

Bees, Beekeepers, & Growers

Partners in Food Production



North Alabama Beekeepers Symposium

August 10, 2013

The Perfect Bee

- Does not sting
- Only pollinates the target crop
- Pollinates in any weather
- Pollinates “King” blooms
- Stops pollinating after crop set
- Works for free
- Dependable from year to year



Sorry. There is no “super” bee.



Honestly, we as humans are irrelevant to the bee/flower relationship.





US Forest in the 1600's



Today.....



We were lucky that bees could make the change.

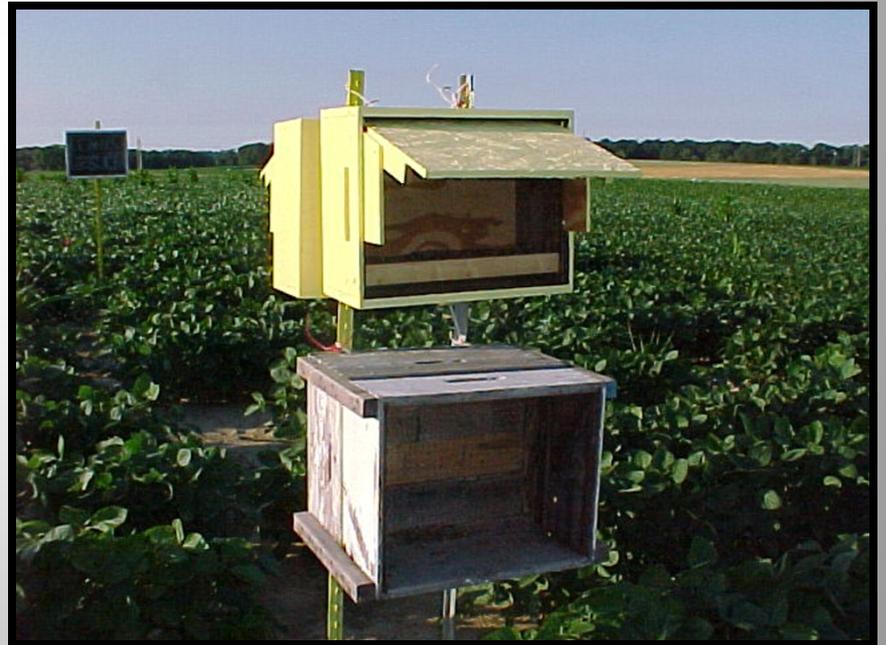
Bumble Bees

- Primarily queens in the early season
- Fly on more marginal days
- Bigger bodied
- Excellent pollinators
- Seasonal
- Confined pollination



Leaf Cutter Bees

- Local species
- Stay close to nest site
- Minimal stings
- Selective pollination
- Purchased from year to year



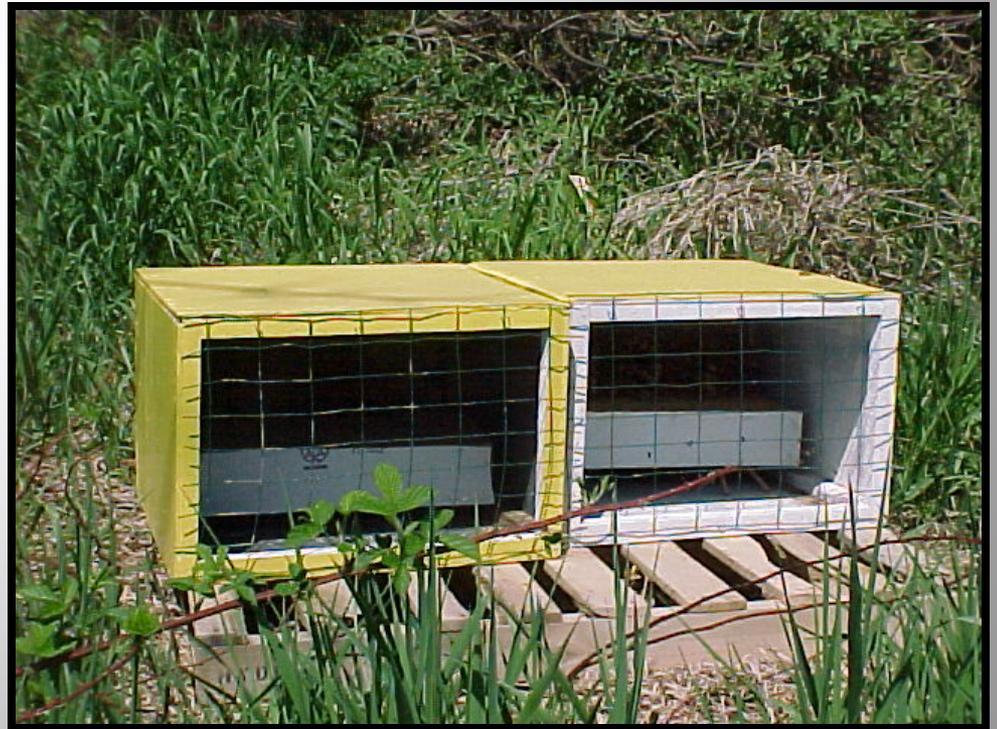


A native bee buzz-pollinating a tomato blossom

A small, metallic-colored bee that will pollinate a few blossoms that honey bees will sometime ignore.

And Others

- Osmia species
 - Horn-faced bees
- Solitary bees
 - Mining bees
- Shaggy foot bees
 - (Japanese solitary bee)
- Other insects
 - Flies
 - Moths



Honey Bees, the Standard



Honey Bees:

- Are generalists
- Exhibit plant fidelity
- Are in abundant numbers
- Are dependable
- But:
 - Will sting
 - Require management
 - Are weather dependent



Presently, all bees species are stressed

- For now, only guesses
- Populous colonies not as common
- Winter losses routinely higher
- Sub-par queens and expensive



Fifty years of changes in the national bee industry

- Numbers
 - 1970 - > 5 million colonies
 - 2011 – about 2.4 million colonies
- Honey production
 - Imports from the world
 - Artificial sweeteners
- Pollination
 - US almond industry
 - Skilled labor shortage



Mid-west bee yard, 1944

Some Typical Grower Concepts

- Rented/purchased bees should stay on crop
- Honey crop provides significant income
- Colony moves are routine
- Rental fees have a ceiling



Targeting Crops

- Delivery time
- Distribution in the field
- Rotating colonies
- Review competing bloom
- Attractant sprays
- Trap pollen
- Avoid pesticides and irrigation

Nothing helps flawlessly



Bees mostly do their own thing

Comments....

- Pollinating insect crisis? *No, but close*
- We have been lucky.
- Bee pollination is somewhat like weather.
- Can't depend on "natural" pollination.
- Support and encourage all bee populations.
- Don't believe all you hear.

Thanks

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