

Procedures for Creating Crop Plans

Overview:

AgroDoc.NET's new crop planning format allows agronomists to plan an unlimited number of applications for similar crop inputs. Multiple applications of starter fertilizer, broadcast fertilizer, nitrogen fertilizer, pesticides, other products, seed varieties, and associated services can be planned. This section shows the steps to planning.

Common Steps:

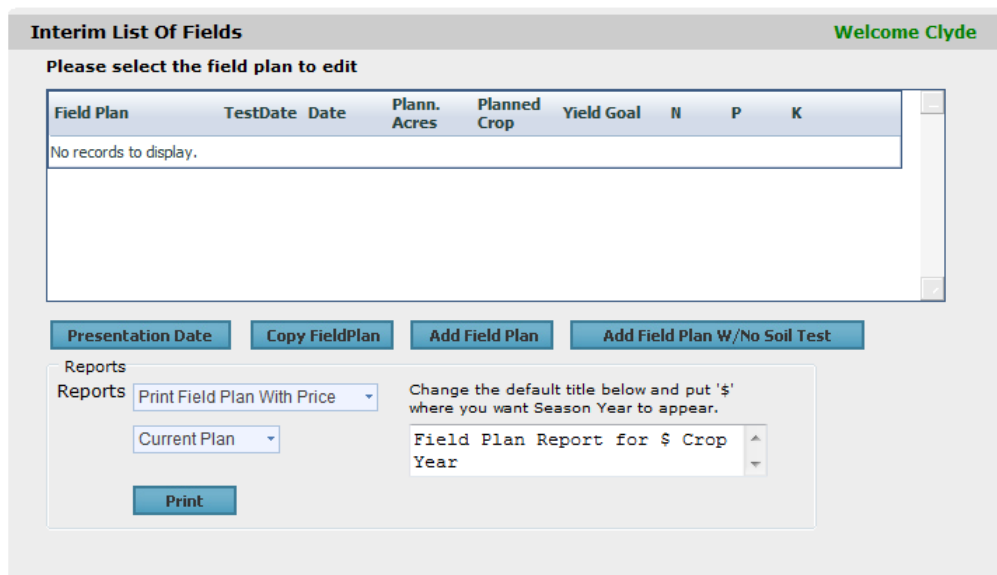
- A. Crop Plan, select the grower, select the crop plan;
- B. For Example: Broadcast Fertilizer
 - a. Select Broadcast
 - b. Click on +
 - c. Add Broadcast Fertilizers and associated services in normal procedure
 - d. Click Save
 - e. Multiple Broadcast Products will be saved as line items.
- C. The same basic steps apply to all the listed in-puts and service applications

Preparing the Interim List of Fields

1. Click on **Crop Plans**



2. Select a Grower by clicking on the → button
3. The Interim List of Fields will be displayed



Field Plan	TestDate	Date	Plann. Acres	Planned Crop	Yield Goal	N	P	K
No records to display.								

Interim List Of Fields Welcome Clyde


Please select the field plan to edit

Reports



Reports

Change the default title below and put '\$' where you want Season Year to appear.

Field Plan Report for \$ Crop Year

4. Click on the **Add Field Plan** button to begin adding data from soil tests.
 - a. If you do not have soil tests in the system for this Field Plan you can click on the **Add Field Plan W/No Soil Test** button to add a Crop Plan without a soil test.
5. Select the soil test you would like to create the Field Plan from by clicking on the  button.



Select SoilTest

FarmName	FieldName	SampleID	TestDate	N	P	K	
Home	10H	LLWI3603	9/27/2007 12:00:00 AM	6.33	Olsen=40		
Home	2H	LLWI3601S	9/27/2007 12:00:00 AM		Olsen=29		

6. The **Interim List of Fields** will be displayed with the newly added item.
 - * The Crop Plan in the example below is created from imported soil test data.


Interim List Of Fields Welcome Clyde

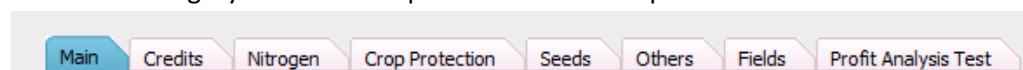
Please select the field plan to edit

Field Plan	TestDate	Date	Plann. Acres	Planned Crop	Yield Goal	N	P	K	
Home: 10H	9/27/2007	2/10/2009	100	Corn	100	120	71	170	 

Reports
 Reports
 Change the default title below and put '\$' where you want Season Year to appear.

From here you can:

- a. Enter a Presentation Date by clicking on the **Presentation Date** button.
 - i. This section will be discussed in another manual.
 - b. Copy a pre-existing Crop Plan to by clicking on the **Copy FieldPlan** button.
 - c. Add another Crop Plan or Add a Crop Plan w/no Soil Test, as mentioned previously.
 - d. View and Print Reports
 - i. This section will be discussed in another manual.
7. To create your Crop Plan, select the field you want to create a Crop Plan from by clicking on the  button.
 - a. Notice the category tabs which separate the different product activities.



