for the selected seasons only.

When spring is over you can use **Send All** and **Send to Applications** and select to remove your planned applications in the spring. This will make sure there are no planned applications left in the spring and you can run **Tools | Update all fields** to see where your plans stand for the year through that season.

You could follow the same process for fertilizer and lime applications.
These options were added so you wouldn’t have to go back to the cropping screen to delete your plans. The **Unchecked only** option will allow you to maintain your plan/actual applications within a season. As actual applications are made and logged you can always use **Export | Planned applications** to find which fields still need applications for any given season. This exported Excel file may be modified to reflect your daily or weekly spreading plan then be printed out and given to the hauler. The hauler should use that sheet to verify or enter the correct data including rates. Finally use the hauler input to update the excel file and import it back into SnapPlus.

When the season is over use **Export | Planned applications** for that season to identify applications that were not made. You will have to go to the cropping screen for those fields to move those applications to a future season or delete them all together.

If you use the **Send All** option at the end of a season all planned applications for the fields in the grid will be deleted. There may still be fields that aren’t in the daily log with planned applications.

After you clean up your last season’s applications run the models - **Tools | Update all fields** - so you can check your field needs for the rest of the crop year and the compliance for the rest of the rotation.
Daily Log

The Daily Log rate is now saved in the associated application record which may be different than the Field application rate if the log applied acres is less than the field acres. This rate was added to the Application Data dump report.

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**Known Issues**

**Soil Test Import**
- Some sample names aren't read properly (e.g. if they contain commas), or if the first eight names consist only of numerals but subsequent ones contain other characters (bug in Microsoft Excel)