



Updating Your Nutrient Management Plan in goCrop

There are three steps to updating your NMP. The first step is updating your goCrop license so that it is active if you have not already. The second is entering crop records from the past season (2020), and the third step is creating/updating a cropping plan for the coming season (2021).

Before you get started

There are a number of documents and information that you will need to have in order to complete the following steps. You will need:

1. Any new soil tests
2. New manure tests
3. RUSLE2 rotation erosion values
4. Soil factsheets or an up to date field inventory sheet
5. All field records including tillage, planting, insect scouting and control, nutrient applications, harvest, and weather (associated with nutrient applications)
6. A credit card to pay the annual license fee

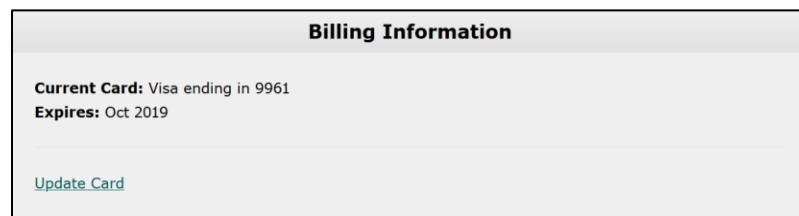
Step 1: Updating your license

If you log into your goCrop account and see *Review This Farm* next to your farm name instead of *Work With This Farm* your license has expired. You will only be able to view information previously entered into goCrop but will not be able to update your plan.

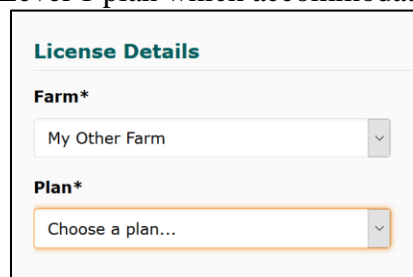


To reactivate your license:

1. click *Buy License*
2. enter new credit card information in the Billing Information section or make sure that, if there is a card already saved there, that it is current and correct. You can do this by clicking the *Update Card* link



3. Choose a farm and plan you'd like to purchase a license for using the drop downs labeled *Farm* and *Plan*. If you only have one farm in goCrop it will automatically be selected. Typically, users choose the Level 1 plan which accommodates up to 5 users.





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- Select any additional add-on features you'd like access to. You are required to have *Advanced Crops* and *Vermont NMP* to complete your update but also available are a grazing planning tool and *Analysis Tools* which include a cover crop economics calculator and a whole farm nutrient balance calculator. These features can be added at any time and do not have an additional fee. They are not required to complete your NMP.

Add-Ons

Advanced Crops

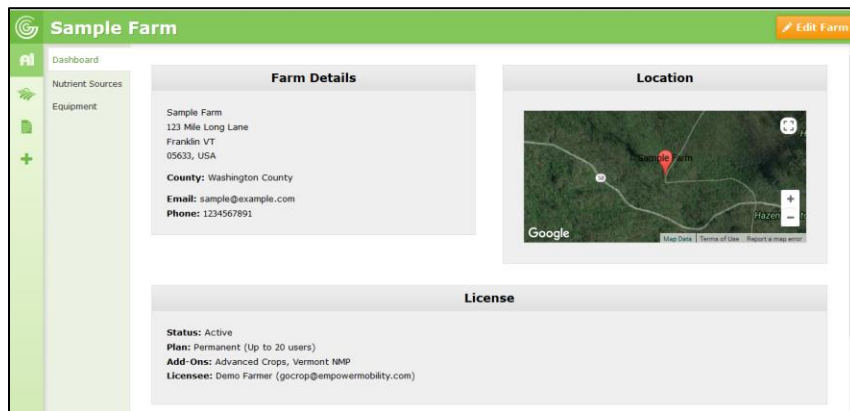
Grazing (Beta)

Vermont NMP (Advanced Crops req'd)

Analysis Tools

- Next, check the *No* box where it asks if you'd like to automatically renew your subscription upon expiring. This will allow you to use a coupon code to get your subscription at a discounted price.
- Finally, enter the coupon code you obtained from your service provider or by contacting Susan Brouillette at UVM Extension in the coupon code box. This will apply a discount to the annual subscription fee. Then you can click *Save License*. You should be brought to the main dashboard in which under the "license" box you can see your license is active and the new expiration date one year from today.

