# LANDSCOUT

## SCOUTING & REPORTING

Satshot Landscout Mobile App
user guide for the iPad and
iPhone

5/15/2018

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# WELCOME to the Landscout Mobile App

This tutorial begins by covering the basics of Landscout and will be followed by step-by-step examples at the end of each section for the iPad and iPhone versions.

It details the functions of each main menu option located at the bottom of the program.

The main menu is in a 'start-to-finish' order, meaning the simplest way to get started is to work from left to right beginning with 'MY ACCOUNT'.

# iOS REQUIREMENTS

Before getting too far, be sure you are using the latest version of the iOS system and also utilizing a iPad or iPhone made in the last 3 years. These versions are the latest at the time of this tutorial's update.

Ipad 2 or newer and iphone 5 or newer

# LOGIN AND BEGINNING SCREEN OVERVIEW

There are 6 main button and processes with both the iPad and iPhone apps.
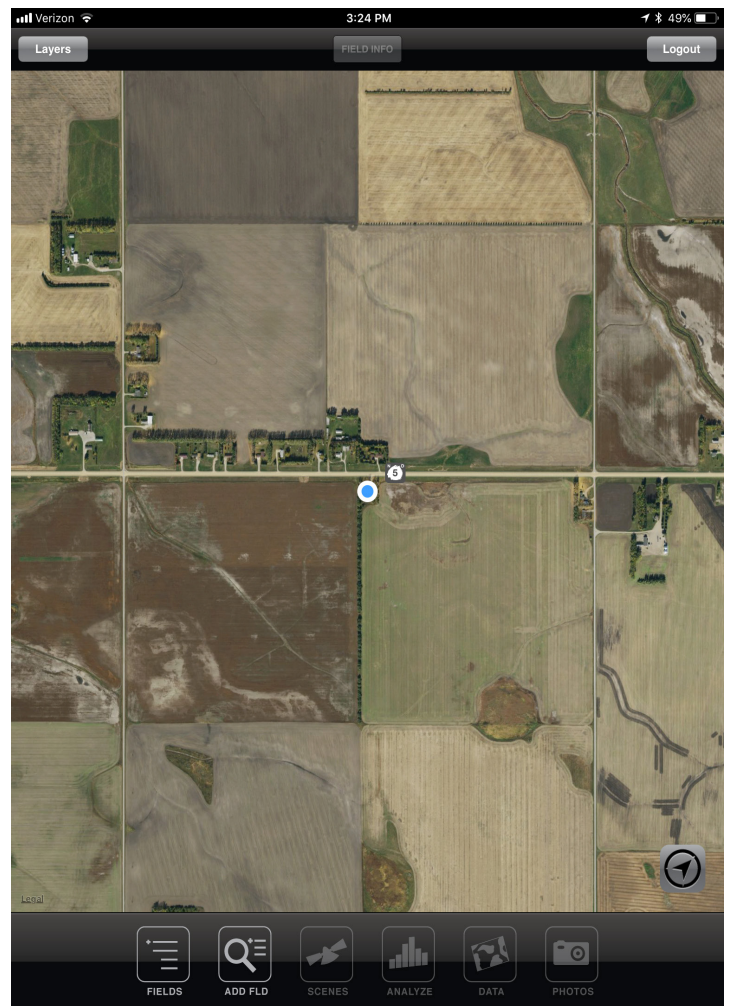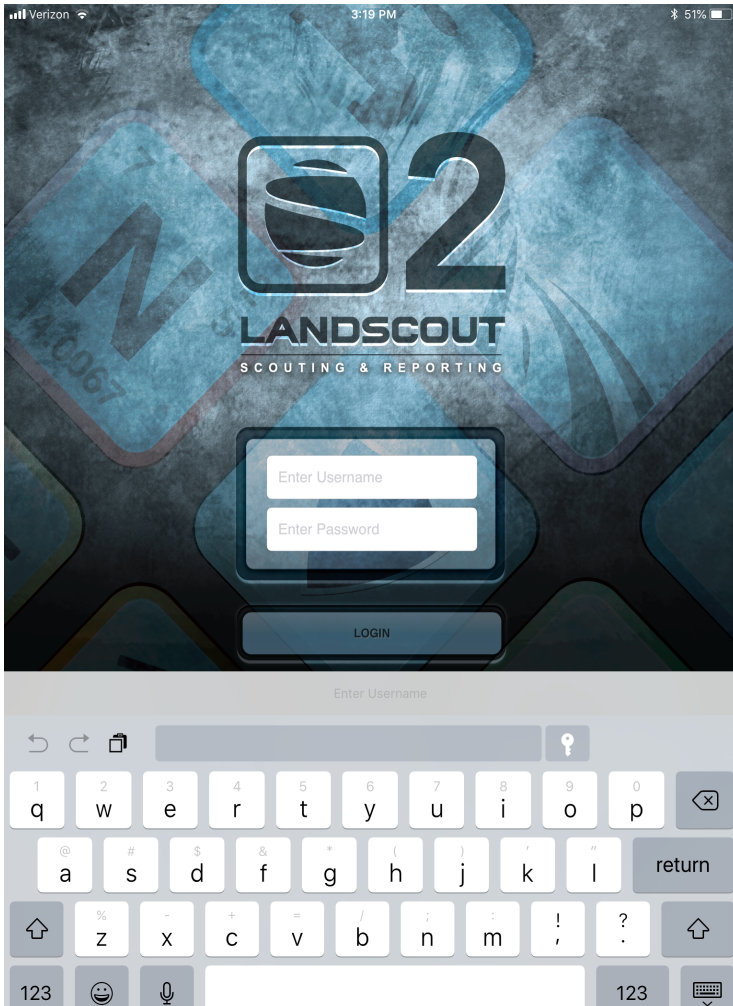




## Fields
View your saved fields

## Add FLD
Add new field via section or CLU

## Scenes
View satellite imagery scenes from the current and past to analyze

## Analyze
Create zones from NDVI and NIR

## Datasets
View saved data and manage what you created

## Photos
Take pictures and save them to certain points or GPS in the field

# Fields Tab

This is where you find and view your saved boundaries that were added on the app itself or from Mapcenter. You need to select a boundary first in order to view Analyze, view or manage Datasets, or take Photos.

Once the Fields tab is selected, a window will pop up (whole screen on iphone) to view your main Groups and Regions associated with your account.

If you just added new boundaries in Mapcenter or another device, you may to to hit the Check for Group or Region updates. This will search for any new Groups, Regions, or Fields that were added to the system.

Once you select a corresponding Group or Region, simply work youself down until you see your individual fields (right picture below). From here you can select on the field you want to view and it will zoom to that area automatically.
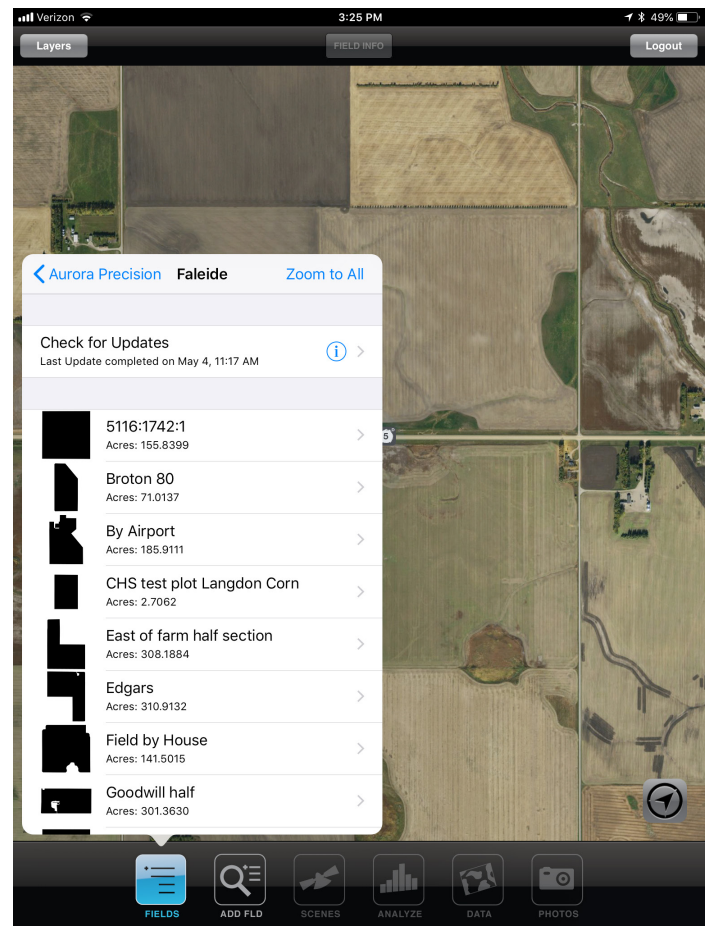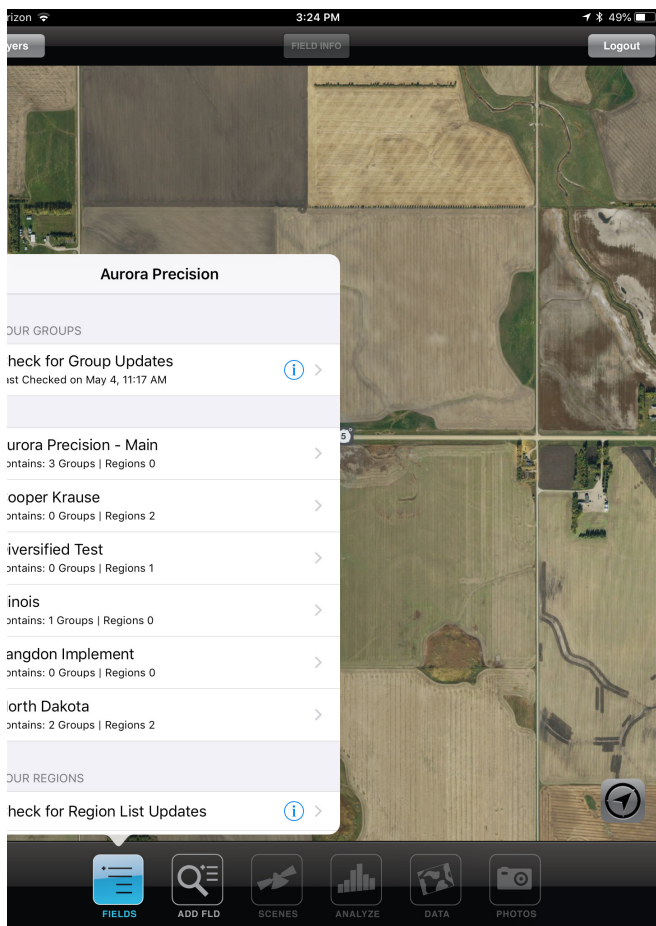
# Fields Tab Continued...

