

The Ohio Sensitive Crop Registry (OSCR)

User Guide

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Ohio Department of Agriculture
Pesticide & Fertilizer Regulation Section



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OSCR can be accessed directly via this address:

<http://www.agri.ohio.gov/scr>

Legal Disclaimer

Data and information provided on the Ohio Sensitive Crop Registry are voluntarily supplied by commercial producers and pesticide applicators. Neither the Ohio Department of Agriculture, nor any of their employees or agents make any warranty, express or implied, nor assume any legal liability or responsibility for the accuracy, completeness, usefulness or merchantability of any information apparatus, products or processes disclosed, nor represent that use would not infringe on privately owned rights. The registry is provided as a service to producers and pesticide applicators and does not eliminate any liability of the registry user regarding compliance with all applicable State, local and federal laws and regulations. Actions undertaken on the basis of this information are the sole responsibility of the user.

Introduction

Pesticide drift from target areas may damage sensitive crops and organisms such as honeybees, grapes, strawberries, tomatoes and broadleaf vegetables. Good communication between beekeepers, producers and pesticide applicators is key to avoid personal/property damage while allowing target crops to benefit from applied pesticides. The Ohio Sensitive Crop Registry (OSCR) is a voluntary informational tool designed to allow stakeholders an effective way to communicate and protect pesticide-sensitive crops and apiaries. Registered beekeepers and producers have the ability to draw their sensitive crop locations and share these maps with pesticide applicators. Additionally, producers may choose to share their contact information with other registered users, such as pesticide applicators.

Apiaries in particular can be difficult for pesticide applicators to find and avoid; Ohio law requires the applicators give registered beekeepers 24-hour notice before using a product that is labeled to be toxic to honey bees, if the blooming crop to be treated is at least half an acre and is within half a mile of the labeled apiary. Although ODA maintains a separate list of registered apiaries, OSCR can be used in addition to that database to help applicators locate apiaries and contact the beekeepers before spraying.

While damage from pesticide drift is an issue for all producers, drift damage to sensitive crops is a significant concern for Ohio agricultural businesses. This registry is reserved for commercial plant and fish producers, beekeepers, and pesticide applicators. Commercial plant production includes orchards, nurseries, greenhouses, tomato and grape productions as well as organic crops. Sensitive habitats are currently not included on the Registry, nor is this site intended for homeowners or individuals with pesticide sensitivity.

To help ensure the highest-quality data for pesticide spray planning, the Ohio Department of Agriculture verifies each user registration submission and each crop location submission before the data is entered into the Registry. This level of quality control is designed to allow for the continued success of OSCR and the optimal use of agricultural pesticides.

Getting Started

Although OSCR is operated by ODA, information on the registry is not available to the general public. Users who wish to submit and search for sensitive crop information need to first register for an OSCR account. After an account has been created, users can either draw a map of their location to add to the registry or simply search the maps.

Registration

Users can register for an account by clicking the [Create an Account](#) link on the left panel. At this time, enrollment and mapping can only be done online.

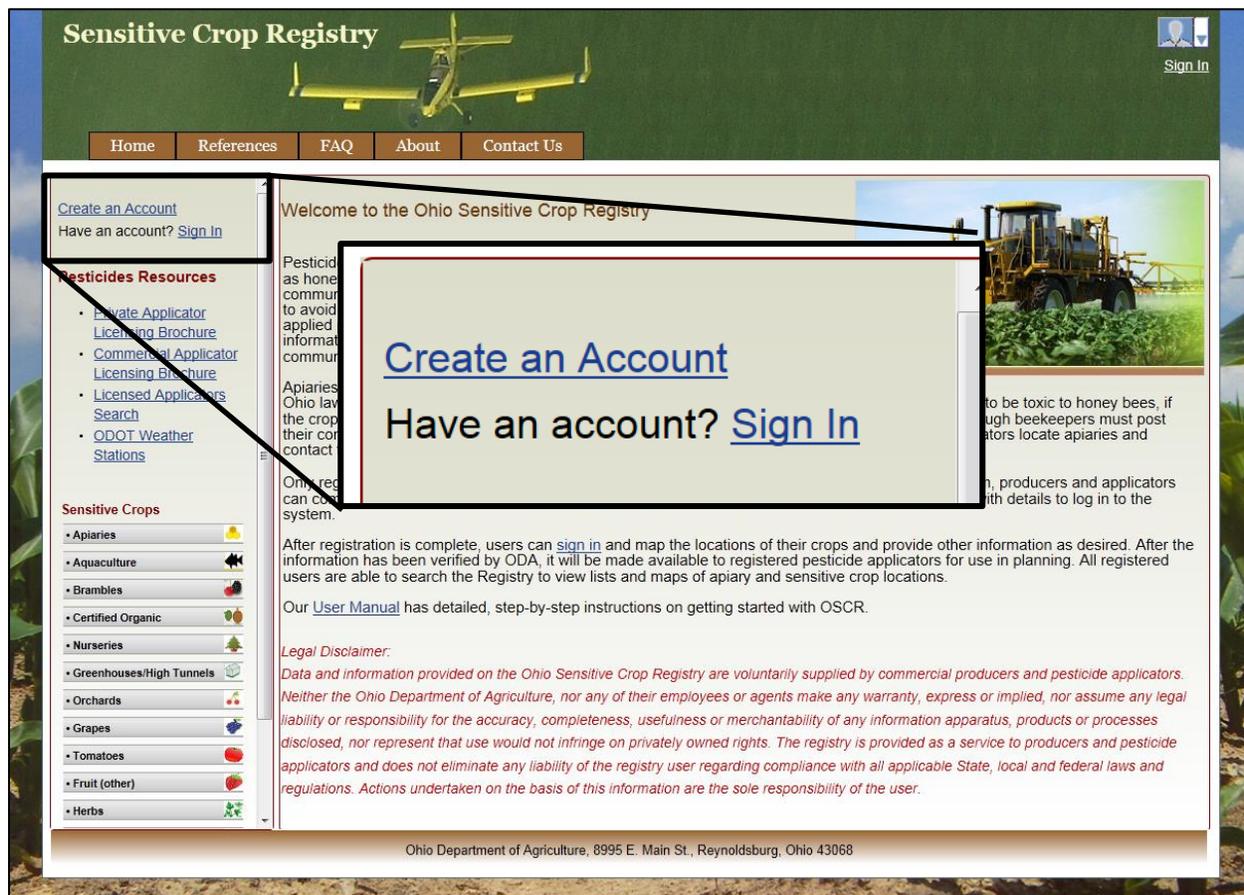


Figure 1. OSCR homepage. Links to register and sign-in can be found on the upper right corner.

Use the form below to request registration access. By clicking "Submit to Register", you acknowledge that you have read and understood the legal disclaimer.
* The red asterisk indicates required information.

Name/E-mail/Phone/Company/Mailing Address:			Registration Type:	
First Name:*	Middle Name:	Last Name:*	<input type="checkbox"/> Producer	
E-mail:*			The crops acreage should be at least:	
Home Telephone:*			<input type="checkbox"/> A half(1/2) acre minimum or more.	
Business Telephone:*			Registrant Type Options:	
Cellular Telephone:			<input type="checkbox"/> Apiarist	
Company Name:*			<input type="checkbox"/> Pesticide Business <input type="checkbox"/> Private Applicator <input type="checkbox"/> Commercial Applicator	
Mailing Address:*			Commercial Pesticide License ID:	
Mailing Address Line 1:			Private Pesticide License ID:	
Mailing Address Line 2:			 <input type="text"/> Submit to Register	
Mailing Address Line 3:				
City:				
State:*				
Zip Code:*	County:*	<input type="checkbox"/> Share address information		
Type the above code.				

