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 it’s 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

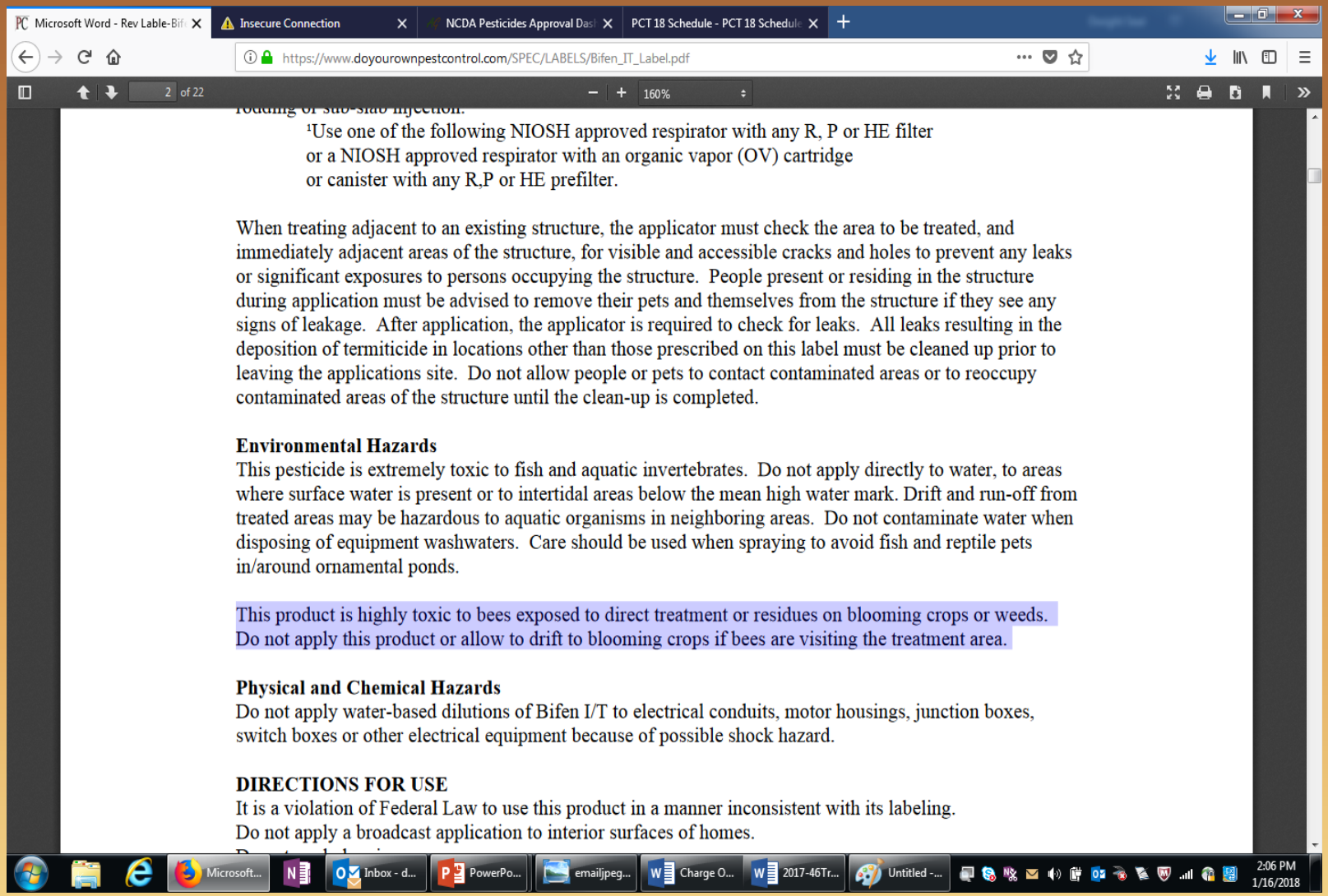
Be in Compliance

- 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



[1]Use 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.

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

FieldWatch
Communication. Cooperation. Collaboration.

<---- 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**.