## Map/Navigation (Zooming and Panning)

On the main map window, at any time you can zoom and pan using basic mapping features associated with many other apps. Pinch with two fingers out to zoom in and pinch two finger in to zoom out.

## End and Resume Session

If for some reason the app closes on you automatically or you leave the app and come back to it. A popup in the login screen will come up and ask if you want to End the session or Resume Session. Ending the session logs you out and starts you over from the beginning. Resume Session brings you back to where you left off.
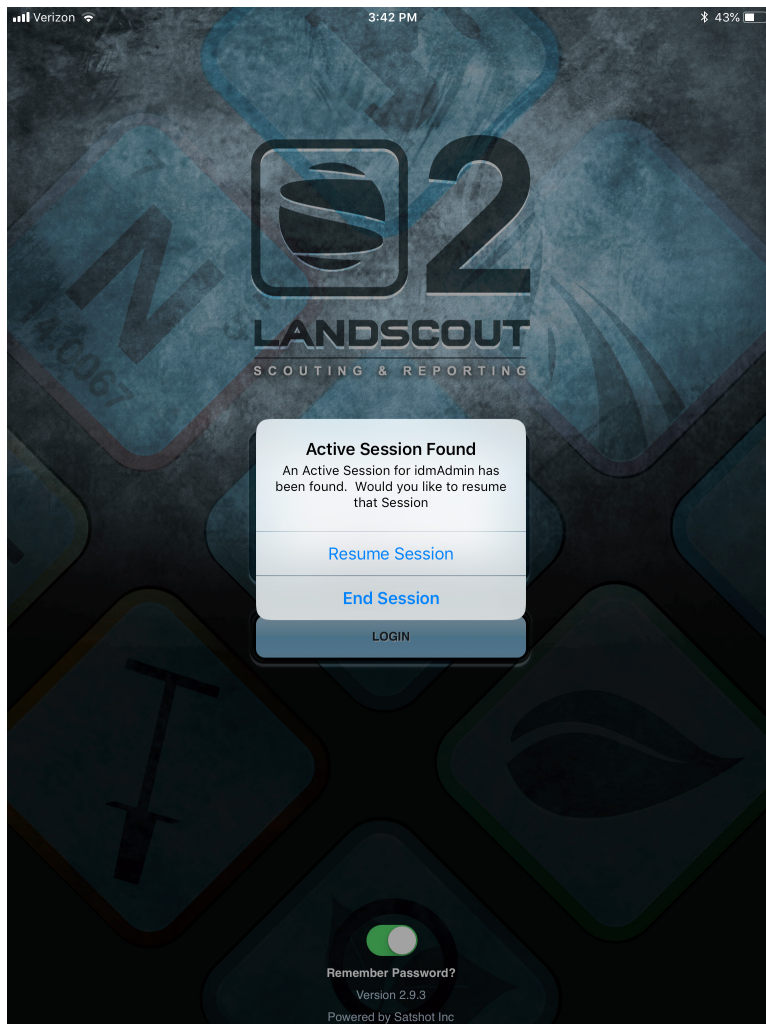
# Add FLD (fields)

The 'Add FLD' tab enables you to add new fields in the the app via CLUs (common land units - USA only) or adding a field by a section (US and some areas of Canada). Also, is the ability to add fields from the MyJohnDeere Operations Center (iPad only currently).

## Basics of the Add FLD process

The process to add fields is similar with both the iPhone and iPad but with slightly different interfaces. Adding custom made fields or doing a bulk upload would require a user to upload or draw boundaries in the Mapcenter interface or use the MyJohnDeere Ops Center to transfer boundaries over.

For the phone, select the Add FLD button, select the Change Layer on the top of the screen and select what you want to view. You may have to zoom out and in for the boundaries to pop up. For the iPad, select the Add FLD tab, then hit the Layers button to select which layer you want to show in that AOI.
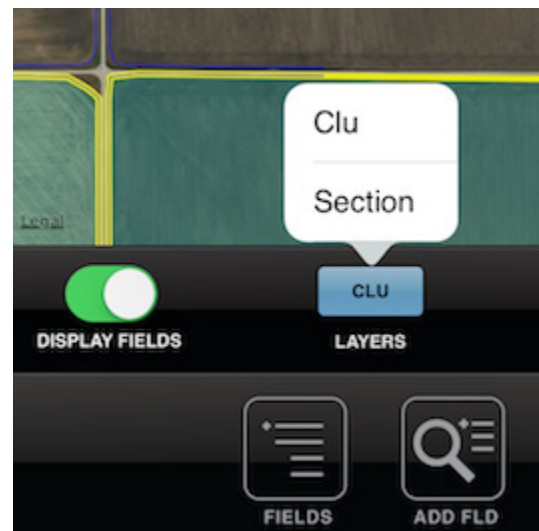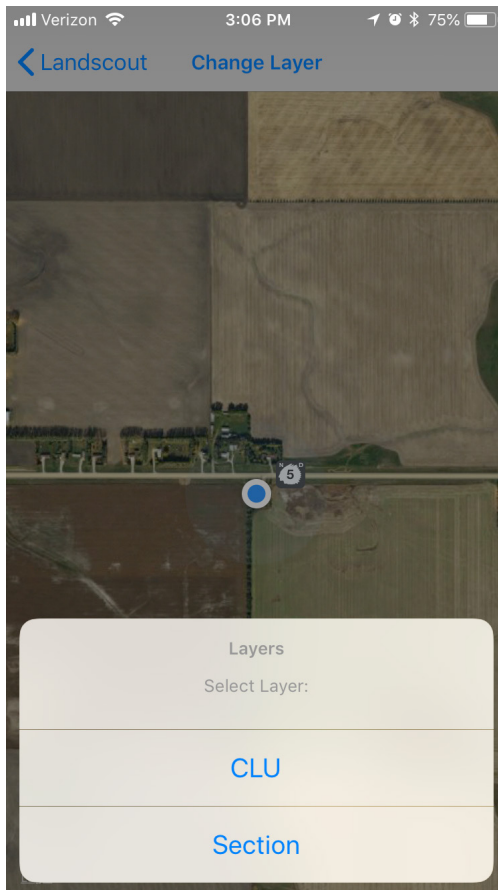
# Add FLD (fields) - continued...

This page will review selecting the new field and saving it to the main hiearchy.

## Selecting and Saving Fields

On the iPhone, click the boundary to highlight it in green and hit the Save button in the upper right of the screen. A popup will come up and ask to enter a name for the boundary.

On the iPad, select the boundary to highlight in green then on the lower right of the screen, hit the save button to bring up a window to add the field name just like the phone version.

Hit OK and you now will have to select where you want to add that field to in the hiearchy. This will be reviewed on the next page.
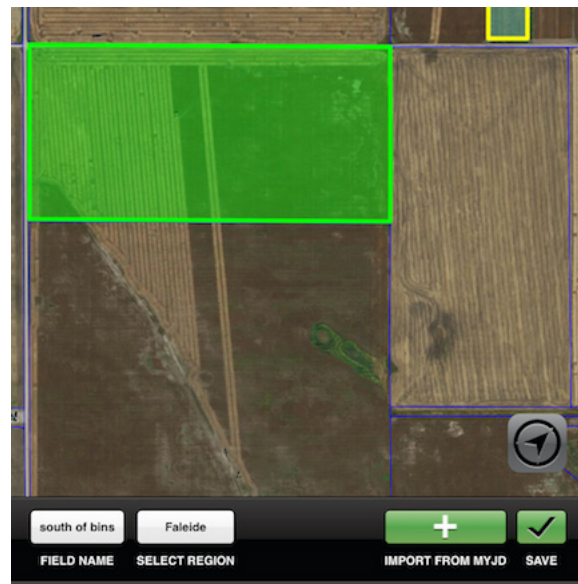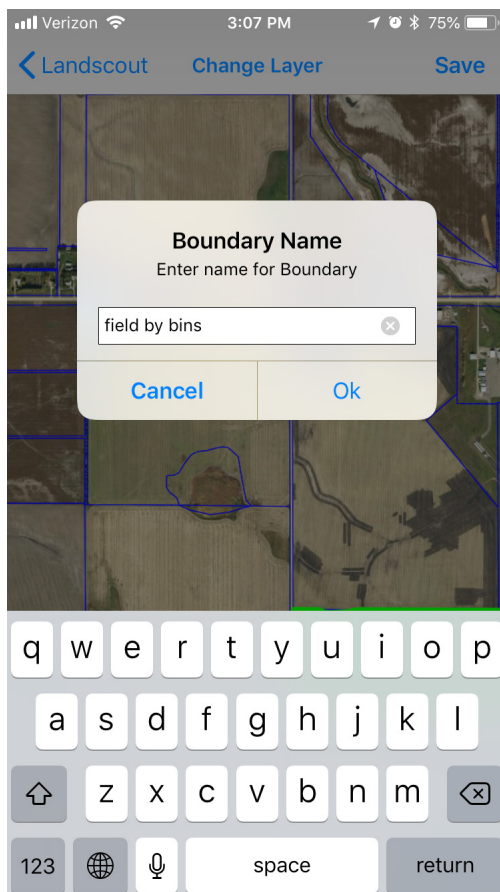
# Add FLD (fields) - continued...