Figure 2. Blank registration page. Users may register as any or all Registrant Type. All registrations will be approved by ODA before access to the system is granted.

User Types

There are three primary OSCR users: apiarists, commercial producers and pesticide applicators.

Apiarists – Beekeepers have the ability to map their hive locations, and search for other registered users within the state. In order for beekeepers to qualify for registry use, they must first be [registered with ODA's Apiary Program](#).

Producers – Producers also have the ability to map their crop locations and search for other registered producers within the state. In order for producers to qualify for registry use, they must be commercial growers who produce at least half an acre of an individual crop.

Applicators – While applicators do not have the ability to enter data into the registry, they do have the ability to search for crop and hive locations and access other information provided by apiarists and producers.

- For pesticide businesses, a single point of contact for the company may register as a *Pesticide Business* and share the account User Name and Password with the various applicators under their supervision. There is no requirement that each applicator under employment needs to register.

Users who are both *apiarist/producer* and an *applicator* should check all applicable registrant types (i.e., Private applicator and Producer). This will allow the user to both enter crop information and search the map as an applicator.

After the registration form has been submitted, the information will be verified by ODA and an email will be sent with a temporary password. Depending on demand, this verification may take up to 2 business days.

Sign-In

Having received the email providing your username and temporary password, you may login to the OSCR system. If at any time you forget your password, a new one can be created by clicking the [Forgot password?](#) link.

Log In

Login Information:

Username:

Password:

[Forgot password?](#)

Time the above code.

You are not logged in. Enter your username and password and click the Login button to sign in.

Details for logging in:

In order to log in you must have received your username and password by filling in the

[Registration Form](#)

The site manager will approve your registration information and notify you with login details.

Login Message from Site Manager:

Status: Opened for logins.

After signing in, users will be greeted with the following *Registration Information* screen:

The screenshot displays the 'Ohio Sensitive Crop Registry' interface. At the top, there is a navigation menu with links: Home, Sensitive Crops Search, References, FAQ, Instruction, Contact Us, and Member Information. The user is logged in as Jared Shaffer. The main content area is titled 'Registration Information' and contains several sections:

- Name/ E-mail / Phone / Company Name:** Fields for First Name (Jared), Middle Name, Last Name (Shaffer), E-mail (jared.shaffer@agri.ohio.gov), Telephone, Business Telephone, Cellular Telephone, and Company Name (ODA).
- Mailing Address:** Fields for Mailing Address Line 1 (8995 E Main St), Mailing Address Line 2, Mailing Address Line 3, City (Reynoldsburg), State (OH), Zip Code (43068), and County (Licking).
- Identification Information Options:** Fields for Commercial Pesticide License ID, Private Pesticide License ID, and Apiary License ID, all marked as [Locked].
- Registrant Type Options:** Radio buttons for Apiarist, Pesticide Business, Private Applicator, Commercial Applicator, and Producer. The Commercial Applicator option is selected.
- The crops acreage should be at least:** A checked box for 'A half(1/2) acre minimum or more. [Locked]'.

An 'Edit' button is located on the right side of the form.

All users will have the Registration Information page available to them, and can be found by clicking the Member Information button in the upper right-hand corner. Users may edit their contact information at any time using the *Edit* button found on the right side of the *Registration Information* tab. If an email address or Registrant Type needs to be changed, please contact the [site manager](#).

Passwords

When you first login, you should change your password. Any password at least 6 characters long is acceptable. It is not recommended that the password be the same as the username. Although not required for this system, strong passwords contain characters from at least three of the following categories:

- English uppercase characters (A - Z)
- English lowercase characters (a - z)
- Base 10 digits (0 - 9)
- Non-alphanumeric (e.g., ! \$ # %)

Change Password

Use the form below to change your password.

New passwords are required to be a minimum of 6 characters in length.

Account Information

Old Password: **(Type in your old password below).**

New Password:

Confirm New Password:

If at any time a user forgets his or her password, it may be reset by clicking the [Forgot password?](#) button on the log-in page.

Using the Map Interface

The map interface is designed for drawing and searching crop locations, and offers several tools for navigation. The left side of the interface shows navigation arrows, a zooming scroll bar, and zooming icons. You may move around the map by clicking on and dragging the map itself, or by using the arrow icons. You may zoom in and out of the map using the zoom bar, magnifying glass icons, or the mouse wheel.

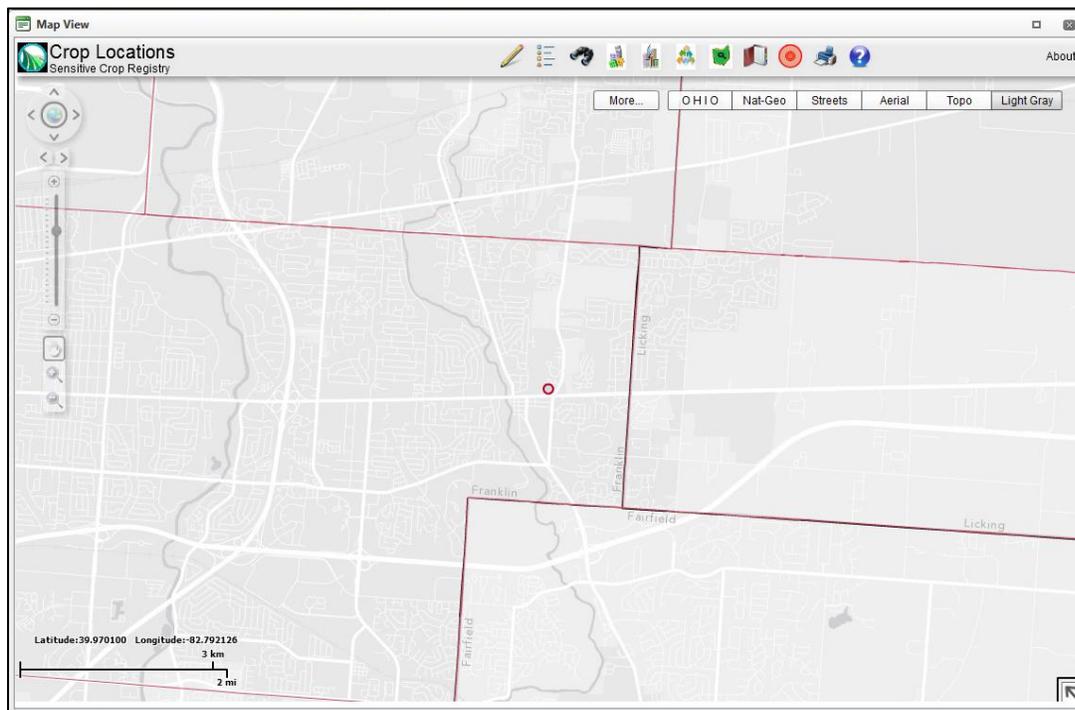


Figure 3. Example screen of the map viewer.

There are 7 built-in tools to find specific map locations:



Search for a Parcel

This tool allows the user to retrieve parcel information, such as owner name and a link to the county auditor's database. This information can be found by clicking on a section of the map, or by searching with a parcel ID.



Search for a Township

This tool provides the user with a complete list of Ohio townships to search through, and will navigate across the map to the selected township.



Search for a City/Village

This tool provides the user with a complete list of Ohio cities and villages to search through, and will navigate across the map to the selected municipality.



Search for Just Villages

This tool provides the user with a complete list of Ohio villages to search through, and will navigate across the map to the selected village.



Near Locations

This tool allows the user to see and navigate to nearby mapped locations within the county.



