

How Driftwatch helped During the Encephalitis Outbreak October 2019



<https://in.driftwatch.org/>

Presentation Overview

- What is Driftwatch?
- What happened with Encephalitis?
- How did they tie in together?





What is DriftWatch?

- A sensitive crop registry tool
- Foster communication between pesticide applicators and specialty crop growers
- Tomatoes, fruit trees, grapes, vegetables, apiaries (bees) and more!
- Producers plot their fields on satellite images (Google Earth)
- Only producers growing a commercial crop can register
- Pesticide applicators check website for producers nearby
- Applicators can register to be notified of new sites in their area

Why DriftWatch?



- Drift is expensive!!
- Some crops cost more than \$10,000 an acre to replace
- What are you neighbors growing?? (bees or organics)
- Some aerial and right of way companies use Driftwatch every time they apply

State View

driftwatch INDIANA SPECIALTY CROP SITE REGISTRY
Specialty Crop Site Registry by FieldWatch

[Home](#) [About](#) [FieldWatch Map](#) [Order Signs](#) [Contact Us](#)

My FieldWatch
Username Password

Search by Address, Zip Code, etc.

Filter Growing Conditions

- ☒ All
- ☒ Organically Grown (in states permitted)
- ☒ Certified Organic
- ☒ Conventionally Grown

Filter Crop Types

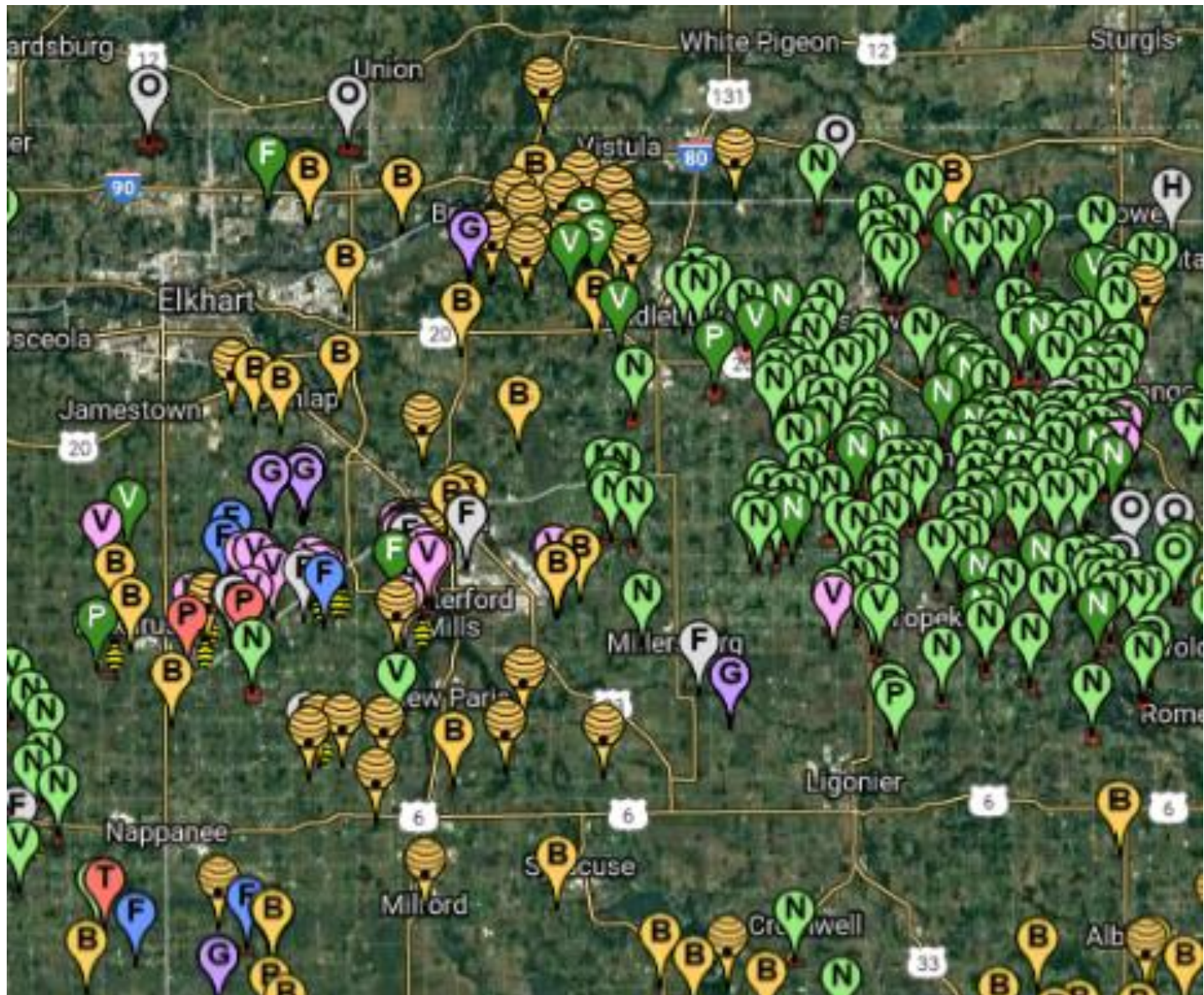
- ☒ All
- ☒ Beehives
- ☒ Christmas Trees
- ☒ Corn
- ☒ Cotton
- ☒ Fish Farm
- ☒ Floriculture or Greenhouse
- ☒ Fruits
- ☒ Grapes
- ☒ Greenhouse - High Tunnel
- ☒ Hardwood Plantation
- ☒ Hops
- ☒ Industrial Hemp
- ☒ Mint or Herbs
- ☒ Non-specialty Certified Organic
- ☒ Non-specialty Transition to Certified Organic
- ☒ Nursery Crops
- ☒ Pastures
- ☒ Potatoes
- ☒ Pumpkins or Melons
- ☒ Rice
- ☒ Soybeans
- ☒ Tobacco

