

FOR RESOURCEFUL GROWERS

SEEKING TO **ENHANCE PRODUCTIVITY**



Landodb

GETTING STARTED



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USEFUL RESOURCES

Support Contact Information

AgriEdge Support

AgriEdge Specialist: _____

Phone Number: (_____) _____

Email Address: _____

Sustainability Specialist: _____

Phone Number: (_____) _____

Email Address: _____

Ag Connections Support Desk

270-435-4369 Option 1

support@agconnections.com | www.agconnections.com | www.farmshots.com

Land.db Account Login Info

Login Email Address: _____

Password: _____

Farmshots Account Login Info

Login Email Address: _____

Password: _____

Land.db Access Options

Land.db Client:

- Windows® 7 and later on desktop
- On or offline

Land.db iOS App:

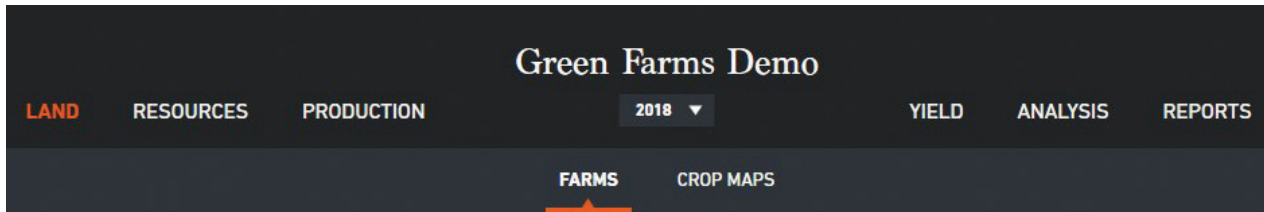
- iOS-based data entry solution
- On and offline iPhone® 6 and later
- Access from the App Store:
- Search for AgriEdge or Land.db

Land.db Web:

- Online computer and tablet solutions
- Solution for limited access to business partners
- Access to administrative tools

Interface – Land.db Client

Interface Layout: The Land.db Client consists of six pages: Land, Resources, Production, Yield, Analysis and Reports. Each page has tabs which vary by page and are found beneath the pages. Always select the Page and then choose the tab.



Screen Layout: Almost every page in the software has a list of items on the left side of the page and the information screen (also an Edit screen) on the right portion of the page. When a user selects an item within the list, the window to the right will display the associated information.

Add, Remove and Back Buttons: Almost every page in the software has an **Add** and **Remove** button in the bottom left of the screen to add or remove an item to or from the list. Many screens have a **Back** button, similar to a web browser. If the user wants to return to the previous screen, simply click **Back** in the upper left corner of the viewing window. Note that the information the user is working with in the current window will not be saved if **Back** clicked before **Complete**.

Editing: If the user needs to update or edit an existing item, select the item in the list that needs editing. Roll the mouse over the various areas in the window to the right. The different editable areas will highlight with a box around the area and the word **Edit** will appear. Click inside the box to edit. Once changes are made select the **Update** button to save the changes.

The screenshot shows the "Home Place" farm detail view in the Green Farms Demo application. The top navigation bar is the same as in the previous screenshot. Below it, there are two sub-tabs: "FARMS" (highlighted with an orange arrow) and "CROP MAPS". The main content area is divided into three sections: a left sidebar, a central map, and a right information panel. The left sidebar contains a list of farms, with "Home Place" selected and highlighted in orange. Below the list are "ADD" and "REMOVE" buttons. The central map shows an aerial view of the farm with a yellow highlighted area representing the farm's boundary. The map is labeled "Home Place" and "63.23 acres". The right information panel contains details for the selected farm, including location, crop history, and FSA information. The "FSA Information" section has an "EDIT" button highlighted in yellow.

YEAR	CROP	AREA	TILLAGE
2016	Corn : Yellow	63.23	

FARM NUMBER	FSA AREA
1234	65.00

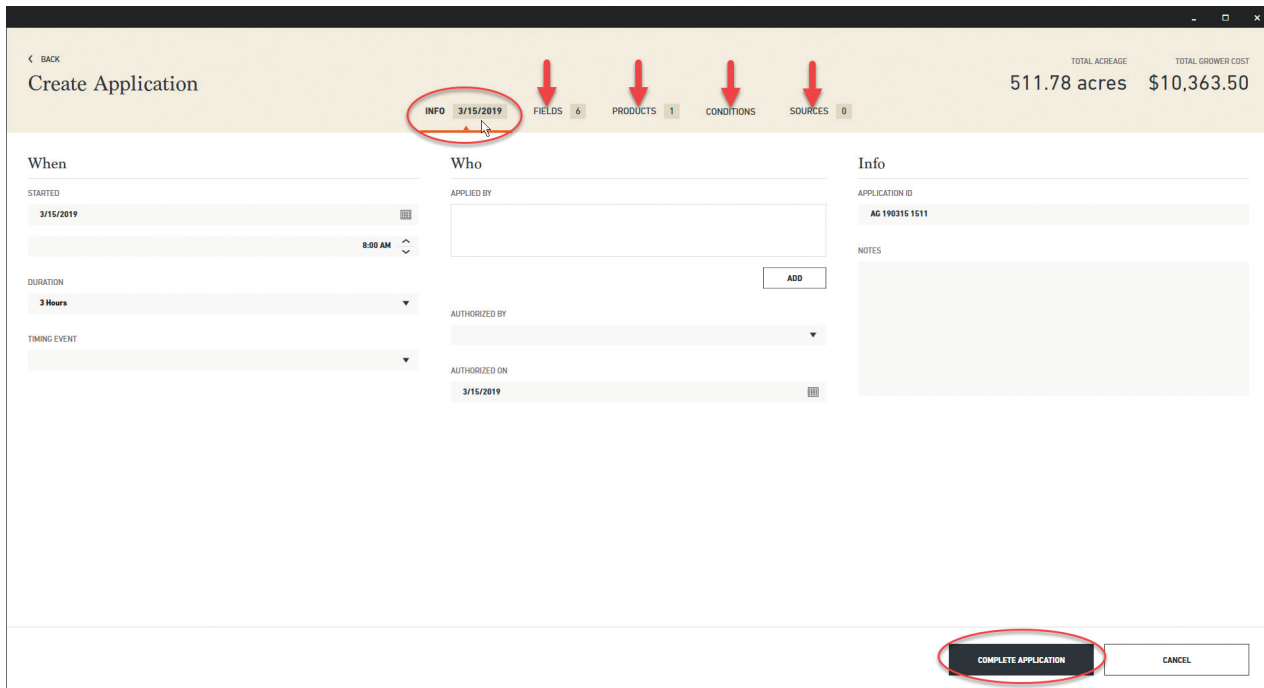
TRACT NUMBER	RENT TYPE
6847	Cash Rent

FIELD NUMBER	LAND OWNER %
1	0

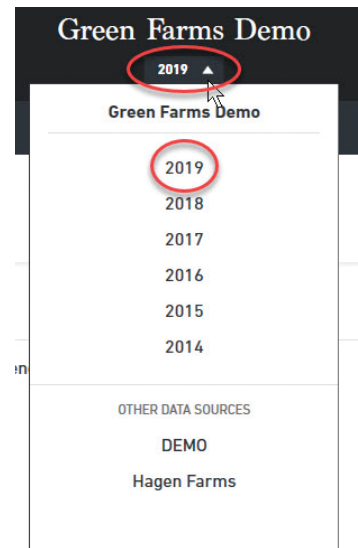
CLU ID	TENANT %
	0

Multi-Page Templates: When working with various features in the software, the user will navigate through pages of the template when creating a record. See the below example: Creating an application consists of a five page template to navigate through. Once the user fills out the information on the first page, they can advance by clicking the next page located at the top, center of the screen (see image below). Once the user has entered all relevant information on all the pages, the user will always select the Complete button at the bottom of the screen.

A user may advance pages but also return to the different pages during the record creation process in order to edit information before completing the entry.



Refresh/ Synchronize Data: To synchronize changes made within the datasource, it is a best practice to refresh the data periodically. To refresh a datasource, select the Crop Year dropdown and re-select the same crop year.



GETTING STARTED GUIDE

Requirements

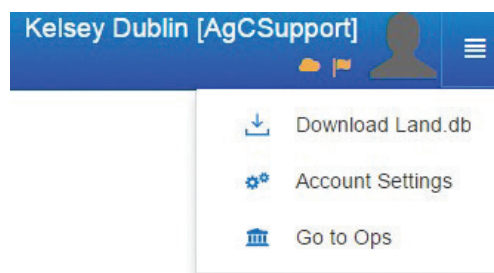
- A device installed with a full version of Windows 7, 8, or 10.
- Google or Microsoft account for logging into Land.db

Creating a Land.db Account

- Navigate to www.landdb.com in the Google Chrome browser.
 - If you do not have Google Chrome installed, you can download it by clicking the following link, <http://www.google.com/chrome/>.
- Click **Google** or **Microsoft** and log into the associated account.
 - **Remember this email address and password for future access to Land.db. You may record this info on page 3 of this document for your records.**
- Complete the Welcome Form, check the box agreeing to the Terms and Conditions, and click **Submit**.
- Navigate to the email inbox of the address used on the Welcome Form. Click on the email notification from Land.db and click on the link within the email.
- A new Land.db page will open and prompt for a datasource to be created. Type in the name of the entity and click Create.
 - Note: This step is not required if you are needing access to an existing datasource. Please contact Support at (270) 435-4369, option 1.

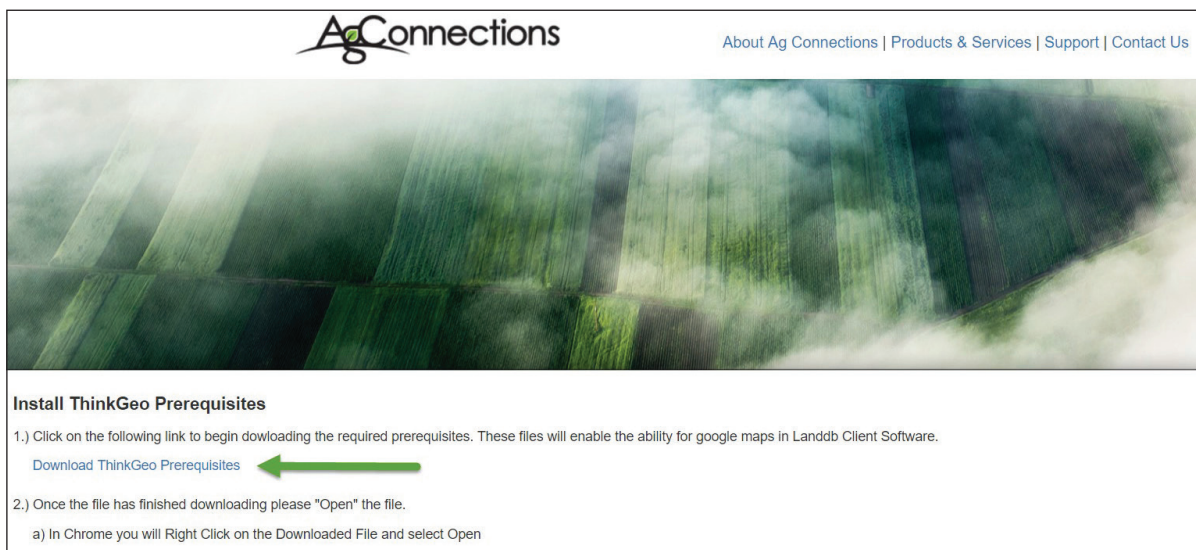
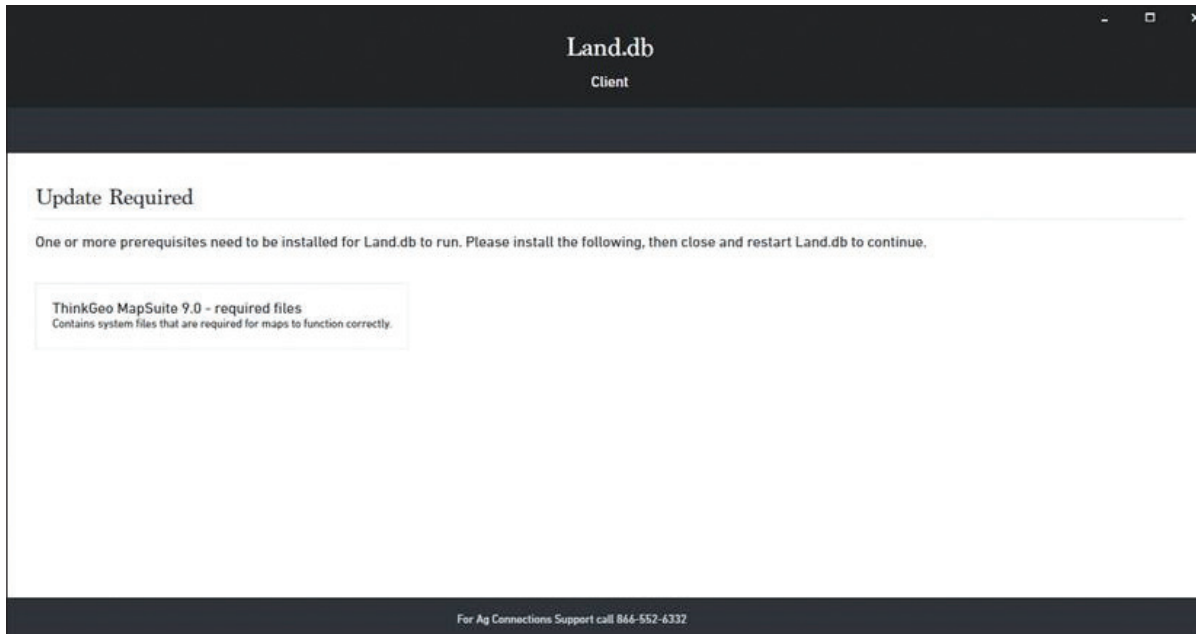
Downloading the Desktop Land.db Client

- Click on the four white horizontal bars in the top right of the page and choose **Download Land.db**. (Refer to image at bottom right of page.)
- A **setup.exe** file will download. Click on it to open and run the installer.
- Click **Yes** or **Run** on permission messages that might be encountered.
- Click **Agree** when the agreement box opens.
- Once download is complete, the Client will open automatically.
- When the client downloads successfully, there will be a new icon on the desktop. Double click this icon to access the software. (Refer to the image in the bottom left.)