Bookmarks of State Counties

This tool provides the user with a complete list of Ohio counties to search through, and will navigate across the map to the selected county.



Find an Address

This tool allows the user to enter a valid Ohio address, intersection, or geographic coordinates (i.e., Latitude and Longitude) and navigate across the map to the specified location.

There are also several map backgrounds to help navigate:

- Nat-Geo** The map was developed by National Geographic and Esri and is designed to be used as a general reference map for informational and educational purposes. This reference map includes administrative boundaries, cities, protected areas, highways, roads, railways, water features, buildings and landmarks, overlaid on shaded relief and land cover imagery for added context.
- Streets** This comprehensive street map includes highways, major roads, minor roads, one-way arrow indicators, railways, water features, administrative boundaries, cities, parks, and landmarks, overlaid on shaded relief for added context. The map also includes building footprints for selected areas.
- Aerial** This map presents 0.3m resolution satellite imagery. Imagery was collected 2011 or later.
- Topo** This map presents land cover and detailed USGS topographic maps.
- Light Gray** This map provides a neutral background with minimal colors, labels, and features. Only key information is represented to provide geographic context. The map shows political boundaries, populated places, water, roads, urban areas, parks and building footprints.

Additional map borders can be added or removed from the map background by clicking the *More...* button:



For Beekeepers/Producers

Users who have registered as Apiarists or Producers will have access to the *Producer Details* tab (an example page shown below). This is where a user's hive or crop locations are listed. New users will not have any locations (called *records*) in their Producer Location List to start with.

The screenshot displays the Ohio Sensitive Crop Registry web application. The header includes the Ohio Department of Agriculture logo and a navigation menu with items: Home, Sensitive Crops Search, References, FAQ, Instruction, Contact Us, and Member Information. The user is logged in as Jared Shaffer (jared.shaffer@agri.ohio.gov) and has options to view Member Information, Change Password, and Logout. The main content area shows the 'Producer Details' tab selected, with a 'Location List' table below it. The table has columns for Edit, Location, County Name, Township, Location Zip Code, Crop Description, Acres, Organic Status, Create Date, Submit for Approval, Copy Location, and Delete. The table is currently empty, displaying 'No records to display.' and a pagination indicator 'Page 1 of 1, items 0 to 0 of 0.'

Figure 4. New users will have no records (crop locations) in their Producer Location List to begin with.

These location records will store information about each crop and location, as well as a map of the location. There is no limit to how many records a user may create or how often they are updated.

Entering New Crop/Hive Locations

To add your apiary or production area to OSCR, click the *Add new record* button in the upper left corner of the Producer Location List. A new form will appear:

The screenshot displays the 'Location List' interface. At the top, there are tabs for 'Registration Information' and 'Producer Details'. Below the tabs is a table with columns: Edit, Location, County Name, Township, Location Zip Code, Crop Description, Acres, Organic Status, Create Date, Submit for Approval, Copy Location, and Delete. A single record is shown with values: -- Counties --, False, 0, No, 2/7/2014 2:35:00 PM, Submit, Copy, and a delete icon.

Below the table is a form titled 'Crop Details and Location Details'. It includes a 'Type' dropdown set to 'Vegetables' and a checked 'Organic Crop?' box. The 'County' dropdown is set to 'Licking'. Under 'County Townships', 'Etna Township' is selected. There is a field for 'Or Location's Zip Code'. A 'Description of Location: Optional' text area contains the text: 'This field is directly south of 8995 E Main St, Reynoldsburg. We are growing romaine lettuce, please contact before spraying: 614-728-6386'. A 'Spell Check' button is located below the description. On the right side, there is a map of Ohio with a red square indicating the location, and an 'Update Options' section with 'Update' and 'Cancel' buttons.

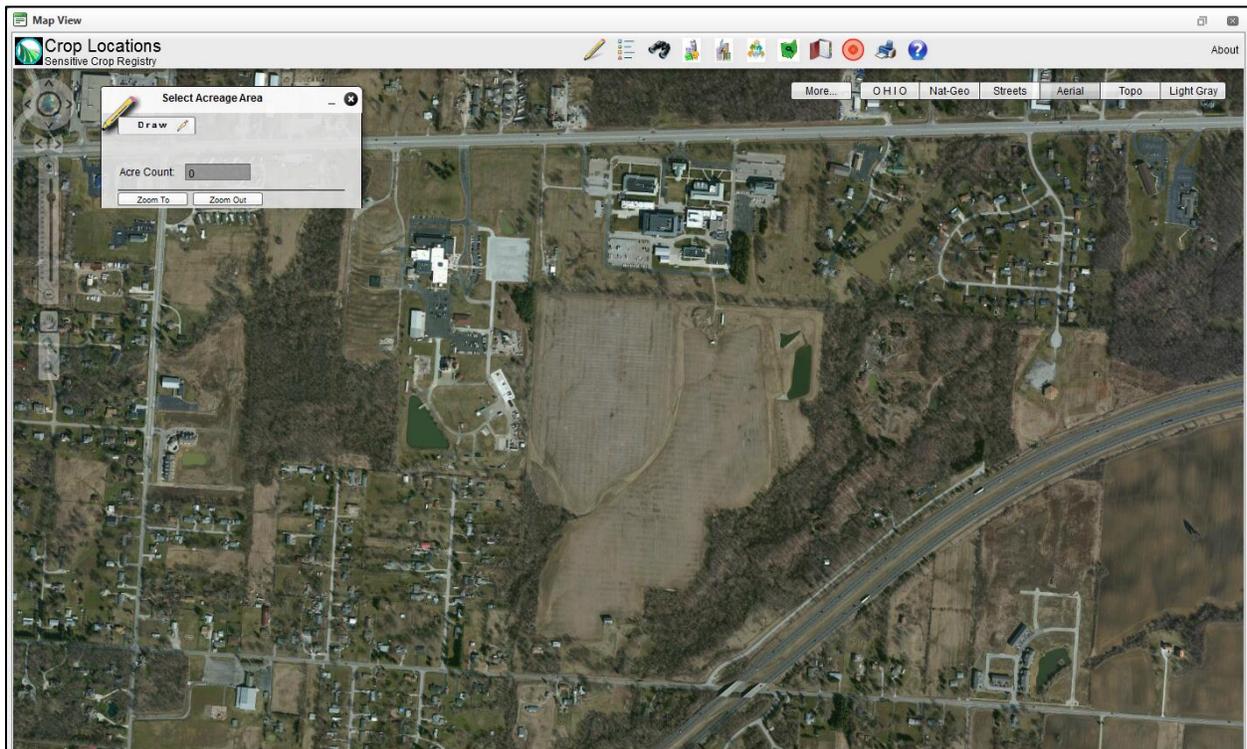
At the bottom right of the form, it says 'Page 1 of 1, items 1 to 1 of 1.'

Select a crop type (or apiary) from the dropdown list, and check the *Organic Crop* box if appropriate. If your specific crop is not listed, or multiple crops are being grown, please provide these details in the *Description of Location* box. You may also use this description box to enter any other information you want other users to know about this location. At a minimum, producers will need to specify the county in which they are growing, and either the township or zip code.

After this information has been supplied, the user **will need to click on the map of Ohio icon in the right-side panel to begin drawing their location**. A new map window will appear, and will focus on the township or zip code specified in the *Add new record* form.

