Beginning with Honey Bees
What can be expected of the bees? Of beekeeping?
Urban Beekeeping
The Honey Bee Colony

Sexes & Castes:

- Worker
- Queen
- Drone
Worker
Highly Specialized Body Structure
What is a Honey Bee?

Complete Metamorphosis –

egg
What is a Honey Bee?

Complete Metamorphosis –
larvae
What is a Honey Bee?

Complete Metamorphosis – pupae
What is a Honey Bee?

Complete Metamorphosis – adult
Sidenote: Another Organism in Your Hive

Varroa
Spring Reproduction -
Brood production stimulated by presence of fresh pollen
Hive Components

- Outer cover
- Inner cover
- Supers with frames
- Queen Excluder
- Hive bodies with frames
- Entrance reducer
- Bottom board
- Hive stand
Smoker
Hive Tool
Bee Gloves
Where to Locate your Bees

Sunny
Water Source
Windbreak
Flat & Accessible
Avoid Damp, Humid environments
Hives facing South-ish

Neighbor Concerns
Pesticide Concerns
Livestock Concerns
Calendar for 1st Year with Bees

- **April & May** - Spring Maintenance, Build-Up, Swarm “Control”, IPM (Integrated Pest Management)
- **June thru August** - Honey Flow & Supering, Doing your part for the IHPA at the State Fair
- **September** – Honey Removal & IPM, Processing of honey and hive products
- **October** – Feeding if Necessary, IPM, Winter Preparations
- **November thru March** – Education, Equipment Maintenance, Preparations for spring, Occasional quick checks when weather permits
Springtime in the Beekeepers’ Year:

Starting a new colony
Package Bee Installation

• Remove a few frames from center of hive.
• Shake & Rap the bees out of the package into their new home.
Package Bee Installation
Package Bee Installation

• Suspend the queen cage between two central frames.
Package Bee Installation

• You’re not finished until you feed the bees.
Foundation Becomes Comb
Workers Carrying Dandelion Pollen
Worker Collecting Water
Using your Smoker

• Why?
• How?
• What to burn?
• Keeping it lit…

Good Fuel, Tightly Packed = Cool, White Dependable Smoke
Your Inspections

• How often should the hives be inspected?

  You need to know what’s going on in there. You need to be one step ahead of the bees. Swarm prevention, Supering up...

  An inspection every ten days or so may be a good rule of thumb.
Your Inspections

• What should I look for each time?
  – Signs of queen’s presence and quality
    • or lack thereof…
  – Symptoms of pests, parasites, disease
  – Signs of overcrowding
  – Indication of food quantity / supply

• Get a “feel” of general strength, health, vigor of colony
Good Pattern Reflects a Good Queen & a Healthy Hive

- Good, solid brood coverage
- Drone brood along bottom edge
- Honey-band along top and sides
Adding Honey Supers

Stay a step ahead of the bees’ need for space

Avoid overcrowding

Make sure the bees always have room to store more surplus honey
Summer / Honey Flow
Removing Honey from Colonies

- Select only fully capped frames for removal. This ensures proper moisture content.
Uncapping Honey Frames
Extracting Honey from Uncapped Frames
Spinning Honey from the Frames
Straining from the Extractor
Bottling
Again, VARROA
Apiary Registration & Regular Inspection
Where to Find Further Info

• Attend your local Honey Producer meeting

• Email me – andrew.joseph@iowaagriculture.gov
• Call me – 515 725 1481

• Read The IHPA Buzz – www.abuzzaboutbees.com
• Journals – American Bee Journal, Bee Culture
• Books – Look in Bee Catalogs, order from your local bookstore

• Internet searches – beware the nonsense!