ThinkGeo Mapsuite

ThinkGeo Mapsuite is a required component of Land.db Client. New Client installations will automatically prompt for installation. After installing Land.db, click the boldface type that displays **ThinkGeo Mapsuite 9.0 – required files**. This will open a browser window with installation instructions. Choose the link for **“Download ThinkGeo Prerequisites”** and follow the installation instructions.



Logging In

Land.db utilizes Google and Microsoft as identity providers. This eliminates the need to maintain a separate username and password for Land.db access as well as extends the security of Google and Microsoft to protect Land.db users.

Each time the software is opened, there will be a prompt to log in using either Google or Microsoft. Log in with the username and password created during registration. After initially logging in, Land.db can be set to remember the login for future use.



To log in through Land.db Web, navigate to the website www.landddb.com through the Google Chrome web browser. Log in just as you would with the Client (desktop). The screen will look like this:



1. The Farm Field Tree

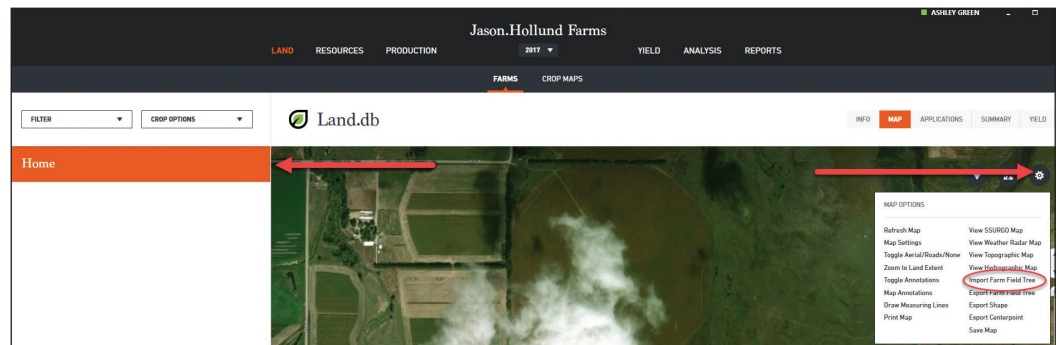
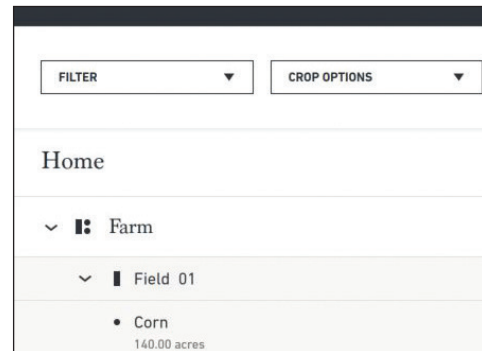
Every tree will start with the Home level. The tree structure has 3 branches: Farm, Field, and Crop Zone. A user can have multiple Farms and multiple Fields under a Farm, as well as multiple Crop Zones under a Field.

NOTE: If you have fields mapped in another software, proceed to Option 1. If not, proceed to Option 2.

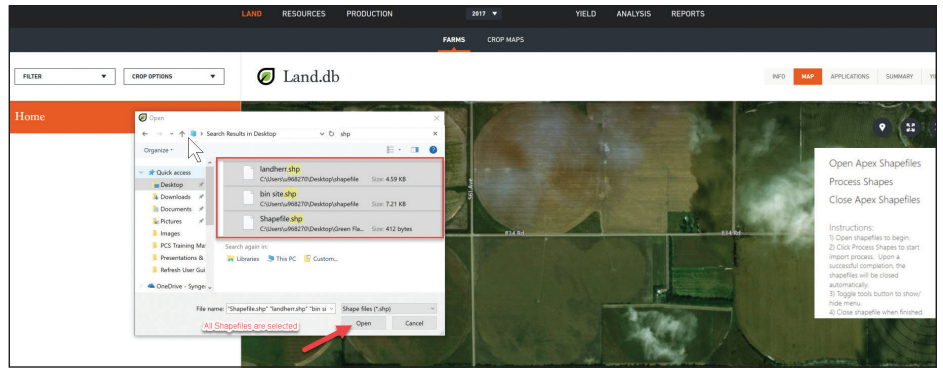
Option 1. Import Farm Field Tree

The **Import Farm Field Tree** tool allows one to utilize a Farm Field Tree that has been previously drawn in another farm management software such as Apex and MyJohnDeere Operations Center. This allows the user to bypass the steps of manually creating the Farm and Field names as well as mapping the field boundaries. To determine if the shapefiles exported out a different farm management software is compatible with this tool, please call Ag Connections Support. Prior to attempting this process in Land.db, export all field boundaries as individual shapefiles from the farm management software.

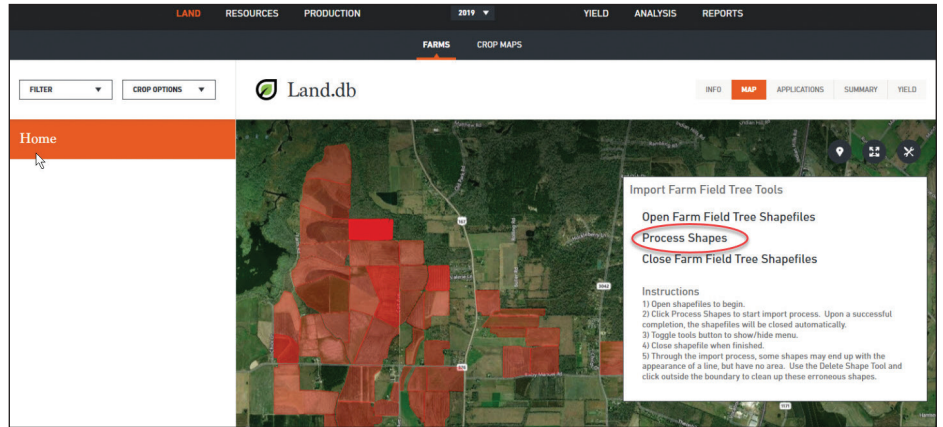
To utilize the **Import Farm Field Tree** tool, select the **Home** level of the Farm-Field Tree and navigate to the Map tab on the upper right of the screen. Click on the **Settings** cog and select **Import Farm Field Tree**.



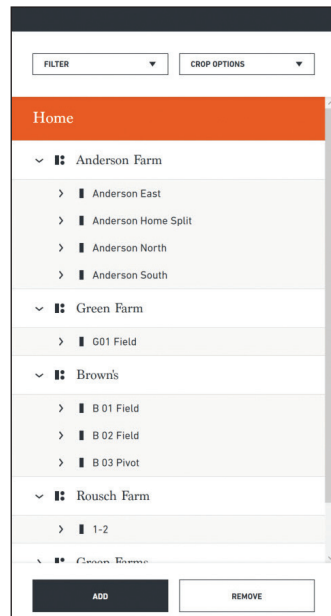
Once **Import Farm Field Tree** has been selected a window will open, allowing the user to choose the files to import. Navigate to the folder containing the shapefiles. Once that folder has been opened, press **Ctrl + A** on the keyboard to select all shapefiles, and press **Open**.



After selecting **Open**, the field shapefiles will appear on the map in red. When the field shapes are visible, select **Process Shapes** in the **Import Farm Field Tree** tools box.



It will take a moment for the shapefiles to process. After the process completes, the Farms and Fields will be accessible in the client as shown to the right.



Option 2. Building the Farm Field Tree

To Create a New Farm:

Click **Home** level and click the **Add** button in the bottom left corner.

Type the name of the Farm, then click **Add Farm**. The Farm will now appear in the Farm Field Tree. A user can add as many Farms as desired.

A form titled 'New Farm' with a 'NAME' dropdown menu. At the bottom, there is a checkbox labeled 'Continue adding farms', a dark grey 'ADD FARM' button, and a white 'CANCEL' button.

To Create a New Field:

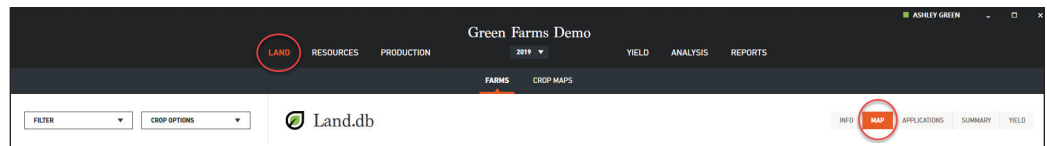
Click on a Farm in the tree and click **Add** in the bottom left again. This will create a Field under that Farm. Type in the name of the Field and choose **Add Field**. To add multiple Fields under a Farm, check the box next to **Continue Adding Fields**, and it will keep the New Field box open to continue adding.

A form titled 'New Field' with a 'NAME' dropdown menu containing 'Field 01'. At the bottom, there is a checkbox labeled 'Continue adding fields', a dark grey 'ADD FIELD' button, and a white 'CANCEL' button.

2. Mapping Options

Once the Farm Field Tree hierarchy is complete, field boundaries must be assigned to each field in the tree. There are four different options to map in the fields: Manually draw the fields in, importing the Common Land Unit (CLU) boundaries, import individual shapefiles from another program, or mass import the fields within one shapefile from another program.

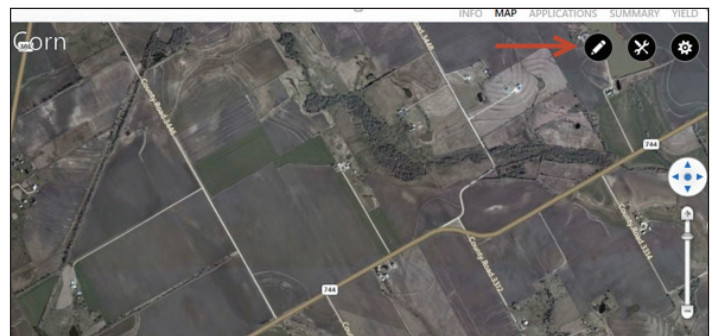
Boundaries are managed on the Land page within the Map tab.



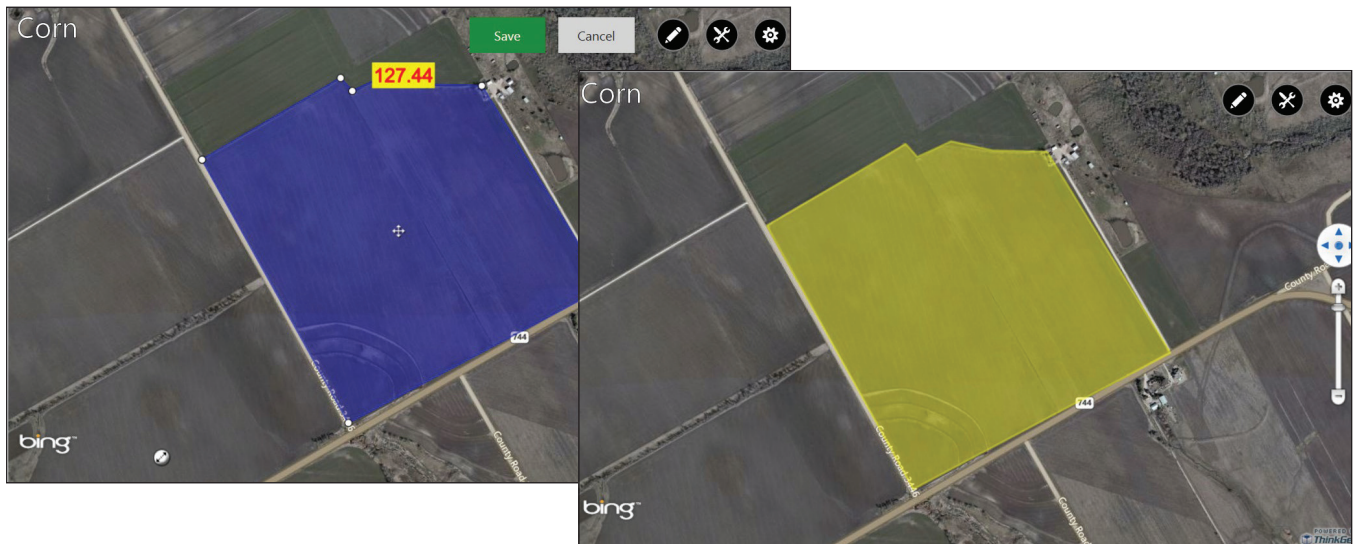
Option 1. Drawing Fields

Click on a Field in the tree and zoom in on the map until the Field is in view.

Click the black pencil tool.



Click once on the corner of the Field to activate the drawing tool. Move the mouse around the edges of the boundary, continuously clicking to add editable points until the red polygon has covered the entire field. Double click on the final boundary point to end the draw tool and click the Save button. The boundary will turn orange after saving.