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Step 2: Enter records for last year (2020)

There are two ways to enter records in goCrop. To quickly add records in succession, click the plus sign for *Add Records* on the left toolbar

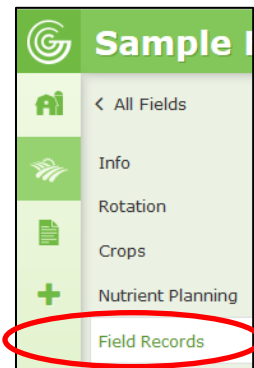




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Fill out the form with the record information including the type of record, field the record is for, date, etc. If you would like to continue to add more records at this time, click *Save and add another* at the bottom of the form. This will save the date and other information you entered and then bring up another record to fill out. This feature can greatly expedite the record entering process.

The other way to enter records is to go to your fields list by clicking *Fields* from the sidebar menu, then clicking on the field you want to enter a record for and then clicking on the *Field records* button that appears at the left as shown below.



The following options are given for records to add:



- Fertilizer (including weather conditions at time of application)
- Forage Test (including sample date and various analysis results)
- Forage Observation (including crop height and standing yield)
- Harvest (including date, seeding rate and method, and amounts)
- Irrigation (you will not be able to record these if you do not add water sources)
- Manure (spring, summer, and fall 2020 and associated weather conditions at application)
- Pest Control
- Scouting (for any desired pest scouting notes)
- Seeding (includes date, seeding rate, seeding method etc.)
- Tillage (includes type and date)
- Tissue Analysis (including sample date and various nutrient results)
- Weather (including date, temperature, precipitation, and which fields to apply the record to)

In order to update your NMP for the upcoming crop year, you will need to **at least** enter manure application records. Entering additional records may be helpful to your farm and can improve your nutrient management over time.

Click on one of the record types to begin entering that type of record. When you finish the form and click *Add Record* at the bottom. If you are adding a manure or fertilizer record, you will be



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asked to record weather information for the day of the application. There is also the option to add weather records for the 24 hours prior to and after an application which are required for MFOs and LFOs in VT.

Manure Application

Crop: [Hay](#)

Record Date: Jun 30, 2015

Manure Source: [Big Pit](#)

Rate: 2500 gallons / acre

Time to Incorporation: > 7 days (or not incorporated)

Incorporation Method: N/A

Soil Moisture: Slightly Moist

Notes:

Weather

In VT all farms are required to record the weather on the day of a nutrient application. Farms designated as MFOs and LFOs must also record weather for 24 hours before and after each application. Weather before, during, and after an application impacts nutrient loss from the field to the surrounding environment.

	Date	Details	Notes	
Day Before	6/29/2015	-	-	Add Weather
Day of Application	6/30/2015	-	-	Add Weather
Day After	7/1/2015	-	-	Add Weather

When adding weather, there is an option at the bottom of the form to select other fields to apply weather records to. For simplicity, click the *Select All* check box. This will ensure that weather records are applied to all applicable fields. You will need weather for each field that has a manure or fertilizer application so it is best to always select all fields to make sure none are missed.

Fields*

Select All

Front Field

Back Field

New Field

Hill Pasture

When you finish with one type of record and you wish to add another to the same field, you must click on *Field Records* to the left and then add another record. Continue to do this until you have entered all your records for that field.

To enter records for another field, use the field drop down list at the top of the page to select another field to enter records for.

Field: **North Hill [154-3]** ^

- Boulder Hill [176-8]
- By Bunk [896-7]
- Little Flat [154-1]
- North Hill [154-3]**
- South Hill [154-2]
- coolidge [198-5]
- hay/pasture [157-8]
- test [154-6]

When you are finished and ready to print, go to *Reporting Tools* > click next to your 2020 VT NMP > *Reports* (on the left) > *Records* under fields on the right, there is a record report for each field separately.



