Minimizing Conflicts Between Pesticide Users and Beekeepers

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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?

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

<table>
<thead>
<tr>
<th>Crop</th>
<th>Percentage of Total Pollination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almonds</td>
<td>88%</td>
</tr>
<tr>
<td>Apples</td>
<td>7%</td>
</tr>
<tr>
<td>Peaches</td>
<td>5%</td>
</tr>
<tr>
<td>Grapes</td>
<td>2%</td>
</tr>
<tr>
<td>Oranges</td>
<td>0%</td>
</tr>
<tr>
<td>Oranges</td>
<td>0.9%</td>
</tr>
<tr>
<td>Eggs</td>
<td>0.4%</td>
</tr>
<tr>
<td>Peaches</td>
<td>3%</td>
</tr>
</tbody>
</table>

Not Just Honey
Many valuable agricultural products are dependent on honeybee pollination
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?**
- 92.3%
- 7.7%

Do you communicate with growers in your area regarding hive locations?
- 68.4%
- 31.6%

Do you communicate with growers in the vicinity of your apiary about pesticide applications made to their crops?
- 72%
- 28%

Do you know who the professional pesticide applicators are in your area?
- 64.6%
- 35.4%

What we have here is a failure to communicate!

**Why?**
- Human nature
- Philosophical differences
- Intimidation effect
- Small vs large scale

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
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

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!

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