Option 2. Import CLU Boundaries

Another mapping option is to import boundaries via the Common Land Unit (CLU) boundary import tool. To utilize the CLU boundary import tool, select the field from the list for which you are importing the boundary. Then, navigate to the mapping tools button located in the top right of the screen. Click on **Import CLU boundary**.

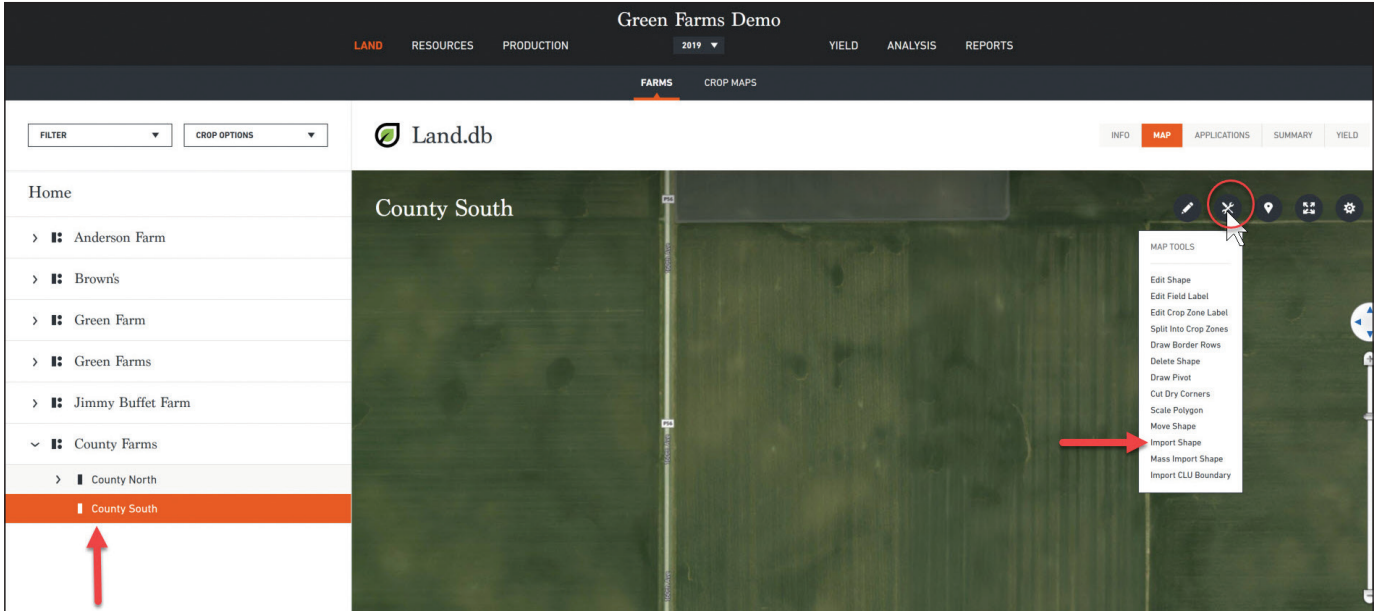
Wait until the field maps show up in red. To select the field boundary, simply click inside of the boundary. The field will display orange when it is selected, and the user can then close the CLU layer. If the field boundary is not consistent with the way you farm the field, you are able to assign more than one boundary to a field by simultaneously clicking in the other boundaries.



Option 3. Import Individual Shapefiles

If you have boundaries in another farm management software, you may export them as shapefiles to be imported into Land.db. This will allow you to bypass manually drawing the fields in by hand or using the Import CLU boundary tool. You must create the Farm Field Tree names and have the boundaries exported as shapefiles from your other system. For assistance with either of these steps, contact AgConnections Support.

Choose the field name from the Farm Field Tree for which you wish to import a shape. To import individual shapefiles that have previously been saved, navigate to **Tools** and click **Import Shape**.



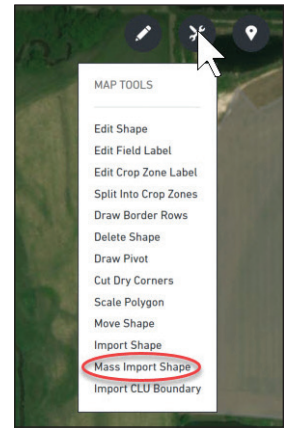
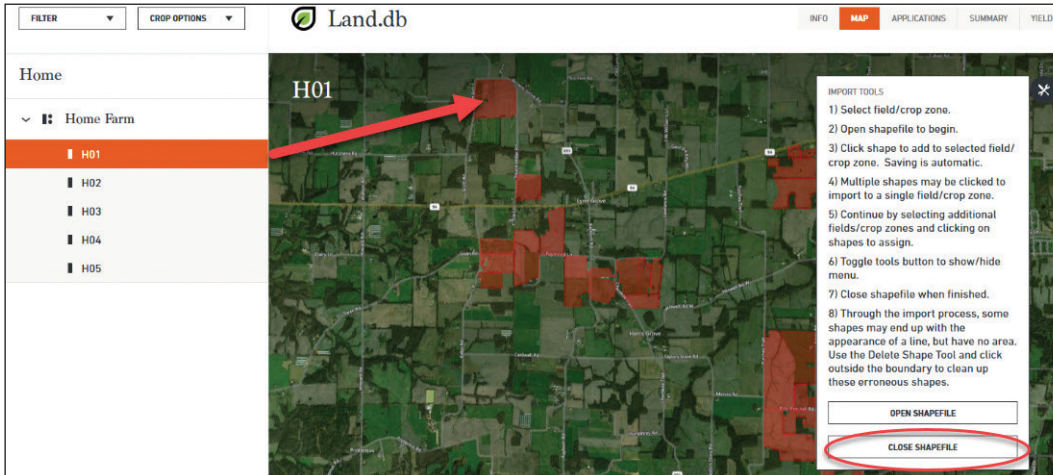
A file explorer will open and you may navigate to the location of the shapefile. Select the shapefile and click **Open**. The boundary will then appear on the map in yellow. Click once within the yellow boundary to select it and it will turn red. Click **Save** to complete the import. Repeat these steps for every field in the Farm Field Tree until all fields have a shapefile assigned.



Option 4. Mass Import Shape

If multiple fields are included in a single shapefile, the Mass Import Shape tool can be used. Be sure to have the fields created in the Farm Field Tree prior to import. The Mass Import Shape tool can be found in the Map Tools section of Land.db as shown to the right.

After clicking **Mass Import Shape**, select the shapefile that contains the field boundaries that you would like to import and choose **Open**.



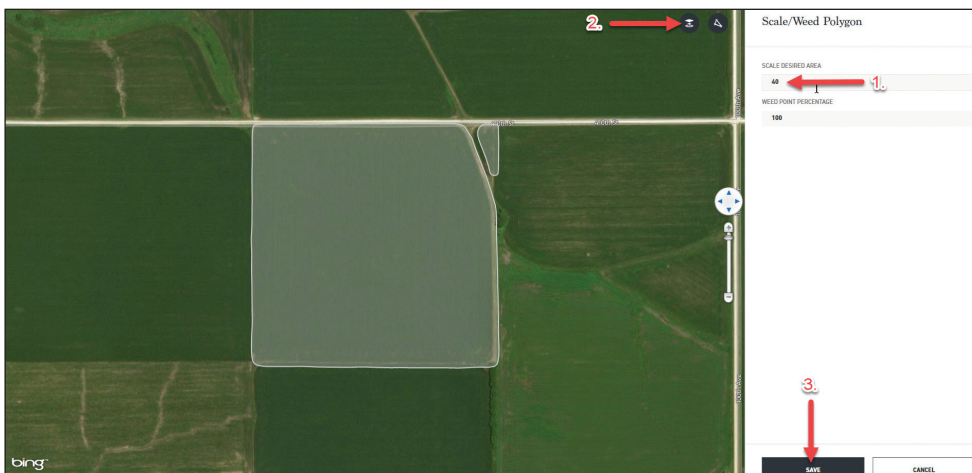
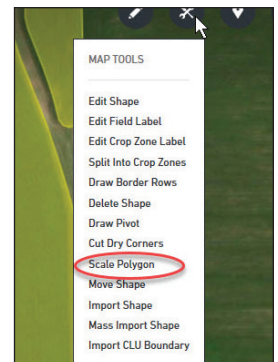
After selecting **Open**, the available fields will appear outlined in red on the map. Select a field in the Farm Field Tree and then click once inside a red boundary to associate it with that field. Once selected, the field will turn yellow. Additional boundaries can be associated to the same field if needed. Repeat this process by selecting additional fields and boundaries. Choose **Close Shapefile** from the Import Tools box when complete.

Scale Polygon: Easily Adjust Total Acres per Field

Once all of your fields have been mapped in Land.db, you may adjust the acres of each field easily using the **Scale Polygon** mapping tool. First, synchronize Land.db. (For syncing instructions, refer to the Useful Resources instructions.)

Choose a field in the list you wish to adjust the mapped acres then select the **Tools** button on the **Map** tab. Select **Scale Polygon**.

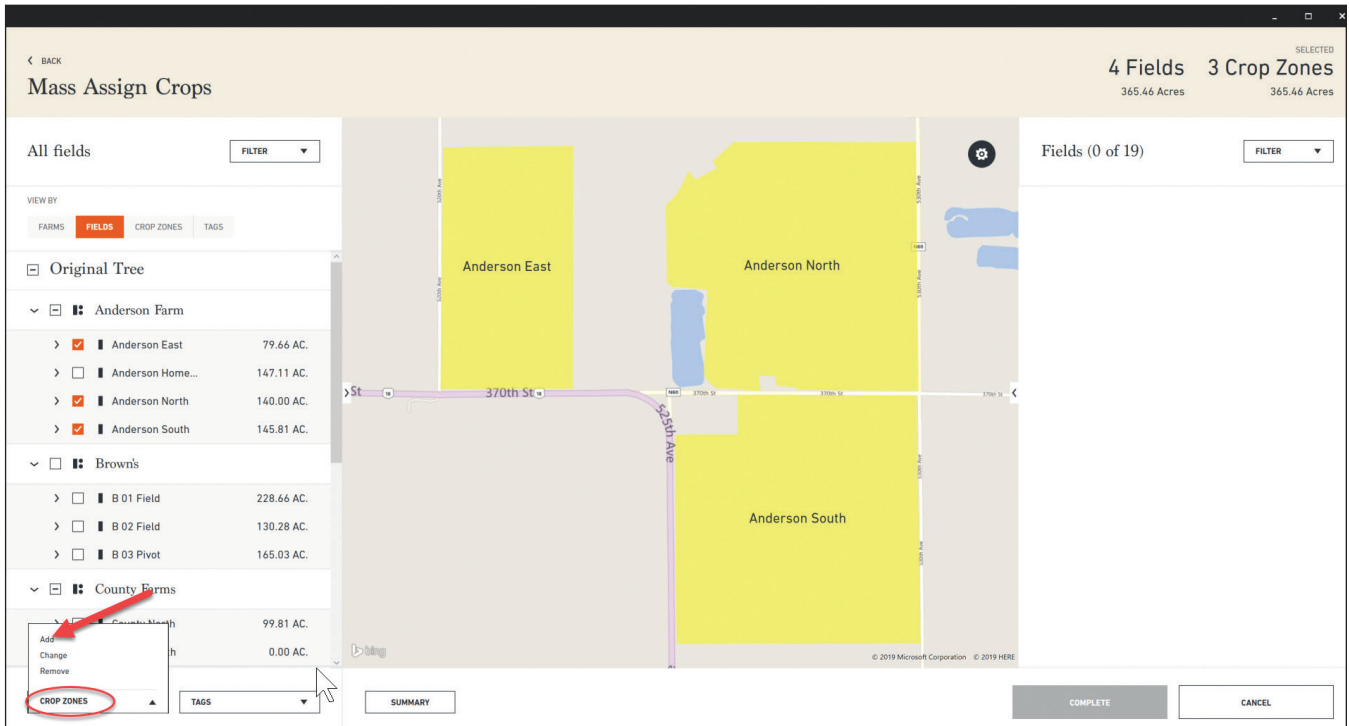
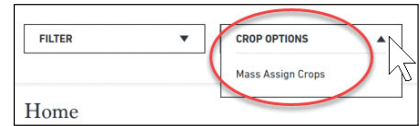
1. Place your cursor inside the **Scale Desired Area** box and type in the desired acres.
2. Click the **Scale** button on the top right of the map. The map boundary will expand or shrink to the desired acres you typed in.
3. Click **Save**. Repeat these steps for the other fields in the list as needed.



3. Assigning Crops

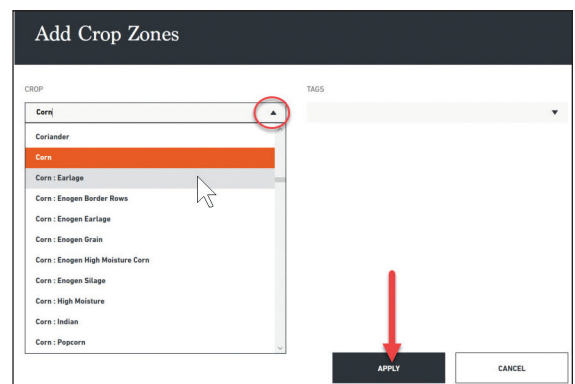
Once the Fields all have boundaries drawn or imported, the next step is to assign crops to the fields. If a user plants one crop to a field, then the Mass Crop Assigner is recommended. If the user often has multiple crops in a field, you may split fields into multiple crop zones by using the Crop Zone Splitter tool. For instructions on using the Crop Zone Splitter tool, call Ag Connections Support.