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Fields

Back Field [2345-678] - [Plan](#) - [Records](#)

Front Field [1234-324] - [Plan](#) - [Records](#)

Hill Pasture [2345-678] - [Plan](#) - [Records](#)

New Field [2345-678] - [Plan](#) - [Records](#)

At the bottom of this fields list, there are two other options listed:

[Combined Record Log](#)

[Combined Field Records](#)

The Combined Record Log displays all records entered for all fields listing multiple fields per page. The Combined Field Records report creates a one-page summary of records entered for each field similar to the field recommendations report for planning.

If you are a LFO in VT, you may be interested in using the Land Base Summary report that can be found at the bottom of the Farm reports list. This report will provide you with the information necessary to file your annual compliance form required by the VT Agency of Agriculture.

Farm

[Farm Summary](#)

[Manure Drawdown](#)

[Manure Sources](#)

[Field Inventory](#)

[Risk Assessment](#)

[VT P-Index](#)

[Farm Nutrient Balance](#)

[Soil Test Schedule](#)

[Farm Plan Summary](#)

[Manure Plan](#)

[Fertilizer Plan](#)

[Crop Rotation Schedule](#)

[Farm Nutrient Balance \(with Grazing\)](#)

[Farm Plan Summary \(with Grazing\)](#)

[Land Base Summary \(LFO Appendix D VI & VII\)](#)

Step 3: Creating/Updating the NMP for the 2021 cropping season in goCrop

1. Because it is already 2021, you already have a year 2021 in your plan. However, you need to start a new NMP report for 2021. Do this by going to *Reporting Tools*. Click + *New VT NMP* in the top right corner. You will then be asked if you want to copy an existing VT NMP or start from scratch. The information in this VT NMP is only your basic farm information including your livestock and land inventories, and future goals. You will most likely want to copy the previous year's information.

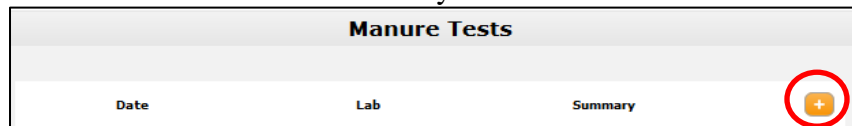


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Once you have created the VT NMP for 2021 you are brought to the *Plan Details* section where you can check and update any information needed concerning your farm's goals, basic crop and nutrient management, and land and livestock inventories.

- When you have finished updating your basic farm level information, click on *Farm* at the top of the left hand toolbar. Then click on *Nutrient Sources*. You will see your manure and fertilizer nutrient sources listed here. Look first at your manure sources. Do you have a new manure source? If yes, click *manure* in the *Add a source* box and input the requested information. You will then have the option to add a manure analysis for that source. **You are required to test each manure source annually.**

If you do not have any new sources, click the blue button associated with your manure source. You should see manure analyses listed for this source. In the right there is a plus sign you click to add a new manure analysis.

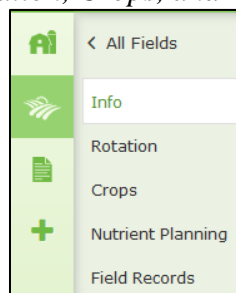


If you have new fertilizers, click *fertilizer* in the *Add a source* box. As with a manure source, you will need to enter the nutrient value of each fertilizer.

If there are fertilizers you no longer will be using you can archive them by clicking this symbol  next to the fertilizer.

- Now that you have updated your manure and fertilizer information, you can update your spreaders if anything has changed. You can get to your spreaders by clicking on *Equipment* on the left below *Nutrient Sources*. Again, if there are spreaders you are no longer using you can archive them and if you have a new spreader you can click *Spreader* in the *Add Equipment* box at the top.
- Next you will update field specific information. Click on *Fields* on the left hand toolbar, you will be brought to a list of your fields. If you have acquired land that is not currently in your plan, click + *New Field* in the top right corner and fill in the information for that field. If you are no longer managing land that is already in goCrop, you can archive those fields.

