

Pollinator Protection Update on BeeCheck

Dwight E. Seal
North Carolina Department of Agriculture & Consumer Services
Structural Pest Control & Pesticides Division

Honey Bee

Apis Mellifera



Bee Facts

- 1 of every 3 bites you take are due to a pollinated crop
- A worker bee will produce 1/12 of a teaspoon of honey during its life
- Hive consists of 20-60,000 bees
- Worker bees only live 6 weeks

It's Cool to
be a
Beekeeper



Beekeepers

- Hobbyist 10,000 +
- Sideline 100s people who derive some income from beekeeping
- Commercial < 12 primarily pollinators who have 1000s of stands of bees

Top Crops Pollinated in NC

- Blueberries
- Pumpkins
- Apples
- Cucumbers

Generally 100.00 per
hive for pollination



What's Causing Bee Decline?

- Varroa Mites are Public Enemy Number 1
- Habitat Decline
- Forage Resources
- Disease (viral and bacterial)
- and Yes Pesticides



Honeybees: are not the only Pollinators

- Several species of Other Insects that are Responsible for Pollination too. Even though they are not domesticated, they deserve protections from pesticides



Be in Compliance

- Correct license: Structural License P phase
Pesticide Section Public
Health Category
- Use properly labeled Pesticides
- Follow label directions
- Look out for managed hives



When Bees are Present

- Communicate with beekeeper to cover bees
- Don't apply when bees are foraging area
- Apply at dusk if possible
- Use less toxic insecticide
- Be conscious of drift



Environmental Hazards

loading of sub-slab injection.

¹Use one of the following NIOSH approved respirator with any R, P or HE filter or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any R,P or HE prefilter.

When treating adjacent to an existing structure, the applicator must check the area to be treated, and immediately adjacent areas of the structure, for visible and accessible cracks and holes to prevent any leaks or significant exposures to persons occupying the structure. People present or residing in the structure during application must be advised to remove their pets and themselves from the structure if they see any signs of leakage. After application, the applicator is required to check for leaks. All leaks resulting in the deposition of termiticide in locations other than those prescribed on this label must be cleaned up prior to leaving the applications site. Do not allow people or pets to contact contaminated areas or to reoccupy contaminated areas of the structure until the clean-up is completed.

Environmental Hazards

This pesticide is extremely toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and run-off from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters. Care should be used when spraying to avoid fish and reptile pets in/around ornamental ponds.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow to drift to blooming crops if bees are visiting the treatment area.

Physical and Chemical Hazards

Do not apply water-based dilutions of Bifen I/T to electrical conduits, motor housings, junction boxes, switch boxes or other electrical equipment because of possible shock hazard.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Do not apply a broadcast application to interior surfaces of homes.

2:06 PM
1/16/2018

Investigation

- Mosquito treatment made using bifenthrin
- Managed hives in the vicinity
- Plants blooming that were attracting bees
- Application made to Privet hedge
- Company not properly licensed expired and didn't have public health category
- Label violation documented



Investigation

- Bee kill reported
- No obvious pesticide treatment
- Termite treatment was made prior
- Bees attracted to AC condensation in trench
- Plastic weed barrier with no gutters on house held water
- Treatment by licensed PMP
- No violations



FieldWatch.com



[Click here for the FieldWatch Registry Home](#)

Home

Welcome

About FieldWatch

In the News

FieldWatch Registries

FieldWatch Membership

FAQs

Contact Us

Annual Meeting

Resources

Job Posting



Communication + Cooperation + Collaboration = Successful Co-existence

FieldWatch is a non-profit company that offers mapping and communication tools which are just one element of a successful formula for successful co-existence of specialty producers, large scale commodity farmers, commercial and private applicators and beekeepers. **Communication** is the start, but **cooperation** and **collaboration** of all parties is essential. Sometimes it means compromise or adjustments that foster an environment that everyone can do what they need to do with respect to the needs of others.