Fields Tab

8. The first part of the Crop Plan is entering the planned acres. Do this by clicking the **Fields** tab.

Farm	Field	Acres	Planned	Field Comments
Home	10H	100	100	

- a. Planned Acres will default to the number of acres stored on the field record, to edit the planned acres click on the button. When you have finished adding your value for Planned Acres, click on the button to save.



Note: It is possible to create several Field Plans for the same field. This is useful if portions of a field are to be treated differently (such as manure application, different crop, different past crop, etc...). The planned acres do not have to equal the field acres; you can create multiple plans for the same field each with partial acres for the whole field.



Caution: *There is no built-in procedure to ensure that the entire acreage is planned. Users are responsible to enter and maintain correct acreages.*

Recommendation

9. Next, click on the **Recommendation** button. This section allows you to select what crop will be planned in this field. The Recommendation section is separated into 3 tabs - **Recommendations Details**, **Lime Rec**, and **Farm Details**.

Recommendation Details Tab

Recommendation (McGregor, ID =401)

Recommendation Details | Lime Rec | Farm Details

Recommendation 120 71 170 **lb/acre**

Soil Test 6.33 40.00 0.00 **ppm**

NITROGEN Olsen DTPA

PHOSPHORUS POTASSIUM

S 0.00 **Zn** 0.00 **B** 0.00 **Cu** 0.00 **Fe** 0.00 **Mg** 0.00 **Mn** 0.00 **Cl** 0.00

Tillage Till **Yield Goal** 100

Crop None

Status Message

Ok Cancel Calculate Print

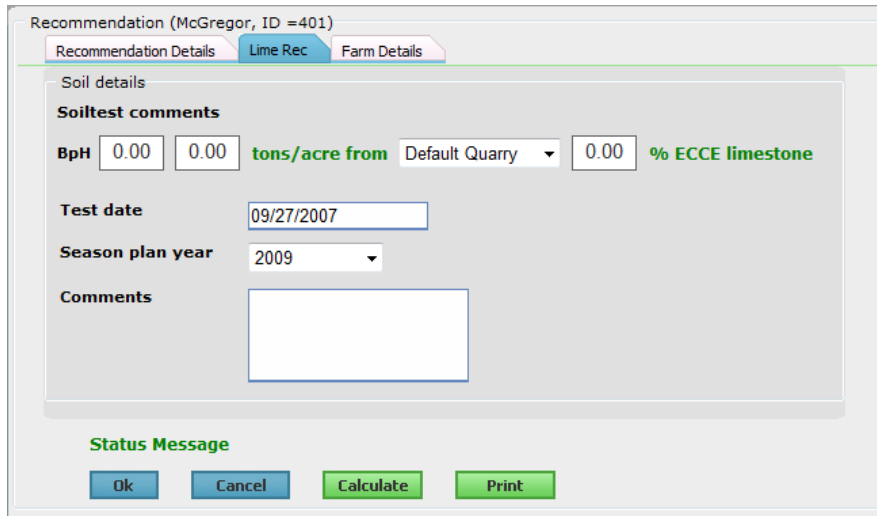
On the **Recommendation Details** tab, you can:

- Select your **Tillage** using the drop down list
- Select your **Crop** using the drop down list
- Enter your Yield Goal
- Click on the **Calculate** button to calculate the data for your Recommendation.



Note: The recommendation will be calculated from the recommendation formula that was previously set in AgWorks Manager (Agronomy > Nutrient Recommendation Algorithm). The results are #/acre for N, P, K and trace elements. The N, P, K..amounts can further be edited or “fine tuned” if desired.

Lime Rec Tab



The screenshot shows the 'Lime Rec' tab within a 'Recommendation (McGregor, ID =401)' window. The interface includes three tabs: 'Recommendation Details', 'Lime Rec' (selected), and 'Farm Details'. Under the 'Lime Rec' tab, there is a 'Soil details' section with the following fields:

