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Everybody complains about the weather but nobody does anything about it

-- attributed to Charles Dudley Warner

I tried to help a friend this spring who was trying to get started keeping bees. Unfortunately the folks who control her Home Owners' Association (HOA) have apparently decided that honey bees are dangerous creatures that go around stinging small children to death and they don't want them in the neighborhood. I did a bit of quick research on Google Maps and was able to tell my friend that there are at least ten beekeepers who I can personally name that live within a two-mile radius of her neighborhood. So the neighborhood already has bees, with all of the fearsome risks that go with them, and there is nothing the HOA can do about that. What they don't have are beekeepers, people who understand bees and can deal with any issues that may arise.

This issue-response pattern seems to be common in our society. Somebody notices that <<u>fill in the blank</u>> can potentially harm <<u>fill in</u> <u>the blank</u>>. They gather support from the most vocal and least informed segment of the public, not people most involved with the actual issues such as <<u>fill in the blank</u>>. They pressure the HOA/government/society to ban <<u>fill in the</u> <u>blank</u>>. Problem solved! This is all perfectly justified because they saw a blog on the internet saying how this problem happens all the time in another state/country/continent not too far from ours.

In this particular instance, somebody noticed that <u>honey bees</u> can potentially harm <u>children</u>. They gather support from the most vocal and least informed segment of the public, not people most involved with the actual issues such as <u>beekeepers or apiary inspectors</u>. They pressure the HOA/government/society to ban beekeeping. Problem solved!

I hope we can all understand how this decision-making system is flawed. It is based on populism, not science. As Giordano Bruno said, "Truth does not change because it is, or is not, believed by a majority of the people." Nevertheless, we've seen this type of societal



What killed this bee? Was there anything that the beekeeper could have been done to prevent her death?

decision-making pattern in relation to gluten, vaccinations, gun control, charter schools and so on.

As victims of this sort of fluffy, no-thoughtrequired opinionizing, surely we beekeepers would never be guilty of it ourselves. Would we? How about this scenario: somebody noticed that <u>pesticides</u> can potentially harm <u>honey bees</u>. They gather support from the most vocal and least informed segment of the public, not people most involved with the actual issues such as <u>growers or government regulators</u>. They pressure the HOA/government/society to ban <u>pesticides</u>. Problem solved!

Please don't get me wrong – there are clearly challenges to be addressed with respect to the impact of pesticides on non-target species such as pollinators. Notice I say "nontarget species"... would anyone argue that mosquito treatments, for example, shouldn't kill mosquitoes? Hopefully killing mosquitoes per se isn't the concern, or killing cockroaches, bed bugs, gypsy moths, cut worms, tobacco stem borers or boll weevils. We just don't want our pesticides to spill over and kill our butterflies, honey bees, kittens or children. It is this spill-over, the unintended effects on non-target species, that can potentially be a major issue and should be our concern.

What we need are <u>better</u> pesticides (more focused on eradicating specific target pests with

less chance of off-target impacts); more informed applicators (especially Joe/Jane Homeowner and Bob/Betty Gardenguy); a more informed at-risk population (e.g. beekeepers) and lots of open, hysteria-free communication between all relevant parties. As long as we are making a wish list, I would include a strong dose of Mind Your Own Business for uninformed and uninvolved people who simply parrot the rantof-the-day from the popular headlines.

Despite what you may hear, there is progress all around us. In general, the pesticides we use today are tremendously better than those that were commonly used in the past in terms of target specificity, amount of product that needs to be applied and safety for both the applicator and the environment. There is lots of room to improve - we need to continue to advance - but we must not go backwards.

After that long introduction, we now come to the point: we don't have to whine, we can now do something that is effective, meaningful and relevant regarding the risk of off-target pesticide exposure to our honey bees! The NC Department of Agriculture and Consumer Services (NCDA&CS), along with 13 other states, has partnered with an online mapping service called FieldWatch to help prevent crop damage and bee deaths due to accidental and unintended pesticide drift. Producers of specialty and organic crops can map their field's location in an application called DriftWatch. A companion application, BeeCheck, allows hive owners to map the locations of their hives. Pesticide applicators can access both databases before treating a field to identify sensitive sites that are close to the spray areas. Based on what they find, the applicators may select an appropriate product or application plan based on the risk to the area, notify the potentially affected parties of their plans and/or engage in a dialog with the affected people to decide the best course of action. In addition, pesticide applicators receive e-mail notifications when new apiaries are added to the areas they service.

If open, well-informed, hysteria-free communication is the best plan for an old



BeeCheck allows pesticide applicators to locate apiary sites on a map. Anyone applying pesticides near my hives can contact me beforehand so that I can take appropriate action, if necessary.

married couple sharing the same house then certainly it is also the best plan for growers, beekeepers and pesticide applicators sharing the same land. Anybody want to circulate a petition to ban that? Then let's all do our part to help make it happen.

Participation in the DriftWatch/BeeCheck program is free, easy and totally voluntary on the part of applicators, growers and beekeepers. No one is going to force you to protect your honey bees!