WELCOME NORTH CAROLINA USERS!!

[NCDA&CS Press Release](#)

Click here to sign up or login as a **commercial crop producer.**



Click here to sign up or login in **if you only keep bees.**



Click here to sign up or login **if you are an applicator.**



FOR ORDERING SIGNS AND FLAGS, YOU MUST HAVE AN APPROVED CROP OR APIARY SITE.
[Click on field sign to go to order page!!](#)

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yesterday

More coverage of #BeeCheck thanks to @AgricultureDE wgmd.com/beekeepers-pes...



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yesterday

New Apiary Program In Missouri!!

Check out the new Missouri Pollinator Conservancy Program initiated by University of Missouri Extension in collaboration with the Missouri Department of Agriculture, Missouri Farm Bureau, applicators, crop producers, beekeepers and FieldWatch. **New BeeCheck flags are available from FieldWatch for beekeepers who have approved apiary sites on DriftWatch.** Link for more information: [MPCP](#)



FieldWatch – DriftWatch

Specialty Crop Site Registry

DriftWatch Website

- An easy-to-use, reliable, accurate and secure on-line mapping tool intended to enhance communications that promote awareness and stewardship activities between producers of specialty crops, beekeepers, and pesticide applicators to reduce incidences of drift.
- FREE - EASY

Communication + Cooperation + Collaboration = Successful Co-existence

FieldWatch – DriftWatch

Specialty Crop Site Registry

FieldWatch – DriftWatch - BeeCheck

- **FieldWatch** - a non-profit company created to develop and operate the DriftWatch Specialty Crop Site Registry
- **DriftWatch** - a web based mapping tool created to promote communications between producers of specialty crops and pesticide applicators in support of ongoing stewardship activities
 - Designed to alert applicators where specialty crop fields and beehives are located before their applications of chemicals
- **BeeCheck** – a web based mapping tool created for beekeepers (hobby, sideline, and commercial) to map apiaries, purchase signs, and flags.

Register for an Account

DriftWatch - Home | Insecure Connection | NCDA Pesticides Approval Das... | PCT 18 Schedule - PCT 18 Schedule... | DriftWatch NC - Sign Up

https://nc.driftwatch.org/signup#applicator

driftwatch NORTH CAROLINA SPECIALTY CROP SITE REGISTRY
Specialty Crop Site Registry by FieldWatch

Home About FieldWatch Map Order Signs Contact Us

Sign Up for an Account

Signing up is fast, free, and simple.

driftwatch Specialty Crop Site Registry by FieldWatch

beecheck Apiary Registry by FieldWatch

Active State
Some states are not in the FieldWatch system. If your home state is not selected below, please select the state where you are active.
North Carolina