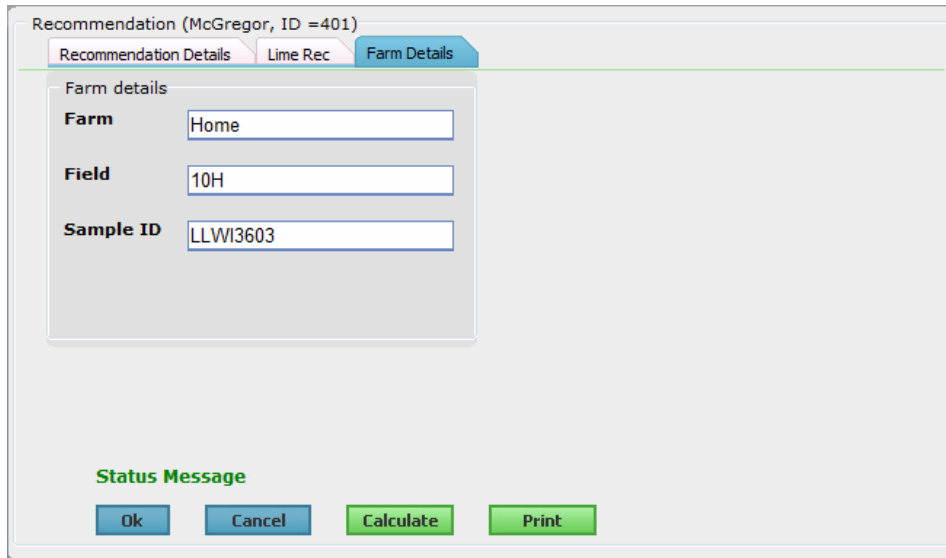
- Soiltest comments:** A text area for additional notes.
- BpH:** Two input boxes, both containing '0.00'.
- tons/acre from:** A dropdown menu set to 'Default Quarry'.
- % ECCE limestone:** An input box containing '0.00'.
- Test date:** A date picker set to '09/27/2007'.
- Season plan year:** A dropdown menu set to '2009'.
- Comments:** A large text area for user comments.

At the bottom of the window, there is a 'Status Message' area and four buttons: 'Ok', 'Cancel', 'Calculate', and 'Print'.

On the **Lime Rec** tab, you can:

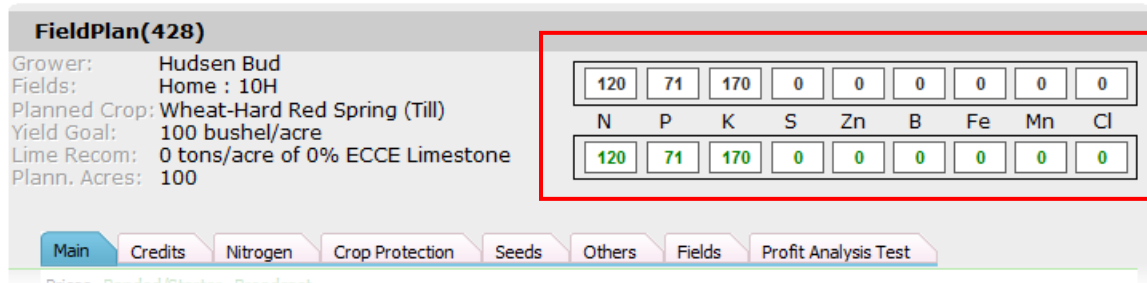
- Enter **BpH**
- Enter **Quarry value** and Select your **Quarry** from the drop down list
- Enter your percentage of **ECCE limestone**
- Enter **Test Date**
- Select **Season Planning Year**
 - By Default it will be set for the present year.
- Enter **Comments**

Farm Details Tab



On the **Farm Details** tab, you can:

- a. View **Farm Name**
 - b. View **Field Name**
 - c. View **Sample ID**
10. Once everything is acceptable on the Recommendation, click the **Ok** button to save and return to your Field Plan.
 11. The Recommendation is now transferred to the **Recommendation** and **Double Check** area of the Field Plan



120	71	170	0	0	0	0	0	0	0
N	P	K	S	Zn	B	Fe	Mn	Cl	
120	71	170	0	0	0	0	0	0	0



Note: As changes are made to the various components of the Crop Plan, the **Double Check** numbers will reflect recommended nutrients that have NOT been met by the plan in its current state.

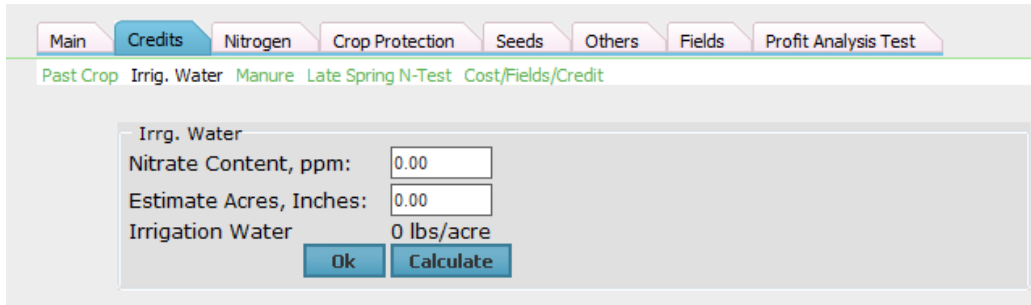
Credits – Past Crop

12. Next click on the **Credits** tab.
 - a. Select the Past Crop from the drop down list and enter the appropriate amounts for Credits or Debits.
13. When complete, click on the **Calculate** button.

