

OHIO STATE UNIVERSITY EXTENSION

Beekeeping Equipment Basics


Amanda Bennett
Extension Educator,
Agriculture and Natural Resources
Miami County
Bennett.709@osu.edu

March 23, 2019
SW Ohio Bee School
Clermont County

 THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

OHIO STATE UNIVERSITY EXTENSION

Early Beginnings





2

OHIO STATE UNIVERSITY EXTENSION

Langstroth Hives

- LL Langstroth combined "bee space" and moveable frames
- Father of American beekeeping



 THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

3

OHIO STATE UNIVERSITY EXTENSION

Langstroth Hive Uncovered: Hive stands



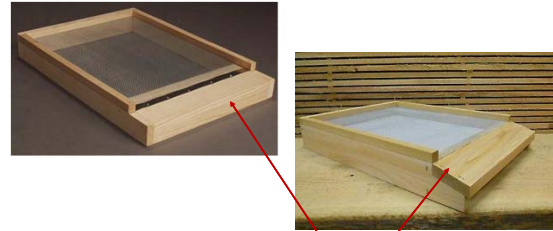
 THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

4

Hive Stand Functions

- Elevate the hive to protect from skunks, mice, other rodents.
- Weather protection (flood, snow, rain, soggy soil, etc.)
- Oh, my aching back!

Langstroth Hive Uncovered: Bottom Boards

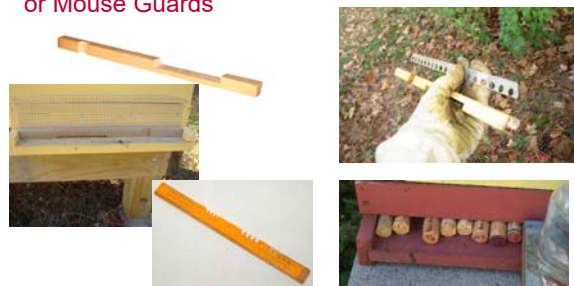


Landing board

Langstroth Hive Uncovered: Bottom Boards




Langstroth Hive Uncovered: Entrance Reducers or Mouse Guards




OHIO STATE UNIVERSITY EXTENSION

Langstroth Hive Uncovered: Deeps




- 19-7/8 inch by 16-1/4 inch
- 9-5/8 deep
- AKA Brood Box/Chamber
- Hives usually have 1-2 deeps
- Various wood types
- Can be painted

 THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES


9

OHIO STATE UNIVERSITY EXTENSION

Langstroth Hive Uncovered: Inside the Deeps



- 10 frames
- 9-1/8 deep
- Wax or plastic (waxed-rite) or foundationless
- Wired or unwired

 THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

10

OHIO STATE UNIVERSITY EXTENSION

Langstroth Hive Uncovered: Inside the Deeps



- Starter strips
- Foundationless

 THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

11

OHIO STATE UNIVERSITY EXTENSION

Langstroth Hive Uncovered: Inside the Deeps



 THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

12

OHIO STATE UNIVERSITY EXTENSION

Langstroth Hive Uncovered: Mediums/Shallows/Supers



- 10 frames
- 6-5/8 deep
- Honey storage



THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

13

OHIO STATE UNIVERSITY EXTENSION

Langstroth Hive Uncovered: Lingo recap

Deep(s) = brood box = brood chamber = deep
super = deep box

Supers = honey supers = mediums = shallows

THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

14

OHIO STATE UNIVERSITY EXTENSION

Langstroth Hive Uncovered: Inner Covers



THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

15

OHIO STATE UNIVERSITY EXTENSION

Langstroth Hive Uncovered: Telescoping Covers

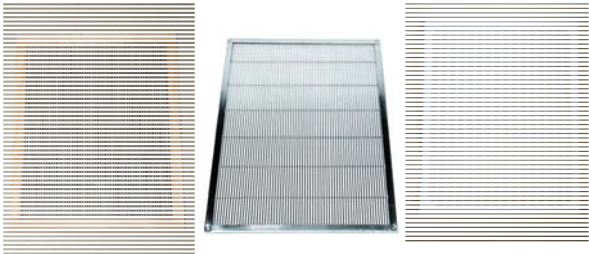


THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

16

OHIO STATE UNIVERSITY EXTENSION

Optional Hive Equipment: Queen Excluders




THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

17

OHIO STATE UNIVERSITY EXTENSION

Must Have Inspection Gear: Hive Tools



- 9-9.5 inch hive tool
- J Hook hive tool
- Either one, just get two
- Inexpensive

THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

18

OHIO STATE UNIVERSITY EXTENSION

Must Have Inspection Gear: Smoker



THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

19

OHIO STATE UNIVERSITY EXTENSION

Must Have Inspection Gear: Smoker fuel




THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

20

OHIO STATE UNIVERSITY EXTENSION

Optional Inspection Gear




A collection of optional inspection gear including a green-handled brush, a yellow-handled brush, a white spray bottle, a bottle of NOW disinfectant, a notepad with a blue pen, a smartphone, and a red bucket with blue buckets.

THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

21

OHIO STATE UNIVERSITY EXTENSION

Personal Protective Equipment (PPE): Suit Up!



Two images of a person in a white protective suit. The left image shows a close-up of the hood with a zipper closure. The right image shows the full suit with labels: Veil, Thumb loops, and Elastic closures.

Zippered closure

Veil

Thumb loops

Elastic closures

THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

22

OHIO STATE UNIVERSITY EXTENSION

PPE: Veils and Hats



Four images showing different types of protective veils and hats: a white beekeeping veil, a black mesh veil, a white mesh veil, and a white mesh veil with a yellow hat.

THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

23

OHIO STATE UNIVERSITY EXTENSION

PPE: Gloves



Four images of gloves: a pair of white gloves, a pair of tan gloves, a pair of blue gloves, and a pair of yellow gloves. A box of Playtex Living gloves is also shown.

THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

24

OHIO STATE UNIVERSITY EXTENSION

Specialized Equipment




THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

25

OHIO STATE UNIVERSITY EXTENSION

Feeding Equipment: Boardman Feeder

- Easy set-up
- Cons
 - Quarts/pints
 - Robbing
 - Far from cluster







THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

26

OHIO STATE UNIVERSITY EXTENSION

Feeding Equipment: In-Hive or Division Board Feeder

- Next to cluster
- Easy to re-fill
- Problems with re-filling
- Problems with drowning




THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

27

OHIO STATE UNIVERSITY EXTENSION

Feeding Equipment: Plastic bag feeders

- Simple, gallon plastic Ziploc ©



THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

28

Feeding Equipment: Pails with perforated lids

- Similar to Boardman
- Closer to cluster
- Larger capacity
- Need extra supers to enclose it

