

Minimizing Conflicts Between Pesticide Users and Beekeepers



Bob Hammon
 Tri River Area Extension
 Grand Junction CO



Is There a Honey Bee Crisis? Who is Responsible?

- Colony Collapse Disorder
- Pathogens
- Parasites
- Nutrition
- Stress
- GM crops
- Cell phones
- **Pesticides**



The Media and Internet

The Headlines:

- Bee crisis
- Endangered food



The Problem:

- Isolated issues
 - geographic
 - management
- National reporting



Beekeepers

Honey bees are important pollinators of many types of plants. Honey is a popular and nutritious food

The vast, majority of beekeepers are reasonable, rational, pleasant people who are passionate about their hobby/ vocation/ lifestyle



Pesticide Users

Pesticides are one of the reasons we have an abundant and relatively inexpensive food supply. They are an important tool used to protect natural and man-made environments

Pesticide users do not want to kill bees! They are passionate about a healthy environment.



How Important are Honey Bees?

Not Just Honey

Many valuable agricultural products are dependent on honeybee pollination.

Crop	Value in billions 2006	% Pollinated by honeybees
Soybeans	\$19.7	50%
Alfalfa	7.5	60
Cotton	5.2	60
Almonds	4.4	100
Apples	2.1	90
Oranges	1.0	90
Peaches	0.5	80
Strawberries	0.5	90
Grapefruit	0.4	90
Tangerines	0.1	90

SOURCE: U.S. Dept of Agriculture, AP
Roger A. Morse and Nicholas W. Calderone, Cornell University

- One of few managed bee species
- Can pollinate many crop types
- Watch TV/ Browse the Internet – we would all die without them!

Western CO Crops Requiring Bee Pollination

- Apples, pears, cherries, apricots, raspberries
 - Primarily honey bees
- Alfalfa grown for seed
 - Leafcutter bees
- Squash, pumpkins, cucumbers
 - Squash bees
- Melons
 - Honey and native bees



No benefit from bees

- Corn
- Hay crops
- Dry beans
- Small grains



May benefit from bees

- Soybeans
- Sunflowers
- Canola

Who is Doing Whom a Favor?

- The presence of honey bees does not benefit the vast majority of western Colorado farmers!
- Beekeepers are not doing you a favor by placing hives near most agricultural operations
- Growers who require bee pollination should account for that in their farm management



The Insecticide Label:

“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 it to drift to blooming crops or weeds if bees are visiting the treatment area.”

Some beekeepers believe label wording relieves them from all responsibility:

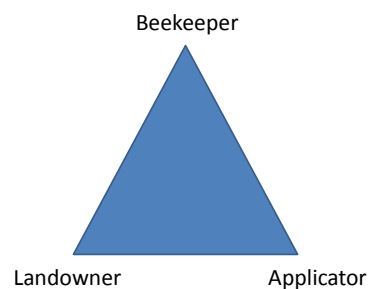
“I can put my bees anywhere, and if they die from pesticide poisoning, someone else is responsible!”

Some pesticide applicators ignore the label:

“My spray won’t kill any bees (that anyone will notice)”

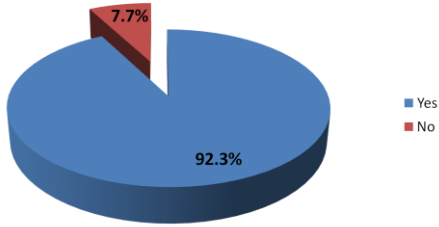
Both are in the minority within their profession.

The first step in minimizing conflicts is improving communications



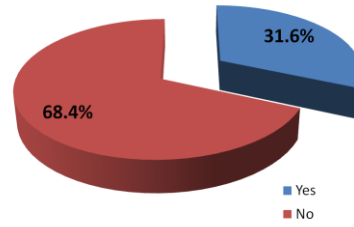
Survey conducted at 2011 CO Beekeepers Association Meeting

Are you concerned with pesticide applications near your apiary?



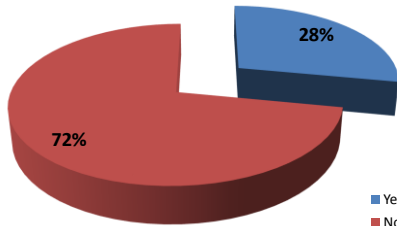
Colorado State University Extension

Do you communicate with growers in your area regarding hive locations?



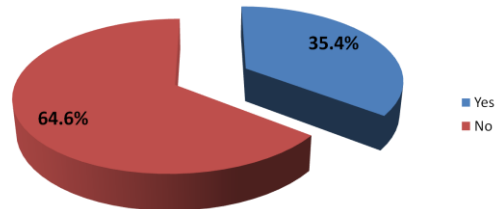
Colorado State University Extension

Do you communicate with growers in the vicinity of your apiary about pesticide applications made to their crops?



