

1

### A little about the presenter

- Farm background
- OSU, College of Agriculture, Animal Science
- Career in agribusiness/animal DNA, joined ODA in 2018
- Keeping bees since 2013

2

Crazy People

Farmers

Beekeepers

3

Smith Homestead  
Saltair, Ohio

4

### Agenda:

- Share my beekeeping story with you
  - Background- Years 1 and 2 Failures
  - Year 3 and beyond – sustainable growth at least cost
- Focus on trapping swarms
  - Demonstrate successful trap setup, baiting, placement, and retrieval
  - Perhaps there are some nuggets within this story that you find useful and interesting.

5

### Reasons I keep bees:

- Pollination
- Honey
- Fascination and fun?

6

### Start-up expenses

Hive Kit	\$300
• (includes bottom board, 2 deeps, 2 mediums, frames and foundation, inner and outer cover)	
Bee Jacket	\$50-\$150
Gloves	\$10-\$20
Smoker	\$25-\$40
Hive tool	\$5-\$15
Bees	\$120-\$150
<b>Total</b>	<b>\$510- \$675</b>

7



8

### Year 0 - 1

- 2012 Bee school, a lot of research and reading
- Excitement (and anxiety)
- 2013 started with 2 hives
- Package Bees

9

### Coming out of year 1 going into year 2

- 1 of 2 hives survived
- Purchased more package bees
- Purchased 2 nucs
- 1 swarm

10

### Coming out of year 2, going into year 3

- Dead package bees
- Nucs/ swarm survived
- \$ lost/ Frustration

11

### Definition of Insanity:

the state of being seriously mentally ill; madness; extreme foolishness or irrationality

“doing the same thing over and over again and expecting different results”

12



13

### Conclusions after year 2

- In spite of failures, I still enjoy working bees
- Honey and pollination benefits
- Bees are too expensive to replace every year.

14

### I had questions...

- Is there a textbook formula?
- How many hives is ideal?
- Are bees livestock?
- Is there such a thing as a "feral" colony?
- How can I continue to feed my growing obsession for bees without going broke?

15

### Year 3 Goals

- Maintain/grow my apiary at least cost
- Build my own equipment
- Splits from overwintered colonies
- Concentrate on acquiring swarms
- No more purchased bees

16

### Honeybee "nest"

Kept in hives for honey production and pollination

17

### Honey Bee nest

In the woods "feral" bees often nest in hollowed out trees or even dwellings

18



Is this a Honey Bee nest?

19

### What is a "Swarm"?

A honey bee swarm is a natural process of one hive splitting into two. As a honey bee colony grows within a hive, it becomes crowded. The bees instinctively begin to nurture a new queen while preparing for the current queen to leave.

Once she is ready, the existing queen leaves the hive in search of a new location for her colony. She takes hundreds to thousands of worker bees (all female) and some drones (all male) with her, and together, these form a swarm.

Worker bees that are good at foraging for food are called scout bees. Scout bees find a suitable place for the queen to rest until they go off and identify a more permanent location to call home. The queen is often led to a tree or shrub branch or another object not too far from the original hive. Worker bees follow, milling around her to keep her safe and warm.

•<https://bygl.osu.edu/node/1573>

20

### Swarm Calls (chasing) vs trapping

#### Swarm Calls

- Work schedule
- Travel/ Fuel
- Equipment
- Swarm placement- high in a tree?
- Is the swarm still there?

#### Swarm Traps

- Acquire bees on your own schedule in your own backyard
- High success rate

21

### Trap design options:

22



Another design trap option

23

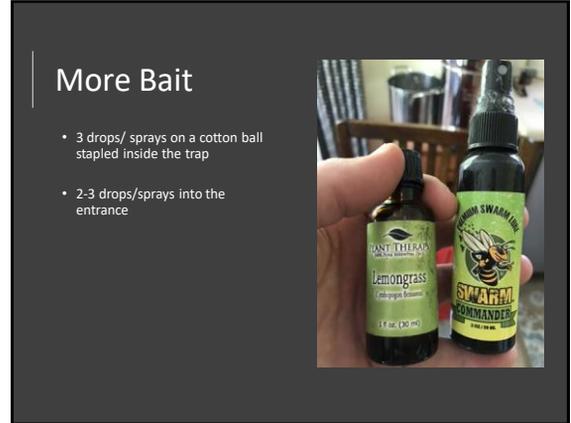
### Year 3 Swarms

- Built 10 traps
- All scrap materials
- Dimensions:
  - 19" long
  - 7-10" wide
  - 16" tall
- 30-50 liters ideal volume
- Holds 4-6 frames
- ½ inch slit for an opening