For Crop Producers
driftwatch
Specialty Crop Site Registry by FieldWatch

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

For Beekeepers
beecheck
Apiary Registry by FieldWatch

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

For Applicators
FieldWatch
Communication. Cooperation. Collaboration.

SPECIALTY CROP DO NOT DRIFT
FieldWatch
www.fieldwatch.com

FOR ORDERING SIGNS AND FLAGS, YOU MUST HAVE AN *APPROVED* CROP OR APIARY SITE.
<------ Click on field sign to go to order page!!

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

@FieldWatchInc

Tweet
Follow @FieldWatchInc

FieldWatch, Inc. @FieldWatchInc yesterday
More coverage of #BeeCheck thanks to @AgricultureDE wgmd.com/beekeepers-pes...

FieldWatch, Inc. @FieldWatchInc yesterday

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

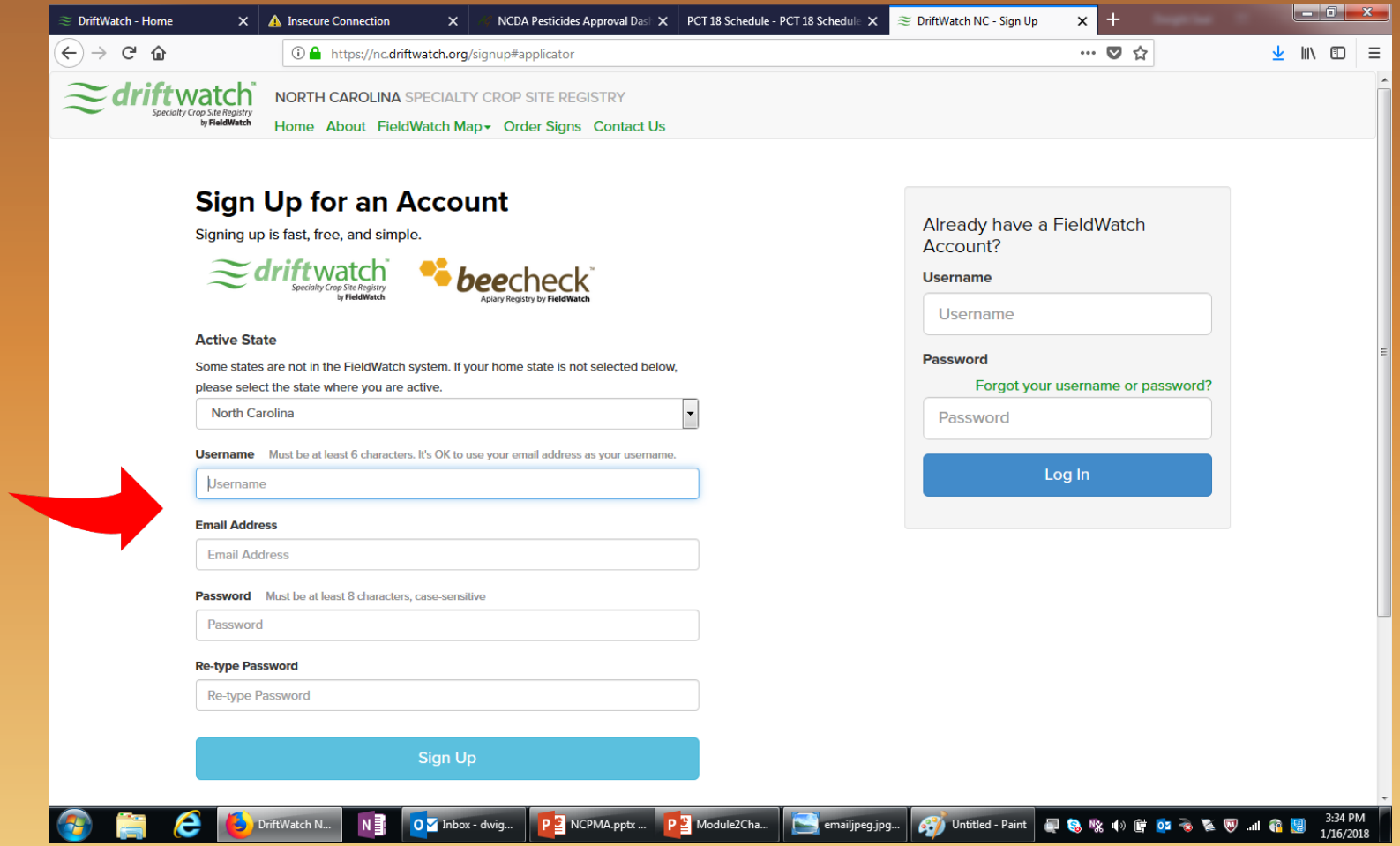
Communication + Cooperation + Collaboration = Successful Co-existence