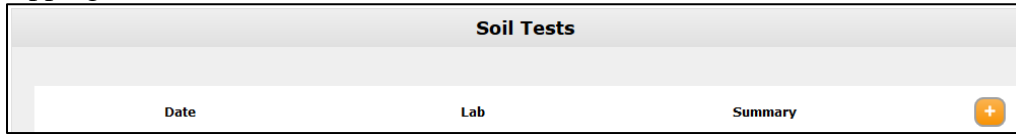
From this point, you will be entering or editing new/updated information associated with your fields under the *Info*, *Rotation*, *Crops*, and *Nutrient Planning* tabs.





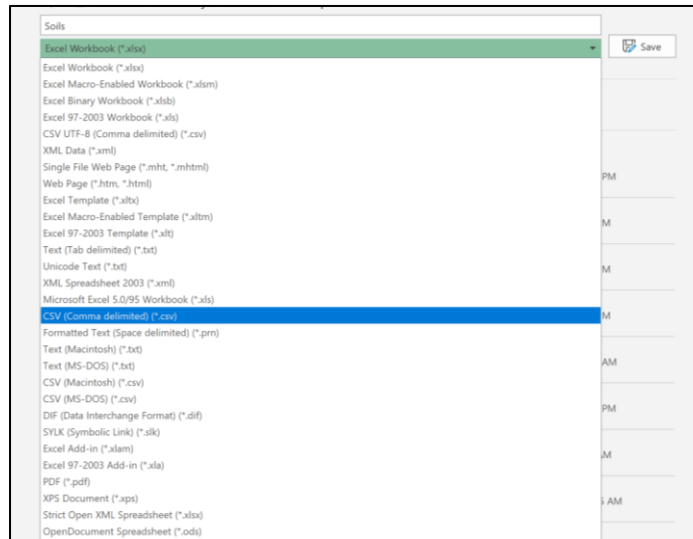
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- You will need to input new soil tests if you have them under the *Info* tab underneath the mapping section.



If you have a lot of new soil tests, it may be faster and easier to import them. However, in order to import your soil test information, you will need to receive your soil test results as a .csv file from the lab. This is not typically how they are reported so this will require a special request from the lab.

If you receive an excel file from the lab containing your results, open the file and click *File>Save As*. Using the file type dropdown under the file's name, select *CSV (Comma delimited *.csv)* and then hit *Save*.



You will also need to make sure the soil testing date in the file is in the format yyyy-mm-dd. To change this, highlight the dates, right click and select *Format cells*. Then under the *Number* tab select the category *Custom* and then scroll until you see yyyy-mm-dd as an option or type it in and hit *OK*.

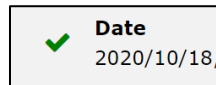
In goCrop, go to the *Farm* tab and scroll down until you see *Import Data* and click the *New Import* button. This opens a window like this where you select what type of data you are importing and the file. Using the dropdown select *From UVM Soil Lab*. If you have a CSV file from a lab other than the UVM soil testing lab, you will need to ask for more assistance to make sure that the file is organized in the same way to allow the import to work properly.



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Then, click the *Choose File* button and find where you saved the .csv file containing your soil test results on your computer. Once you have the file selected, hit *Next Step*.

Now you'll need to go through and make sure the data are being matched up. If you see a green check mark next to one of the sections, it means that data was able to be matched there.



If you see a yellow exclamation point, you need to help the program match the data. This typically occurs with matching the field names on the soil test file to the field names as they are entered into goCrop. In the example below, the soil test called Behind Barn was not matched with a field automatically. Use the dropdown to select which field this sample corresponds to.

Sample Name	Matched Field
Far field	Far Field [56-17]
Behind barn	Choose a corresponding value...
Other field	Other Field [34-12]
Other other field	Other Other Field [34-14]



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When all the sections have the green check marks hit *Preview with these settings* and then *Import* on the next window. If any additional errors occur you will be prompted with a message about what the error was otherwise you will get a message confirming the import was successful.