Special Note for Beekeepers

Although bees may travel several miles to forage, the policy for mapping apiary locations is not to extend beyond the property boundary where the hive(s) are located. The primary goal of the OSCR system is to inform applicators where the hives themselves are located, and the apiarist's contact information. This is because Ohio regulation 901:5-11-02(B)(15) requires applicators using a pesticide labelled to be toxic to honey bees to notify registered beekeepers within a half-mile of the spray zone 24 hours in advance, if the area is at least a half-acre in size and the plant is in bloom. To summarize, the mapped area may be as small as you wish (e.g., a single hive) or up to the approximate boundary of the property.

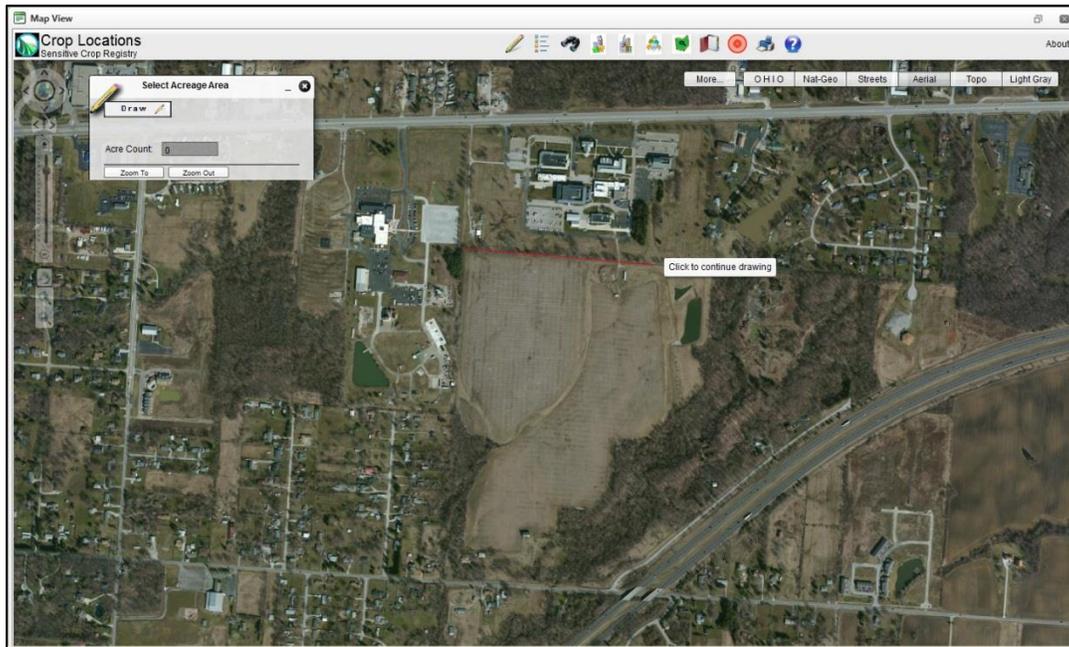


After you have located your production area, click the

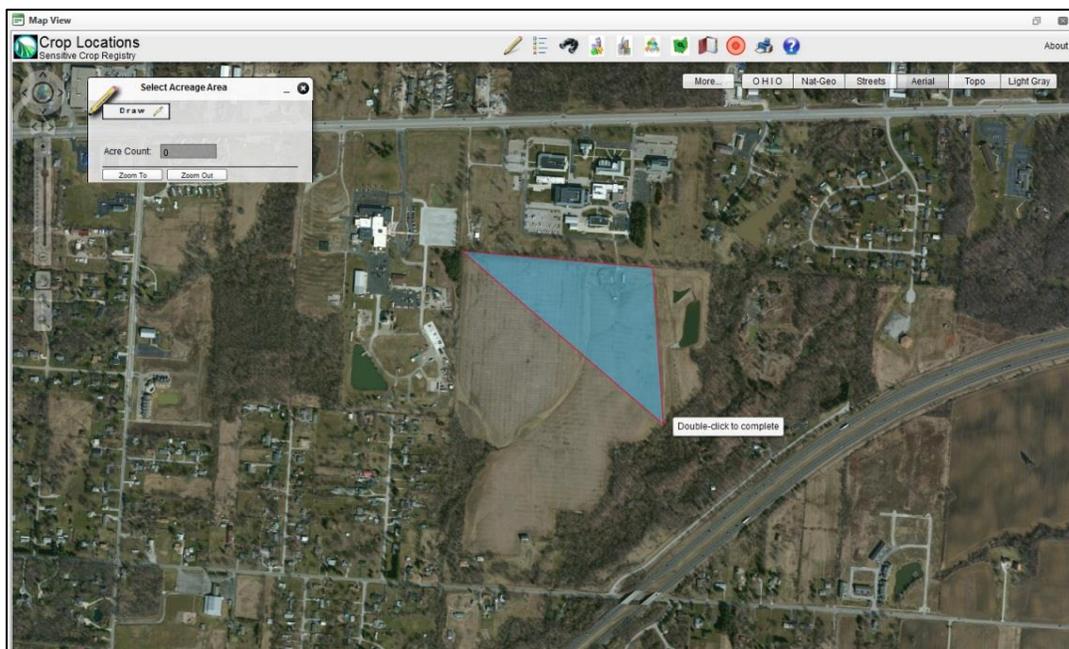


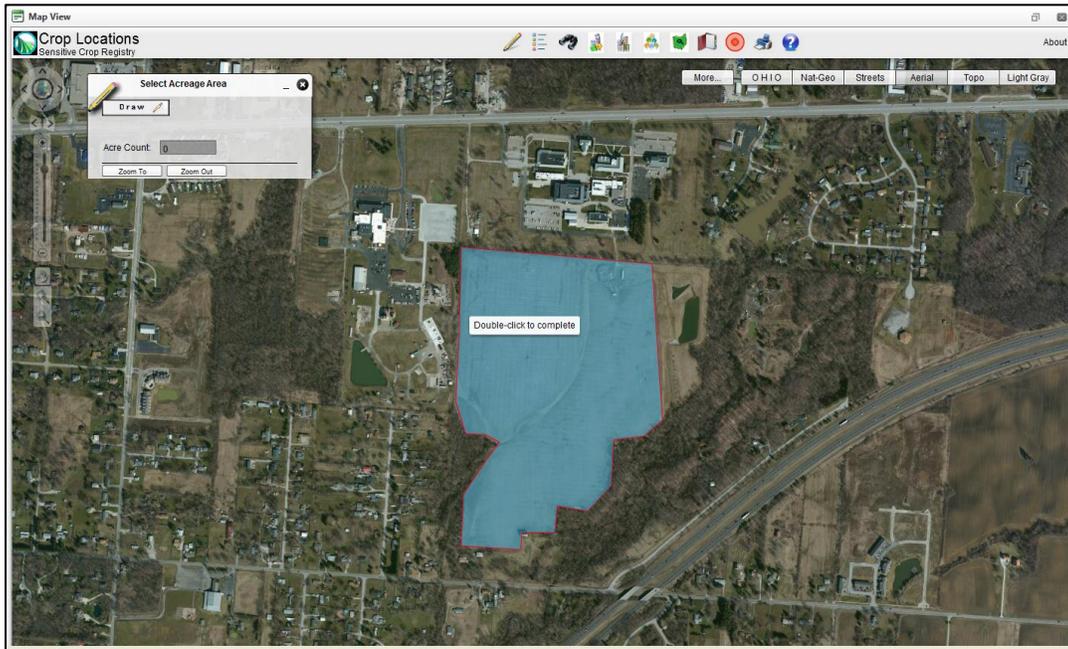
button to begin outlining your growing area.

A single-click on the map will begin drawing by creating an anchor point (e.g., at a corner of your field). A second single-click will create another anchor point (e.g., at another corner) and a line connecting the two (e.g., an edge of the field).