FieldWatch – DriftWatch
Specialty Crop Site Registry

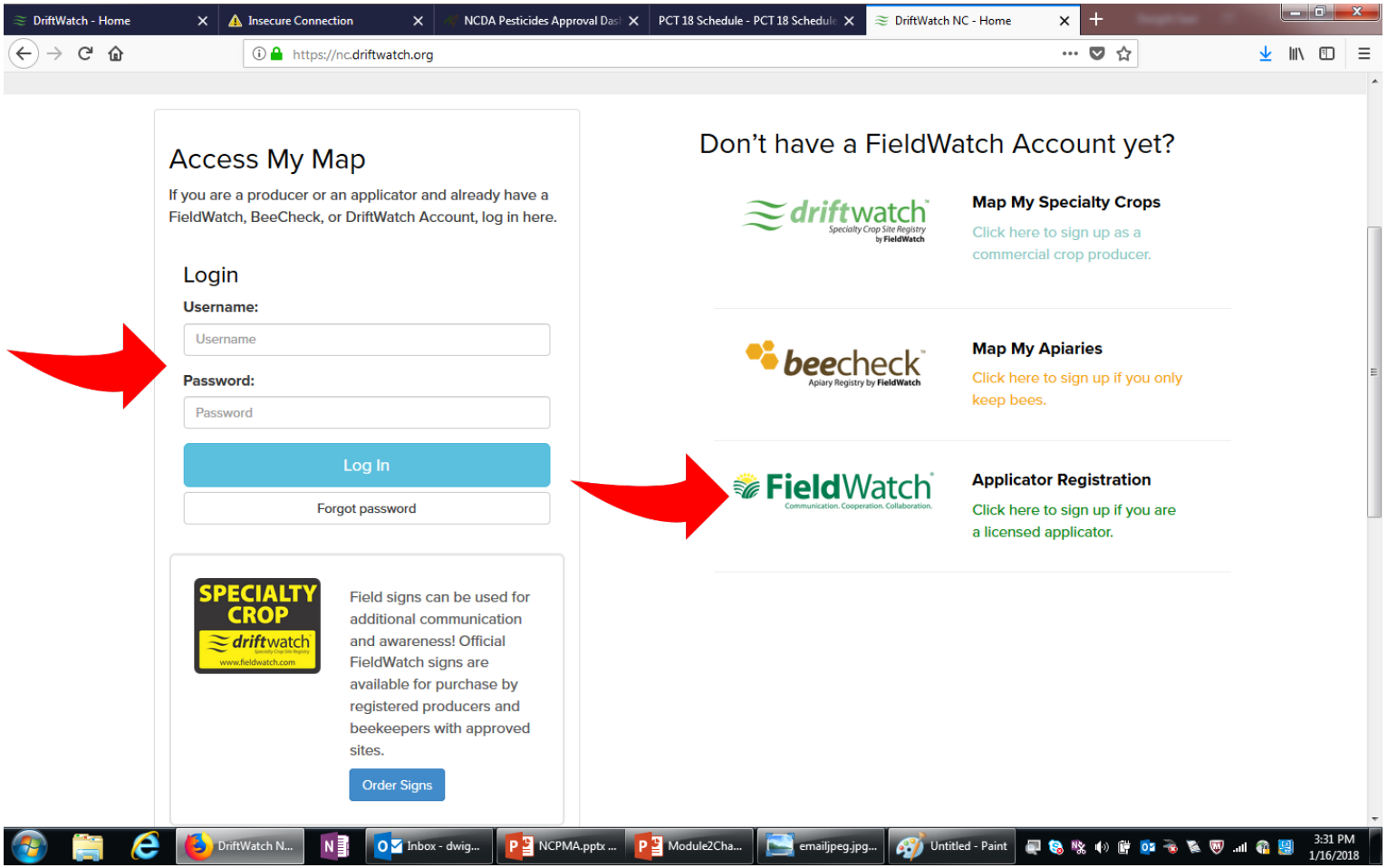
FieldWatch – DriftWatch - BeeCheck