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

Email Address
Email Address

Password Must be at least 8 characters, case-sensitive
Password

Re-type Password
Re-type Password

Sign Up

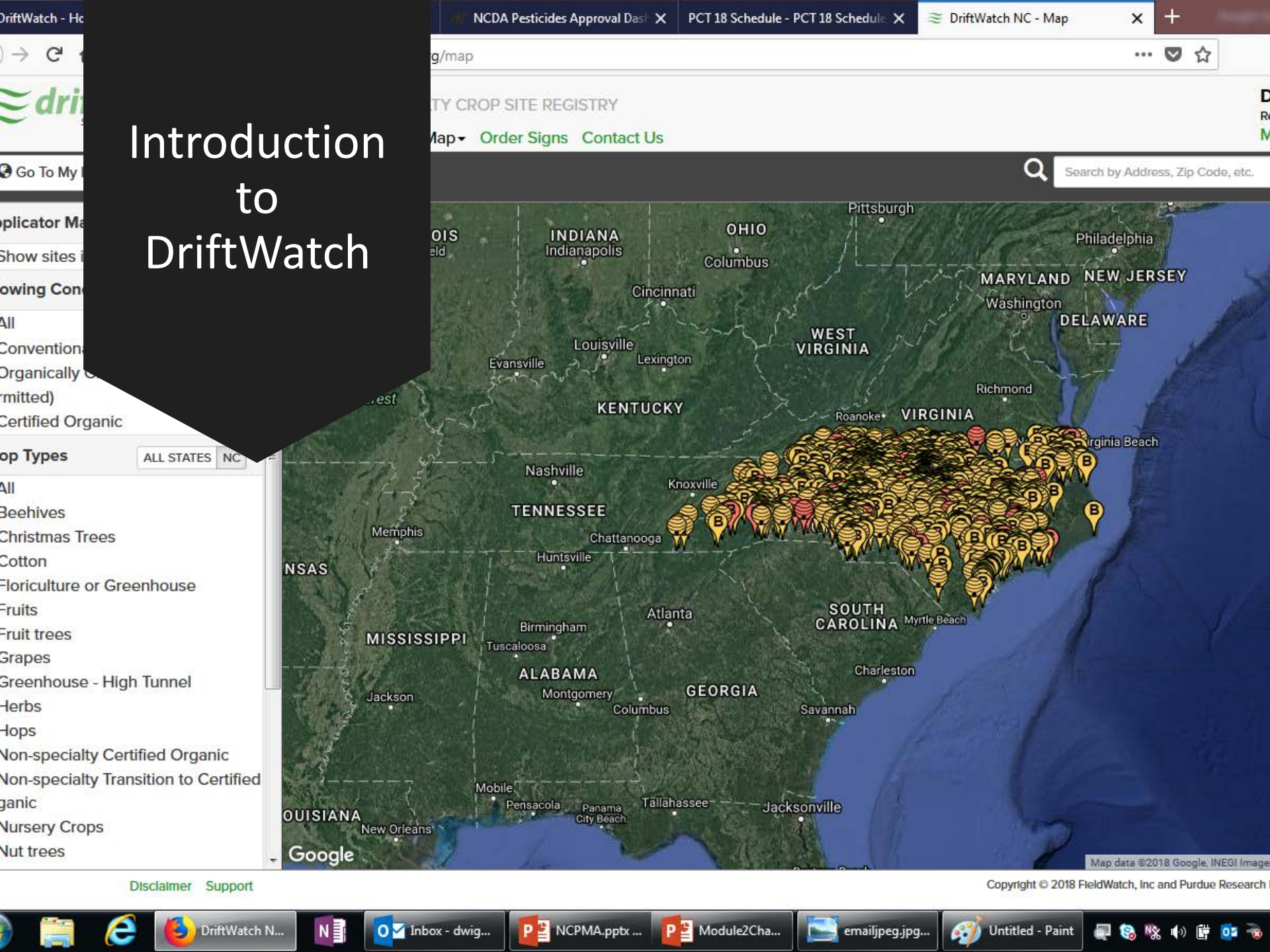
Already have a FieldWatch Account?
Username
Username
Password
Forgot your username or password?
Password
Log In

Windows Taskbar: DriftWatch N..., Inbox - dwig..., NCPMA.pptx..., Module2Cha..., emailjpeg.jpg..., Untitled - Paint, 3:34 PM 1/16/2018

Register with Field Watch and indicate counties you service

The screenshot shows a web browser window with the URL <https://nc.driftwatch.org>. The page is divided into two main sections. On the left, under the heading "Access My Map", there is a login form with fields for "Username" and "Password", a "Log In" button, and a "Forgot password" link. A red arrow points to the "Username" field. Below the login form is a section for "SPECIALTY CROP" signs, featuring a logo and text about additional communication and awareness, with an "Order Signs" button. On the right, under the heading "Don't have a FieldWatch Account yet?", there are three registration options: "Map My Specialty Crops" (with a link to sign up as a commercial crop producer), "Map My Apiaries" (with a link to sign up if you only keep bees), and "Applicator Registration" (with a link to sign up if you are a licensed applicator). A red arrow points to the "FieldWatch" logo in the registration section. The browser's taskbar at the bottom shows various open applications and the system clock indicating 3:31 PM on 1/16/2018.