- a. After entering your data, you notice again, how the **Double Check** numbers are modified.

Credits – Irrigation Water

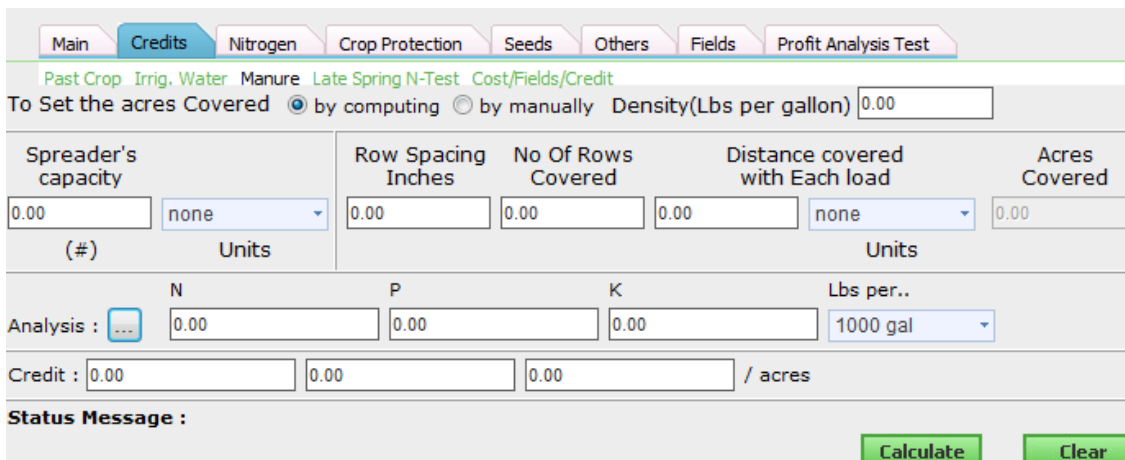
14. Click on **Irrigation Water**



- a. Here you can enter the appropriate values and then for **Nitrate Content, ppm** and **Estimate Acres, Inches**.
- b. When you are done, click on the **Calculate** button to view your **Irrigation Water** in lbs/acre.
- c. If acceptable, click on the **Ok** button.


Credits – Manure

15. Click on **Manure**





Note: This area is used to input Manure applications to a field. There are two methods of input for information – **By Computing** or **By Manually**

By Computing (Shown Above): This method is designed to calculate the Acres covered with manure by each load of a manure spreader.

- a. Enter the **Spreader's Capacity, Row Spacing, # of Rows, and Distance Covered with Each Load.**
- b. Click on the  button to select the **Analysis (N, P, K)** of manure from the University Averages list, or enter the desired amounts manually.

Livestock	Kind Of Manure	N	P	K	Lbs Per	
Cattle	Barnyard Manure	5	5	10	ton	→
Hogs	Barnyard Manure	5	5	10	ton	→
Sheep	Barnyard Manure	10	10	20	ton	→
Poultry	Barnyard Manure	20	45	12	ton	→
Cattle	Confinement System	26	19	30	1000 gal	→
Hogs	Confinement System	55	27	34	1000 gal	→
Poultry	Confinement System	28	38	25	1000 gal	→
Cattle	Open Feedlot Runoff	1.8	0.6	2.7	1000 gal	→

- c. When completed, click on the  button to populate the N, P, K Credits/Acre.
 - i. These amounts will be transferred to the Field Plan and then **Double Check** numbers will be adjusted.


By Manually (Shown Below): This method can be used to do the same procedure if the **Acres Covered/Load of Manure** are known.

Past Crop Irrig. Water Manure Late Spring N-Test Cost/Fields/Credit

To Set the acres Covered by computing by manually Density(Lbs per gallon)

Spreader's capacity <input type="text" value="0.00"/> <input type="text" value="none"/> (#) Units	Acres Covered <input type="text" value="0.00"/>			
Analysis : <input type="button" value="..."/>	N <input type="text" value="0.00"/>	P <input type="text" value="0.00"/>	K <input type="text" value="0.00"/>	Lbs per.. <input type="text" value="1000 gal"/>
Credit : <input type="text" value="0.00"/> <input type="text" value="0.00"/> <input type="text" value="0.00"/> / acres				

Status Message :

- a. Fill in the appropriate information. When you are finished, click on the  button.



Note: The Planned Acres determine how many acres receive manure. If the whole field did not receive manure, you should develop a Field Plan with the planned acres that receive manure and another Field Plan for this field with the remaining field acres without manure.

Credits – Late Spring N-Test

16. This area is used for entering any Late Spring Nitrogen Test information. Enter the appropriate value and then click on the **OK** button.