To mass assign crops to the fields, click the **Crop Options** button and choose **Mass Assign Crops**.



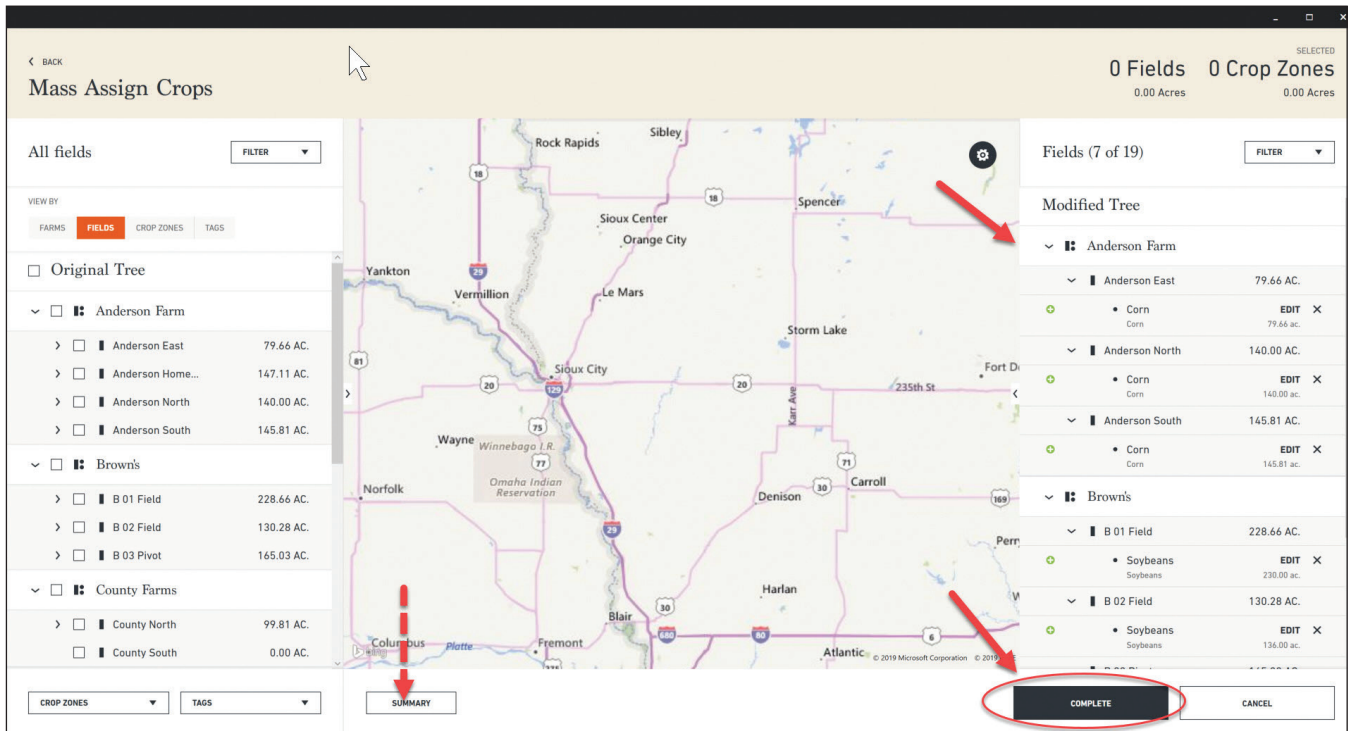
On this page, check the boxes beside the Fields that will all be planted with **one crop**. In this example, all fields selected will be planted to Corn. Once you have selected all fields that will be planted in the same crop, choose the **Crop Zones** button, and select **Add**.

A prompt will open for the user to type the crop to be assigned. Select a crop via the drop down and click Apply.

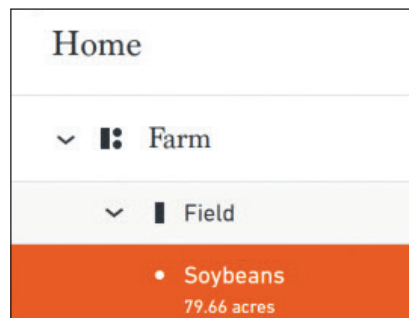


After clicking apply, the crop zones will appear in the right-hand pane for review. The above steps can be completed for other crops, and once all crop zones are finalized, select **Complete**.

NOTE: If you would like to see a Summary of the changes you have made before you complete this step, click the **Summary** button below the map.

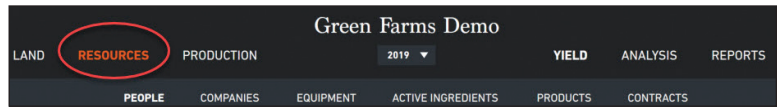


Once the crop is assigned, the Farm Field Tree will look like this:



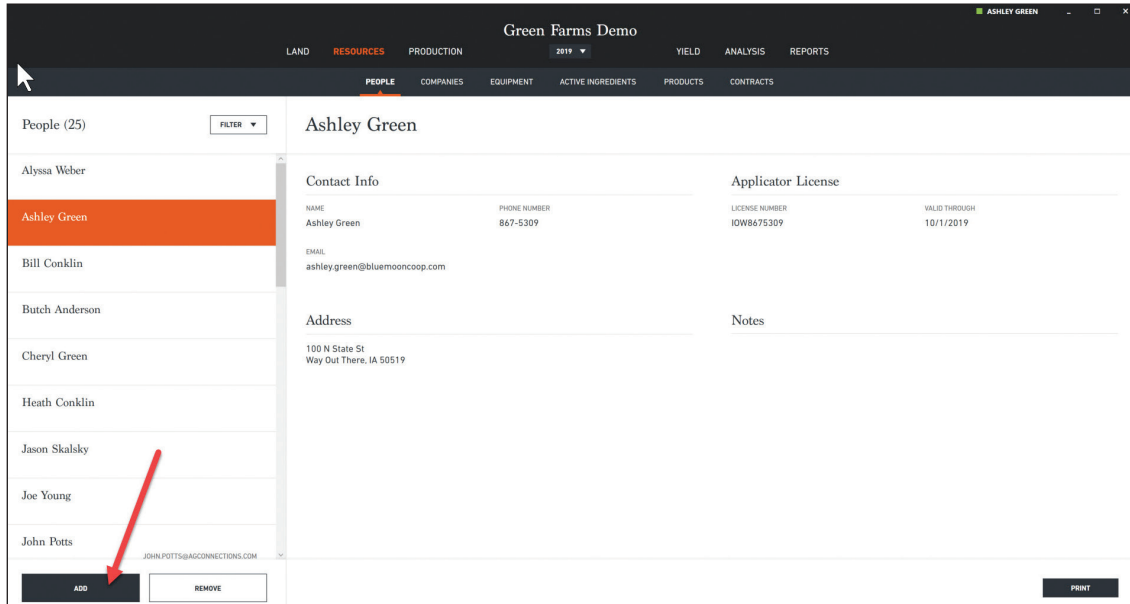
4. Building Resources Lists

Within the Resources Page, lists can be entered for People, Companies, and Equipment.



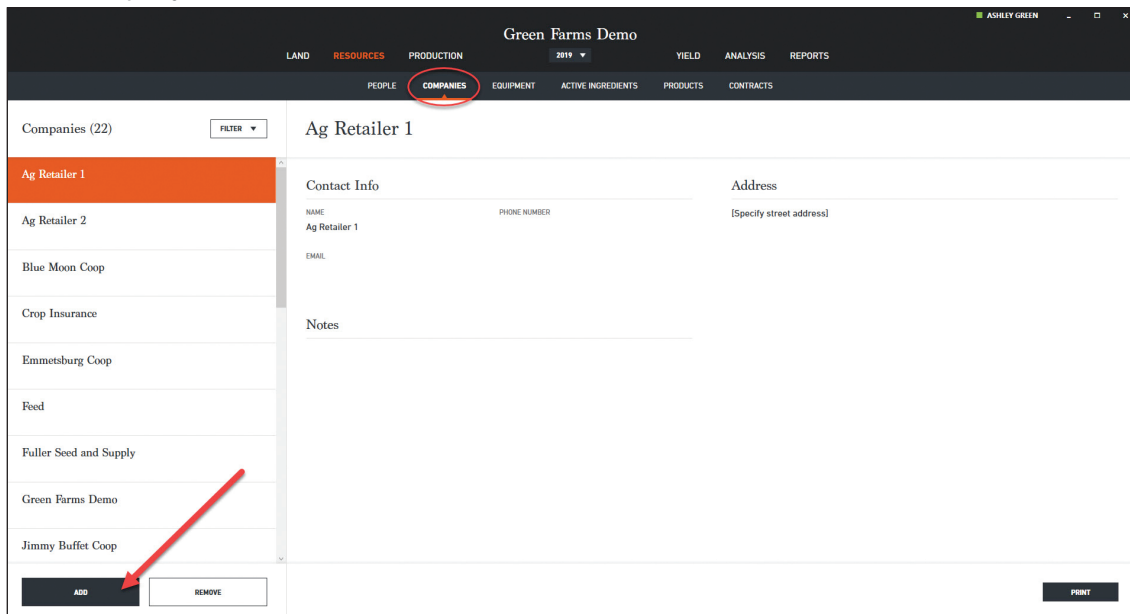
People

This list of people should consist of every individual that works on or with the operation. For example: Applicators, Farm Hands, Landlords, etc. Click the **Add** button at the bottom left corner and enter the Name (and contact info, if desired), then click **Create**.



Companies

This list of companies should consist of every company that works with the business throughout the season. This could include Custom Application Services, Vendors, Retailers, Seed Advisor Businesses, Elevators, etc. Click **Add** to add a new company.



Equipment

List equipment that will be associated to other records. For example, grain trucks can be named for use with yield tickets. When **Add** is selected, a multi-page wizard will open where the user may fill out the appropriate information on each page of the template. To advance to the next page, navigate to the top of the window and select **History** or **Cost**. Click **Complete** when finished.

The screenshot shows the 'Green Farms Demo' interface with the 'EQUIPMENT' tab selected. On the left, a list of machines is shown with columns for name, year, make, and status. The '2012 White Planter' is highlighted. On the right, a detailed view for this planter is shown, including fields for year, make, model, name, type, owned status, unit ID, serial number, license number, purchase price, purchase date, current value, and current value date. A red arrow points to the 'ADD' button at the bottom left of the machine list.

Machines (4)	2012 White Planter
2012 White Planter 2012 WHITE	PLANTER OWNED
Kenworth	TRUCK OWNED
Mack	TRUCK OWNED
White	PLANTER OWNED

Details			Services
YEAR	MAKE	MODEL	Planting
2012	White		
NAME	TYPE	OWNED	
2012 White Planter	Planter		
UNIT ID	SERIAL NUMBER	LICENSE NUMBER	Status History
[Add Unit ID]	[Add Serial Number]	[Add License Number]	Owned

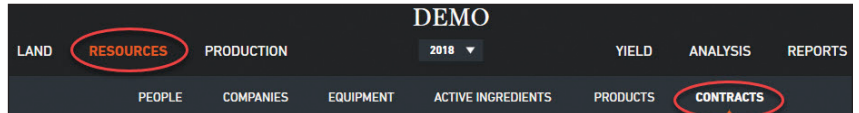
History		Notes
PURCHASE PRICE	PURCHASE DATE	
\$34,000.00	7/13/2017	
CURRENT VALUE	CURRENT VALUE DATE	
\$30,000.00	[Add Current Value Date]	

Rent Contracts

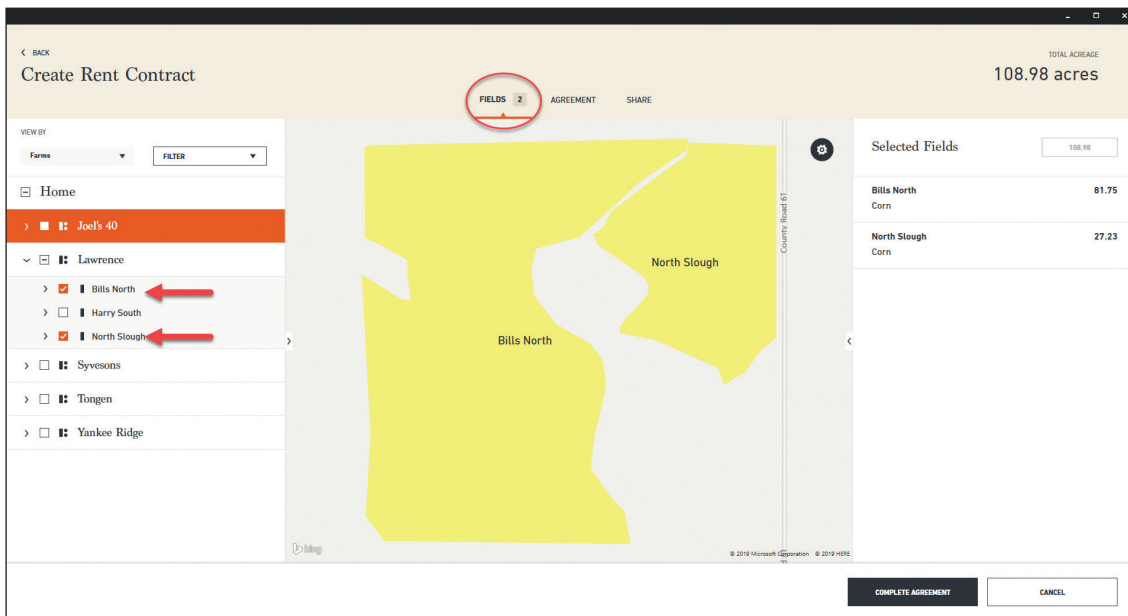
There are three types of rent contracts you can attach to a field: Cash Rent, Flex Lease and Crop Share.