This page will review saving the new field to the main hiearchy list to specific Groups and/or Regions.

## Selecting and Saving Fields

On the iPhone, once you've hit save and OK a screen similar to the one below will appear. Select the Group and/or Region you wish to put the boundary and the process will go through to save it. On the phone, it will prompt you if you want to add more fields or go back to the main hiearchy screen.

On the iPad (shown below), do much like the iPhone and select where you want the field listed in the main Hiearchy. Once you select where you want it, it will run the process and save it to that Group and/or Region and show it as an orange boundary that is saved on the map screen.
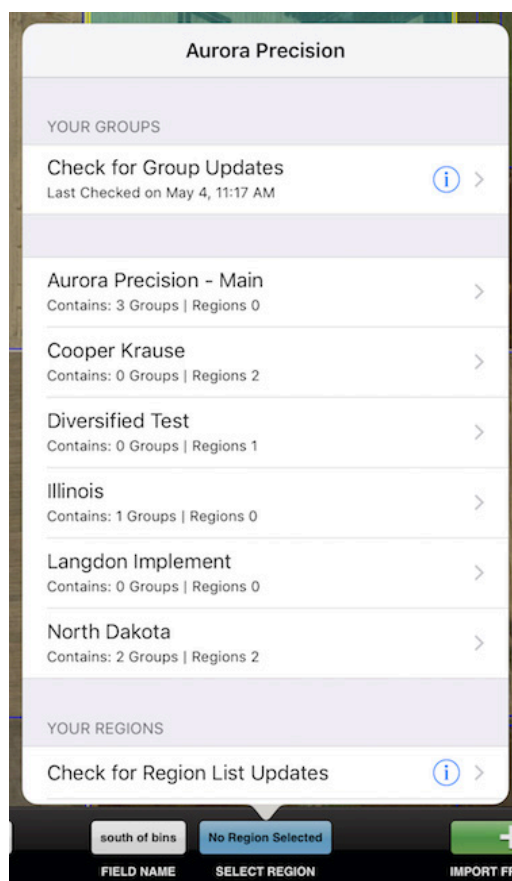
# Add FLD (fields) - continued...

This page will review adding new fields from the MyJohnDeere Operations Center. iPad Only

**ADD FLD**

## Selecting and Saving Fields

On the iPad, select the Add FLD tab first. On the lower right hand side of the screen there will be a green button (shown below on the left) that says "import from MyJD" Select that, and then a new window will open asking you to login into your account or if already logged it, it will ask you to select the Organization or Partnership you are associated with. Select the one you want and it will prompt you to select which Farm you want to view and which fields from there.

After you have selected each of the areas you want to import from, hit next on the bottom right until it brings you to the Hiearchy screen where you select which Group and/or Region you wish to save the boundary under like other steps.
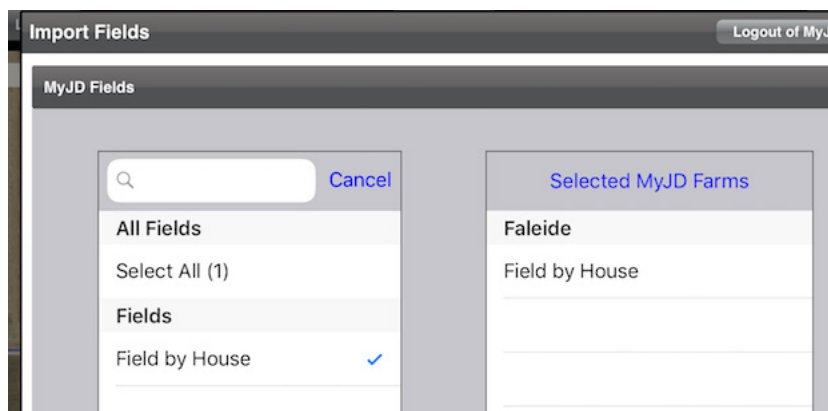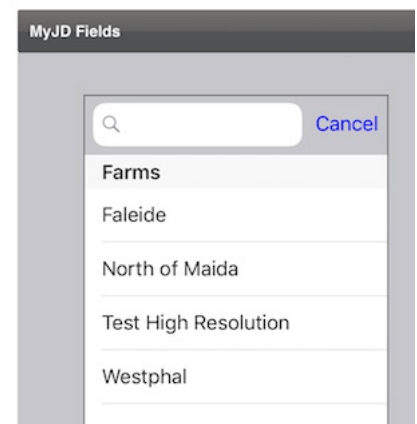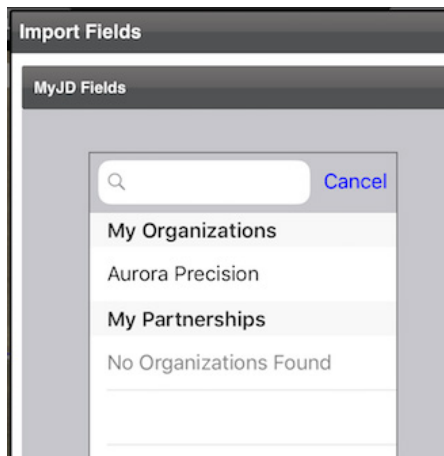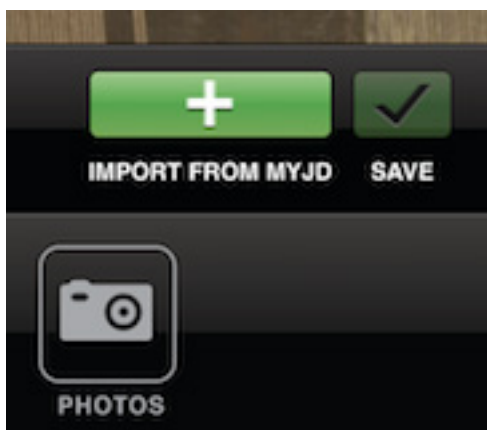
# SCENE SELECTION

The 'SCENES' tab inables you to search for and display any imagery in the app.

## Selecting and Viewing a Satellite image raw scene

On the iPhone, select the Scenes tab. This will bring up a new screen where you can toggle through the dates you wish to look at in the Blue writing. A window will popup at the bottom to select the specific time period. You may also select a specific type of satellite as well like Sentinel, Landsat, SPOT, Aster, or others. Select View Scene list and a new window will open that shows the dates and details of the images available for that area you are in. You can use your finger to scroll through the dates listed. If at anytime you wish to clear the scene on the map. Go back and hit the Scene tab and hit the Remove Scene shown in blue.

For the iPad, select the Scenes tab then select the From and To buttons to determine what timeframe you want to look. You can also search by specific satellite as well like the phone. Hit view scene list to show a list of dates to view and select the one you wish to see on the map. You can scroll through with your finger to view all the dates within the range you selected. You may also clear out the selected image by hitting the Clear tab on the lower right if under the Scene tab process.
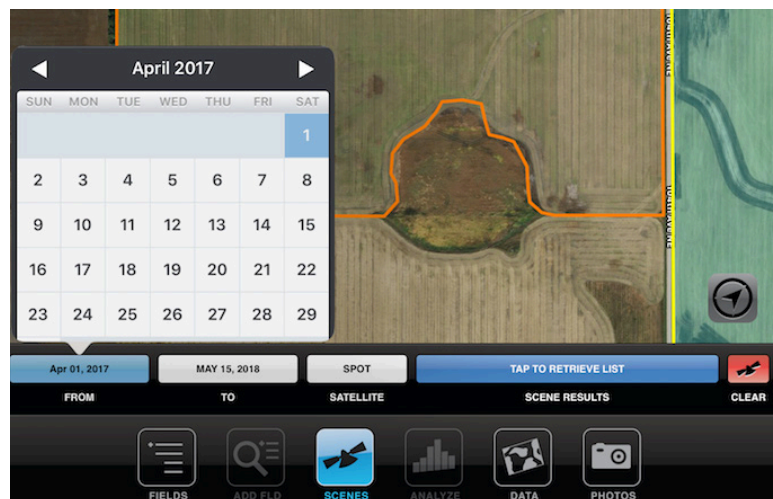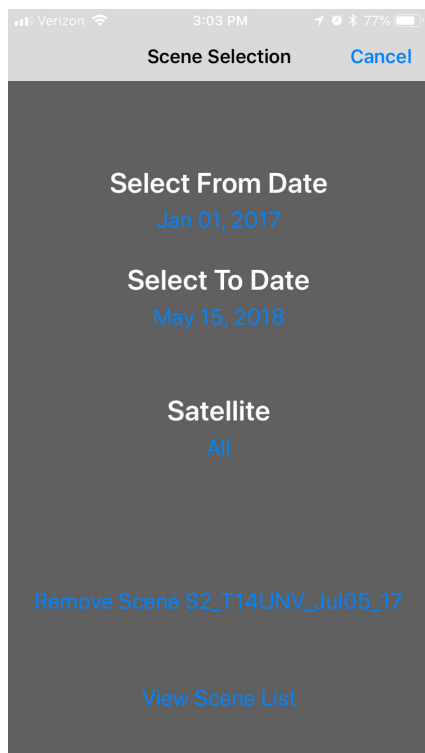
# SCENE SELECTION

The 'SCENES' tab inables you to search for and display any imagery in the app.