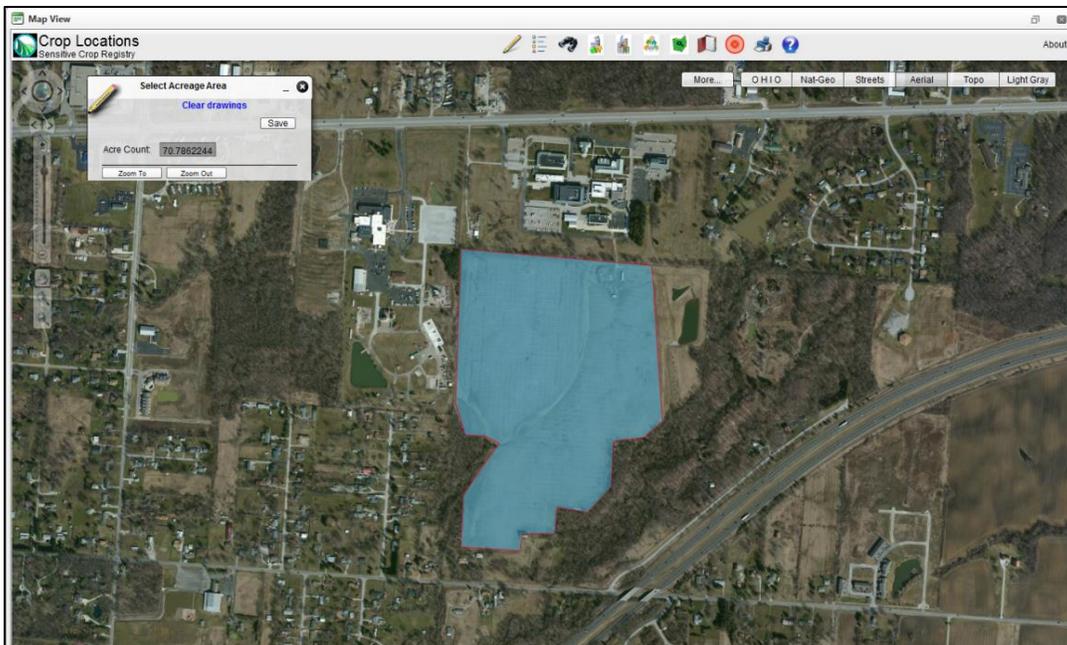


Continue adding anchor points at the corners of your field until the entire area is highlighted blue.





A double-click will add a final anchor point and end the drawing session.



If you make a mistake and need to remove a point or to start over, click the **Clear drawings** button to erase the drawing and start over. After you are satisfied with your drawing, click the **Save Location** button. This will add the drawn map to your record. Once you have saved your location, click the  button in the upper right-hand corner to close the window.

If you have several growing areas:

- Each record in your Producer Location List can hold only one drawing; if your production areas include several land parcels, and if the land is adjacent, you may draw these fields as a single location.
- If your fields are separated, you will need to create a new record for each and draw them separately. There is no limit to the number of records you may have in your Producer Location List.

Tip: If your fields are near each other, but you wish to draw them as separate records, simply fill out the record information and draw the first location. Under the Producer Location List, click the Copy button for that record. This will create a new record with exactly the same information and drawing as the original. Then click the location icon to enter the map interface (which will automatically zoom to the copied drawing). Simply *clear* that copied drawing, move to the next field and draw and save the new location. This process will save you from entering the same information into the new record form and is a quicker method to locate your next fields.

The final step is to submit the information. If you are satisfied with the record information and the map you have drawn, click the **Submit** button for that record.

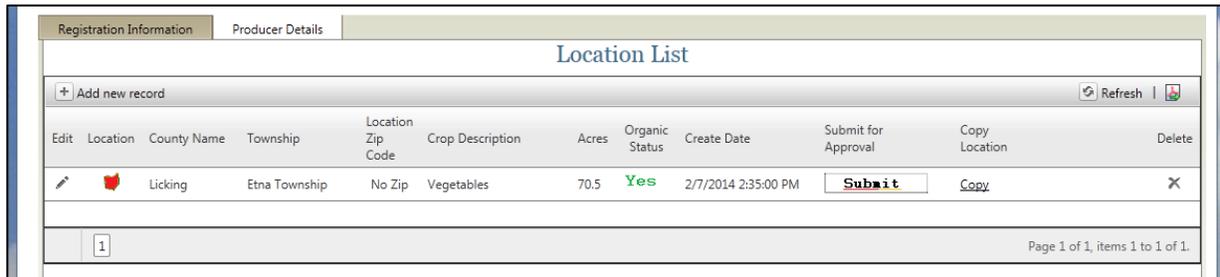


Figure 5. After the record form has been completed and the map drawn, users will need to click the Submit button.

The information will then be sent to ODA for verification, and you will be notified once the crop information approved.

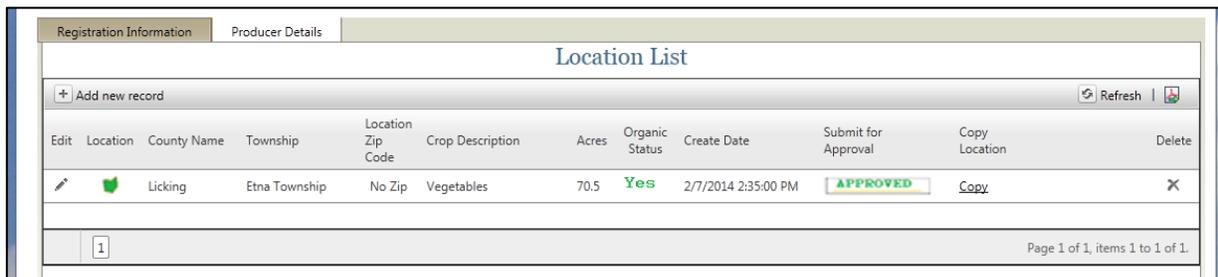


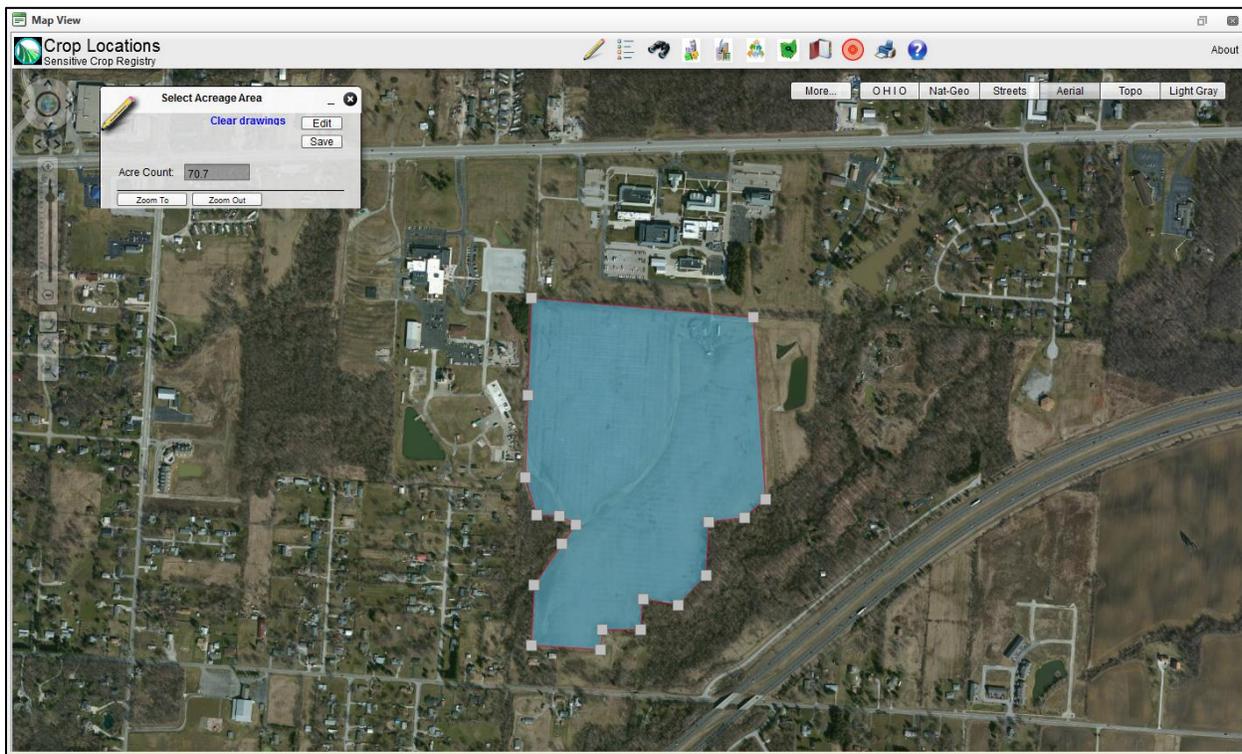
Figure 6. Note the green APPROVED status, indicating that ODA has verified the location and it is now entered into OSCR.

