## 1 Communicate with Beekeepers

Promote communication and cooperation between farmer, applicator, consultant, and beekeeper. Before planting, determine if beehives will be placed on or near your fields. Seek out the beekeeper(s). GIS-based bee colony/sensitive crop registries (e.g., FieldWatch Inc.) exist in some states, and should be consulted.

Farmer and beekeeper may create a written or verbal agreement to guide interactions through the growing season.

## 2. Reduce Exposure to Pesticides

Many pesticides are applied to foliage, often when soybeans are flowering (R1 and beyond). Follow IPM principles for determining need and

timing of applications. Follow all label directions, pay specific attention to 'Directions for Use and Minimizing Drift'.

Avoid spraying when bees are present if possible (e.g., spray at dusk with low residual products).

### **3.** Provide Safe Forage

After soybeans stop producing flowers (R5), there is little in the landscape for bees to feed on. Pollinators forage for food (pollen, nectar) and water. Much of the habitat that provided these resources has declined in the past decades. Adding small, concentrated habitat with many flowering plants (e.g., in field margins, riparian buffers, terraces, etc.), will increase the abundance and diversity of bees.

### 4. Stay Up to Date

After harvest, attend meetings by extension specialist, technology providers, and crop or beekeeping advisors to keep up

to date on developing research and best management practices. This is an active area of research.



/E VC V1 V2 V3 R1 R3 R5 R8



## Protecting Bees in Soybean Fields







# This is a brief summary of resources providing farmers, beekeepers, and pesticide applicators with best management practices to protect pollinators that use soybeans fields. The full document can be found at:

https://honeybeehealthcoalition.org/soybmps/

The United Soybean Board neither recommends nor discourages the implementation of any advice contained herein, and are not liable for the use or misuse of the information provided.

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## Protecting Bee Health in Field Crops

#### Why should we care about bees?

Honey bees, bumble bees, and native solitary bees are required for pollination of many fruit and vegetable crops. Although soybean do not require bees for pollination, there is evidence that yield is improved when bees visit their flowers. Unfortunately, many bee populations are in decline, increasing production risk for fruit and vegetables in the United States.

#### Are bees in soybeans?

Yes! Even though soybeans do not require bees for pollination, many bees visit this crop. Entomologists at lowa State University found over 40 bee species in soybeans. These include social bees like honey bees and bumble bees, as well as solitary bees.

#### Are bees exposed to pesticides?

Bees can be exposed to pesticides in several ways. Direct application and off-target drift of certain pesticides to soybean fields can be detrimental to bees and other pollinators. Contaminated seed lubricants, like talc or graphite, are also a concern.

#### What we can do to help bees in soybeans

#### **Decrease Bee Exposure to Pesticides**

Establish communication with beekeepers.

Reduce dust from treated seeds during planting—Use fluency agents to better move the seed through a planter Follow the label to reduce bee exposure to pesticides when there is a need to apply and crops are flowering.

Watch for "No Spray" signs and use Sensitive Crops Registries or FieldWatch to locate beehives near your farm.

#### Increase Bee Habitat

Bees require nutrition throughout the year. Provide nectar and pollen resources on your farm by planting flowers that are attractive and useful to bees.

Plant a combination of flowering plants that bloom continuously throughout the growing season.

Look to riparian corridors, waterways and field borders.