## Selecting and Viewing a Satellite image raw scene

This is what a clean raw image scene will look like. Red showcases growing vegetation. If you see dark or white areas over a scene like this it is usually clouds or their corresponding shadows. Do not select those to Analyze in the next step. Also, it is advised to view raw scenes only once zoomed into the field in question since if you are zoomed out it could take awhile to load the image. You may select a new image at anytime or change the parameters of what you want to view.

For both the iPhone and iPad, once you have the image you want, make sure you highlight the field from yellow to orange by clicking on the boundary if you wish to continue to the next process which is Analyzing the image to show zones and patterns.
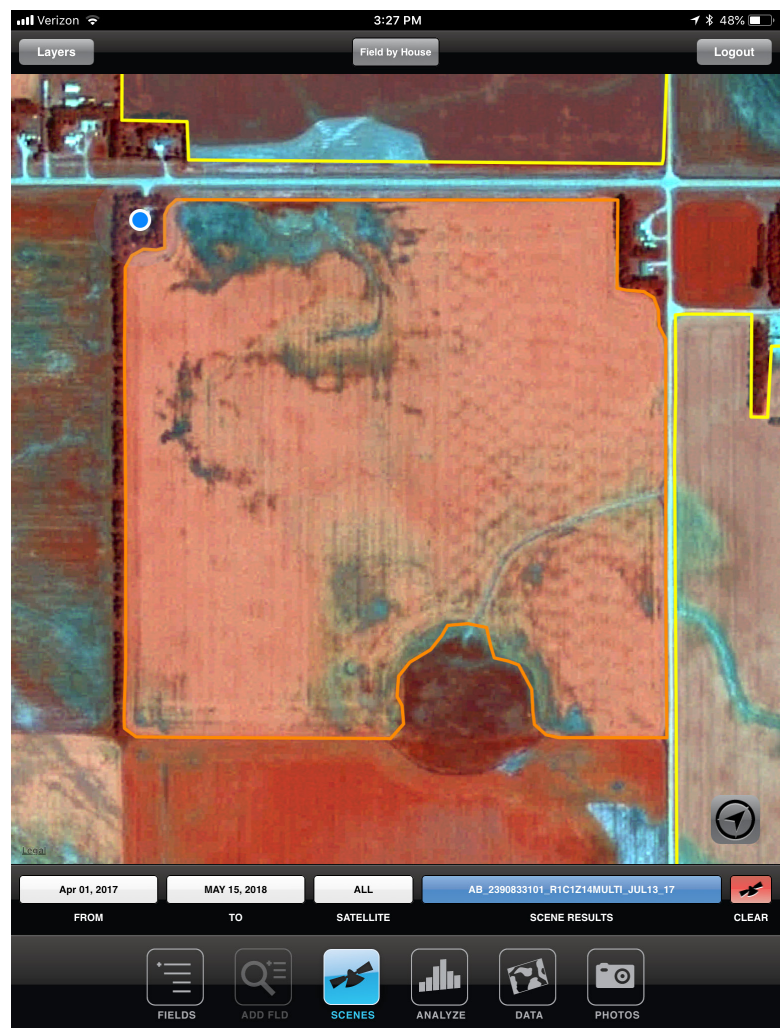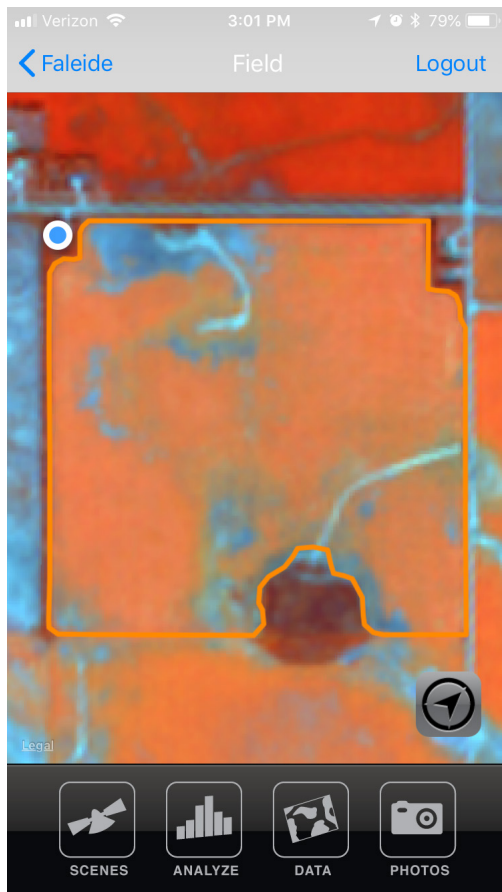
# ANALYZE IMAGERY

The 'ANALYZE' tab toggles a sub-bar to set parameters for custom analyses of your selected fields.

## Analzye Tab and Options

Once a scene is displayed on the map and a field within that scene has been focused, you may analyze that scene with custom parameters in 'ANALYZE'.

Analysis Type: This sets the type of analysis, NIR, NDVIR, NDVIG, Multiband. The default is NDVIR. Red Edge is only for certain satellites but are not used currently with the satellites we have in the system.

Color Table: This sets the desired color table for analysis. The default is Satshot 31-color.

Zones: This sets the desired number of zones/divisions.

Analyze: This button will generate the analysis based on the parameters selected and will place the generated analysis in the Dataset Tray.

For both the iPhone and iPad the process is similar but the screens will look like this below with a selection made for the type of analysis you wish to accomplish. Once the parameters are selected hit the Analyze button on the top right for the iPhone or the bottom green Analyze button for the iPad to get to the next step.
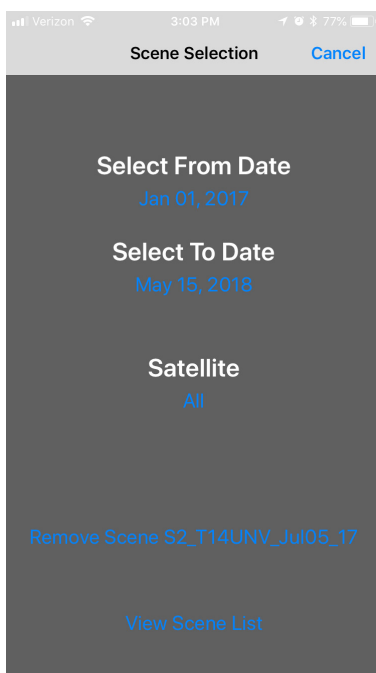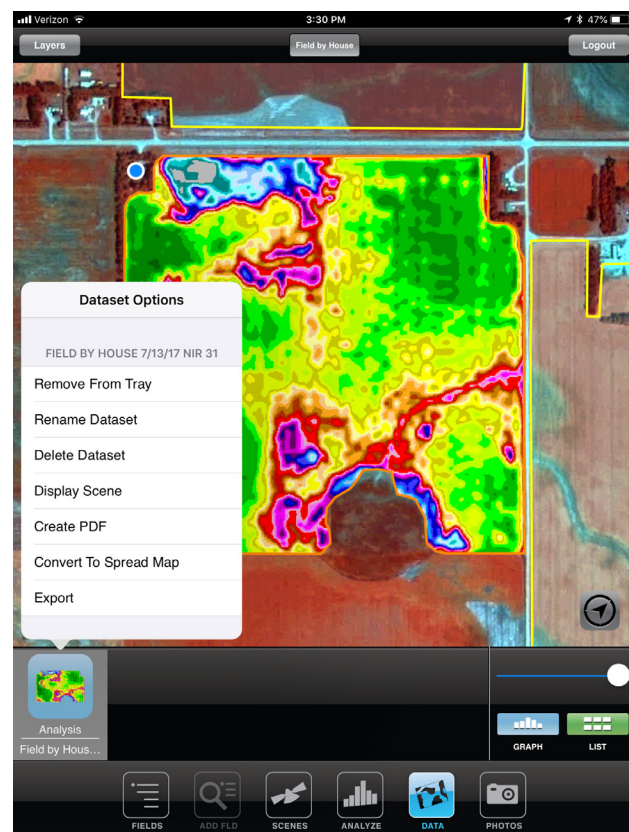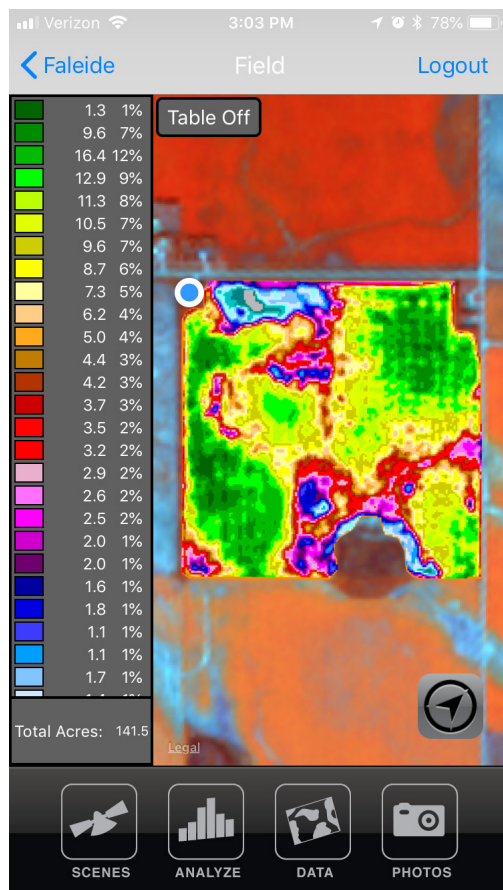
# DATASETS

The 'DATA' tab toggles the Dataset Tray controls the newly created and saved datasets for a Field.