Editing Crop/Hive Information

Registration Information		Producer Details		Location List							
Edit	Location	County Name	Township	Location Zip Code	Crop Description	Acres	Organic Status	Create Date	Submit for Approval	Copy Location	Delete
		Licking	Etna Township	No Zip	Vegetables	70.5	Yes	2/7/2014 2:35:00 PM		Copy	

Page 1 of 1, items 1 to 1 of 1.

Crop information can be changed by clicking  icon under the *Edit* column of the *Producer Location List*. To edit the shape of an existing drawing, click the Ohio icon to enter the map view, and then click *Edit* on the drawing tool window.



Each anchor point is able to be moved to change the shape of the drawing; it is also possible to delete the shape altogether and draw a new one. Note that once an area has been drawn and approved, any changes a user needs to make to its shape/size will need to be re-submitted and approved by ODA again. However, crop information can be changed at any

time without submitting to ODA. This can be useful when producers rotate crops of an entire field without changing its borders.

Search Tools for Applicators

Applicators have the ability to search OSCR for an area of interest. After logging in to the system, the *Sensitive Crops Search* tool becomes available. Applicators may search for sensitive locations at the county-level.

The screenshot displays the 'Sensitive Crop Registry' web application. At the top, a navigation menu includes 'Home', 'Sensitive Crops Search' (highlighted with a red box), 'References', 'FAQ', 'About', 'Contact Us', and 'Member Information:'. A user is logged in as 'Jared.Shaffer@agri.ohio.gov'. Below the navigation, a 'Please Note' message is visible. The main content area is divided into two columns. The left column, titled 'Counties:', contains a list of counties with checkboxes: 'Select all counties', 'Adams', 'Allen', 'Ashland', 'Ashtabula', and 'Athens'. A 'Search' button and a 'Clear Search' button are positioned to the right of the list. The right column, titled 'Summary:', shows 'County list count: 2'. Below this, the 'OSCR Results:' section displays two panels. The first panel, for 'County: Clermont', shows a map of Ohio with a red dot in the southwest and a 'Location Count: 7'. The second panel, for 'County: Pickaway', shows a map of Ohio with a red dot in the southeast and a 'Location Count: 1'. At the bottom of the results section, there are navigation controls including 'N', left and right arrows, a '1' in a box, and 'M'.

Clicking on one of the results will open the map view and focus on the selected county. Changing the zoom extent will allow the user to see the multiple locations within the county.

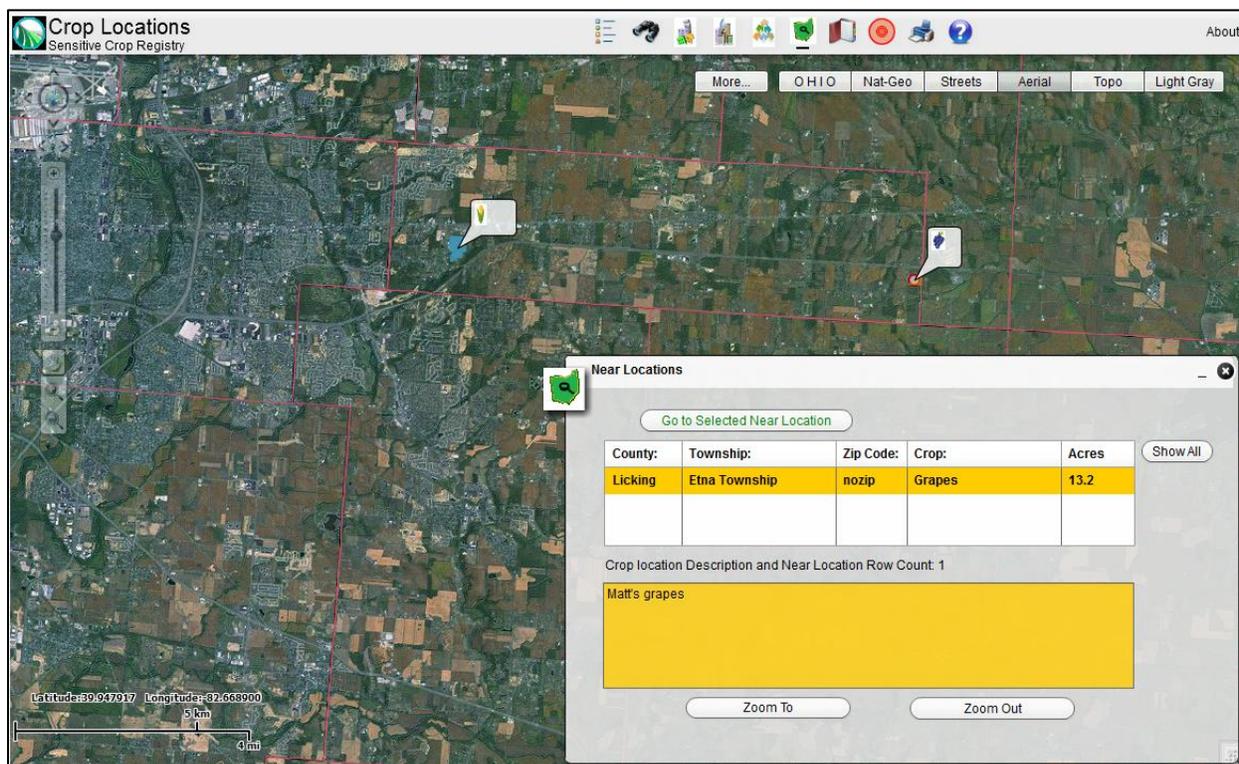


Figure 7. Map view of multiple crop locations in Licking county.

Note that only locations within the selected county are shown; sites which may exist across a county border will not be displayed. The user will have to go back to the Search page and select the bordering county in order to see those locations.

Special Note

Please note that OSCR does not contain a complete listing of registered beekeepers and sensitive crops in Ohio. Even though the system may not show any sensitive areas near your spray zone, you are still required to prevent pesticide drift and to contact beekeepers 24 hours before using a product that is labeled to be toxic to honey bees if the crop to be treated is in bloom and the field is greater than half an acre and within half a mile of any apiary (OAC 901:5-11-02(B)(15)). If you are unsure if an bee hive is near the location to be treated, please contact ODA at 614-728-6373 to request this information.