Satellite


Google

Map data ©2019 Imagery ©2019 TerraMetrics Terms of Use Report a map error

Zoomed in view



Grower contact information



BEEHIVES

Beehive IN-54281

Submitted 01/21/2019 Approved 01/21/2019
Updated 01/21/2019

Site expires from map after 03/31/2020

Information

Producer: Ethan Mitchell

Company: Mitchell's honey company

Email: Ethanmitchell010@gmail.com

Address: 21520 us highway 6 New paris IN 46553

Phone: 5743645618

Purpose: Commercial Honey Producing Bees

Location Type: Permanent for the Season

[Report a problem with this site](#)

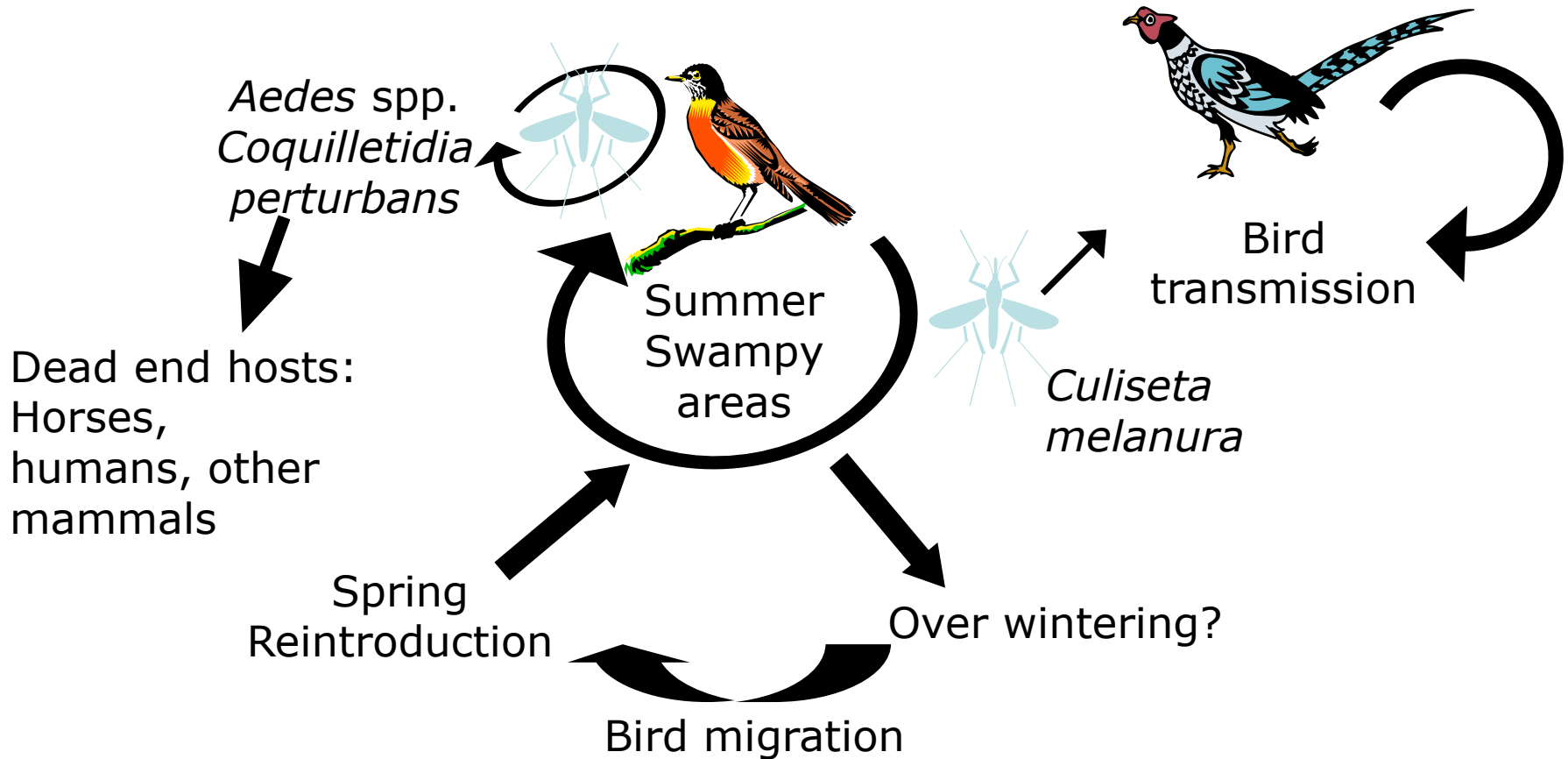
Close

What is EEE?