## Main map view after Analysis

Once you've selected your Analysis parameters and hit Analyze, the system will go through a process and you will be guided to the Dataset tab and options. The iPhone has less options and tools associated to the Datasets but can show saved datasets that were created from Mapcenter, Landscout, or iCue.

For the iPhone, the new analysis will pop up as well with a graph of the zone colors and their corresponding acreage on the left. You can turn the table on and off if you wish.

For the iPad, the new analysis will also show up but will showcase a thumnail of the dataset in a tray at the bottom. This is where you can select it (turn blue) to view the analysis or press and hold the thumbnail in the tray to get more options like shown below. The next pages will go through the more indepth steps in both apps versions.
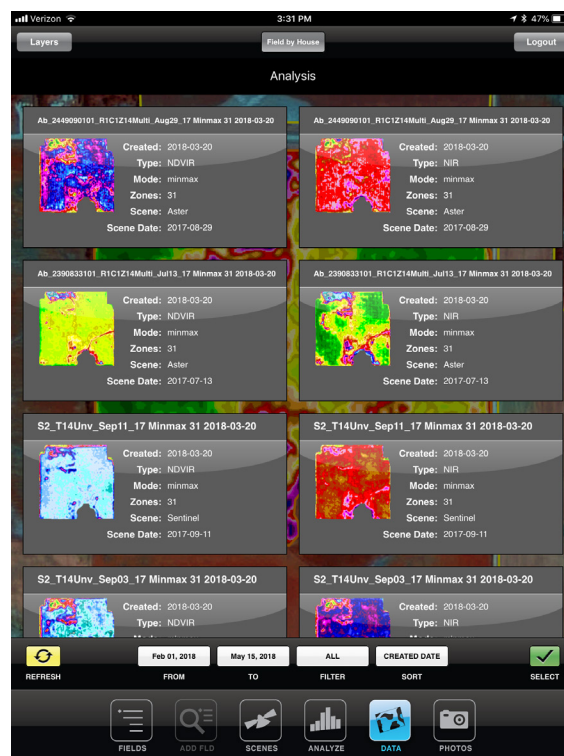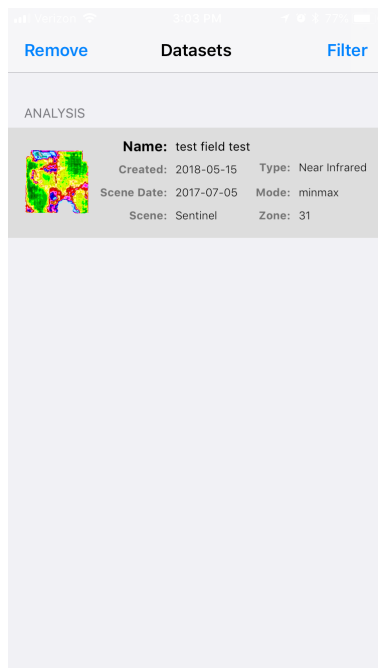
# DATASETS

This page will go into selecting the List under the Data tab to view other save analyses and datasets in the iPhone and iPad.

## Viewing save datasets under the List

Once you have saved a dataset in any of the systems, it will apprear in the List under the Data tab. You can scroll through any of the datasets you have or even filter through a specific timeframe for a specific dataset you want.

For the iPhone, once you have a field selected in orange, you can hit the Data tab and list will show up with all the datasets you haved saved (lower left pic). If it is highlighted in Green it means it is being shown on the map or is behind another layer. If you hit it while green in will show on the map, if you hit the Data tab again and select the same one it will turn Gray and a button in the upper left called Remove will appear so you can turn that Dataset off. In the upper right is the Filter button to find a specific date range of datasets.

For the iPad, once a field is selected in orange, the green List button will appear on the bottom right of the screen. Selecting that will open up a screen like the one on the bottom right of this page. Select all the datasets you want by highlighting them in green and hit select. Any ones selected will show up in the datatray to manage.

# DATASETS - continuned...

This page goes through further into the options located under the Data tab for the iPad.

## The Dataset Options - iPad

To view a dataset on the screen, click and hold the thumbnail of the dataset in the tray below for the iPad and there will be a blue border around the dataset. It will move to the far left of the dataset tray as well as display on the map.

Datasets are layered in the map area based on a left to right order in the dataset tray, the furthest left will be on the top and so on.
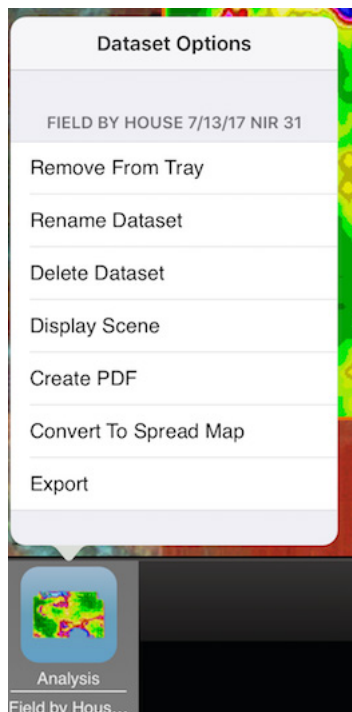


(Pic to the left) Clicking and holding on the Thumbnail in the tray at the bottom will showcase many different options. Some are self explanatory but the main ones that we will focuse on are the Convert to Spreadmap and the Export feature in the coming pages.

(Pic below) To the right of the dataset tray is one set of tools/functions.
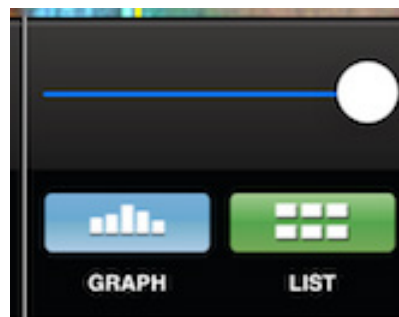


The slider at the top sets opacity for the high-lighted dataset.  Hitting "Graph" will take you to a new screen that show the acres and zones as well as the option to merge zones together. 'List' takes you to the list of all saved datasets for the selected field.
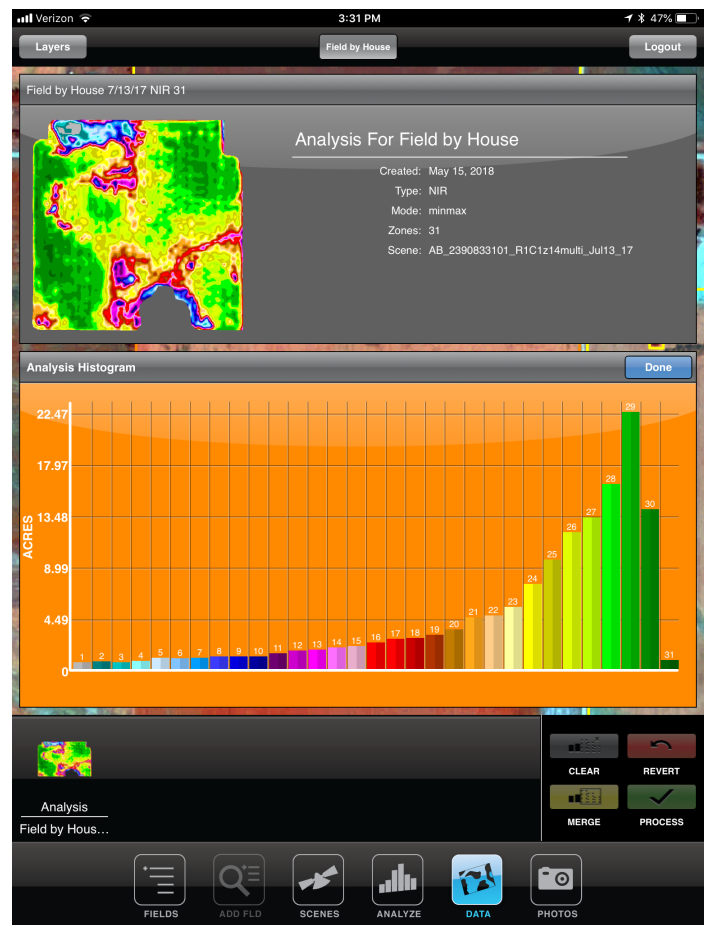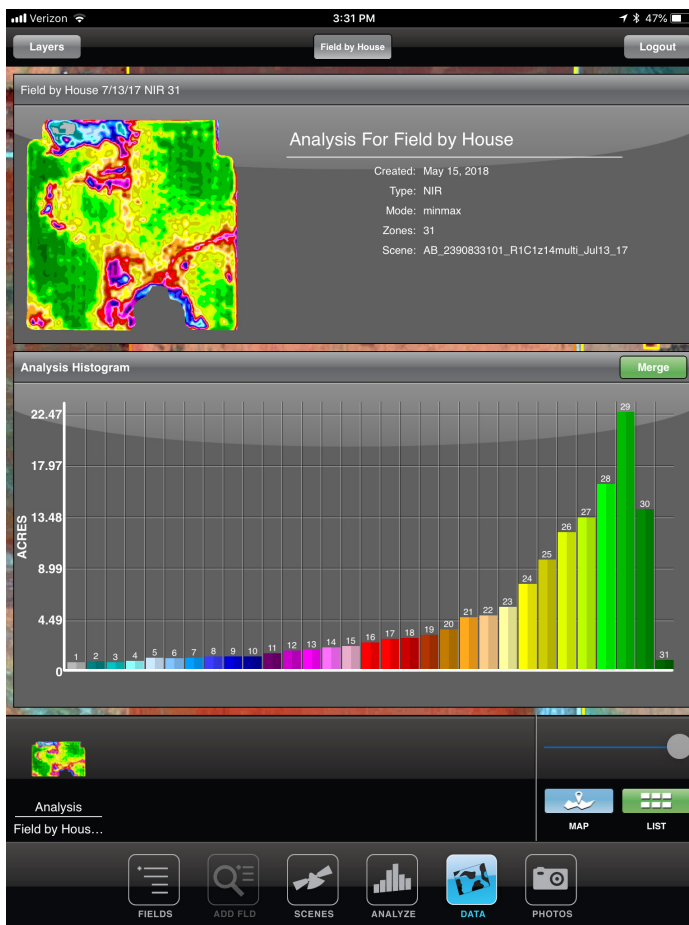
# DATASETS - continued...