Cash Rent applies a per acre cost to the field. Flex Leases allow a per acre cost to be applied yet still allows the user to enter in flexes and bonuses that calculate off the actual yield on the field. Crop Share agreements allow the user to split the yield on the field as well as costs on the field. Crop Share agreements also allow a user to track splits on a field if multiple parties are farming it.

After you have added the landlord names to the People tab, navigate to the Contracts tab under the Resources Page.



Click the **Add** button in the lower left and choose the **Rent Contract** option when prompted. The three page Rent Contract template with the first page being the field selection page. You may select more than one field at a time but the fields must be the same crop.



Next, move to the Agreement page of the template. Fill out the appropriate information under the Agreement Info column.

Cash Rent: To enter a Cash Rent agreement, enter in the per acre cost for cash rent under the Agreement column and click **Complete Agreement**.

Field	Value
LAND OWNER	Trent Murdock [AgCDeveloper]
STARTED	3/18/2019
RENT DUE	3/18/2019
CASH RENT	\$250.00

Flex Lease: The user will enter the information under the middle column of the page titled, Flex Lease.

Crop Share Agreement: Crop Share agreements occur when two parties split the Revenue (Yield) and in some instances, the cost (Applications) on a field. In the below example, two parties split the costs and profits on a field 50% - 50%. When a user enters the split on the Agreement page of the template, it only splits the revenue coming off of the field.

Crop Share		Notes
GROWER	LAND OWNER	SHORT DESCRIPTION
50.00%	50.00%	Trent Murdock [AgCDeveloper] Corn Rent

Flex Lease

ACTUAL YIELD	FLAT CROP PRICE
174.00	\$3.50
FLEX PERCENTAGE	IN CONTEXT
30.00%	Of Production Revenue ▼

If the user needs to document the splitting of costs on the field, the user must also advance to the third page of the Rent Contract template called **Shares**. On the shares page, the user may customize which costs are split between the two parties. In the below example, the grower and landlord split cost on seed, fertilizer, chemical but the grower assumes 100% of the services costs such as equipment, crop scouting, etc.

If the user is fronting the costs initially and charging the landlord later, the user may markup the input costs to charge the landlord.

If the user is billed for their 50% of the costs and the landlord is billed for their 50% of the costs, the user may change the far-right dropdown option to **Direct Billed to Share Owner**. This tells the software not to account for the bills that are directly sent to the landlord or second party.

Click the black **Complete** button when finished.

BACK Create Rent Contract TOTAL ACREAGE 108.98 acres

FIELDS 2 AGREEMENT **SHARE**

Input Share

	GROWER	OWNER	MARKUP	
Crop Protection	50.00%	50.00%	0.00%	Direct Billed to Share Owner ▼
Fertilizer	50.00%	50.00%	0.00%	Direct Billed to Share Owner ▼
Seed	50.00%	50.00%	0.00%	Direct Billed to Share Owner ▼
Service	100.00%	0.00%	0.00%	From Grower Inventory ▼

5. Farm Field Tree Info (Optional)

From within the **Land** page, select the **Info** tab. (All Information entered on this page will follow the fields from year to year. It is a one-time process to enter the info.)

Select a field within your Farm Field tree. Click anywhere within the **FSA Information** or **Legal Information** sections will allow you to capture the respective information. Click **Update** when finished.

The screenshot displays the 'Green Farms Demo' web application interface. The top navigation bar includes 'LAND', 'RESOURCES', 'PRODUCTION', '2018', 'YIELD', 'ANALYSIS', and 'REPORTS'. Below this, the 'FARMS' and 'CROP MAPS' tabs are visible. The main content area is titled 'Land.db' and features a sidebar on the left with a tree view showing 'Anderson Farm', 'Brown's', 'B 01 Field' (selected), 'B 02 Field', 'B 03 Pivot', and 'Green Farms'. The central map shows 'B 01 Field' with a yellow overlay and a '230.00 acres' label. On the right, the 'FSA Information' and 'Legal Information' sections are highlighted with red boxes. The 'FSA Information' section includes an 'EDIT' button and a table with the following data:

FSA Information		EDIT
FARM NUMBER	FSA AREA	
1234	235.00	
TRACT NUMBER	RENT TYPE	
3468		
FIELD NUMBER	LAND OWNER %	
1	0	
CLU ID	TENANT %	
	0	

The 'Legal Information' section includes a table with the following data:

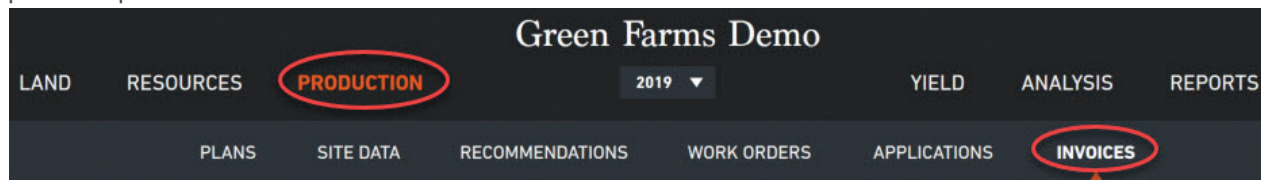
TOWNSHIP	RANGE	SECTION
91 N	38 W	23
MERIDIAN	TAX ID	PARCEL NUMBER
SHORT DESCRIPTION		
LEGAL DESCRIPTION		

WORKING IN THE SOFTWARE

Production: Capturing Cost

Entering Invoices

Entering invoices decreases the user's work load because the software will assign an average weighted cost to products and services captured within work orders and application records. It also allows the user to manage inventory of products. Invoices populate and credit product quantities while Applications decrease and debit product quantities.



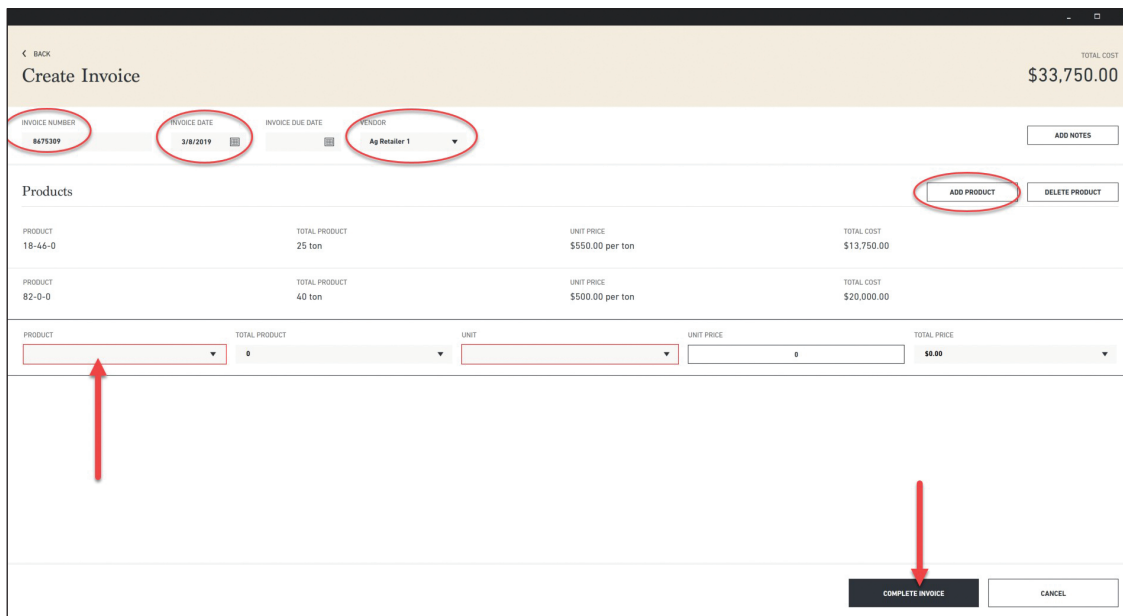
Click on the Production page and choose the Invoices tab.

Click the **Add** button at the bottom left corner. The invoice template will open. Type the invoice number/name and choose the date the invoice was received by clicking the calendar icon. Choosing a vendor, which pulls from the **Companies** list, is required when entering an invoice.

Click inside the **Product** box and type the name of the desired product or service. Select the product from within the list. NOTE: If you don't find the product you are looking for in the list, you may create your own or request the product be added by clicking the link at the bottom of the list.

Choose the **Total Product** box and enter in the total quantity of that product purchased. Click the dropdown in the Unit box to change units if necessary. Click in the **Total Price** box and enter the total paid for that quantity of product. This will back-calculate price per unit.

To add more products on that invoice, click **Add Product**. Click the **Complete Invoice** in the right corner of the screen when finished.

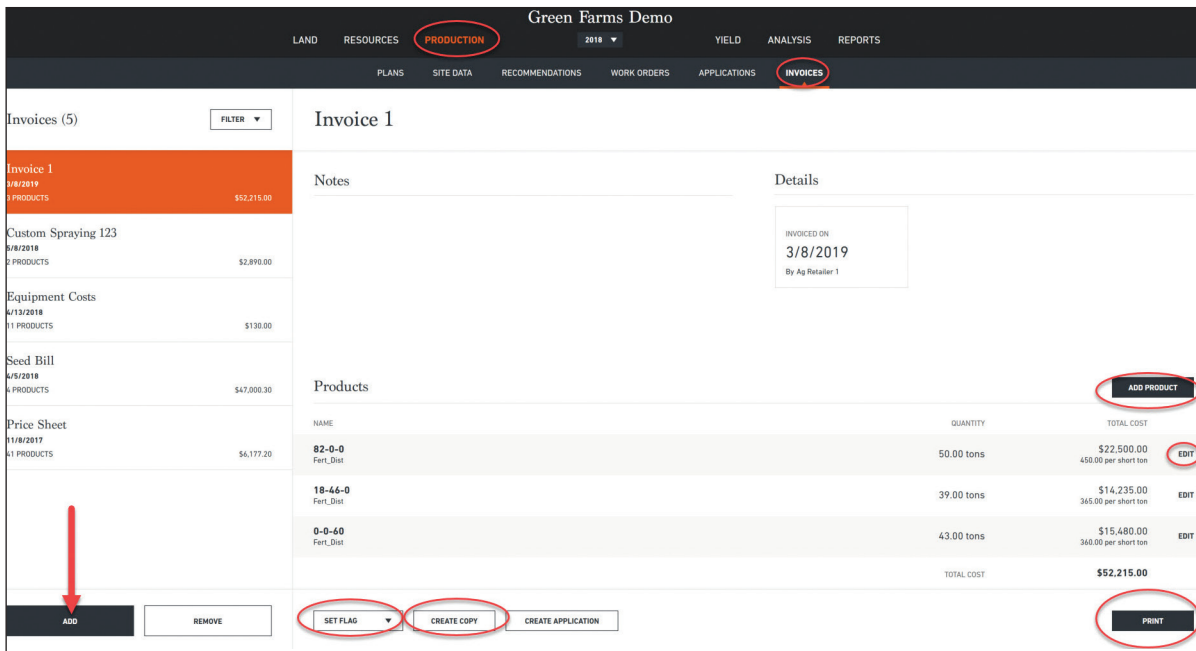


To Edit: Once the invoice is completed, the user can edit any information on existing invoices by clicking on one in the list on the left and clicking on the editable areas to the right. Products can be added or removed or the details of an existing product on the invoice are adjustable.

Create Copy: The user may create an exact copy of that Invoice by clicking **Create Copy** at the bottom of the screen. Although the products, quantities and prices are copied to a new invoice template, the user will have to enter a new Invoice Number.

Set Flag: For organizational purposes, the user may assign a visual indicator to certain invoices in the list by clicking **Set Flag**.

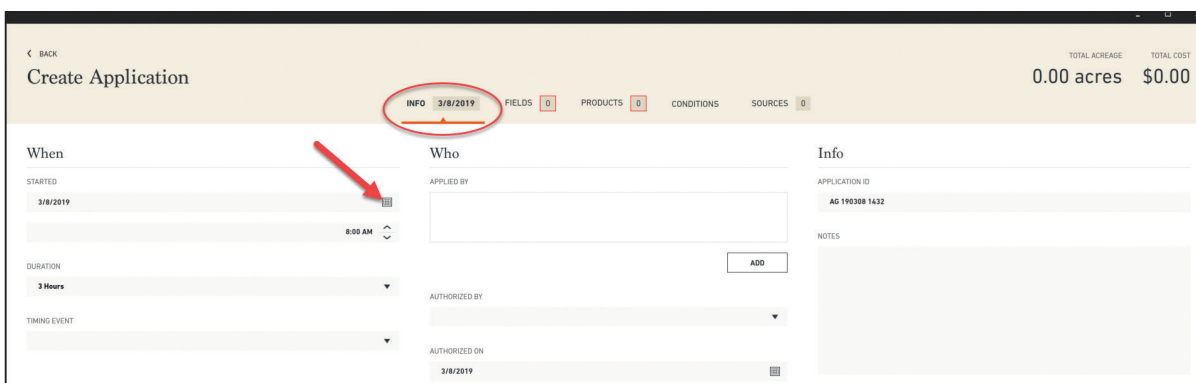
Printing: To print an individual invoice, choose the invoice in the list and click the **Print** button.