The old system

Beekeepers may recall that for many years the NCDA&CS has had a program with a similar goal. Simply called Apiary Registration, the system allows beekeepers to sign up to be notified if applicators intend to apply aerial pesticides with "bee toxic" warnings on the label within a mile of their apiary. A few downsides to the existing program include:

- 1. It costs \$10 per apiary per year to register
- 2. It only relates to <u>aerial applicators</u>. In my part of the Piedmont, "crop dusting" by airplanes is very uncommon so for me, this registration is worthless.
- 3. Although the sign-up forms can be downloaded from the NCDA&CS website, enrollees must mail the paper forms to the State Apiarist (Don Hopkins) to complete the registration. Although this isn't a big deal, it is a minor hindrance to the registration process.

The old program still exists and folks can certainly take advantage of it if it is helpful to

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them, but the vision is that the new BeeCheck system will make the old system obsolete.

How to enroll in BeeCheck

Enrolling in BeeCheck is very simple. It can literally be completed in less than five minutes.

- First, sign up for a free account at: <u>https://nc.driftwatch.org/signup#beekeepe</u> <u>r</u>. You can also navigate to the BeeCheck site via the NCDA&CS Apiary Services page: <u>http://www.ncagr.gov/plantindustry/Plant/</u> <u>apiary/index.htm</u>
- 2. You'll need to provide a user name and email address, and then select a password for the site.
- 3. A second form will ask for your contact information and give you the opportunity to select the disclosure level of your information – whether it can be viewed by anyone or just registered DriftWatch/ BeeCheck members. Personally, as someone who sells honey to anyone with the cash or cash equivalent to pay for it and who doesn't hesitate to advertise that fact, I am happy for the whole world to know that I keep honey bees. And I don't want to place any roadblocks in the way of someone who wants to notify me about a potential risk to my colonies. So my registration is open to anyone who cares to view it and it contains honest and complete information. After all, being able to be contacted is the whole point.
- Once your contact information has been entered, click "Create Account". A legalese disclaimer will pop up, requiring you to attest that the information you've entered is true.
- 5. Another page will appear with an "Add your first hive" button. Click on it. Important: The site uses the word "hive" but they really mean "apiary". There is no reason whatsoever to enter information separately for every single hive in an apiary; that only confuses things tremendously and doesn't assist applicators who are looking for your contact information. So even though I have multiple hives at my home site, I have made

only one entry for it. If you desire, you can include the number of hives at the apiary in the comments but that information isn't really important for the purposes of this registration system.

- 6. You'll be asked for basic information about the apiary, such as the purpose of the bees, whether the apiary is registered with the state (see the discussion above about the NC Apiary Registration program) and the type of bees. You'll also be asked about the dates the registration is relevant. For example, for my home apiary, the registration applies all year. For an out-yard that I maintain at a friend's orchard, I only keep bees there from March to June. The home apiary registration will be active on the site all year while the orchard apiary will only appear within the dates I select, i.e. March to June.
- Click "Next" and you'll be given the chance to include optional comments that will appear with your site on the map.
- Then you'll be asked for the location of the hives. You can put in an address or manually place them on a map.
- Once you've input the location, you'll see a map with the selected location. Click on the blue "Place hive" button at the top of the page.
- 10. Your hives will appear on the map surrounded by a yellow circle that has a ¼ mile radius. That's the radius that NC has chosen. We all know bees fly several miles around their hives, but that's not the point of this circle. Don't worry about it.
- 11. You can adjust the placement of your hives on this map. When they are in the correct place, click on "Done placing hives".
- 12. Click on "Submit hives" and then the "Agree" button. Your information will go to the steward of the site for review. If everything is acceptable, that's it! You are all done.

You can always return to the site and add more apiaries or amend the information you have entered. Note that to ensure that the information on BeeCheck is accurate and relevant, entries are only good for one year. At the beginning of the next year, you will be able to refresh your entries by certifying that the information should be carried over. You won't have to re-enter everything.

Other things you can do

There is no valid reason not to protect your honey bees by registering with BeeCheck. That should be everyone's first line of defense. If despite your best efforts you should suffer pesticide-induced bee losses, contact your bee inspector as soon as possible. Don't wait! Chief Apiary Inspector Don Hopkins and his team take bee kills extremely seriously. When they receive a bee-kill report, they work closely with the NCDA&CS Pesticide Division to determine the cause. But there isn't much they can do once the evidence is gone. If someone says, "pesticides killed my bees sometime last fall" there isn't anything left to investigate. They need fresh samples of the dead bees to determine what the culprit may be.

With all the whining that goes on about pesticide-induced bee kills, we'd think that the problem is rampant across the state. However our state inspectors only received nine pesticide complaints last year and when thoroughly investigated, only two of those proved to be actual pesticide incidents. If you have a genuine problem, report it when it occurs! Otherwise, in my opinion, you forfeit the right to complain about it because you essentially are part of the problem by not being part of the solution. Remember, communication is the cornerstone for making things better!

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NC Department of Agriculture & Consumer Services Plant Industry Division – Plant Protection Section Apiary Inspectors Work Areas



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