This page will focus on the option to see the Graph of zones and acres after hitting the Graph button on the lower right of the Data tab when a saved analysis is selected.

## Graph and Merging Tables - iPad Only

When a Dataset is selected in the Tray on the bottom being highlighted in blue, there will be an option on the bottom right called Graph. Hitting that will open a new window with a corresponding graph of the zone colors, amount of zones, and acres associated to each zone. From there you can go back to the screen below by selecting the blue button called Map on the bottom right or get into the Merge function by hitting the green Merge button on the top of the Graph.

Once in the Merge function, more buttons and options will pop up in the bottom right of the main Tray. This will be gone over on the next page.
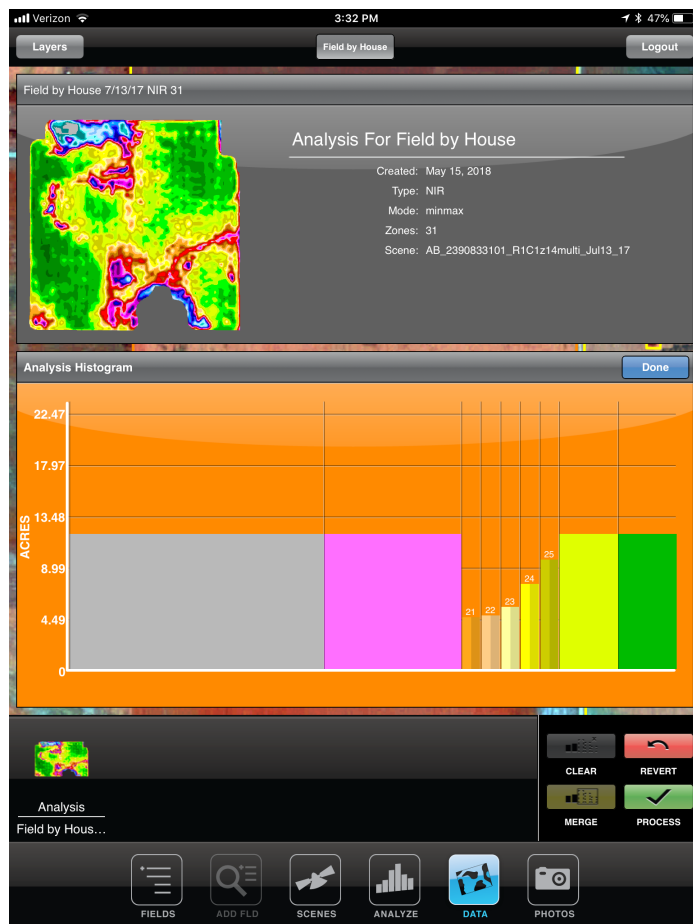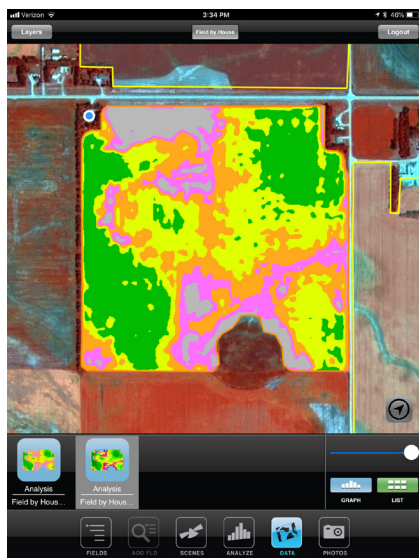
# DATASETS - continued...

This page will go over the merging functions of the graph and zoned map under the Data Tab.

## Merging of zones - iPad Only

After you have selected the Green Merge button, it will turn into a Done button. You can simply merge zones by selecting each zone you want to merge (they will highlight in white) that lies next to eachother and hit the yellow Merge button. Repeat this process for each set of merged zones you want. If you make a mistake, hit the red Revert button below to start over. You can also hit the gray Clear button to erase all the zones you merged.

Once you are finished merging zones, hit the green Process button below to put all the zones together. Once it has done that, hit the blue Done button above the graph to save it. A popup will come up to name it whatever you'd like. Once saved it will create a new Dataset in the tray for you to manage (bottom left pic).

# DATASETS - continued...

This page will go through the options for each dataset in the Tray below for the iPad.

## Dataset Tray Options - iPad Only

The second set of functions that is specific to an individual dataset is launched by pressing and holding on a dataset thumbnail for a second (pictured below on the right) This will bring up a menu of functions specific to that dataset, there will be one or more functions depending on the dataset.

Remove from Tray: This removes the dataset from the tray, you will be prompt to save a dataset if it has not been saved.

Rename: This will allow you to rename the highlighted dataset.

Delete Dataset: This will delete the selected dataset from the system.

Display Scene: This will show the satellite image information like time and date.

Create PDF: This will create a pdf report of the selected dataset to be emailed.

Convert to Spreadmapr: This will create a new polygon vector dataset based on the selected dataset to add attibutes to.

Export: This will start the function to export this dataset in a new window either to an email or to the MyJD operations center.
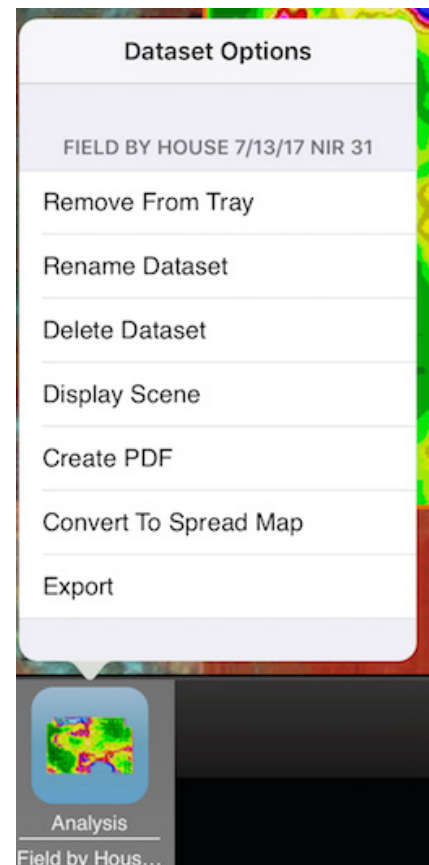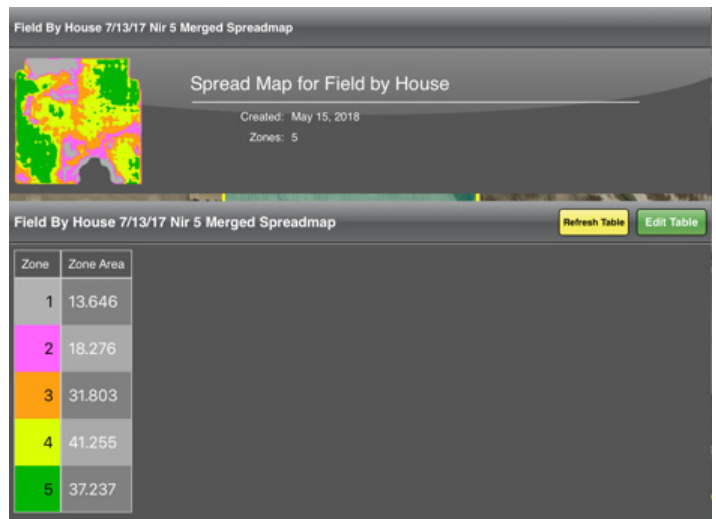
# DATASETS - continued...

This page will go over creating and attibuting a spreadmap. iPad Only

For the iPad only, this function allows you to put different rates or notes towards a specific zone. From page 19, once you hold down and select the dataset, you will get the option to create a spreadmap. Once selected, a pop will come up to name and save this new dataset.

From here, click and hold down on the new spreadmap dataset in the tray to get another pop up window with more options (pic to the right). You can directly export this from here or if you select the blue Table button on the bottom right of the screen you can get options to add attributes and rates to different zones. (pic below)
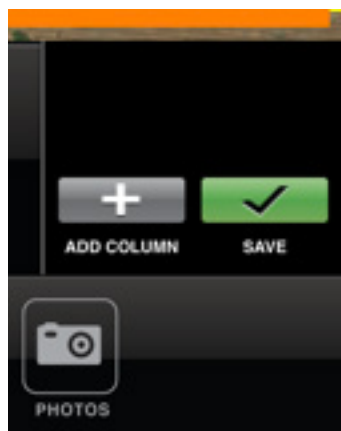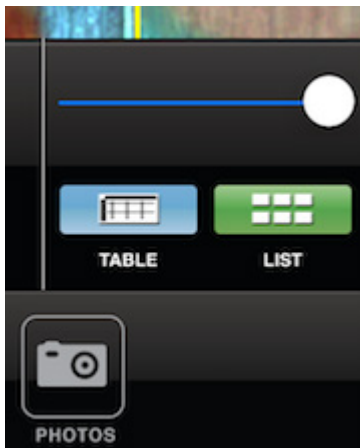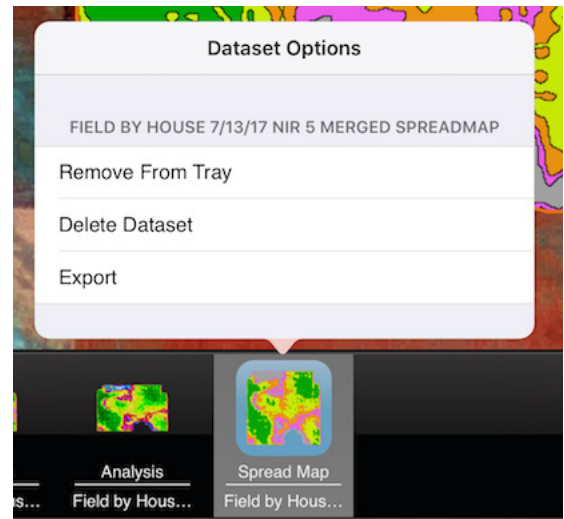


Once you select the blue Table button, a new window will pop up (pic below) with the zones you made and the ability to Edit the Table with the green button in the upper right. Once you do that, you'll get the option on the bottom right (pic bottom left) to add a column. Select that button to get a popup that will give you option on what type of column you want to add (on next page).