- **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.**

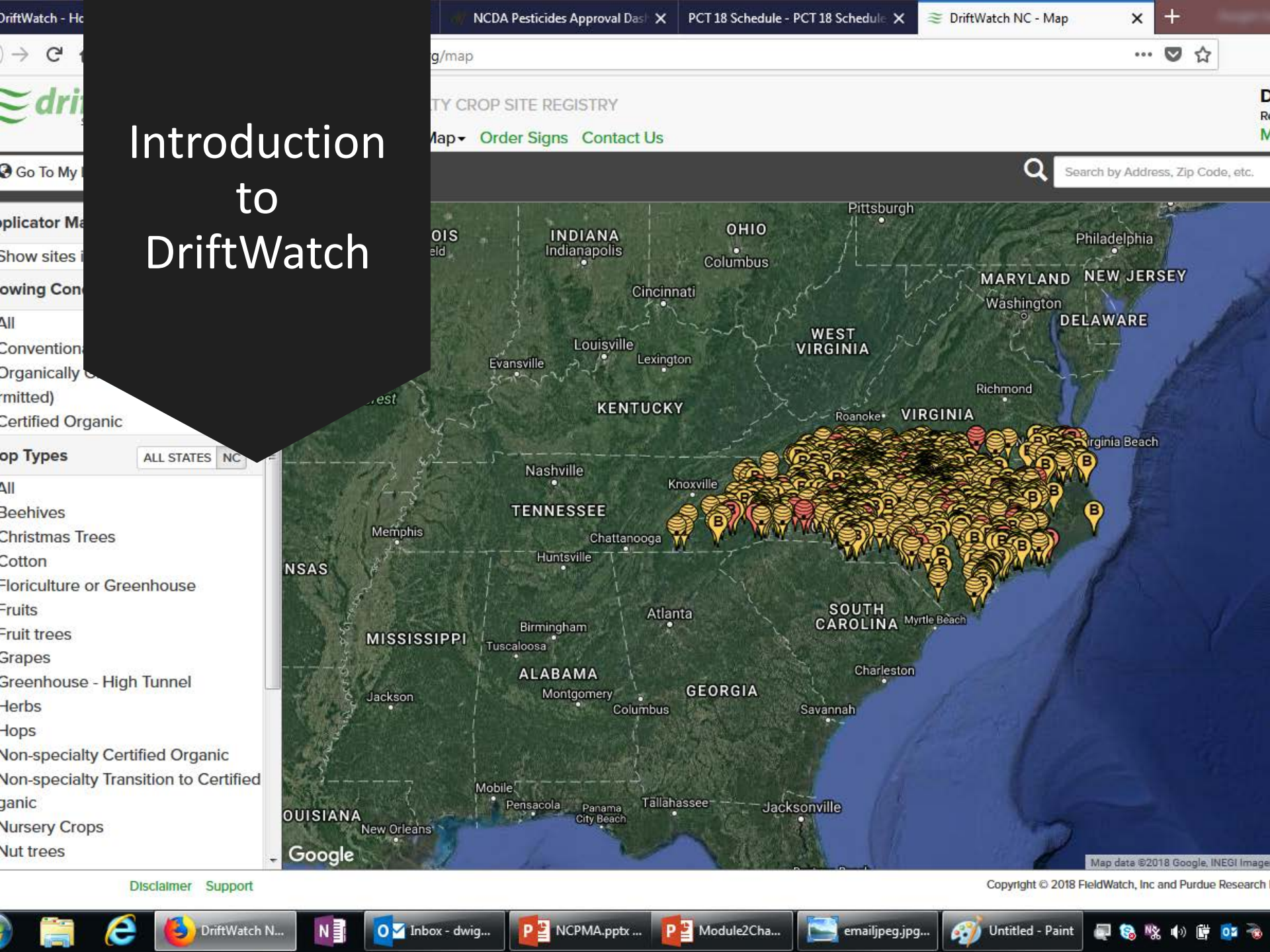