- Eastern Equine Encephalitis
- Virus disease, passes along by mosquitoes
- Complicated life cycle



EEE Transmission

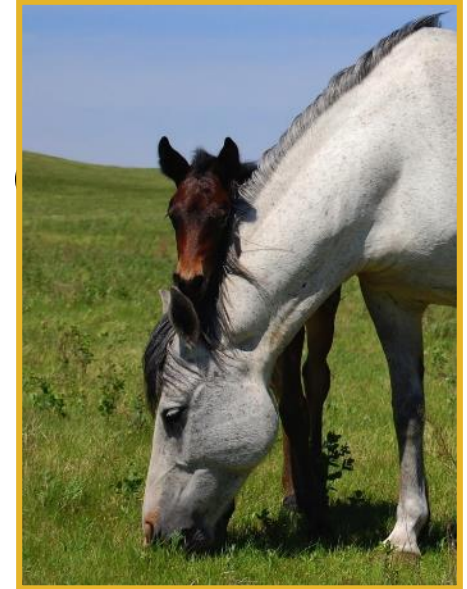


Risks and Outcomes of EEE

- Humans
 - Elderly most at risk
 - Case fatality rate: 33%
- Horses
 - About 90% fatality
 - A vaccine is available, for annual treatment (a 4-H requirement)
 - Equine cases appear first, sentinels for human cases

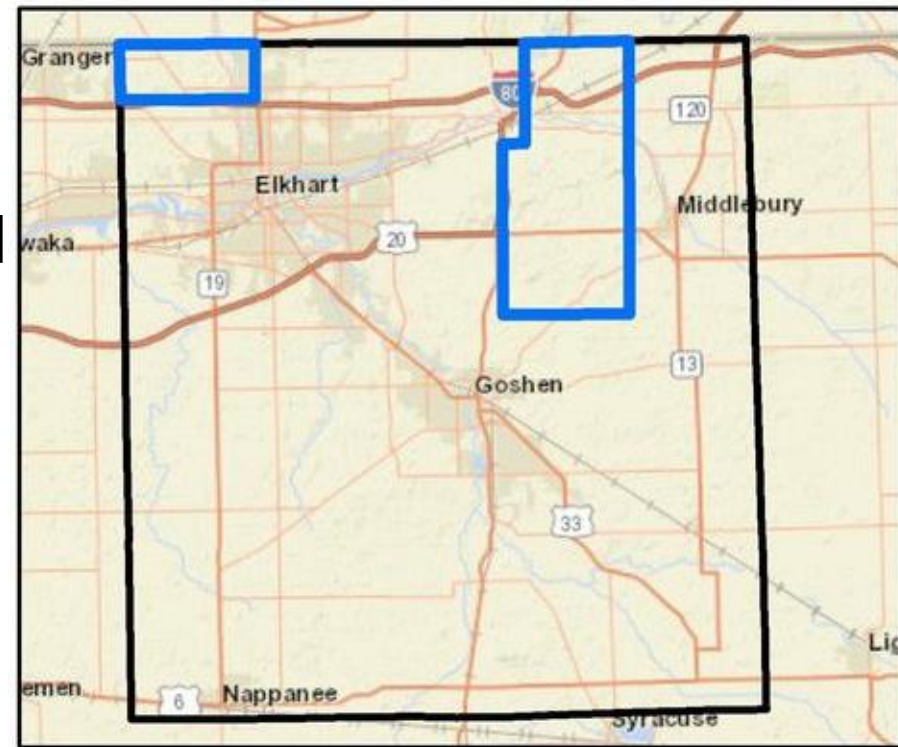
EEE Outbreaks can be serious!

- 1942-1943
 - “Michigan” epidemic – 781 human
- 1947
 - Southern Louisiana and Texas
 - 14,000 horse cases/12,000 died
 - 83% case fatality rate
- 5 additional major outbreaks since 1940s



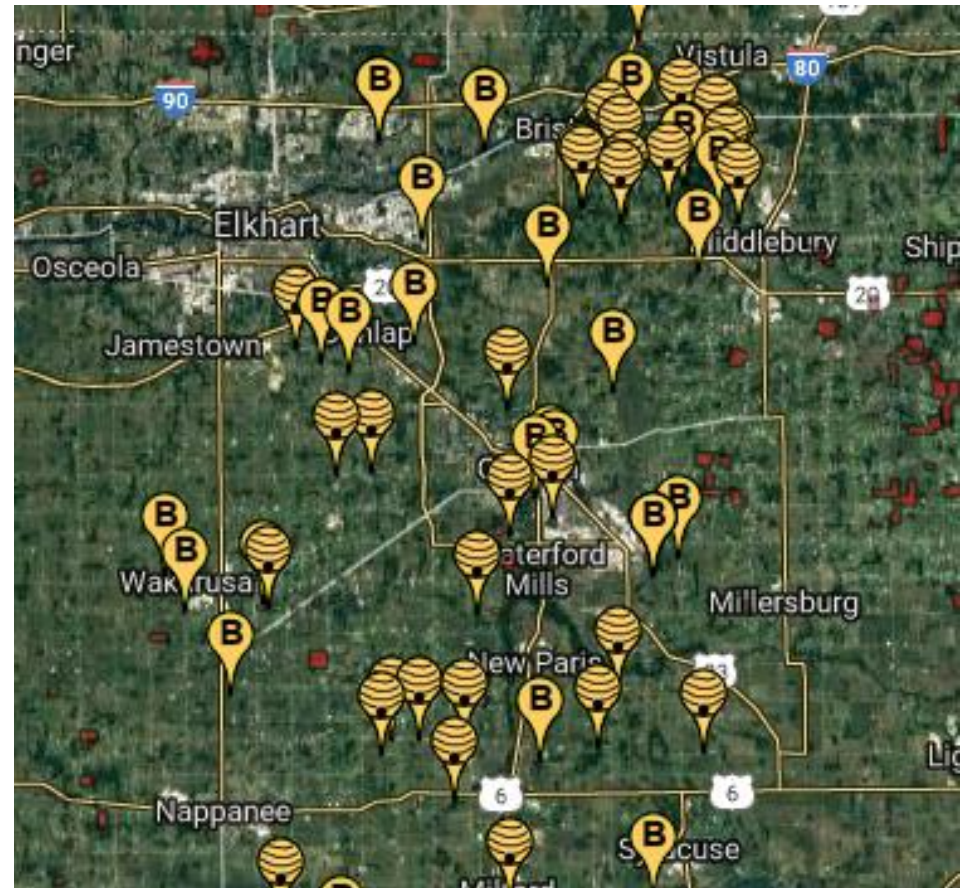
What Purdue Extension Did...