# DATASETS - continued...

Continued....This page will go over creating and attibuting a spread-map. iPad Only

Selecting the Add Column on the lower right of the window will bring you to the next step in adding a new column to put either a number or text to each zone. This will bring up another pop up window (pic to the left). For Variable rate application, select the Add Rate button, for Tex or a note select the Add Text button. Make sure name the column first befor selecting either option.





Once you added the column you wanted, you will get a new table to add the rates or text you wish to add. Enter the details accordingly and hit the green Save button on the bottom right of the window (pic below). This will prompt a popup window to come up to confirm you saving these numbers or text.



Any time you have a Spreadmap selected you can always go back to the saved results by selecting the Table button on the bottom right of the main window. You can add multiple columns if you wish or edit the ones you have by selecting the Edit Table option.
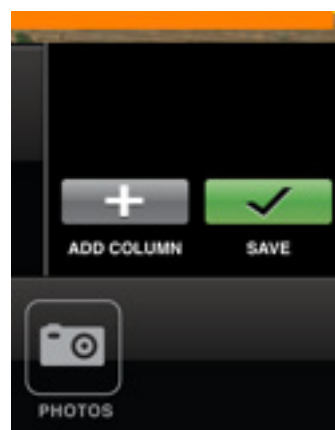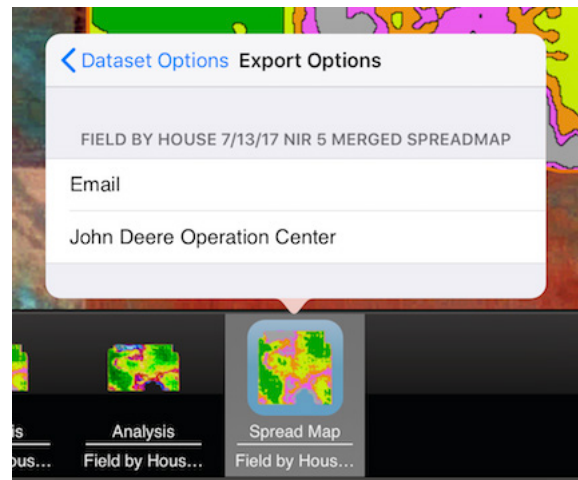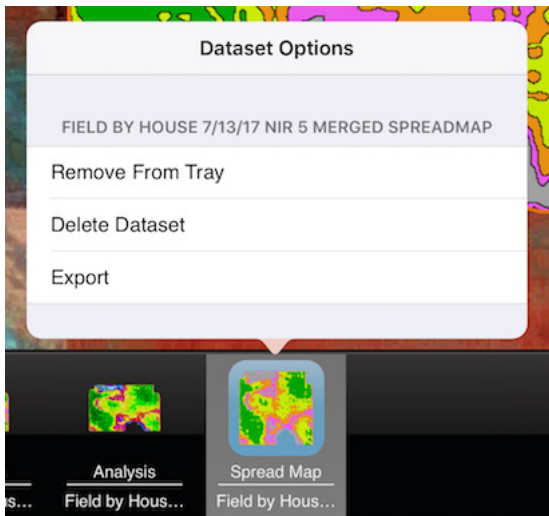
# DATASETS - continued...

This page will go over the Exporting options for Analysed datasets and Spreadmaps for general export via email or via MyJohnDeere Operations Center. iPad Only.

If you click and hold on the dataset and get a popup window (refer to page 19) you will get certain option. If you select Export under a saved Analysis you'll get a window like the one of the right below. If select Export under a Spreadmap dataset, you'll get the window popup like the one below on the left followed by the one of the right.

If the Email selection is choosen, it will open up the email you have connected on the iPad and attach the file to be sent. If John Deere Operation Center is selected a new window will pop up to enter you credentials or if that has already been done you will be asked where to send the dataset in questions.

# DATASETS - continued...

This page will go over the Exporting options for the MyJohnDeere Operations Center. iPad Only.

If you selected the MyJD ops option you will get a new screen to either sign up to your account or select your Organization, Partnershps, Farms, and Fields you wish to add the dataset to.

You'll have the options to export the dataset either directly to a Machine that is connected to your MyJD account or to the Field Analyzer. Simply select the machine you want of the Field is is going to under the Analyzer. If you export an Analyzed image, it will only work with the Field Analyzer. If you export a Spreadmap, it can go to a Machine, the Field Analyzer but also goes automatically to the FIles folder under the MyJD ops center. Next step would be to login to MyJD and view the data.
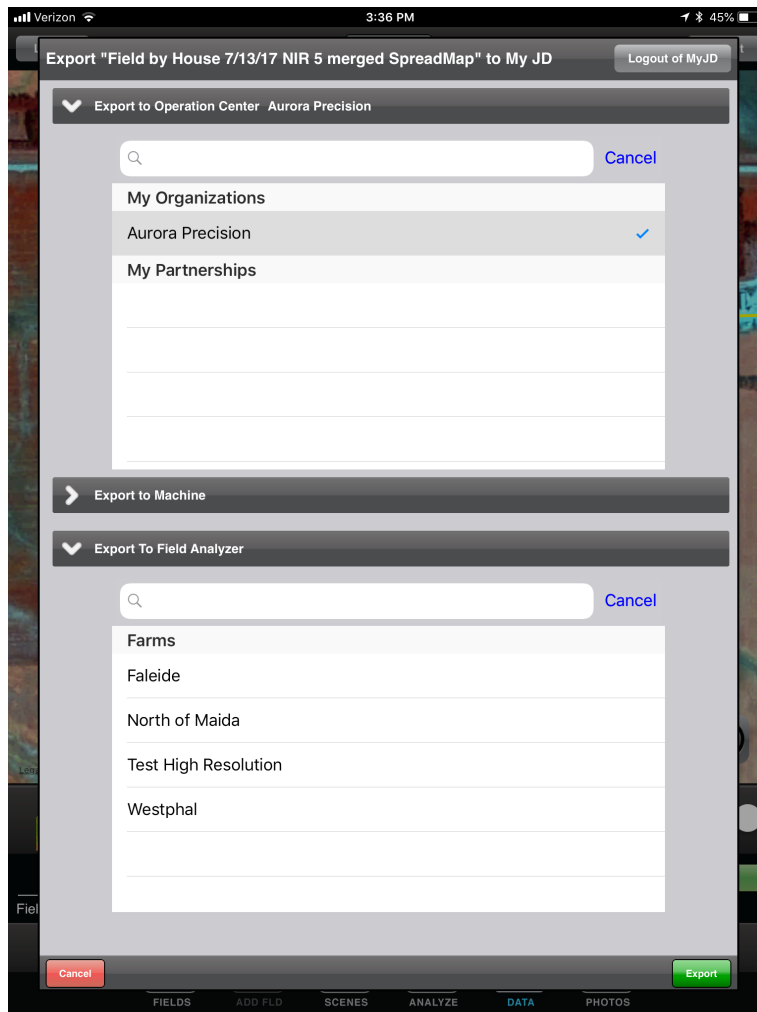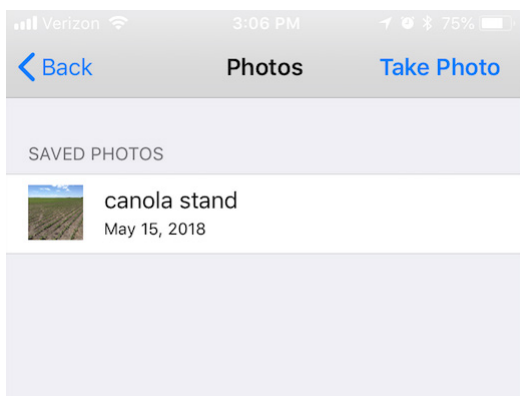
# Photos

This page will go over the Photos options with adding and managing pictures saved to certain field boundaries in the system.

The Photos button works both on the iPhone and the iPad and has the same functions and options for both.

Once you select the Photos button you will get the options on the right (pic right) for the iPad or new window (pic below) for the iPhone. For the iPad, hitting the List button will bring you to a new screen showing saved Photos (pic bottom right). For the iPhone, the list will pop up on the same screen with a small thumbnail. You can filter through the images on the iPad if you want.



Selecting a Saved Photo will bring it up on the main map screen for the iPad or a new window for the iPhone. it will then show the location you put that photo from before.

If you select the Take Photo option you will be redirected to some extra options. That will be covered on the next page.
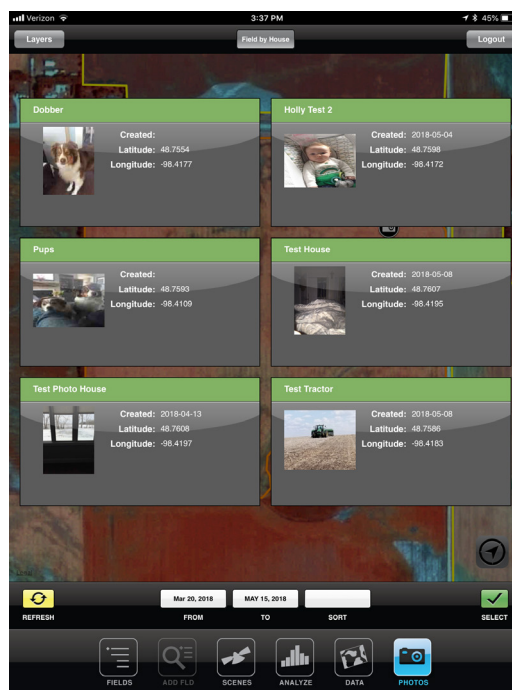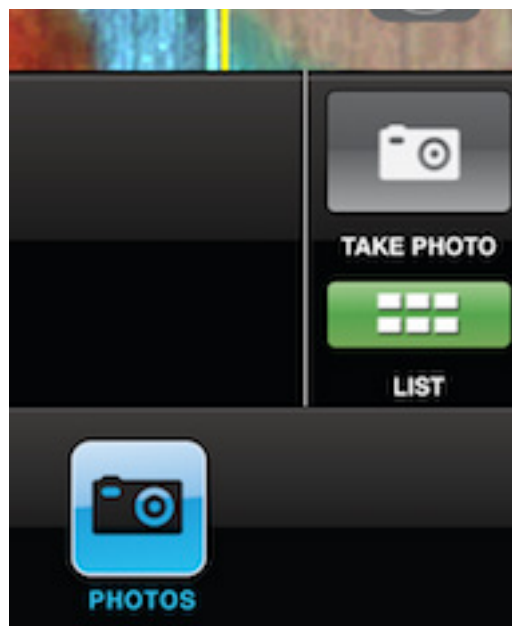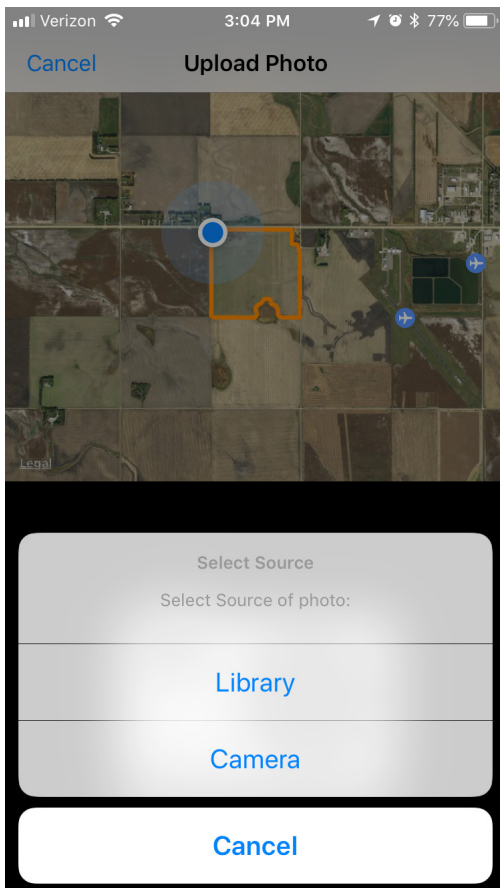
# Photos – continued...

This page will go over the Photos options with taking a new Photo or selecting a picture from you local library.

Once you select Take a Photo you will get options to go to your Camera to take a new photo or go to your photo Library to select a previously taken photo. The pic on the bottom left is similar for both devices but for the iPad the photo library pops up on the screen itself to select from unlike the iPhone that brings you to the photo library on the phone itself.

Selecting the Camera option will bring you to your standard camera tool on your device. You will get the option to keep the photo you took or retake it. Whichever photo you choose you the will get prompted to save and name the photo to your needs. The same option to save and name to the photo will come up under the library option as well.

After you have saved the photo you will be asked where you want to locate to picture. That will be covered on the next page.

# Photos - continued...



**PHOTOS**

This page will go over the Photos options with taking a new Photo or selecting a picture from you local library.

When you've selected the photo you want and saved it, you can then select to put the photo to your current GPS location or select a specific location. This process is similar on both devirces (iphone shown below). Regardless of which one you choose, it will show the picture and the position of picture.
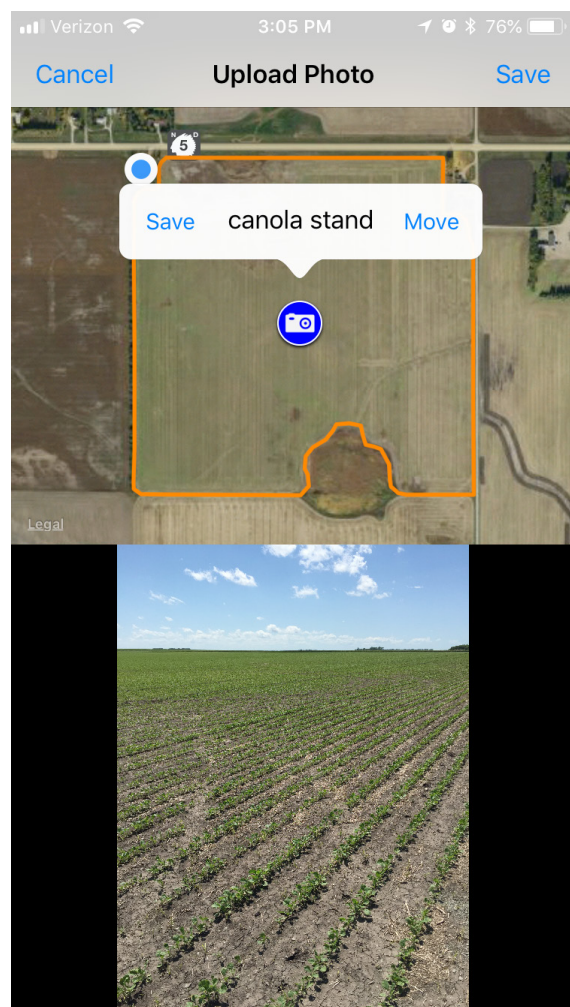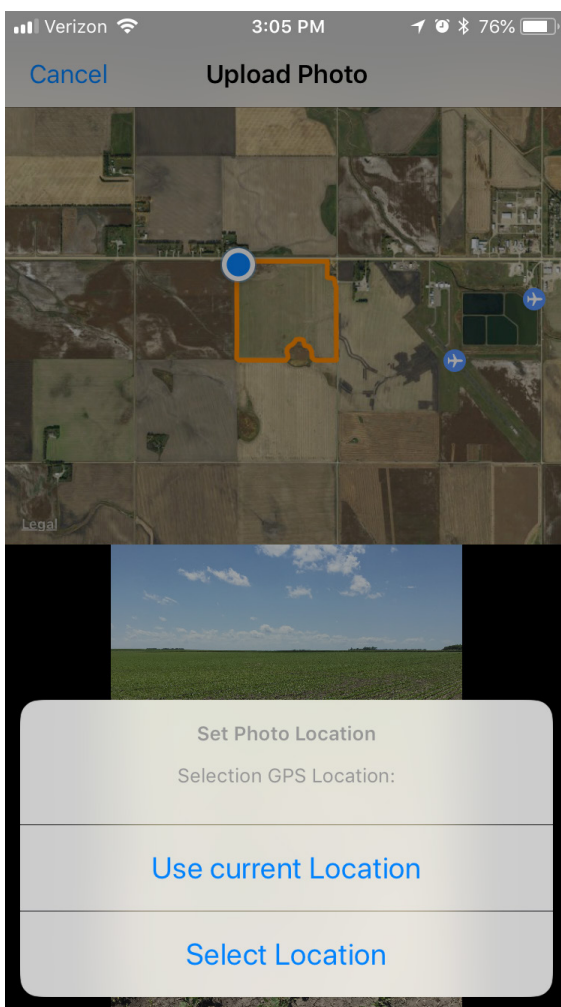




Selecting the Select Location button will default the photo to the centroid of the field boundary selected. if you want to move it, select Move. The button will turn from Blue to Yellow and the Move button will change to Set. When the button is yellow you can press and hold on it and then move it to the desired location. Once done hit set and if that is the correct spot hit Save. This will lock the position. You can move it at a later time if you wish for whatever reason.

# Photos - continued...

This page will review other options to work with saved photos from the library to edit and change the pics themselves or add notes to the pictures.
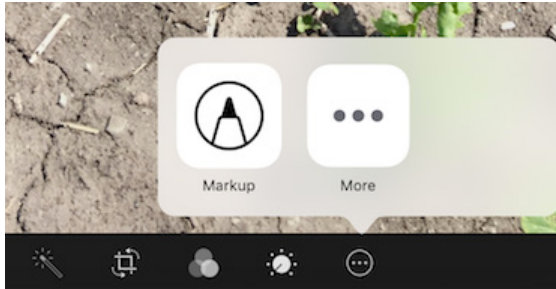


Any picture you have saved in your photo library you can edit and add notes to. All you have to do is select the photo you want, select the Edit button in the upper right of the main screen and you'll get a new screen with the option like you see to the left. Select the circle with the 3 dots and pick Markup.



Once you hit Markup, you get drawing tools like you see above. Draw what you'd like, mark areas of the picture or add notes with a pen or with your finder. From here you'll have a new photo added to your library that you can add into the iPad or iPhone app to a specific point like shown in the page before this one.