Once you have added a new soil test, click back on *Info*. Scroll down below where the soil tests are to the section called *Vermont NMP*. In this section there are two new questions that are necessary for the updated Phosphorus Index to work. They are:

Has Living Vegetation in April?*

Yes

No

Has Tile Drainage?*

Yes

No

These will default to NO so you will only need to edit this section for fields that are cover cropped with species that will be living in the spring (rye, wheat, triticale), are hayfields/pastures, or have pattern tile drainage in them. To edit click the edit icon in the right corner of that section.

- Next Click on *Rotation* and then the edit icon. You should see a place for the average erosion over your entire rotation as well as a table below with each year in your rotation listed with a space for a RUSLE2 number next to each one. If the field has a perennial crop you will just have one listed and the rotation and planned soil loss numbers will be the same.

Years			
Crop Name*	RUSLE2 Planned Soil Loss	Current Year?	X
Corn Silage	2.5	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Corn Silage	2.7	<input type="checkbox"/>	<input type="checkbox"/>
Hay, New	3.1	<input type="checkbox"/>	<input type="checkbox"/>
Hay, Established	.9	<input type="checkbox"/>	<input type="checkbox"/>
Hay, Established	.2	<input type="checkbox"/>	<input type="checkbox"/>
Hay, Established	.08	<input type="checkbox"/>	<input type="checkbox"/>

+ Add another row Check the box on the right to mark a row for deletion.

Make sure you check the box for whichever year in the rotation you are in for 2021! goCrop automatically advances this each year so you mostly need to check that it is accurate and adjust it if you've deviated from your original planned rotation.



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- Once you have finished updating your rotation, click on *Crops*. Perennial crops will automatically be there whereas annual crops will not. For annual crops you will see an option to copy last year's or a previous year's crop. Select the appropriate option for you (you will still be able to edit these after).



Once you have selected one of the options, click on the blue icon next to the crop. From here you will see a summary of the crop (including yield etc.) and a nutrient recommendation below.

goCrop has a new feature that will allow nutrient recommendations be automatically be generated using the soil test and the crop details entered. However, because this is a new feature you need to tell goCrop to do this. If there is an existing nutrient recommendation entered, delete it. Once you delete the values and hit *update crop*, goCrop will then automatically generate a new recommendation based on the information provided. This means that, in the future, when you update soil tests or crop details the recommendation will automatically change for you.

If you aren't sure whether your crop's nutrient recommendation is being automatically generated or not, you can tell by the heading above the recommendation. If the heading says "Using custom values", it is not automatically generating. If the heading says "Using book values" with details about the crop next to it, it is automatically generating the recommendations and will continue to do so.



- Next you will click on *Nutrient Planning*. Your manure records from the fall of 2020 will already be listed. You can tell the difference between a planned fall manure application and a record by the date. A record will have a specific date entered while a planned application will have an approximate timing such as "mid-October". You will want to cancel any **planned Fall 2020** applications that may appear by clicking the red button



next to the planned application.

Mid Oct 2019	Pit 4000 gallons/acre	7.4	40	32	-	-	...		
10/21/19	Pit 4000 gallons/acre	7.4	40	32	-	-	...		



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You will then need to enter all planned manure and fertilizer applications in spring, summer, and fall of 2021. If you wish to copy planned applications (both manure and fertilizer) from a previous year like you did with the crops you may. You can then edit them from there to balance nutrients based on the recommendation, crop removal, and the Phosphorus Index.

If you have pastures in goCrop and would like to estimate the nutrients provided from manure deposited while grazing, you can select *Add Estimated Grazing* instead of *Add Planned Manure*.

+ Add Estimated Grazing

+ Add Planned Manure

You will be asked for the type, number, and approximate weight of the animals grazing the field as well as how many days they spend in the field **throughout the season**. If you rotationally graze through this field, try to estimate the number of full days (24 hrs) that the animals will be in that field even if they only get access a few hours a day.

9. Repeat steps 5-8 for all fields. When you finish this, you are done!