- I was part of the local coordination committee
- Charged with finding organic and specialty crop growers and beekeepers
- Press conference on 10/1/19
- 32,000 acres sprayed 10/2/19



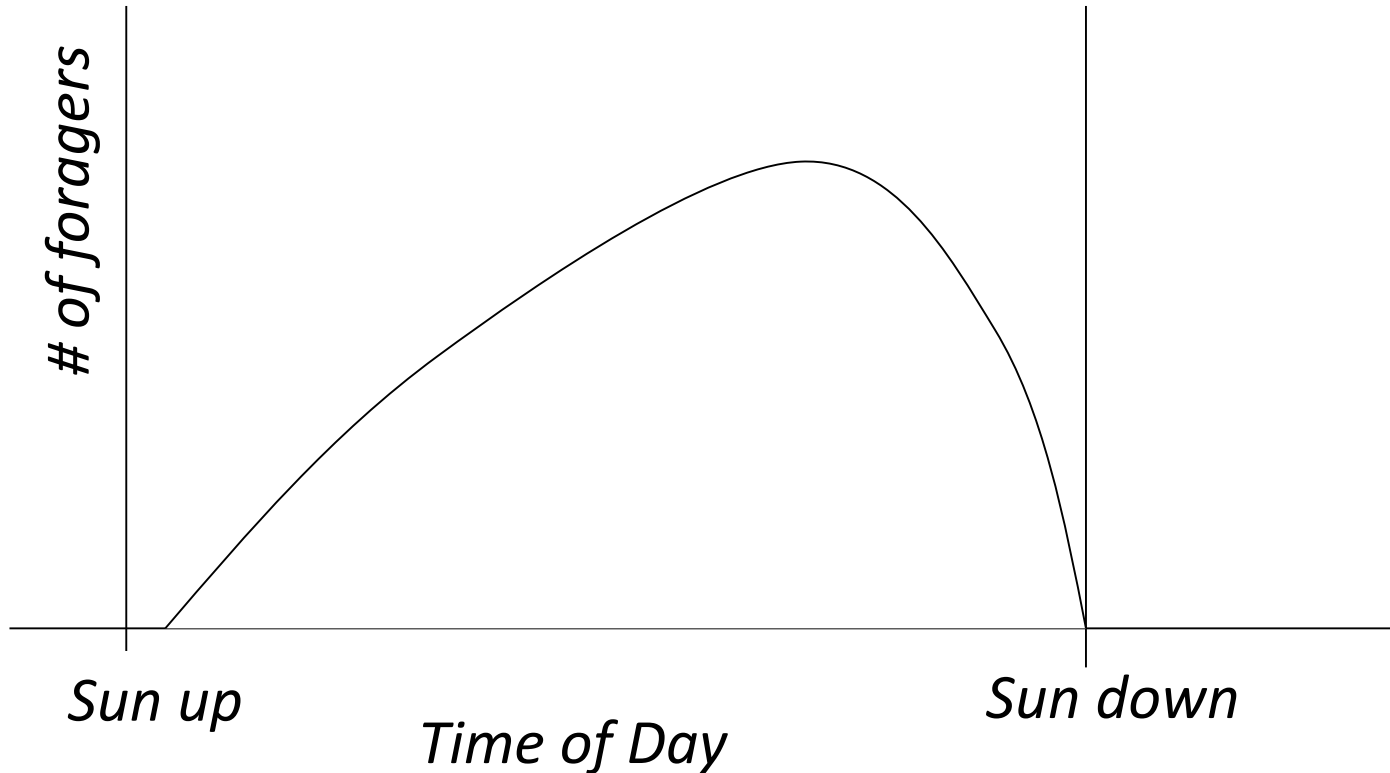
What Purdue Extension Did...