Calculating

17. After any changes are made to the Crop Plan, clicking the **Calculate** button will recalculate all changes and update the **\$/Acre** amount for all components of the Crop Plan.

FieldPlan(428)

Grower: Hudson Bud
 Fields: Home : 10H
 Planned Crop: Wheat-Hard Red Spring (Till)
 Yield Goal: 100 bushel/acre
 Lime Recom: 0 tons/acre of 0% ECCE Limestone
 Plann. Acres: 100

120	71	170	0	0	0	0	0	0	0
N	P	K	S	Zn	B	Fe	Mn	Cl	
120	71	170	0	0	0	0	0	0	0

Main Credits Nitrogen Crop Protection Seeds Others Fields Profit Analysis Test

Prices Banded/Starter Broadcast

Last edit date	2/11/2009	Crop Protection	\$45.86
Starter	NP	Seed	NP
Broadcast	NP	Other	NP
Nitrogen	NP	Credits	NP

Soiltest Recommendation **Calculate** Save WRT Print Status: Current

a. This will also adjust the **Cost/Field** data on the **Credits** tab and the **Double Check**

Main Credits Nitrogen Crop Protection Seeds Others Fields Profit Analysis Test

Past Crop Irrig. Water Manure Late Spring N-Test Cost/Fields/Credit

Cost/Field
 Fertilizer 0 Herbicide 4586

Credits N - P - K
 Past Crop None
 Manure

Main Tab

18. The **Main** tab is the first view of the Crop Plan.

FieldPlan(427)

Grower: Hudson Bud
 Fields: Home : 2H
 Planned Crop: None (Till)
 Yield Goal: 0 none/acre
 Lime Recom: tons/acre of 100% ECCE Limestone
 Plann. Acres: 75

0	0	0	0	0	0	0	0	0	0
N	P	K	S	Zn	B	Fe	Mn	Cl	
0	0	0	0	0	0	0	0	0	0

Main
Credits
Nitrogen
Crop Protection
Seeds
Others
Fields
Profit Analysis Test

Prices Banded/Starter Broadcast

Last edit date	2/10/2009 3:16:00 PM	Crop Protection	NP
Starter	NP	Seed	NP
Broadcast	NP	Other	NP
Nitrogen	NP	Credits	NP

Soiltest
Recommendation
Calculate
Save
VRT
Print
Status: Current ▼

- a. Initially, the categories will be assigned with **NP** (Not Planned) listed after each item. As you plan your field, the **NP** will change to the price per acre for each category.

Main - Starter Fertilizer

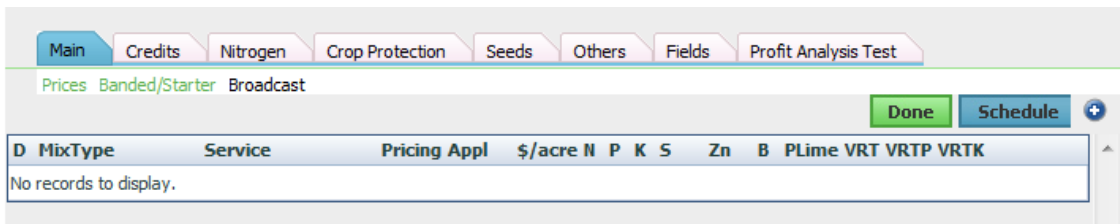
19. On the **Main** tab, click on **Banded/Starter**.


- To add product to this section, click on the button.
- Once you have selected the product, you will be able to set up your product

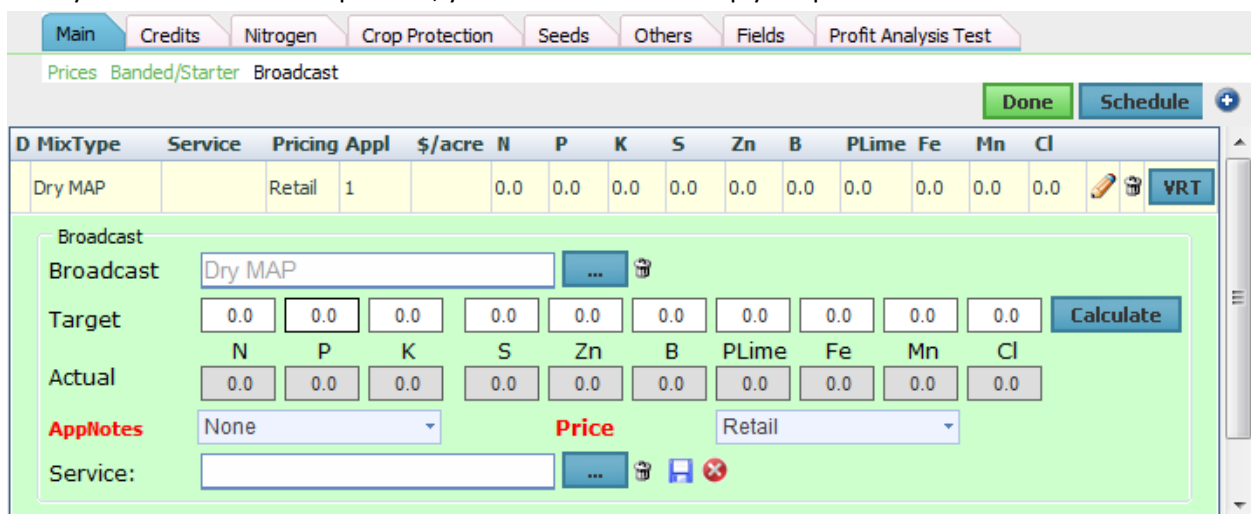
- Click on the button to select your **Starter**
- Click on the button to enter your **N-P-K...** values and to select Dry or Liquid
- Enter **Rate/Acre**
- Select **Price** level from drop down list
- Select **Mix Type** from drop down list
- When completed, click on the button