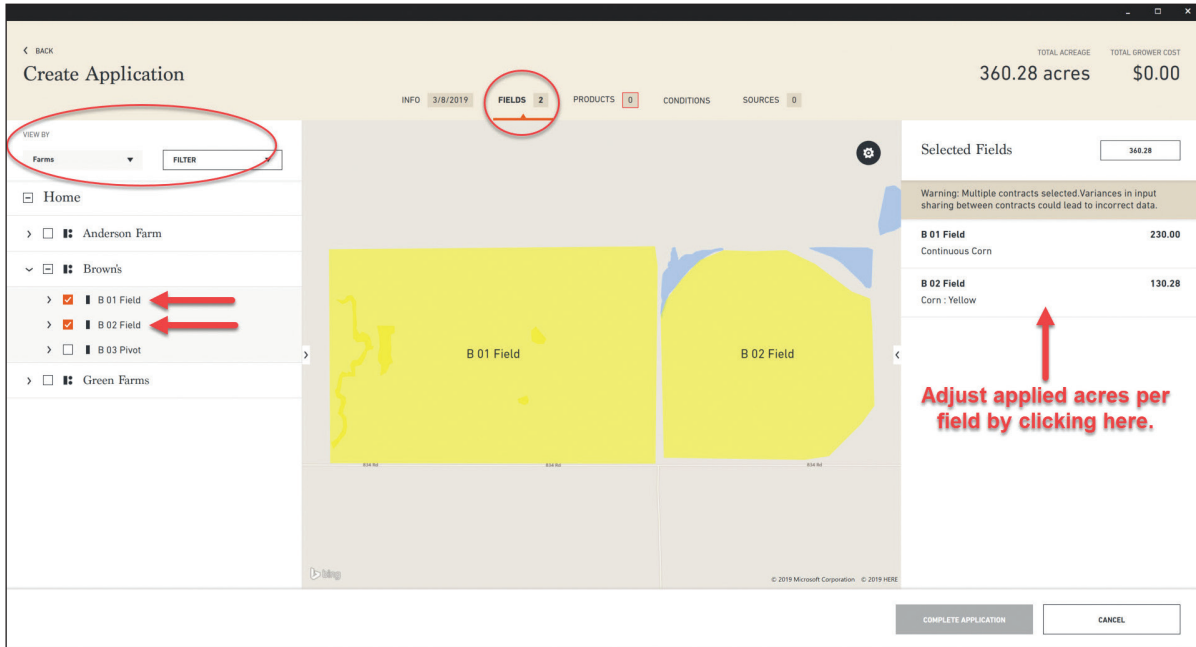
Creating Applications: Applying Production Costs to a Field

Applications are made under the Production page and the Applications tab. To create a new Field Application, click the **Add** button in the bottom left corner. The Applications template will open, consisting of the following five pages in which the user can enter information:

Info Tab: From here enter the date, start time, and applicator. After filling out the information in the Info tab, proceed onto the Fields tab.

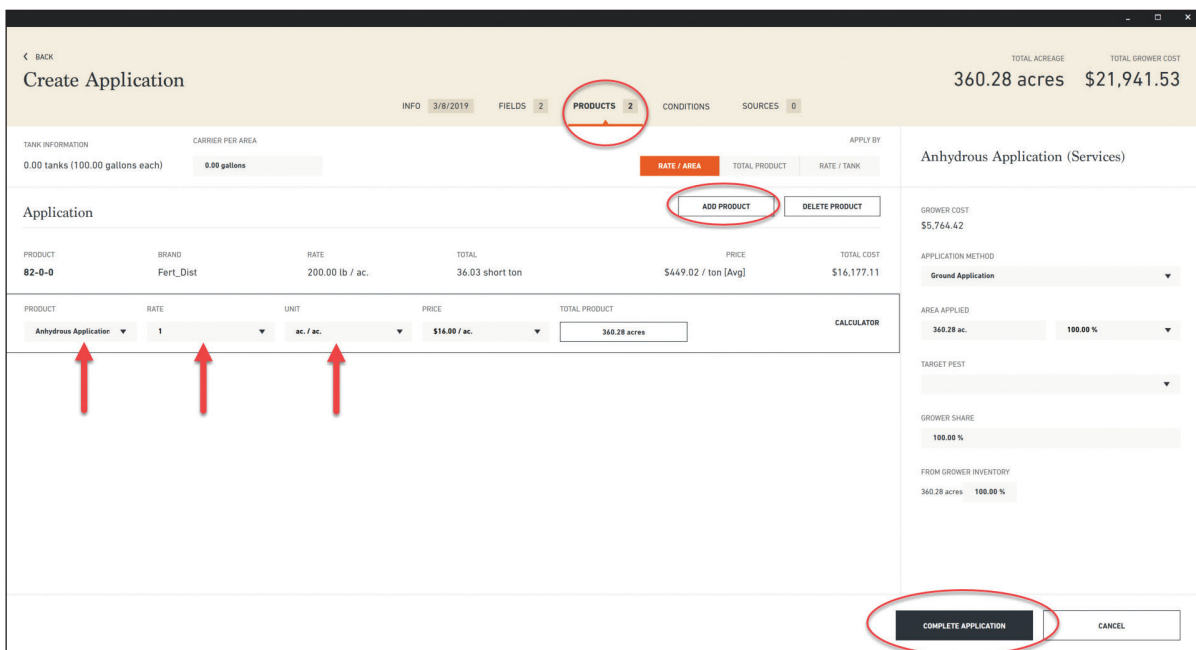


Fields Tab: Select the Farms/Fields that the products were applied on. The Farm Field Tree can be sorted by crop or filtered by tag as needed.



Products Tab: Choose products that were applied and the rate at which they were applied. If the price box displays \$0.00, that means there has not been an invoice entered for that product. If it shows a value, there is an invoice with that product and price is assigned automatically. This can still be completed with \$0.00, and an invoice can be entered later because the software will back-calculate pricing on applications after entering invoices.

After all the products and services are entered, either move forward to the Conditions page (to view or edit environmental conditions of the application) and/or Sources page (to view the associated source record, if applicable). or click the **Complete Application** button at the bottom of the screen.



Once an Application is completed, it will appear on the left-hand side of the screen in the list of Applications. Existing Applications can be edited by clicking on one in the list on the left and clicking on the editable boxes on the right.

Invoice Applications: Attaching Invoices to Specific Fields

An Invoice Application copies the information from the invoice into the application template so the user does not have to re-enter all of the same info they just entered on an invoice. Invoice Applications are used primarily when the grower has an invoice that is separated to each individual field, commonly due to custom application services the grower purchased.

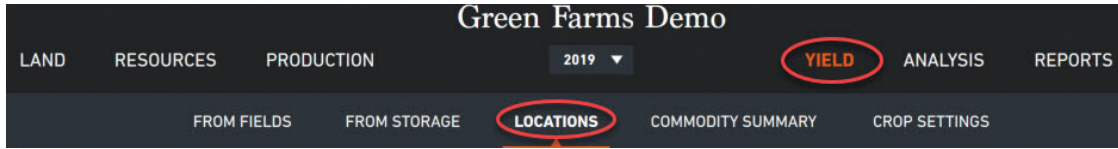
Avoid using this option for bulk purchase invoices (i.e. seed, bulk chemical, etc.) because those invoices have many products that may have gone on many different fields on different dates, therefore the user will want to create multiple applications from the beginning. See below screenshot for an example of an appropriate invoice to tie to an application record. **NOTE:** there is usually product and a service charge like spreading or spraying, etc.

The user will enter one invoice (per field) and opt to Create Application from Invoice. The application template will open and the user should double check the date on the Info page and the Products page, but should not need to adjust anything because the info is copied from the Invoice. The user simply needs to select the Field to attach this invoice to on the Fields tab of the template and select **Complete Application** at the bottom.

Yield: Recording Yield & Revenue to a Field

Creating Yield Locations

Next, go to the Yield Page and click on the Locations tab. See below.



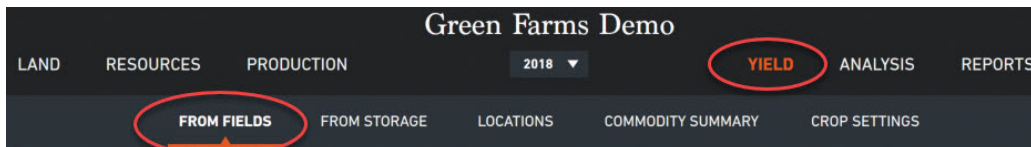
Storage Locations: Click **Add** and type in the name of storage location and then click in **Type** and choose **Storage**. Create locations for all crop storage facilities. Examples: Bin 1, West Bin, Big Bin, etc. NOTE: If you do not want to list out individual bins, make one storage location called “On Farm Storage” that will represent all of your storage facilities.

Sale Locations: Click **Add** and type in the name of a sale location then click **Type** and choose **Sale**. Select **Create** to complete that location addition.

NOTE: If your crop is being stored at the point of sale location prior to selling the crop, create an extra location named “(sale location) -Storage”. For example, the user could make a storage location listed as “Elevator-Storage” and make a sale location called “Elevator – Sale”.

Two types of yield tickets can be entered: **From Field** and **From Storage**. The From Field records can be “delivered” to storage locations or can be “sold”, by selecting a destination for the harvested crop. Storage records can be created when the grower transfers the harvested crop from a storage location to another storage location or to a sale location.

From Field Loads



Select the **Yield** page and click the **From Fields** tab. Click the **Add** button. The **Yield** template will open to the **Fields** selection page first. NOTE: By default, the Farm Field Tree is sorted by Crop, not by Farm. Ensure that the individual field(s) are selected by selecting the drop down next to the crop and farms. Select the specific field(s) this record is for by putting a check in the box next to the field name.



Navigate to the **Loads** page and enter the appropriate information. The user can record all of the individual loads for this field by clicking **Add Load**. For example, title the **From Field** ticket as ‘Home Field Load #’ and click **Add Load** for every load hauled from the Home Field. Figure 1 below, shows that this ticket has 7 loads recorded. Some loads went to different storage destinations on the same date. Figure 2 shows that 7 new items appeared in the list, one per load.

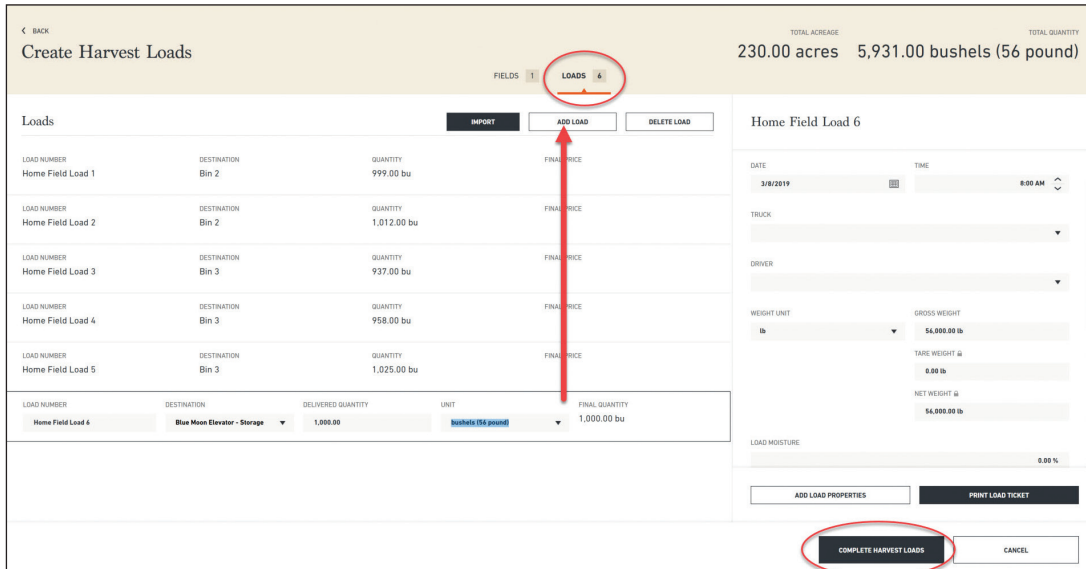


Figure 1

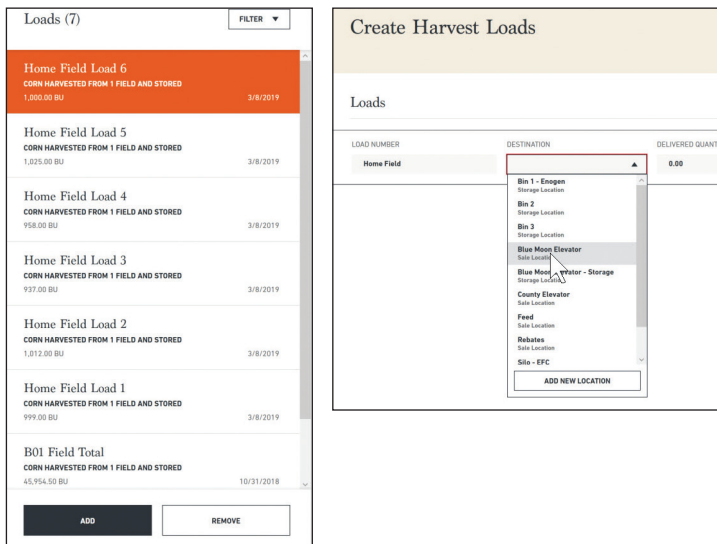


Figure 2

The above example shows Field to Storage tickets. Field to Sale tickets can also be made if yields are sold immediately, by choosing a Sale Location instead of a Storage Location, in the **Destination** box of the template.