- Located beekeepers in the blocks to be sprayed
 - Made calls, Michiana Beekeepers Association, social media
- Promoted BeeCheck to map locations of bees
- 35 new beekeepers registered in BeeCheck (470+ hives)

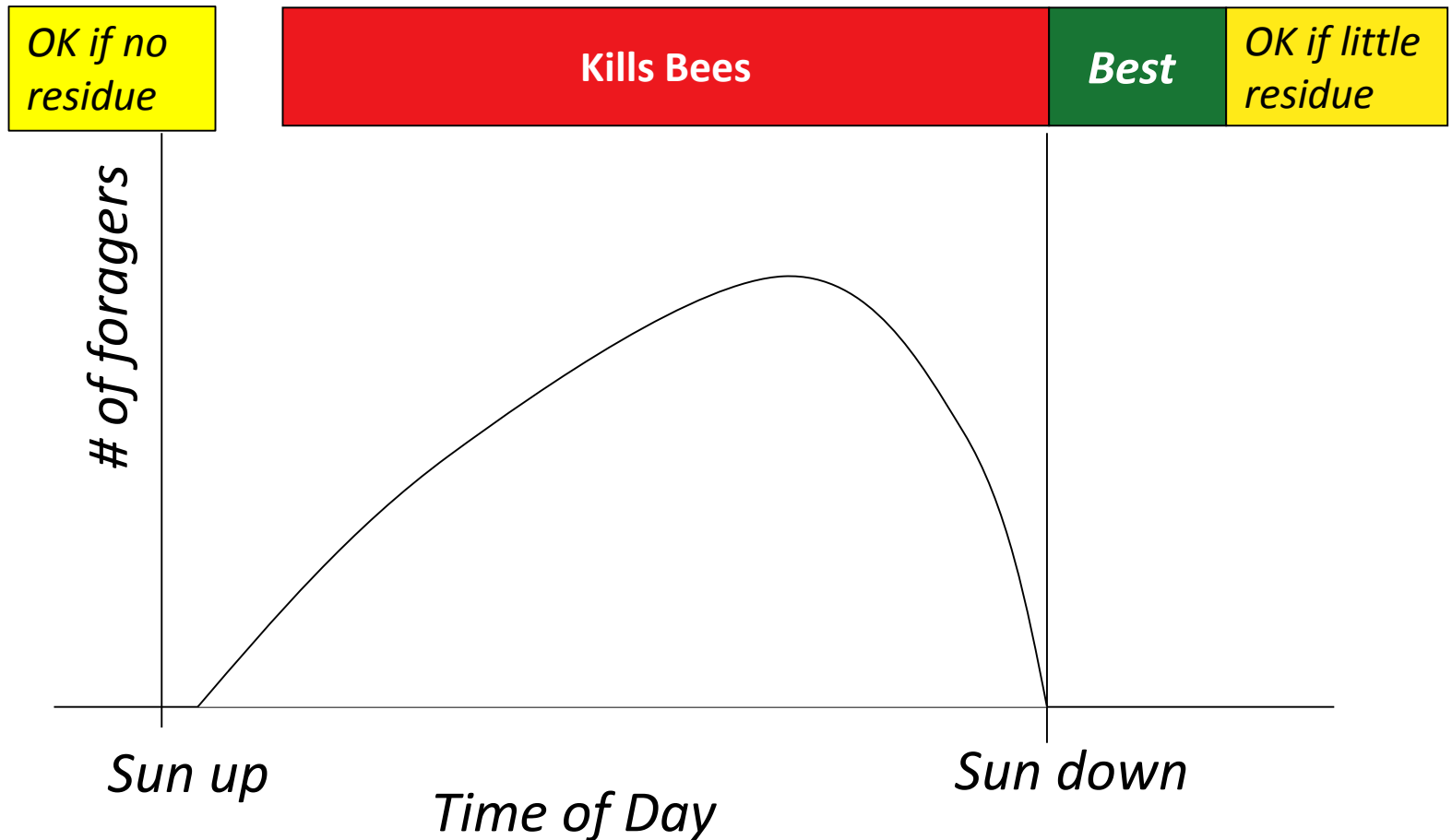


A Honey Bee's (Daily) Life

Honey bees forage sun up to sun down unless it's raining



Best time for pesticide application: Dusk to Dawn



What Purdue Extension Did...

- 6 new organic farms registered in FieldWatch. Two were in the spray block
- Sent information out to our Ag groups (farmers, gardeners..)
- Handled requests for information about the spraying and the pesticide
- Passed information to LaGrange/Noble Counties
- 5 TV interviews, 2 local newspapers that week
- Handled an estimated 450 calls about the spraying over 7 days

