Companies working on supply chain sustainability (e.g., water quality, soil health, biodiversity, etc.) can include a pollinator health focus to benefit both farmland as well as pollinators. Work that addresses sustainability goals — including riparian buffer strips, cover crops, and Integrated Pest Management — can also provide important co-benefits to pollinators through things like nutritious forage and healthy habitat. These potential areas of mutual benefit provide an opportunity for companies in North America with agricultural supply chains to engage with pollinator projects in the following four ways:

1. Provide flowering pollinator habitat, ground nesting opportunities, and clean water sources.
2. Work with growers and organizations to decrease impact on bees from agricultural chemicals.
3. Encourage growers and beekeepers to open communication lines and begin collaborating.
4. Reach out to the Honey Bee Health Coalition for project assistance and information.

Opportunities for Supply Chain Companies to Work in Three Key Areas:

**Forage and Nutrition**

Forage and nutrition development includes:
- Enhancing off-field floral resources (field buffer strips, natural habitat establishment)
- Enhancing on-field floral resources (cover crops)
- Providing nesting habitat for ground bees
- Providing access to clean water

Planting pollinator forage can be integrated into existing sustainability work by including pollinator-friendly plants or seed mixes in your plant selection for cover crops or buffer strips.

The benefits of this work include: improved water quality, emissions reductions, agricultural benefits, soil health, ecosystem health, and agronomic benefits.

**Decreasing Incidental Pesticide Impact**

The Coalition understands the importance and necessity of agricultural chemicals for farmers (beekeepers use pesticides too!) … but they can have an avoidable impact on bees.

Addressing incidental pesticide impact includes:
- Following IPM principles
- Carefully following the label
- Taking other precautionary measures, such as creating hedge or tree buffers from exposure, not spraying crops when in bloom, and mowing down nearby forage prior to spraying

The benefits of this work include: reduction in the number of pests and pesticide applications, financial savings, reduction in producer economic risk, environmental risk reduction associated with pest management, and reduction in risk to human health.

**Grower-Beekeeper Communications**

Communication between beekeepers and growers can enhance collaboration, decrease conflict, and avoid unnecessary bee harm.

Creating a grower-beekeeper plan (formal or informal) can enhance communication. Details in the plan can include things like contact information, hive locations, and timing of crop blooms and chemical applications.

See our presentation for more details.
The Honeybee Health Coalition

We bring together beekeepers, researchers, government agencies, agribusinesses, growers, conservation groups, manufacturers and consumer brands, and about 50 key partners to improve the health of honey bees in general and specifically around production agriculture.

Our mission is to collaboratively implement science-based solutions that will help to achieve a healthy population of honey bees while also supporting healthy populations of native and managed pollinators in the context of productive agricultural systems and thriving ecosystems.

Pollinator Health is Important for Ecosystem Health and Crop Production

Pollinators support plants that provide food, support wildlife, increase diverse root systems, promote soil health, reduce runoff, and improve water quality.

Insect pollinators support approximately 1/3 of our diet, including almonds, blueberries, cherries ...and much more.

They are responsible for over $26 billion in agricultural production annually in the US, and, of that, honey bees are directly responsible for over $17 billion.

...But Bee Colonies are Experiencing Problems

Many beekeepers have experienced higher than average losses of colonies in recent years. Bee health decline has been linked to a variety of factors including incidental pesticide exposure, pests and diseases, and poor forage and nutrition.

Beekeepers must replenish colonies by splitting their hives or replacing colonies.

Past Winter Mortality Rate
Source: USDA

Present Winter Mortality Rate
Source: Lee et al, 2015