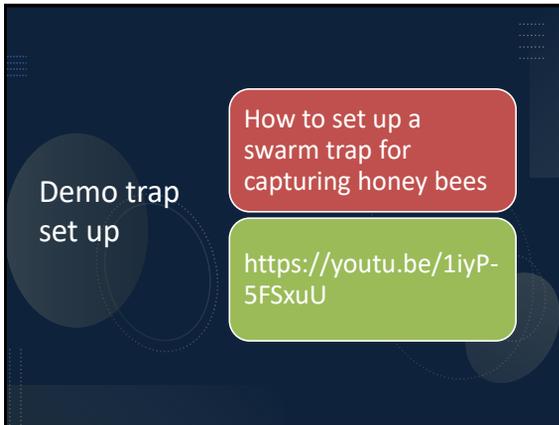
24



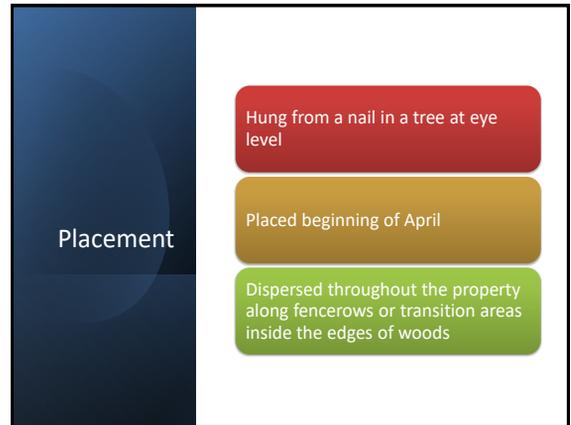
25



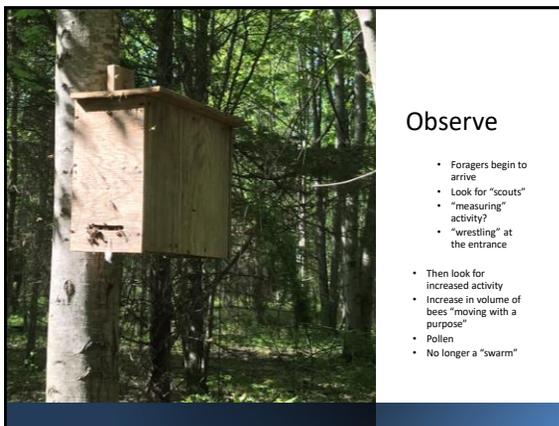
26



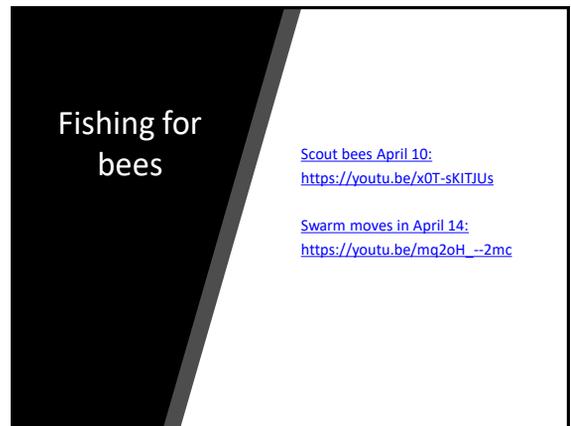
27



28



29



30

Retrieving the new colony

- ½ hour before sunrise
  - All the bees in the box
- Duct tape over the entrance
- Gently walk/transport the trap to your beeyard
- Remove the lid
- A few puffs of smoke
- Move the frames into their new hive
- Shake out the rest
- Re-bait and place the trap back



31

Year 3 - Swarm trapping results

10 traps, captured 10 Swarms



32

Fishing for bees



33

Ohio Phenology Calendar

<https://www.osu.edu/phenology>  
<https://ohio.edu/phenology/ohio-phenology>

- Formula that calculates growing degree days based on a threshold of 50 average daily temp.
- Growing degree days needed for silver maple first bloom = 34.
- For zip code 45106 that occurred on:
  - 2018- 2/15
  - 2017- 1/22

34



Another Swarm Trap

35

Other things...

All mediums

- pros and cons

Foundationless

36



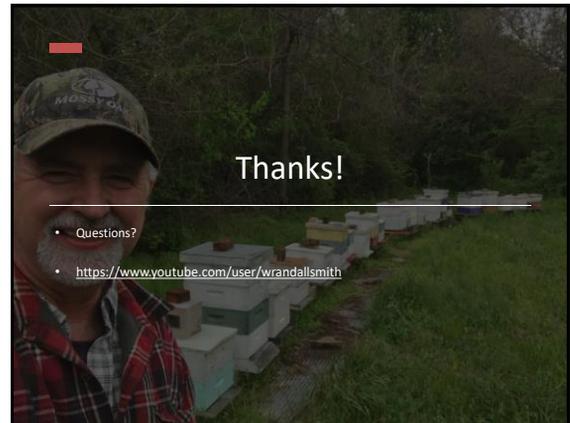
37



38



39



40