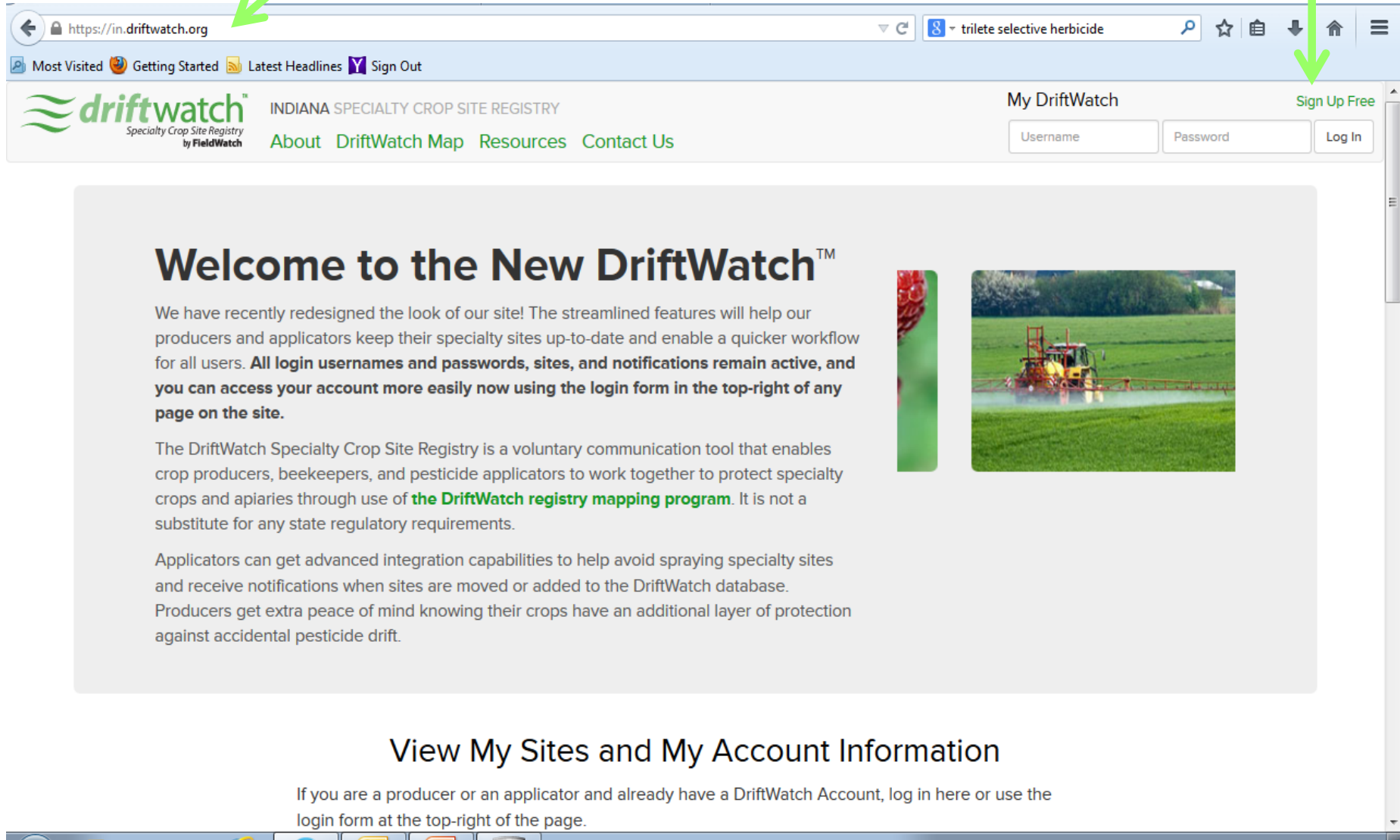
Crazy Stories

- Fueled by Social Media, all kinds of poor information was coming around
- “Everything was going to die”
- Chicken poisoning
- Bees covered, died, not in spray area
- Dead Squirrel

Positives about DriftWatch

- Fairly easy to use
- The aerial applicator could download the specialty crop maps, shut off sprayer
- Beekeepers could be contacted via phone or email and given updates

How to sign up? It's free!



The screenshot shows the DriftWatch website interface. A green arrow points to the address bar showing the URL <https://in.driftwatch.org>. Another green arrow points to the "Sign Up Free" link in the top right corner. The website header includes the DriftWatch logo, navigation links, and a login section. The main content area features a welcome message and information about the site's redesign and the DriftWatch registry mapping program.

<https://in.driftwatch.org>

Most Visited Getting Started Latest Headlines Sign Out

driftwatch™
Specialty Crop Site Registry
by FieldWatch

INDIANA SPECIALTY CROP SITE REGISTRY

About DriftWatch Map Resources Contact Us

My DriftWatch

Sign Up Free



Username Password Log In

Welcome to the New DriftWatch™

We have recently redesigned the look of our site! The streamlined features will help our producers and applicators keep their specialty sites up-to-date and enable a quicker workflow for all users. **All login usernames and passwords, sites, and notifications remain active, and you can access your account more easily now using the login form in the top-right of any page on the site.**

The DriftWatch Specialty Crop Site Registry is a voluntary communication tool that enables crop producers, beekeepers, and pesticide applicators to work together to protect specialty crops and apiaries through use of **the DriftWatch registry mapping program**. It is not a substitute for any state regulatory requirements.

Applicators can get advanced integration capabilities to help avoid spraying specialty sites and receive notifications when sites are moved or added to the DriftWatch database. Producers get extra peace of mind knowing their crops have an additional layer of protection against accidental pesticide drift.



View My Sites and My Account Information

If you are a producer or an applicator and already have a DriftWatch Account, log in here or use the login form at the top-right of the page.

Login information



MICHIGAN SPECIALTY CROP SITE REGISTRY

[About](#) [DriftWatch Map](#) [Resources](#) [Contact Us](#)

Sign Up for a DriftWatch Account

Signing up is fast, free, and simple.

Username Must be at least 6 characters. It's OK to use your email address as your username.

Email Address

Password Must be at least 8 characters, case-sensitive

Re-type Password

I am registering as a ...