Colorado State University Extension

Do you know who the professional pesticide applicators are in your area?



Colorado State University Extension

What we have here is a failure to communicate!



Why?

- Human nature
- Philosophical differences
 - Intimidation effect
- Small vs large scale

Colorado State University Extension

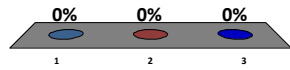
Pesticide Applicator Survey

- Your participation is entirely voluntary
- You don't have to answer all questions
- Individual responses can't be identified
- Results will be used in future programs

Colorado State University Extension

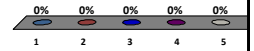
I am

1. Commercial applicator
2. Private applicator
3. neither



My primary application type is:

1. Agricultural
2. Turf/ornamental
3. Residential/commercial
4. Industrial/ROW
5. Public health
6. Other



My primary application type is:

- 0% 1. Agricultural
- 0% 2. Turf & Ornamental
- 0% 3. Residential/Commercial
- 0% 4. Industrial/ROW
- 0% 5. Public Health
- 0% 6. Other



Are there beekeepers in the area you work?

1. Yes
2. No



Are there beekeepers in the areas you apply pesticides?

1. Yes
2. No



Have you ever been contacted by a beekeeper about pesticide use before an incident has occurred?

1. Yes
2. No



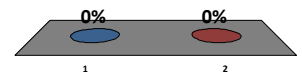
Have you ever been contacted by a beekeeper regarding a bee-kill incident?

1. Yes
2. No



Have you ever contacted a beekeeper before applying a spray?

1. Yes
2. No

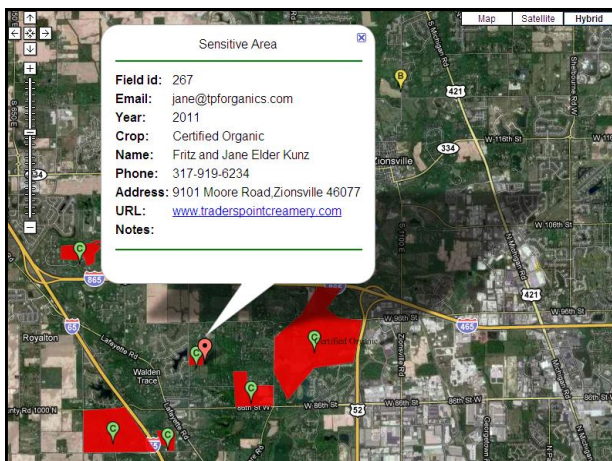


How do we improve communications? How do we minimize conflict?

- Platform for mapping sensitive locations
 - Driftwatch
- Talking points for agreement (or disagreement)
- Taking actions

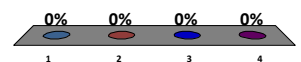


- Communications & Mapping Tool for owners of sensitive sites & pesticide applicators
 - Bees, fruit, vegetables, organic
 - Commercial scale – not gardens
 - Eligibility criteria being formulated
- Voluntary program / no cost to users
- In CO setup phase – available in 2013
 - Currently available in IN, IL, MI, WI, MN
- Colorado administration by CDA



Will you use a mapping tool such as DriftWatch when it becomes available?

1. Yes
2. No
3. I need more information
4. Privacy is a concern



Talking Points:

- Properly used pesticides can benefit everyone
- Bees are a critical part of the environment
- Improperly used pesticides can harm bees
- Not all farmers want/need bees
- Not all mortality is from pesticides. Management practices must be considered as a potential cause



Beekeeper Actions

- Consider hive location carefully
 - Avoid sites near multi-property intersections
- Choose site to maximize visibility
 - Wind socks to mark bee yard
- Mark hives with contact info
- Get to know local applicators
- Move, cover, plug hives when risk is unavoidable
- If there is a bee kill, contact CDA



Landowner/Grower Actions

- Know your neighbors!
 - Communications link between beekeeper and applicator
- Control flowering weeds on entire property
- Don't ask for application when flowering weeds are present



Applicator Actions

- Locate beekeepers within operating areas
- Identify high-risk situations
- Contact beekeepers near a high-risk application before it is made
- Avoid spraying crops in bloom or with blooming weeds
- Time high-risk sprays early AM or in evening



Communications are Essential to Minimizing Conflict!

Bob Hammon
Tri River Area Extension
Grand Junction CO
bob.hammon@mesacounty.us
(970) 244-1834