Search Tools for Producers

Producers have access to a slightly different set of search tools. Producers may search for any combination of counties and crops; they may also search the registry based on the Organic status of the crop.

Sensitive Crops Search Please Note: Please read the disclaimer on the [Sensitive Crop Home Page](#)

Type Selection:
 Organic Crop (Certified Organic)
 - Will return only Organic results.

Counties:
 Select all counties
 Adams
 Allen
 Ashland
 Ashtabula
 Athens

Crops:
 Select all crops
 Apiaries (Registered)
 Aquaculture
 Brambles
 Certified Organic
 Nurseries

Location Keywords:

 Search on keywords only.

SEARCH INSTRUCTIONS:

Type Selection:
 This selection will filter on the Organic Crop locations and will exclude Non-Organic Crops. The search will only return Organic Crop Locations. If you do not select this option the Organic Crops will be displayed with the regular location search results.

County and Crop Selections:
 Choose one or more counties from the County List, then select one or more crops from the Corps List. To select multiple counties or crops select check boxes by each item. To select all counties select 'Select all counties'. To choose all crops press 'Select all crops'.

Keyword entry selection:
 Type your keyword in the box titled 'Location Keywords'. The search will return the possible locations that contain your keywords. To search on just the keywords you entered click the check box labeled "Search on keywords only". By choosing this option you do not have to select a county or crop from the provided lists.

Press the "Search" button to start the search.

Your results will be displayed in a List or Grid view displaying rows from your search selections.

Search Result Column Descriptions:

'Location Description' - This column will contain the entered description of the location.

'County Name' - This column will contain the location's county. A location could overlap into another county. But, the location will be based on the selected primary county selected by the registered user.

Search results are displayed in a table with summary information (shown below). Each record can be expanded to view more detailed information on the crop location and producer's contact information (if allowed). These records can be exported to a pdf format by clicking the



button.

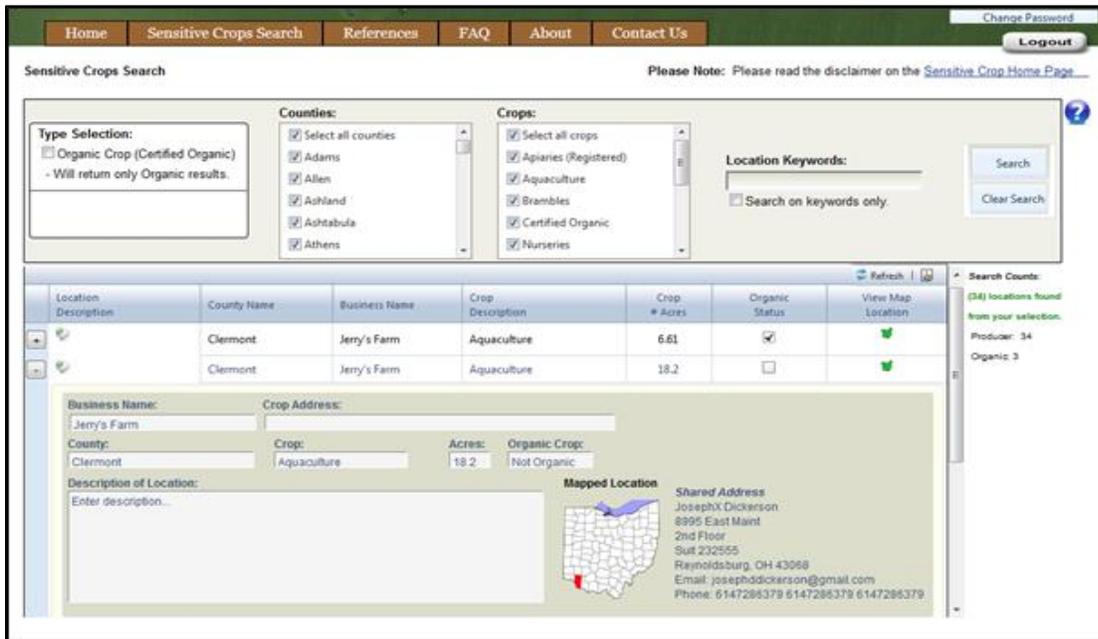


Figure 8. An example search results table, with an expanded record for additional information.

In addition to this text view, users can click the Ohio icon under the *View Map Location* column to view the mapped crop locations. These maps can

be printed by clicking the  print icon.

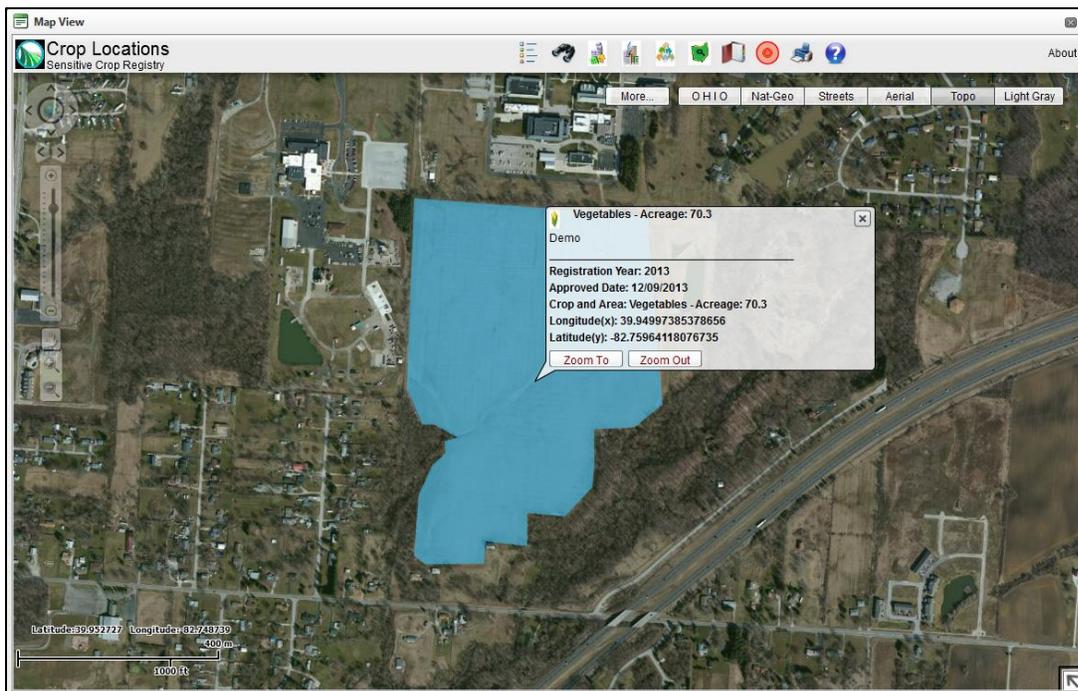


Figure 9. Map view of a crop search result.



Other crops in the area can be viewed using the  Near Locations tool.