Introduction to DriftWatch



Hives Registered in Winston Salem

The screenshot displays the DriftWatch NC - Map interface. The browser address bar shows the URL <https://nc.driftwatch.org/map>. The page header includes the DriftWatch logo and navigation links: Home, About, FieldWatch Map, Order Signs, and Contact Us. A user profile for Dwight Seal, a Registered FieldWatch Applicator, is visible in the top right corner with links for My Profile, Alerts, and Log Out.

The main content area features a satellite map of Winston-Salem, NC, with numerous yellow beehive icons representing registered hives. The map includes labels for various locations such as Pfafftown, Oak Crest, Winston-Salem, Old Salem Museums & Gardens, Guthrie, Kernersville, Union Cross, Wallburg, and Horneytown. Major roads like I-40, I-77, and US-421 are also visible.

On the left side, there is a sidebar with the following sections:

- Applicator Map Settings**
 - Show sites in my area only
- Growing Conditions**
 - All
 - Conventionally Grown
 - Organically Grown (in states permitted)
 - Certified Organic
- Crop Types**
 - ALL STATES NC
 - All
 - Beehives
 - Christmas Trees
 - Cotton
 - Floriculture or Greenhouse
 - Fruits
 - Fruit trees
 - Grapes
 - Greenhouse - High Tunnel
 - Herbs
 - Hops
 - Non-specialty Certified Organic
 - Non-specialty Transition to Certified Organic
 - Nursery Crops
 - Nut trees

At the bottom of the page, there is a disclaimer and support link, and a copyright notice: Copyright © 2018 FieldWatch, Inc and Purdue Research Foundation.

Click on Pin and details of Beekeeper will be shown

The screenshot shows a web browser window displaying the DriftWatch website. The browser's address bar shows the URL <https://nc.driftwatch.org/map>. The website header includes the DriftWatch logo and the text "NORTH CAROLINA SPECIALTY CROP SITE REGISTRY". A user profile for "Dwight Seal" is visible in the top right corner, with options for "My Profile", "Alerts", and "Log Out".

A pop-up window is centered on the screen, displaying details for "Beehive NC-25483". The window has a bee icon and the text "BEEHIVES". The details include:

- Submitted 06/02/2017 Approved 06/02/2017
- Updated 06/02/2017
- Number of Hives for this submission: 2
- Site expires from map after 03/31/2018

The pop-up window also has an "Information" tab. Below it, the following details are listed:

- Producer:** Jim Gwyn
- Purpose:** Hobbyist
- Email:** jimgwyn@bellsouth.net
- Location Type:** Permanent for the Season
- Address:** 232 Lodge St. Winston-Salem NC 27105
- Phone:** 336-971-0211

The background of the website shows a map of the Winston-Salem area with several beehive icons. A sidebar on the left contains "Applicator Map Settings" and "Growing Conditions" sections with various checkboxes. The Windows taskbar at the bottom shows several open applications, including DriftWatch, Outlook, PowerPoint, and Paint. The system clock in the bottom right corner shows 3:29 PM on 1/16/2018.

FieldWatch – DriftWatch - BeeCheck

Specialty Crop and Apiary Site Registry

State	Registered Start Date	Registered			
		Applicators	Registered Producers	Registered Apiaries	Registered Beehives
Delaware	1/1/14	5	51	41	1890
New Mexico		18	55	109	793
Montana	8/1/12	30	52	112	112
Nebraska	6/1/12	254	575	197	482
Michigan	6/1/10	145	418	232	1095
Kansas	3/1/14	89	384	262	675
Minnesota	8/1/11	132	565	377	2245
Missouri	1/1/13	70	656	599	903
Wisconsin	12/1/10	50	751	650	3443
Colorado	8/1/12	144	360	676	1861
Saskatchewan	5/1/14	9	147	789	7127
Indiana	3/1/09	292	1446	1082	2752
North Carolina	4/4/16	160	1430	1699	7888
Illinois	7/1/10	223	1842	1580	3495
Total:		1485	8070	7883	30569