Register for an Account



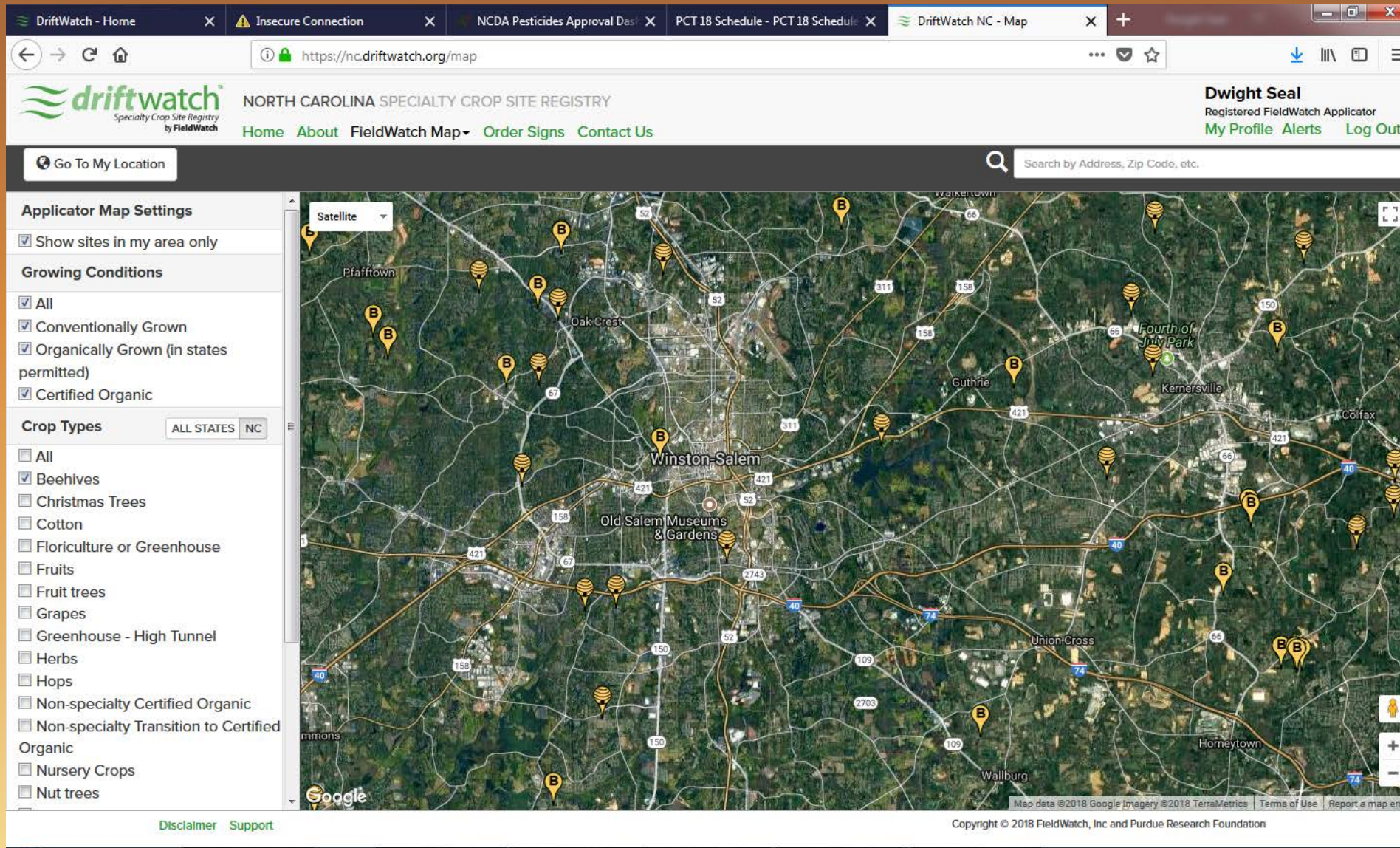
Register with Field Watch and indicate counties you service