Main - Broadcast

20. On the **Main** tab, click on **Broadcast**





- To add a product click on the  button.
- Once you have selected the product, you will be able to set up your product



- Click on the  button to select your **Broadcast**
- Enter your nutrient values for **N-P-K...**
- Select your **Application Notes** using the drop down list



Note: Application Notes are important. They can allow users to tie a Broadcast application to a Chemical application. To do this, the note must define what Mix Number of the Chemical application is tied to this application. You will see how Mix Numbers are assigned in the section on Crop Protection.

- Select your **Price** level using the drop down list
- Click on the  button to select a **Service**
- When completed, click on the  button to save this product

Nitrogen Tab

21. The **Nitrogen** tab of the Crop Plan is used to plan the Nitrogen application on this field.

- a. To add a product click on the button.
- b. Once you have selected the product, you will be able to set up your product

- i. Enter the appropriate value of lbs of **Actual N**



Note: If Anhydrous is used, remember the lbs. entered are lbs. of actual N, not lbs. of product. Corresponding actual N is shown on the **Double Check** area. It is usually best to have planned your Starter and Broadcast Fertilizer components first so that any Nitrogen components of those will be reflected in the **Double Check** area before planning the balance of your Nitrogen applications here.

- ii. Select a **Service** by clicking on the button
- iii. Select your **Application Notes** using the drop down list



Note: The Application Note can be used to tie Chemical applications to the Nitrogen application. To do this, the note must define what mix number is tied to the application.

- iv. Select your **Price** level using the drop down list
- v. Select the application **Timing** using the drop down list



Note: Notice that the Nitrogen can be applied in a plan through various time frames. This could be an application of Anhydrous NH₃ in the Fall and a Liquid 28% or 32% in the Spring, or a split shot of two Liquid Nitrogen applications in the Spring.

- vi. If you want to include **N-Serve**, click the .

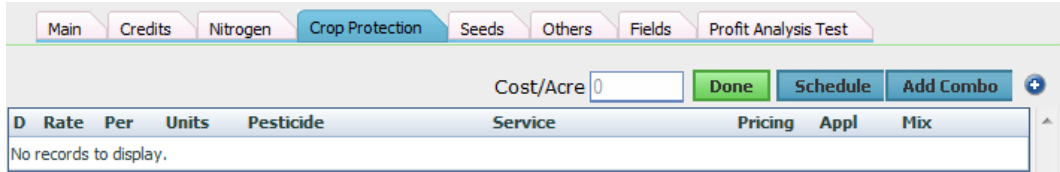


Note: This will include a default quantity of N-Serve product (1 qt/acre) to the plan and will be reflected in the cost/acre calculations for the application.

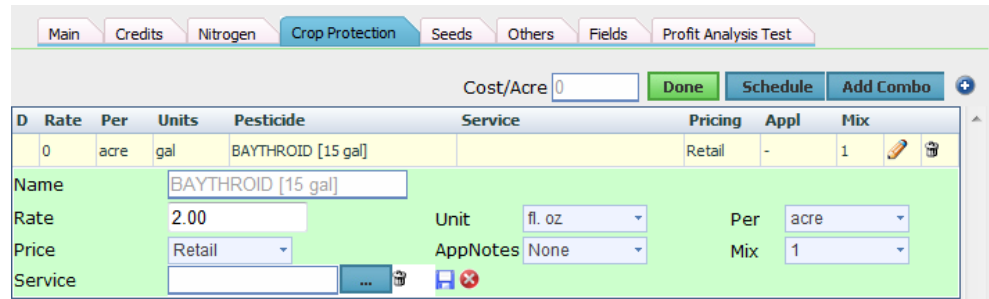
- vii. When you are finished, click the button to calculate the Cost/Acre.

