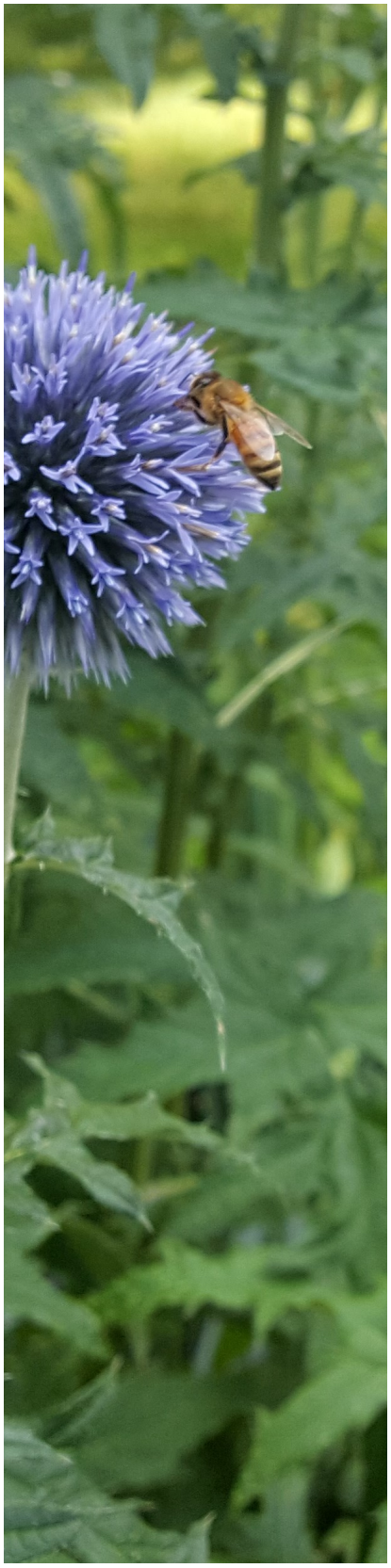
Managing Pests While Protecting Pollinators



The close association of pests and pollinators poses certain challenges when pest management methods must impair one and protect the other.

Fate of Pesticides in the Environment

Once a pesticide has been applied, if it doesn't land on target it will move through the environment through air, water, soil, animals, plants, and objects that move through an application area. **The transport and storage of pesticides by pollinators has the potential to accumulate and magnify pesticides in nests and increase exposure among individuals and young who do not initially come in direct contact with the pesticide**.

Read the Pesticide Label to Protect Pollinators

- The **Environmental Statements** section of the pesticide label will usually include a warning if it is toxic to pollinators.
- The **Directions for Use** and crop-specific precautions may detail instructions for mitigating pollinator risk.
- The new **"Bee Box"** on the label helps signal a pesticide's pollinator hazard. Be aware that not all labels will have this component yet.

NOTE: Systemic pesticides may not have any bee hazard statements on label because they do not typically come in direct contact with pollinators.

This work is supported by Crop Protection and Pest Management Program [grant no. 2017-70006-27143/1013802] from the USDA National Institute of Food and Agriculture. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture.

USDA United States Department of Agriculture National Institute of Food and Agriculture

Pollinator Protection Steps for All Environments

DO NOT apply pesticides to plants in bloom

1. Prepare

- Communicate with neighboring beekeepers about hive locations, food and water sources.
- Scout for native bee nesting areas.
- Provide nesting sites, food and water sources away from application areas.
- Obtain pesticide applicator training to encourage proper and legal pesticides use.
- Avoid unnecessary pesticide applications. Follow Integrated Pest Management (IPM).
- Read the product label for pollinator warnings.

2. General Practices

- Avoid harmful formulations (e.g. dusts, powders, microencapsulated mimic pollen).
- Choose products with low residual toxicity and with less systemic persistence.
- Avoid mixing pesticides that produce synergistic toxic effects to pollinators.
- Time applications to minimize pollinator exposure (see details below).
- Minimize drift to hives, nests, food, and water sources (see details below).

3. Time Applications

- Remove blooming weeds that attract pollinators to area before pesticide application.
- Time applications prior to native bee emergence from overwintering or breeding.
- Make early morning or evening applications when pollinators are not flying. Adjust to even earlier or later when pollinator forage time is extended during high temperatures.
- Avoid low temperatures and high humidity (moisture and dew extends residual toxicity).

4. Minimize Drift

- Apply according to label directions.
- Always use lowest practical spray pressure and nozzles that allow for larger droplets.
- Increase spray dilution volume (if label allows) to apply same amount of pesticide per area in larger droplets.
- Make early morning or evening applications to avoid high heat, low humidity, and wind.

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CULTIVATING HEALTHY COMMUNITIES
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