Crop Locations
Sensitive Crop Registry

More... O H I O Nat-Geo Streets Aerial Topo Light Gray

Latitude: 39.947917 Longitude: -82.668900
5 km
4 mi

Near Locations

Go to Selected Near Location

County:	Township:	Zip Code:	Crop:	Acres	Show All
Licking	Etna Township	nozip	Grapes	13.2	

Crop location Description and Near Location Row Count: 1

Matt's grapes

Zoom To Zoom Out

Weather Sensors

The National Weather Service provides a data service of weather information and forecasts from 31 airports around Ohio:

http://weather.noaa.gov/weather/OH_cc_us.html

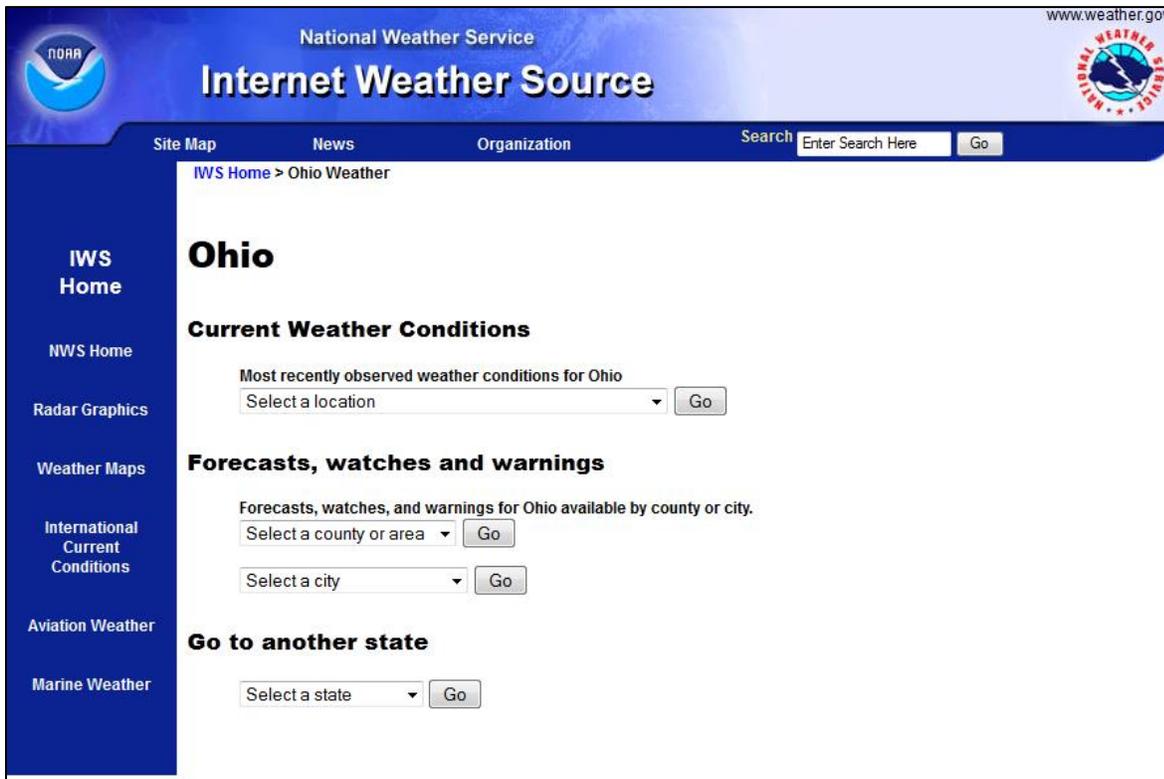


Figure 10. The National Weather Service source page for Ohio

In addition to this, the Ohio Department of Transportation maintains a network of more than 180 atmospheric sensors across Ohio:

<http://www.ohgo.com/dashboard/all-ohio>

These sensors report air and dew temperatures, relative humidity, wind vectors, and precipitation in near real-time. These sensor data are updated every 10-20 minutes.

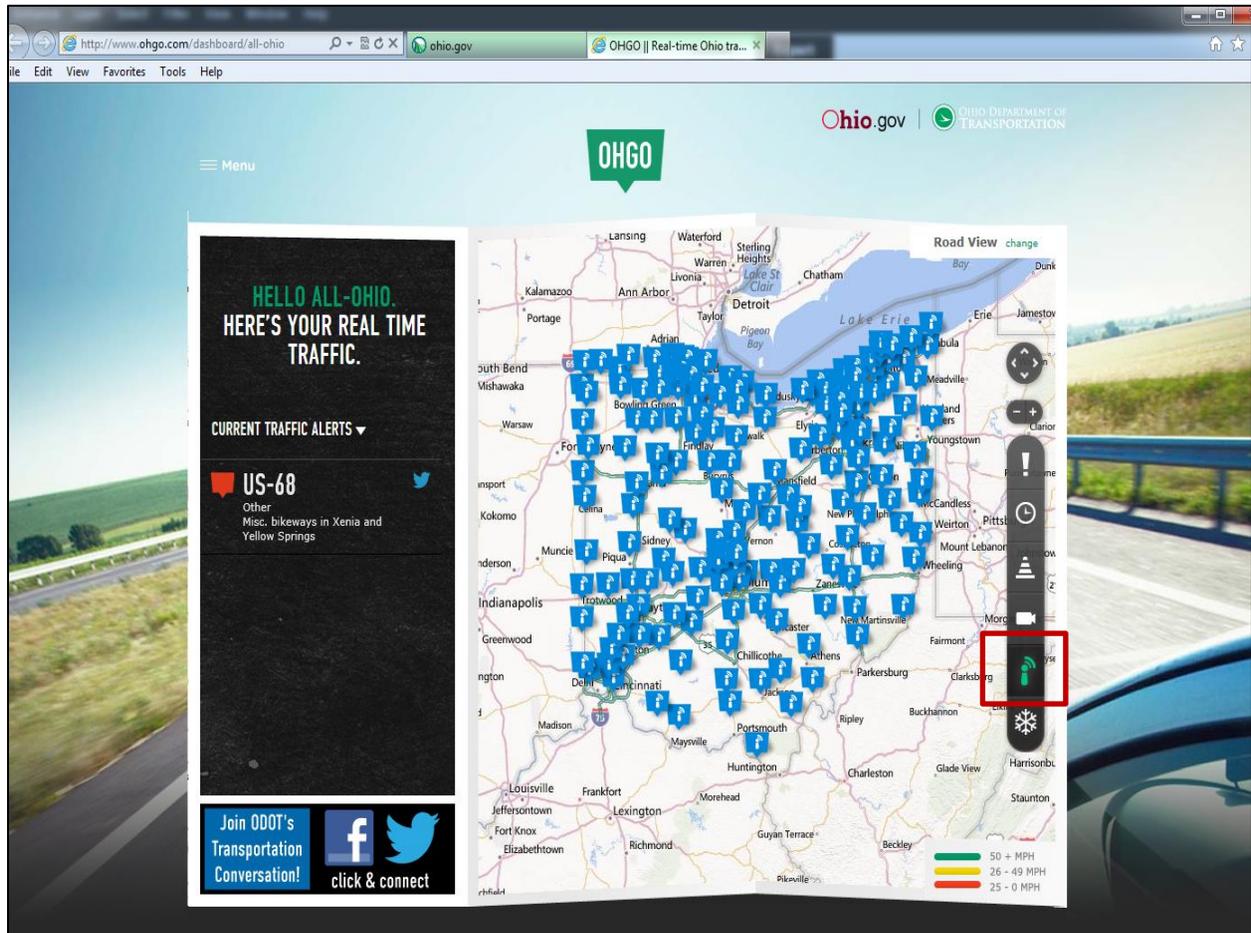


Figure 11. The ODOT road sensor network. Clicking on an icon will display the current weather information at that location.

Contact Us

We would like to hear from you! You may contact us directly via mail, phone, or email to send in your questions, comments, or other input about OSCR.

Attention: Sensitive Crop Registry
Ohio Department of Agriculture
Pesticide & Fertilizer Regulation
8995 E. Main Street, Bldg. 23
Reynoldsburg, OH 43068-3399

Phone: (614) 728-6386

Fax: (614) 466-9754

Email: SensitiveCropRegistry@agri.ohio.gov