Crop Protection Tab

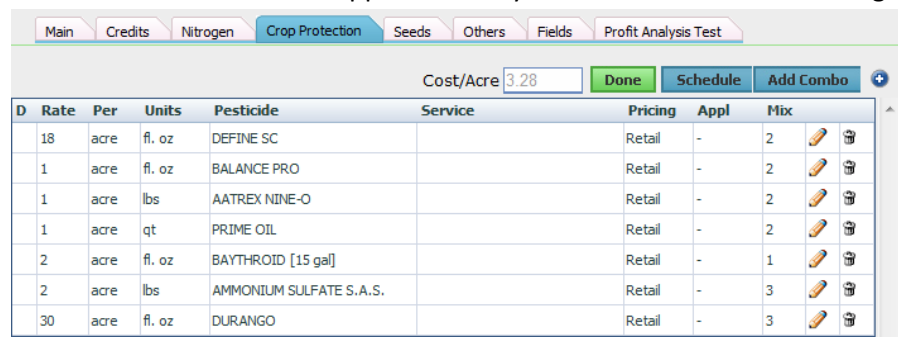
22. Click on the **Crop Protection** tab



- a. To add a product click on the button.
- b. Once you have selected the product, you will be able to set up your product




- i. Enter your **Rate** and select your **Unit/Per** items using the drop down lists.
- ii. Select a **Price** level using the drop down list
- iii. Select **Application Notes** using the drop down list
- iv. Select your **Mix** using the drop down list
- v. Select a **Service** by clicking on the button
- vi. When completed, click on the button to save and calculate.
- c. You may also add multiple Crop Protection products at one time, by clicking on the **Add Combo** button.
- d. Here you can view where **Mix Numbers** were used to group pesticides together and reference when a chemical application may be tied to Broadcast or Nitrogen.



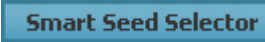

Seed Tab

23. Click on the **Seed** tab

a. To add a product click on the  button.





Note: The varieties displayed in the Product List are dependent upon which crop is in the planned crop area of the Crop Plan. If the planned crop is corn, only corn seed products will be available to choose from.

i. From the Seed selection window you can also access  and view the 

b. Once you have selected the product, you will be able to set up your product.


- i. Enter the **Planting Rate**
- ii. Select the **Unit** from the drop down list
- iii. Select the **Price** level from the drop down list
- iv. Select the **Application Notes** from the drop down list
- v. Enter the amount of **Acres**

Note: As seed products are entered, the acres data entry box will default to the Crop Plan's planned acres for the first seed product entered into the plan. As more seed varieties are entered, the acres data entry box will default to the Crop Plan planned number minus (-) the planned acres for the existing seed products in the plan.

- vi. Select the **Service** by clicking on the  button
- vii. When completed, click on the  button to save and calculate



Note: Planning two or more varieties for the same field is possible. To do this:

1. Click on the  button to add additional products

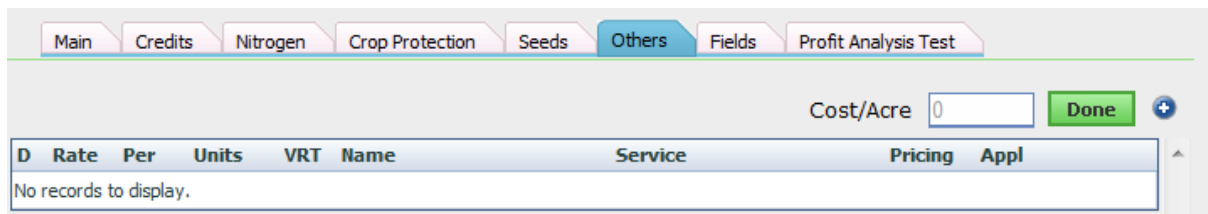
2. Select the additional variety and follow the steps above.
3. You may want to enter planting instructions in the comments area associated with each variety




Caution: *The recorded acres for all varieties should not exceed the total acres in the field.*

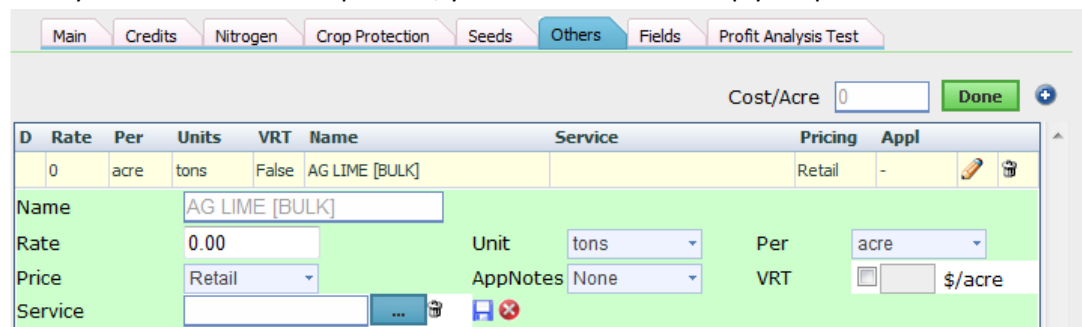
Other Tab

24. Click on the **Other** tab



D	Rate	Per	Units	VRT	Name	Service	Pricing	Appl
No records to display.								