When creating loads that are destined for a Sale Location, the available data entry options will change automatically. Selections for the **Production Contract** and pricing will be shown only after selecting a Sale Location. After entering the **Unit Price**, the **Gross Price** and the **Final Price** will automatically populate. Enter any adjustment pricing, if applicable. Additional load details can be captured in the box on the right side of the window. Scroll down in the box to enter additional details. Click the **Complete Harvest Loads** button when finished.

From Storage Loads

Loads being sourced from a Storage Location can be moved to either another Storage Location or to a Sale Location. Select the **Yield** page and the **From Storage** tab. Click the **Add** button and the template will open which prompts the user to choose the **Source Location** (storage location that the commodity is coming out of) and choose the crop.

Move to the **Loads** tab next. Enter a name or number for the load and choose the type of location from the **Destination** list. (The **Tab** key on the keyboard can be used to easily move from cell to cell.) When creating loads that are destined for a Sale Location, the available data entry options will change automatically. Cells for the **Production Contract** and pricing will be shown only after selecting a Sale Location. After entering the Unit Price and the **Gross Price**, the **Final Price** will automatically populate. Enter any adjustment pricing if applicable. Additional load details can be captured in the box on the right side of the window. Click the **Complete Storage Loads** button when finished.

Commodity Summary

The Commodity Summary tab, under the Yield page, displays a summary of the total yield per commodity. The user can see a Summary of how much of each commodity has been harvested, contracted, sold and stored.

Land.db allows the user to enter an expected sale price for the commodity that has not been sold yet. If the user enters an expected sale price for the commodity in storage, this will allow the user to run profitability reports before the entire crop is “sold”. The stored commodity’s price will average with the “sold” commodity’s price.

Green Farms Demo | 2018 | YIELD | ANALYSIS | REPORTS

LAND | RESOURCES | PRODUCTION | FROM FIELDS | FROM STORAGE | LOCATIONS | **COMMODITY SUMMARY** | CROP SETTINGS

Crops (2) | **Corn** | SUMMARY | HARVESTED | STORED | SOLD | CONTRACTED

Corn
 51,885.50 BU | 39,688.50 BU STORED
 9 LOADS | 12,197.00 BU SOLD

Soybeans
 12,166.00 BU | 7,166.00 BU STORED
 7 LOADS | 5,000.00 BU SOLD

CONSIDERATIONS AND CONVERT UNITS INTO
 -do not consolidate-

SHARE	QUANTITY	PRICE/BU	TOTAL PRICE
Grower Wet Delivered	52,716.00 bu		
Grower Shrink	830.50 bu		
Grower Dry Delivered	51,885.50 bu		
Grower Sold	12,197.00 bu	\$3.55/bu	\$43,299.35
Grower Stored	39,688.50 bu	\$3.30/bu	\$130,972.04
Crop Average Revenue	51,885.50 bu	\$3.36/bu	\$174,271.39

Landowner Share
 No data available

Total

Total Wet Delivered	52,716.00 bu
Total Shrink	830.50 bu
Total Dry Delivered	51,885.50 bu
Total Sold	12,197.00 bu
Total Stored	39,688.50 bu
Total Amount	51,885.50 bushels (56,000 lb)

PRINT

ANALYZING DATA IN LAND.DB

Summary by Field

Reports are not the only way to view and analyze the database. Below are some quick ways to review your information.

Field Summary

Invoices, Applications and Yield records populate this **Summary** tab. This is a sound starting point to begin reviewing your work and investigating data entry issues. If you notice a discrepancy on the **Summary** page, that should indicate further investigation into the Applications tab (see Step 2.) or the Yield tab (see Step 3.) for that field.

From within the **Land** page, choose the **Summary** tab. This screen displays a summary of the field and crop zone. The user must be clicked on the crop zone level under the field to access this. With this view, there is a summary of yield data, input costs, production revenue, seed variety planted and nutrient values. Active ingredients and usage per season are displayed with progress bars when a maximum active ingredient threshold is established. To generate a report of this page, click the **Print** button in the lower right of the screen. NOTE: You may also access this report under the Reports Page.

The screenshot shows the 'Green Farms Demo' interface. At the top, the 'LAND' menu item is circled in red. The sidebar on the left shows a tree view with 'Anderson Farm', 'Brown's', 'B 01 Field', 'B 02 Field', 'B 03 Pivot', and 'Green Farms'. Under 'B 01 Field', 'Continuous Corn' is highlighted in orange. The main content area is divided into several sections:

- Variety:** Cover Crop Rye (Public) planted on 8/31/2018; N45P-3011A (NK) planted on 4/29/2018.
- Fertilizer:** 283.03N 141.6P 76.78K 18.95S
- Active Ingredients:** Alkyl Polyglycoside (0 lb per acre); Corn syrup (0 lb per acre).
- Yield:** Corn (51,885.50 bu, 225.59/acre); Average Sale (\$3.36); Grower Shares (51,885.50 bu, 225.59/acre); Grower Revenue (\$174,271.39, \$757.70/acre).
- Input Cost:** Seed (\$25,857.91, \$112.43); Fertilizer (\$22,069.26, \$95.95); Crop Protection (\$15,558.68, \$67.65); Services (\$23,612.88, \$102.66); Total (\$87,098.73, \$378.69); Cash Rent (\$57,500.00, \$250.00); Contribution Margin (\$29,672.66, \$129.01); Break even yield at \$3.36 / bu (187.18); Break even cost at 225.59 bu / ac. (\$2.79).

At the bottom right, a 'PRINT' button is circled in red.

Quick View of Applications by Field

From within the **Land** page, select the **Applications** tab and select a field from the Farm Field Tree. This page displays all the applications made to the selected field or crop zone.

If you need to edit an existing Application, click **Go To Application** on the far right of the product line and Land.db will navigate to the exact Application record you wish to edit, under the **Production** Page and **Applications** tab. This will eliminate scrolling through the list of applications to find the one in which you need to edit. After editing the **Application**, refresh Land.db by re-selecting the database name and crop year in which you are working within.

Home	7/31/2018	Trivapro (Syngenta)	24.55 / 0.00	24.55 gallons 13.70 fluid ounces / ac. (229.34 ac.)	\$4,271.07 \$18.62 per ac.	GO TO APPLICATION
> Anderson Farm	7/5/2018	Fert-Sidedress - Liq (Services)	229.34 / 0.00	229.34 acres 1.00 acres / ac. (229.34 ac.)	\$1,605.37 \$7.00 per ac.	GO TO APPLICATION
> Browns	7/5/2018	32-0-0 (Fert_Dist)	19.09 / 0.00	38,182.74 pounds 15.00 gallons / ac. (229.34 ac.)	\$5,727.41 \$24.97 per ac.	GO TO APPLICATION
> B 01 Field	6/30/2018	Spraying (Services)	458.68 / 0.00	458.68 acres 2.00 acres / ac. (229.34 ac.)	\$4,580.79 \$19.97 per ac.	GO TO APPLICATION
> B 02 Field	6/30/2018	Halex GT (Syngenta)	103.20 / 0.00	103.20 gallons 3.60 pints / ac. (229.34 ac.)	\$4,644.10 \$20.25 per ac.	GO TO APPLICATION
> B 03 Pivot	6/30/2018	Atrazine 90 DF (Agri Star) (Albaug...)	57.33 / 0.00	57.33 pounds 0.25 pounds / ac. (229.34 ac.)	\$286.67 \$1.25 per ac.	GO TO APPLICATION
> Green Farms	6/30/2018	Class Act NG (Winfield Solutions, L...)	43.00 / 0.00	43.00 gallons 24.00 fluid ounces / ac. (229.34 ac.)	\$1,196.72 \$5.22 per ac.	GO TO APPLICATION
	4/30/2018	Spraying (Services)	229.34 / 0.00	229.34 acres 1.00 acres / ac. (229.34 ac.)	\$2,290.39 \$9.99 per ac.	GO TO APPLICATION
	4/30/2018	Acuron (Syngenta)	86.00 / 0.00	86.00 gallons 1.50 quarts / ac. (229.34 ac.)	\$5,160.11 \$22.50 per ac.	GO TO APPLICATION
	4/29/2018	N45P-3011A (NK)	97.47 / 0.00	97.47 bag (80000 kernel) 34,000.00 kernel / ac. (229.34 ac.)	\$22,417.83 \$97.75 per ac.	GO TO APPLICATION
	4/29/2018	10-34-0 (Fert_Dist)	13.49 / 0.00	13.49 tons 10.00 gallons / ac. (229.34 ac.)	\$6,071.92 \$24.48 per ac.	GO TO APPLICATION
	4/5/2018	VRT Spreading (Services)	229.34 / 0.00	229.34 acres 1.00 acres / ac. (229.34 ac.)	\$1,834.71 \$8.00 per ac.	GO TO APPLICATION

Quick Look at Yield Loads by Field

From within the **Land** page, select the **Yield** tab. This view displays yield loads linked to the specific fields.

Home	7/31/2018	Trivapro (Syngenta)	24.55 / 0.00	24.55 gallons 13.70 fluid ounces / ac. (229.34 ac.)	\$4,271.07 \$18.62 per ac.	GO TO APPLICATION
> Anderson Farm	7/5/2018	Fert-Sidedress - Liq (Services)	229.34 / 0.00	229.34 acres 1.00 acres / ac. (229.34 ac.)	\$1,605.37 \$7.00 per ac.	GO TO APPLICATION
> Browns	7/5/2018	32-0-0 (Fert_Dist)	19.09 / 0.00	38,182.74 pounds 15.00 gallons / ac. (229.34 ac.)	\$5,727.41 \$24.97 per ac.	GO TO APPLICATION
> B 01 Field	6/30/2018	Spraying (Services)	458.68 / 0.00	458.68 acres 2.00 acres / ac. (229.34 ac.)	\$4,580.79 \$19.97 per ac.	GO TO APPLICATION
> B 02 Field	6/30/2018	Halex GT (Syngenta)	103.20 / 0.00	103.20 gallons 3.60 pints / ac. (229.34 ac.)	\$4,644.10 \$20.25 per ac.	GO TO APPLICATION
> B 03 Pivot	6/30/2018	Atrazine 90 DF (Agri Star) (Albaug...)	57.33 / 0.00	57.33 pounds 0.25 pounds / ac. (229.34 ac.)	\$286.67 \$1.25 per ac.	GO TO APPLICATION
> Green Farms	6/30/2018	Class Act NG (Winfield Solutions, L...)	43.00 / 0.00	43.00 gallons 24.00 fluid ounces / ac. (229.34 ac.)	\$1,196.72 \$5.22 per ac.	GO TO APPLICATION
	4/30/2018	Spraying (Services)	229.34 / 0.00	229.34 acres 1.00 acres / ac. (229.34 ac.)	\$2,290.39 \$9.99 per ac.	GO TO APPLICATION
	4/30/2018	Acuron (Syngenta)	86.00 / 0.00	86.00 gallons 1.50 quarts / ac. (229.34 ac.)	\$5,160.11 \$22.50 per ac.	GO TO APPLICATION
	4/29/2018	N45P-3011A (NK)	97.47 / 0.00	97.47 bag (80000 kernel) 34,000.00 kernel / ac. (229.34 ac.)	\$22,417.83 \$97.75 per ac.	GO TO APPLICATION
	4/29/2018	10-34-0 (Fert_Dist)	13.49 / 0.00	13.49 tons 10.00 gallons / ac. (229.34 ac.)	\$6,071.92 \$24.48 per ac.	GO TO APPLICATION
	4/5/2018	VRT Spreading (Services)	229.34 / 0.00	229.34 acres 1.00 acres / ac. (229.34 ac.)	\$1,834.71 \$8.00 per ac.	GO TO APPLICATION

Manage Product Inventory

View and compare the quantity of each product purchased versus quantity applied by navigating to the **Resources** page and the **Products** tab. This list of products populates from products selected on an Invoice or used in an Application. Invoices populate the **Average Price per Unit** as well as the **Total Purchased** amount. Applications populate the **Applied** amount as well as the quantity of product remaining. If an existing Invoice or Application needs adjusted, you may click **Go To Invoice** or **Go To Application** to edit.

Set Units allows the user to select the unit in which they wish to apply the product to the field in Applications. For example, fertilizer is often billed by the ton, but applied by the pound or gallon.

Print the Inventory Report by selecting **Print** in the lower right of the screen. It will aggregate all of the products into one report which can be saved as a PDF document or printed. To return to the main page, click **Back** in the upper left corner.

Migrate Product Inventory allows the user to move remaining product inventory into the next crop year. Within the new crop year, select **Migrate Product Inventory** and a template will open. Select the products to migrate by checking the box next to the appropriate products. The user may choose to adjust the quantity if necessary.