Already have a DriftWatch Account?

Username

Password [Forgot your username or password?](#)

No email address?:
no.email@driftwatch.org

User Contact Information

Same for producers & applicators

Contact Information

First Name:

Last Name:

Organization (Optional):

Web Site (Optional):

Street:

Apt (optional):

City

State / Province

Zip or Postal Code

Phone:

Commercial Pesticide Applicator License Number

Create Account and Select Notification Areas

Signing up as an applicator: Notification options



MICHIGAN SPECIALTY CROP SITE REGISTRY

[About](#) [DriftWatch Map](#) [Resources](#) [Contact Us](#)

Reid Applicator3

Registered DriftWatch Applicator

[My Profile](#)

[Log Out](#)

Sign up for Free Site Alerts

Registered DriftWatch Applicators get automatic email notifications of new sites in selected areas. You can select to receive notifications statewide, county-by-county, or in specially designated regions of your choosing.

Notification Options

- ☐ Entire State / Province
- ☐ Select Counties
- ☐ Draw a custom region on the map

Finish

[Disclaimer](#) [Support](#)

Copyright © 2014 FieldWatch, Inc and Purdue Research Foundation



Registering your site as a producer

2) Submit new site button

3) Fill out crop info

1) Login

The screenshot displays the DriftWatch website interface. On the left, a sidebar contains navigation links: 'Most Visited', 'Getting Started', 'Latest Headlines', and 'Sign Out'. Below these is a 'SUBMIT NEW SITE' button. The main content area is titled 'Submit New Specialty Site' and shows 'Step 1 Enter Basic Site Information'. The form includes several sections with checkboxes and dropdown menus:

- Select the Crop Year for this Site:** A dropdown menu showing '2014'.
- Select Your Site's State or Province:** A dropdown menu showing 'Indiana'.
- Specialty Crop Type:** A dropdown menu showing '(Select Specialty Crop Type)'.
- Growing Conditions:** Radio buttons for 'Conventionally Grown', 'Organically Grown(Not accepted in all states)', and 'Certified Organic'.
- Active Dates:** Radio buttons for 'Area will be registered as soon as it is approved.', 'Date your site will appear on the DriftWatch map: mm/dd/yyyy', 'Do not expire this site.', and 'Date site will expire from the DriftWatch map: mm/dd/yyyy'.

On the right side of the page, a user profile for 'Beth Carter' is visible, with links for 'My Profile' and 'Log Out'. The background of the page shows a satellite map of a rural area.