- a. The **Other** tab is used to enter products like Ag Lime or other additional products that do not fit into one of the existing tabs or categories. Some micronutrient mix products may be added to the Crop Plan here. This area can be used to plan any single ingredient product. To add a product click on the  button.
- b. Once you have selected the product, you will be able to set up your product.



D	Rate	Per	Units	VRT	Name	Service	Pricing	Appl
0	0.00	acre	tons	False	AG LIME [BULK]		Retail	-

Name:
 Rate: Unit: Per:
 Price: AppNotes: VRT: /acre
 Service:

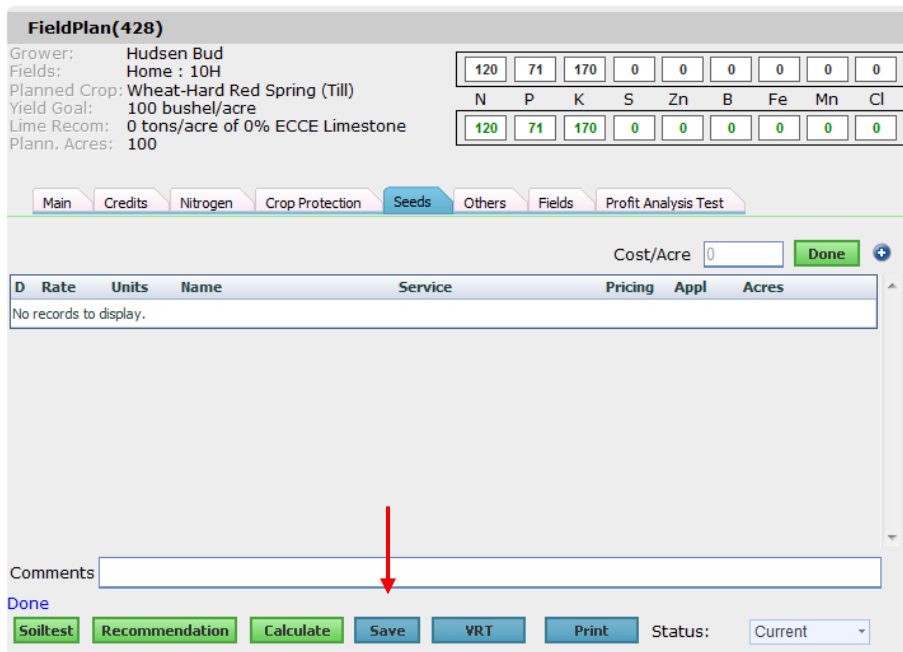
- i. Enter the **Rate** and the **Units/Per** items using the drop down lists
- ii. Select the **Price** level using the drop down list
- iii. Select the **Application Notes** using the drop down list
- iv. If this is for **VRT**, click on the and enter the **\$/Acre**
- v. Select the **Service** by clicking on the button
- vi. When completed, click on the button to save and calculate

Comments

- The ability to enter comments for each Crop Plan is an important feature. A **Comments** section is available at the bottom of the Crop Plan worksheet. There are varying strategies which can be used while entering comments for a Crop Plan
 - Comments entered on the Crop Plan worksheet will also be on the printed Crop Plan and can be useful for the Customer reading the printed Plan(s).
 - Comments can also be used to relay important information about a Crop Plan for a specific field to other members of the Ag Retail staff; such as the Scheduler, Formulator, Mix Plan Operator, and Applicator Driver(s).
- These comments can be passed from AgroDoc.NET module to the Schedule module, as well as, Smart Guns™ and BB Guns.

Save and Quit

- After entering all of your data into the Crop Plan, you can click on the  button to save your worksheet and be returned to the **Interim List of Fields**



FieldPlan(428)
 Grower: Hudson Bud
 Fields: Home : 10H
 Planned Crop: Wheat-Hard Red Spring (Till)
 Yield Goal: 100 bushel/acre
 Lime Recom: 0 tons/acre of 0% ECCE Limestone
 Plann. Acres: 100

120	71	170	0	0	0	0	0	0	0
N	P	K	S	Zn	B	Fe	Mn	Cl	
120	71	170	0	0	0	0	0	0	0

Main Credits Nitrogen Crop Protection **Seeds** Others Fields Profit Analysis Test

Cost/Acre 0

D	Rate	Units	Name	Service	Pricing	Appl	Acres
No records to display.							

Comments

Status: