About Me

- Extension Entomologist
- Support research
- Communicate findings to the public
- Worked with beekeepers in 5 countries

- Follow me on Instagram: @iowastatebees

IOWA STATE UNIVERSITY

Extension and Outreach
Today’s Discussion

Information for New Beekeepers

- Honey bee biology
- Beekeeping basics
- Resources for getting started

Ongoing Research at Iowa State

- Bees in the Iowa landscape
- Best practices for Iowa Beekeepers
Why Become a Beekeeper?
Why Become a Beekeeper

- Pollination
Why Become a Beekeeper?

- Pollination
- Honey
Why Become a Beekeeper

- Pollination
- Honey
- It’s fun
The Honey Bee

- Scientific Name: *Apis Mellifera*
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- One of few honey producing species
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- Around 5000 beekeepers in Iowa today
The Honey Bee

Three-Caste Society

- Worker
- Queen
- Drone

Photos: University of Georgia
Honey Bee Pests and Diseases

- Varroa Mite
- Wax Moth
- Small Hive Beetle
- Chalk Brood
- American/European Foul Brood
- Nosema
- Deformed Wing Virus

Photos: University of Florida,
Finding the Right Place

Consider Local Laws

• The City of Ames has no laws prohibiting keeping bees
• But neighbors may disagree

Considering the Natural Elements

• Will the location be too hot or too cold?
• Does the area experience extreme wind?
• Are there raccoons??
Finding the Right Place

Overwintering

• Apis Mellifera is bred to survive cold winters
• Have a windbreak
• Ventilation is important
• Some beekeepers wrap their hives for winter
Monitoring the Hive Throughout the Year

**Things to check for every 7-10 days:**

- If the Queen is present
- Signs of pest and disease
- Hive population/swarming potential
- Honey stores
Equipment
Will I Get Stung?

- Only 1% of the population is severely allergic
- Most species only sting when they feel threatened
- When stung, avoid breaking the venom sac
- Invest if in Epi-Pen
Resources for New Beekeepers in Iowa

Local Resources

• Iowa Honey Producers Association
• State Apiarist: Andy Joseph
• ‘The Buzz’ Newsletter

Purchasing Bees

• Spring Valley Honey Farms (Perry, IA)
• P & P Honey and Bee Supply (Goodell, IA)

Purchasing Equipment

• Dadant Bee Supplies, Mann Lake Bee Supplies
Iowa State Research

Pollinator Conservation

- Funded by USDA/NIFA
- Focused on Soybean and Prairie
- Looking at impacts of major bee stressors (The 3 P’s):
  - Pests and disease
  - Poor forage
  - Pesticide exposure
- Observing the effect honey bees have on native species
Iowa State Research

USDA/NIFA Grant

Co PI’s:
Amy Toth, Adam Dolezal, Matt O’Neal, and Erin Hodgson

Post-Doctoral Researcher:
Harmen Hendriksma

PhD Students:
Ashley St. Clair and Ge Zhang
Monitoring hive mass in simple and complex agricultural landscapes
Hive mass after moving hives from soybean fields to prairie in late summer
Iowa State Research

Best Practices for Beekeepers

- Monitoring hives regularly for pests and disease
- Take forage availability into consideration
- Communicate with nearby farmers
Best Practices for Farmers

• Manage insecticide drift
• Manage off-dusting from treated seed
• Establishing pollinator-friendly habitat or enrolling in CRP programs
• Utilizing an IPM plan
Iowa State Research

Best Practices for Farmers

• Follow the Iowa “Bee Rule”

“Farmers may not apply pesticides labeled ‘toxic to bees’ between 8a.m. and 6p.m. to blooming crops within 1 mile of registered apiaries”
Thank You

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