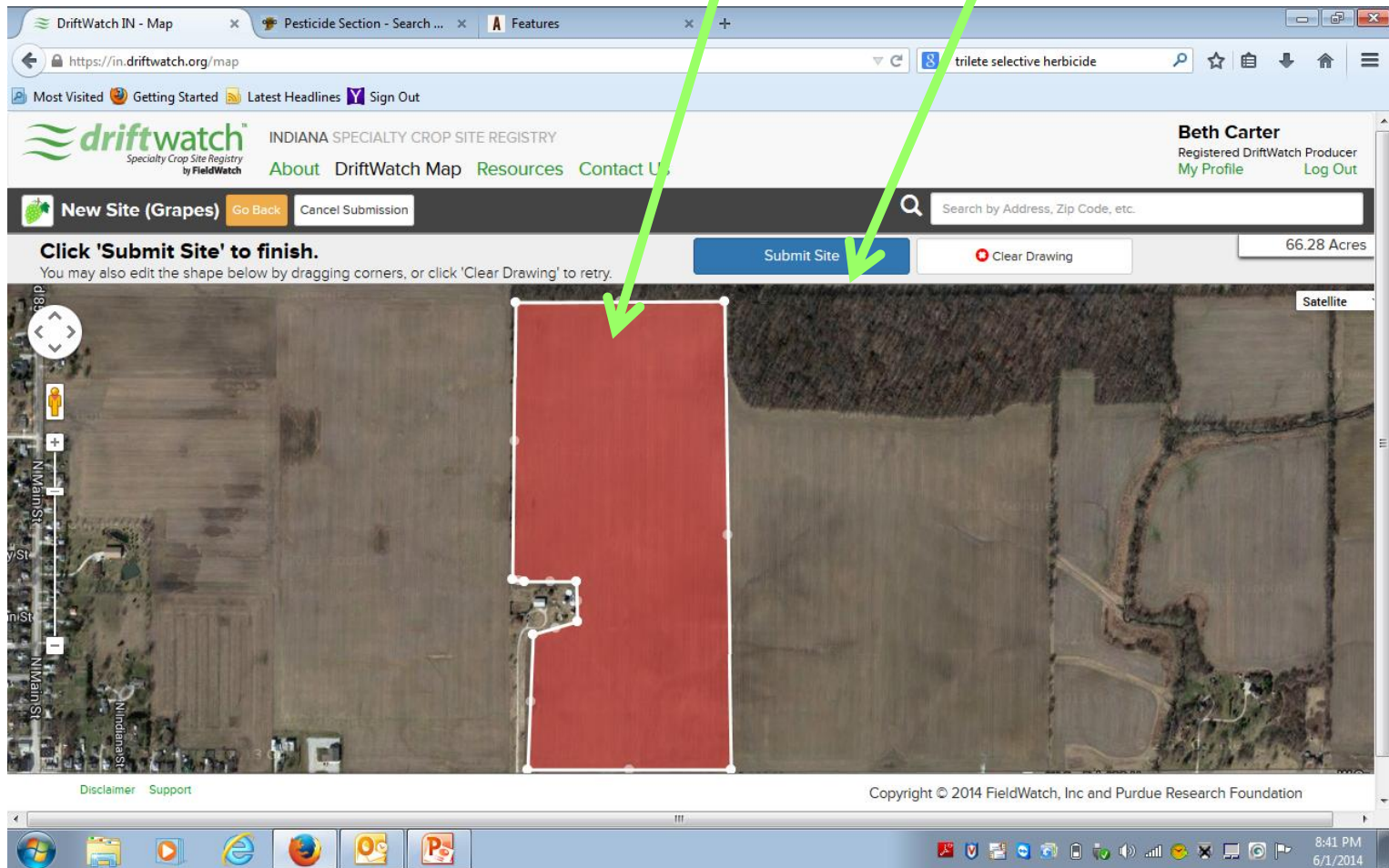
Registering your site as a producer

4) Begin tracing
button

The screenshot shows the DriftWatch website interface. At the top, the URL is <https://in.driftwatch.org/map>. The page header includes the DriftWatch logo, the text "INDIANA SPECIALTY CROP SITE REGISTRY", and navigation links: "About", "DriftWatch Map", "Resources", and "Contact Us". On the right, the user "Beth Carter" is logged in as a "Registered DriftWatch Producer", with links for "My Profile" and "Log Out". Below the header, there is a section for "New Site (Grapes)" with "Go Back" and "Cancel Submission" buttons. A search bar prompts the user to "Search by Address, Zip Code, etc.". A prominent instruction reads "Locate your site on the map, then click Begin Tracing." with a blue "Begin Tracing" button. A green arrow points to this button. The main area is a satellite map showing a rural landscape with roads like "W Co Rd 400 N" and "E Gas Line Rd". The bottom of the page includes a "Disclaimer Support" link and a copyright notice: "Copyright © 2014 FieldWatch, Inc and Purdue Research Foundation".

Registering your site as a producer

5) Draw 6) Submit



Producer page

in.driftwatch.delmarit.com:1180/map

driftwatch
Specialty Crop Site Registry
by FieldWatch

About **DriftWatch Map** Resources Contact Us

ADD NEW SITE Search by Address

My Sensitive Sites

My new field	Unfinished
My Bees	Submitted
Grapes	Rejected
South Tomatoes	Approved
Grapes 2	Approved

Crop Types

ALL STATES IN

- ☒ All
- ☒ Beehives
- ☒ Certified Organic
- ☒ Christmas Trees
- ☒ Fish Farm
- ☒ Floriculture or Greenhouse
- ☒ Fruits
- ☒ Grapes
- ☒ Greenhouse - high tunnel
- ☒ Hardwood Plantation
- ☒ Mint or Herbs
- ☒ Nursery Crops
- ☒ Organic Crops
- ☒ Organic Livestock
- ☒ Other

Google

Map data ©2013 Google Imagery ©2013, DigitalGlobe, IndianaMap Framework Data

DriftWatch Specialty Crop Site Registry

Notification Emails

RE: DE DriftWatch™ Approval

Dear Ray Walker,

Thank you for signing-in and utilizing the DriftWatch Specialty Crop Site Registry. This note is providing verification and approval of your recent submission that has been added to the DriftWatch database.

- **DriftWatch Field ID:** DE-4713 'Walker's Apiary'
- **Crop Type:** Beehives
- **Growing Condition:** Organically Grown
- **Crop Year:** 2014
- **Submission Date:** Feb 24, 2014
- **Start Date:** 02/23/2014
- **Email:** ray.m.walker@gmail.com
- **Website:** <http://www.naturallygrown.org/producers/3817>
- **Public Notes:** Certified Naturally Grown Apiary
- **Area:** approximately 0.61 acres

To see this field on the map, [click here](#).

The data steward made the following remarks regarding your submission:

Thank you for using DriftWatch. Please contact me if you have any questions or comments. Laura Mensch (302) 698-4573 laura.mensch@state.de.us

As an approved producer, you may purchase official black and yellow "No Drift Zone" signs for additional identification of your specialty crop site!

Simply [login to DriftWatch](#) and click on your approved site, then in the popup click "Purchase a No-Drift Sign for my site".

If you see anything in error or have any problems, please contact your data steward david.pyne@state.de.us.

Thank You for Using DriftWatch!

Regards,

FieldWatch™ Customer Service

www.fieldwatch.com

™ - Trademark of FieldWatch, Inc and Purdue Research Foundation

Users receive automated emails
with site specific information

- Welcome and Sign Up
- Submission
- Approval
- New Sites in Area

Contact info

Contact Us

Indiana Data Steward

Beth Carter

Investigator, Office of the Indiana State Chemist

Office of Indiana State Chemist
175 S. University Street
West Lafayette, IN 47907

Email: carter14@purdue.edu

FieldWatch National Organization

FieldWatch, Inc.
Purdue Research Park
1281 Win Hentschel Blvd.
West Lafayette, IN 47906

www.fieldwatch.com

Email: support@fieldwatch.com



Thank you