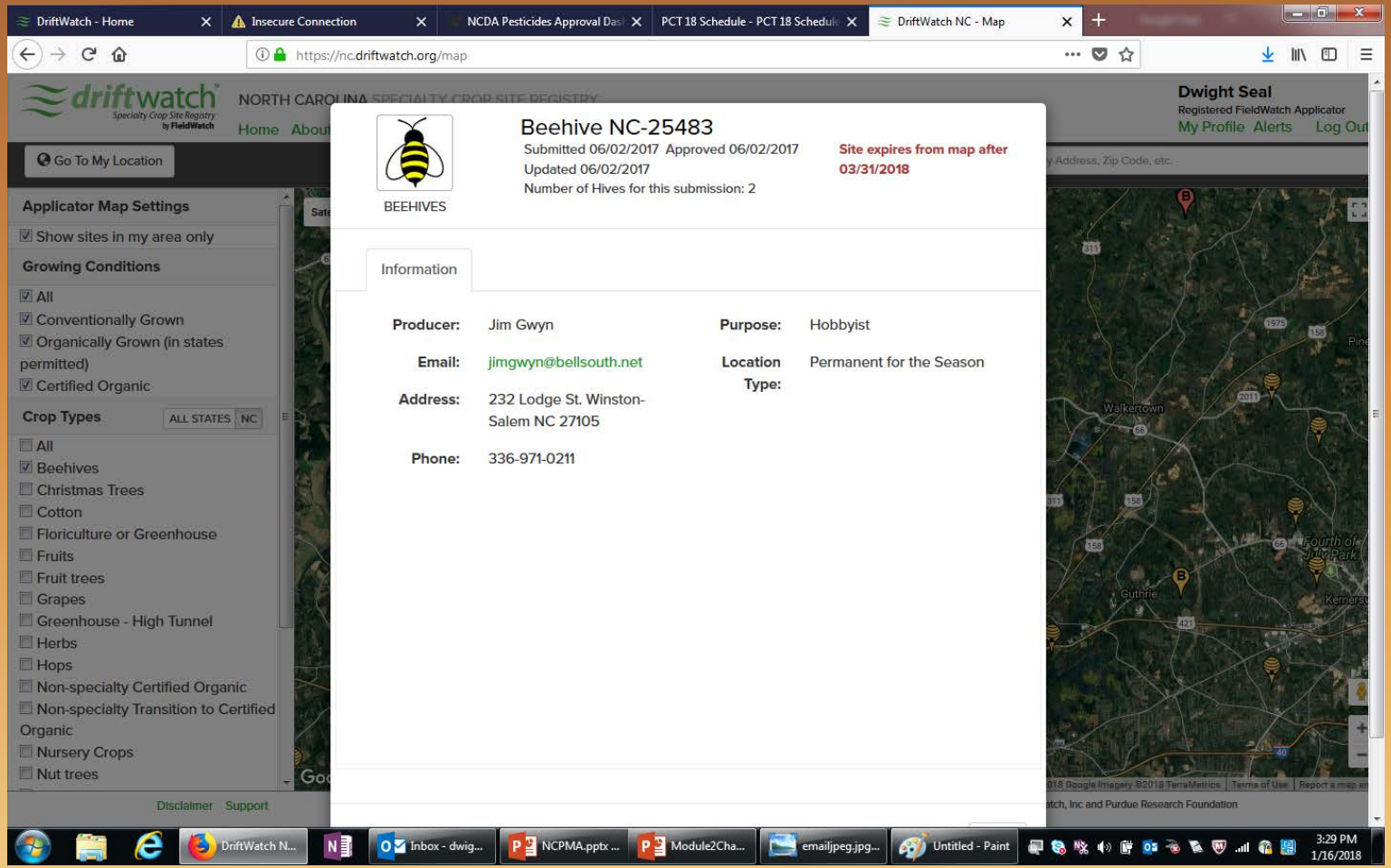
Introduction to DriftWatch



Hives Registered in Winston Salem



Click on Pin and details of Beekeeper will be shown

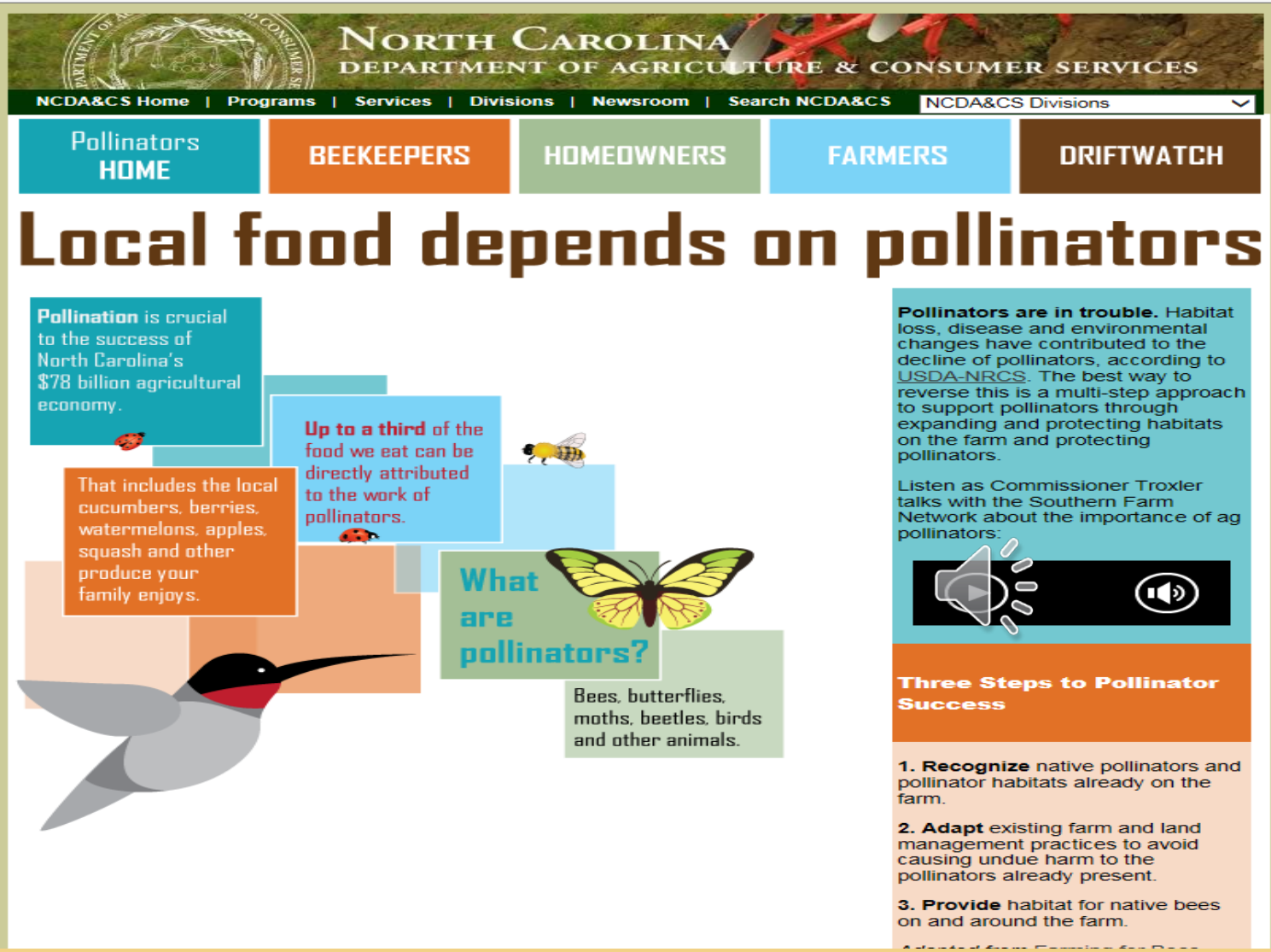


FieldWatch – DriftWatch - BeeCheck

Specialty Crop and Apiary Site Registry

State	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



Visit the Booth for More Information

QUESTIONS, COMMENTS or DISCUSSION ?

Dwight E. Seal
NCDA&CS
Pesticide Section