New Webpage:

<http://www.ncagr.gov/pollinators/index.htm>

The screenshot shows the top navigation bar of the North Carolina Department of Agriculture & Consumer Services website. The header includes the department's name and a search bar. Below the header is a menu with five categories: Pollinators HOME, BEEKEEPERS, HOMEDOWNERS, FARMERS, and DRIFTWATCH. The main content area features a large title "Local food depends on pollinators" and several informational boxes. On the left, a vertical stack of boxes explains the importance of pollination to the state's economy and lists examples of pollinated crops. In the center, a box titled "What are pollinators?" lists various types of animals. On the right, a box titled "Pollinators are in trouble" discusses habitat loss and provides a link to USDA-NRCS. Below this is an audio player with a play button and a volume icon. At the bottom right, a box titled "Three Steps to Pollinator Success" lists three key actions: recognizing existing habitats, adapting farm practices, and providing habitat for native bees.

Pollinators HOME | **BEEKEEPERS** | **HOMEDOWNERS** | **FARMERS** | **DRIFTWATCH**

Local food depends on pollinators

Pollination is crucial to the success of North Carolina's \$78 billion agricultural economy.

That includes the local cucumbers, berries, watermelons, apples, squash and other produce your family enjoys.

Up to a third of the food we eat can be directly attributed to the work of pollinators.

What are pollinators?

Bees, butterflies, moths, beetles, birds and other animals.

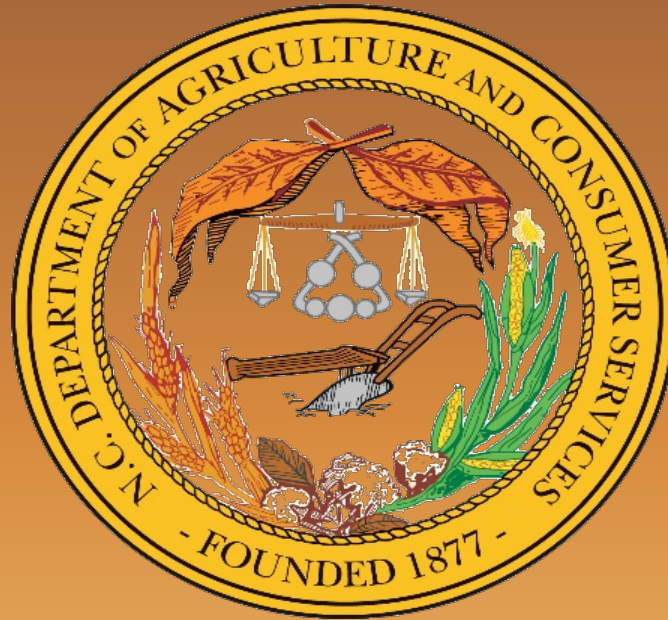
Pollinators are in trouble. Habitat loss, disease and environmental changes have contributed to the decline of pollinators, according to [USDA-NRCS](#). The best way to reverse this is a multi-step approach to support pollinators through expanding and protecting habitats on the farm and protecting pollinators.

Listen as Commissioner Troxler talks with the Southern Farm Network about the importance of ag pollinators:

Three Steps to Pollinator Success

- 1. Recognize** native pollinators and pollinator habitats already on the farm.
- 2. Adapt** existing farm and land management practices to avoid causing undue harm to the pollinators already present.
- 3. Provide** habitat for native bees on and around the farm.

Visit the Booth for More Information



QUESTIONS, COMMENTS or DISCUSSION ?

Dwight E. Seal
NCDA&CS
Pesticide Section