Products

NAME	EPA NUMBER	USED QUANTITY	REMAINING QUANTITY	MIGRATED QUANTITY	AVG. PRICE
<input type="checkbox"/> 21-0-0-24S Fert, Diat		0.68 tons	49.32 tons	49.32	\$290.00 / tons
<input type="checkbox"/> Bicep II Magnum Syngenta		0.00 gallons	150.00 gallons	150	\$142.00 / gallons
<input type="checkbox"/> Cornbelt Crop Oil Concentrate VAN DIEST		42.39 gallons	7.61 gallons	7.61	\$20.00 / gallons
<input type="checkbox"/> CruiserMaxx Vibrance - Soybeans - 140,000 seed bag Syngenta		0.00 bag (140000 seed)	400.00 bag (140000 seed)	400	\$12.00 / bag (140000 seed)
<input checked="" type="checkbox"/> E101P5-3011A Enogen		0.00 bag (80000 kernel)	100.00 bag (80000 kernel)	100	\$230.00 / bag (80000 kernel)
<input type="checkbox"/> Endigo ZC Syngenta		11.59 gallons	88.41 gallons	88.41	\$200.00 / gallons
<input type="checkbox"/> Fusilade DX Syngenta		13.25 gallons	6.75 gallons	6.75	\$33.00 / gallons
<input checked="" type="checkbox"/> G01P52-3011A Golden Harvest		0.00 bag (80000 kernel)	50.00 bag (80000 kernel)	50	\$235.00 / bag (80000 kernel)
<input type="checkbox"/> Lumax EZ Syngenta		142.52 gallons	107.48 gallons	107.48	\$0.22 / gallons
<input type="checkbox"/> Quilt Xcel Syngenta		75.36 gallons	41.37 gallons	41.37	\$229.02 / gallons

COMPLETE MIGRATION CANCEL

Select the **Invoices** page of the template and enter in the required information for the **Current Year Invoice** and **Previous Year Invoice** and click **Complete Migration**. A new invoice with the migrated products will be created in the new crop year.

In the previous crop year, the **Amount Remaining** for the migrated products are now zeroed out and there is an invoice with a negative quantity, accounting for the amount subtracted from that crop year and added into the next crop year.

Products

NAME	TOTAL QUANTITY	PRICE
E101P5-3011A	100 bag (80000 kernel)	\$23,000.00
G01P52-3011A	50 bag (80000 kernel)	\$11,750.00

Current Year Invoice

INVOICE NUMBER: 2018 Carryover Product | INVOICE DATE: 3/13/2019 | INVOICE DUE DATE: | VENDOR: Blue Moon Coop

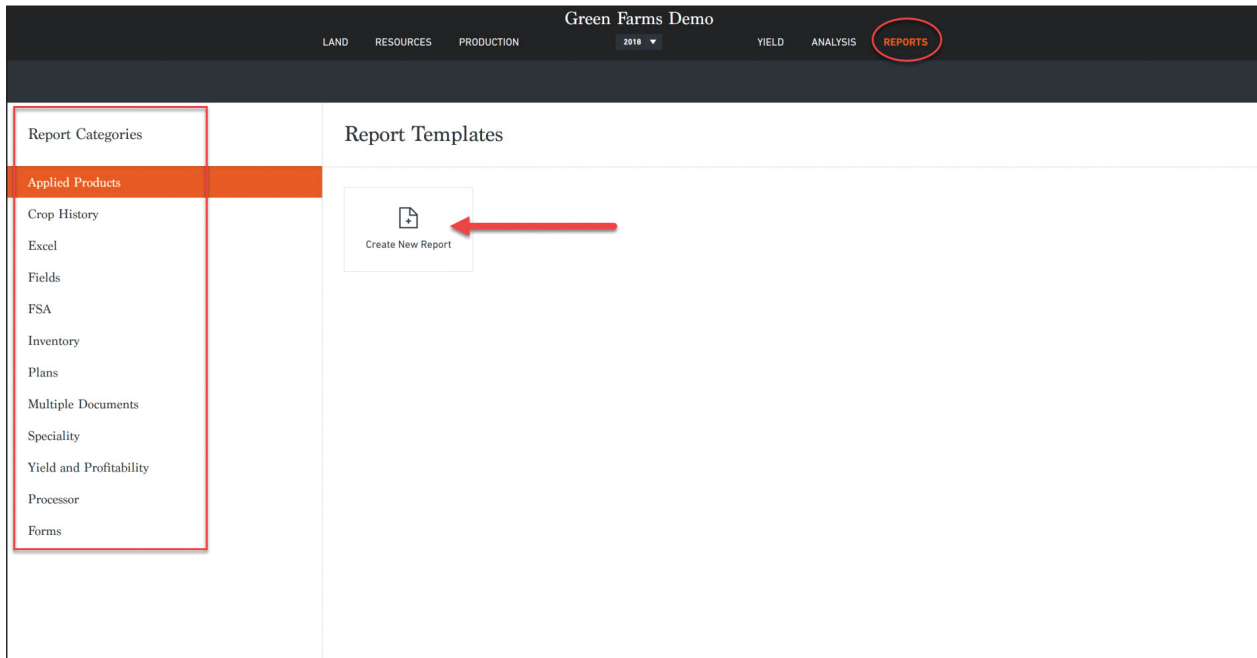
Previous Year Invoice

INVOICE NUMBER: 8475309 | INVOICE DATE: 2/14/2018 | INVOICE DUE DATE: | VENDOR: Blue Moon Coop

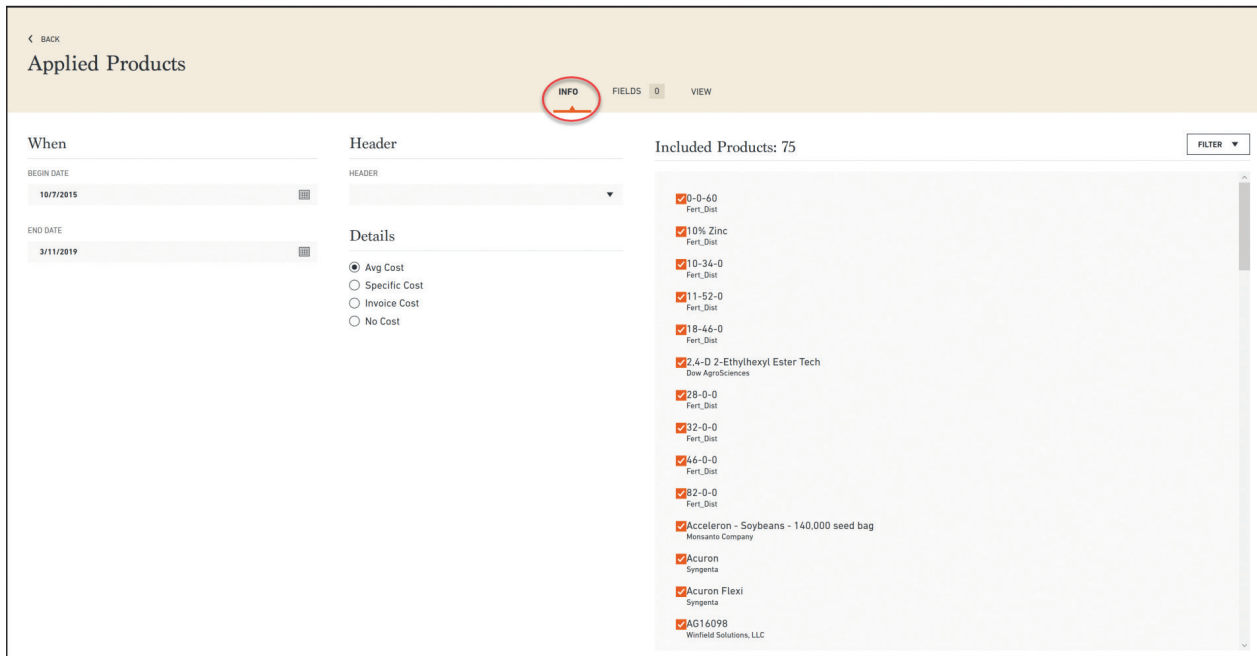
COMPLETE MIGRATION CANCEL

Accessing Reports

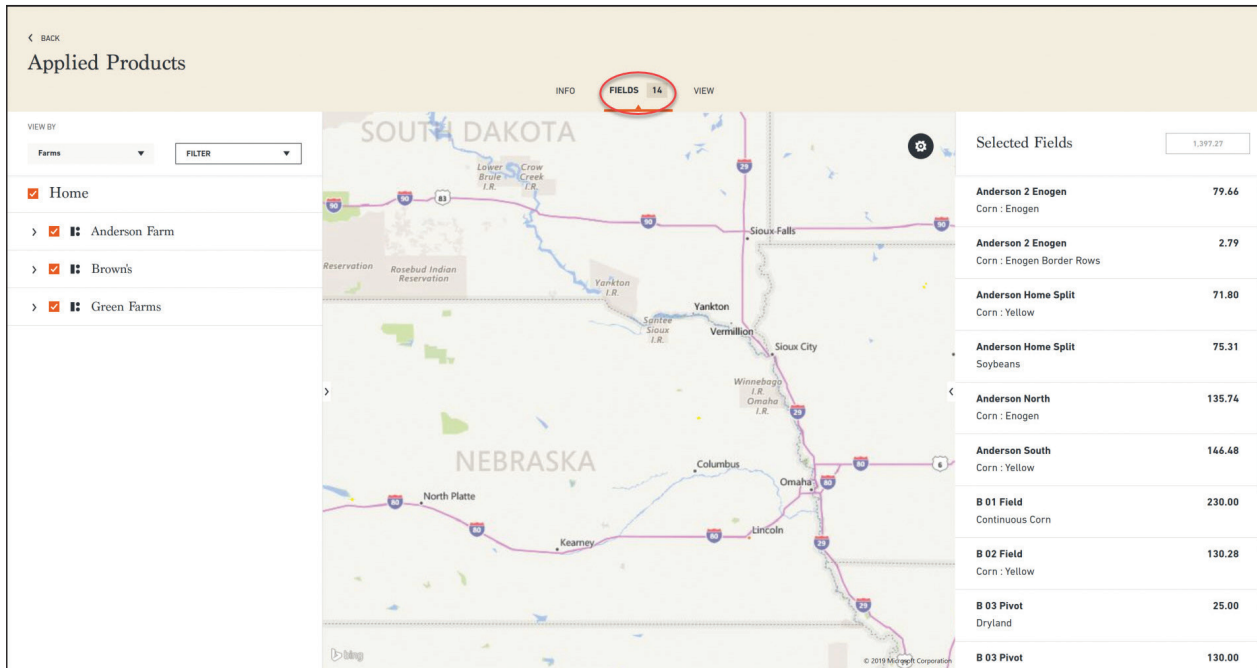
Click on the **Reports** page and then select a report category: Applied Products, Crop History, Excel, Fields, FSA, Inventory, etc. Click **Create Report**. In the below example, **Applied Products** was selected.



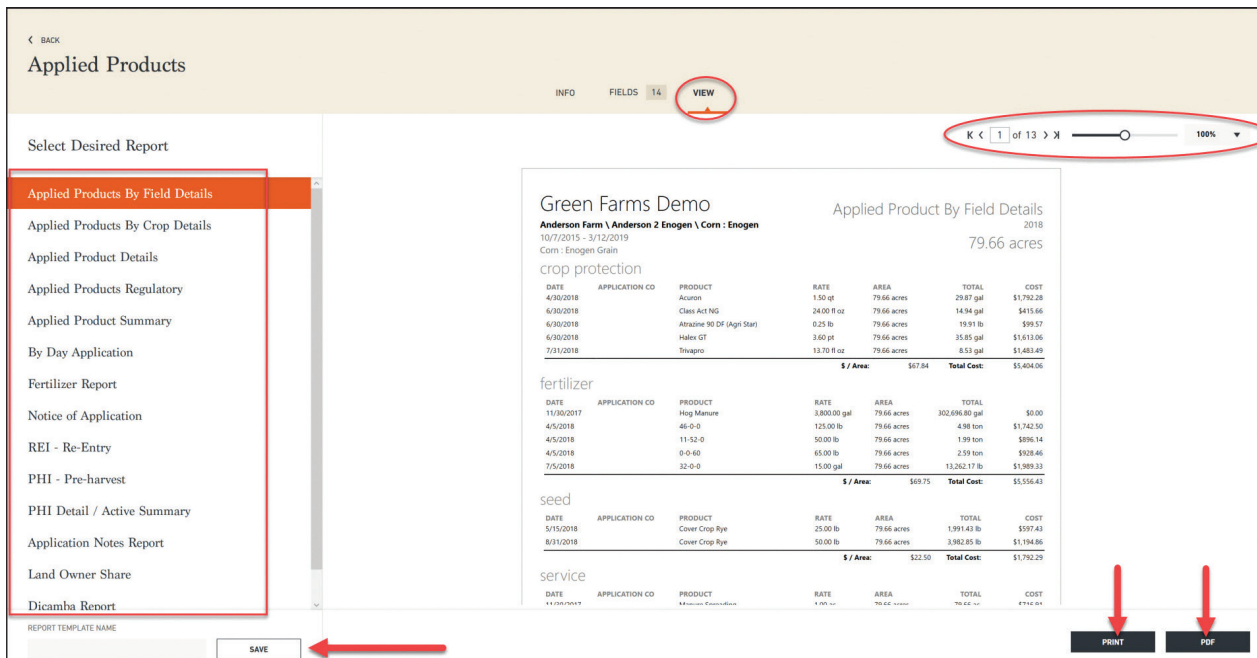
A template will open to the **Info** page. By changing dates, products and pricing, the report can be filtered and customized.



Next, click the **Fields** tab and select the Fields to be included on this report by placing a check in the box next to each field to be included on the report. If all fields should be included, put a check in the **Home** box. NOTE: It is common practice to run reports by crop. Remember, you may sort the Farm Field Tree by crop by selecting the box titled **View By** at the top of the Farm Field Tree.



Next, click the **View** page of the template. Click on any of the Reports in the list. It may take a moment to generate the report if there are many fields selected. The reports can be printed or saved as a PDF by clicking either option at the bottom right of the screen. If this is a commonly desired report, the selections within the Info and Fields pages can be saved for future use by saving it as a **Report Template**. Type in the name the report template in the lower left corner of the screen.



NOTES

