



Tools of the Trade

Introduction

Top Bar Hives are the most efficient and sustainable hive for a family farm. To establish a colony of bees you will need to purchase a hive and a few essential tools. These same tools will help you maintain the hive throughout the seasons. Beekeeping tools are readily available on catalogue form and online from any beekeeping supplier*



Beekeeping Tools & Supplies

- Bee veil*
- Ventilated leather beekeeper's gloves* (*optional*)
- Standard hive tool* *or* French hive tool*
- Bee brush*
- Beekeeper's smoker*
- Sawdust
- Fine wood chips
- Coarse wood blocks
- Newspaper
- Matches

Instruction

Before your bees arrive, set up your hive and acquire basic tools. They can be ordered through catalogs and online sources.*

Beekeeper's Smoker

A **smoker** is one of the beekeeper's most important tools, because smoke calms bees. Bees communicate using scented **pheromones**. When bees become alarmed, they put out pheromones that warn the other bees to attack. **Smoke** masks the alarm pheromone. It also causes the bees to begin eating honey, because they think there is a fire and they might have to leave the hive.

Lighting the Smoker

Keep 4 fuels for your smoker on hand for regular use: sawdust, fine wood chips, coarser wood blocks and newspaper. You'll also need a box of matches. A wooden box with 4 compartments serves as a handy place to store all the fuels together.

- Crumple a piece of newspaper and place it in the bottom of the smoker. Light it with a match. Pump the attached bellows to fan the flames. As soon as the paper flames, add a handful of sawdust. Continue to pump the bellows.

* See *Beekeeping Suppliers Supplement*



- Once the sawdust is burning well, add a few fine chips of wood. One of the keys to lighting a smoker is getting the proper amount of oxygen into the firebox, so keep pumping the bellows.
- Add a few coarse blocks or wood, pumping the whole time. It takes a few minutes for the blocks to catch fire.
- Continue to pump the bellows. Check for radiant heat by holding your hand an inch or so away from the side of the smoker. As soon as you can feel the heat, you will know that some embers are forming.
- When you can feel steady radiant heat alongside the smoker, fill the cylinder with coarse blocks. Continue pumping the bellows.
- Once you have a good fire going, discontinue pumping and close the lid of the smoker. Smoke should steadily pour out of the spout.

Note: *You don't want any flames coming out of the top of the smoker.* It is a fire hazard and definitely could damage your bees.

Protective Gear

Before you work with your bees, it's always a good idea to put on some protective gear.

Bee Veil

- Place the [bee veil](#) over your head. Bring the strings forward on both sides and pull them



through the ring attached to the bottom front of the veil. Then crisscross the strings behind you, bring them forward again and tie them at your waist. This keeps the bottom of the veil secure on your clothing and prevents the bees from crawling near your face.

Gloves

- Ventilated leather beekeeping gloves extend to your elbows. They will definitely minimize the number of stings you'll get while working with your bees, but they are not 100% sting proof. Wearing beekeeping gloves is optional. If your bees are docile, you may choose to work without gloves.

Essential Tools

Hive Tool

Two different types of [hive tools](#) are available for working with your beehive – a standard hive tool and a [French hive tool](#). Both tools are made of steel.

Either tool will work well, but the French tool is longer and more slender and you may find that you prefer it over the standard tool. It will reach all the way down to the bottom of the hive. With it, you can scrape out any wax or reach anything that falls to the bottom.

You will need the hive tool to remove top bar frames from your hive. Bees continually retrieve a sticky, resinous substance called [propolis](#) from surrounding trees. They apply the propolis to



the inner surfaces of their hive, which acts like caulking and seals any openings. The propolis seals so well that it is almost impossible to remove the top bars by hand. Whenever you want to check your hive and remove a bar, you will need to use the hive tool to pry the bar loose.

- Slide the lid off your hive. Apply smoke to the top of the open hive to calm the bees.
- Slip the flat edge of the hive tool under the outer edge of one of the top bars and pry

upward. The wooden top bar will easily pop loose. Notice the propolis stuck to the edges of the extracted bar. The bees have applied it between the bars to seal the gap. This is how they glue the whole hive together.

Bee Brush

The bee brush has a row of long, soft bristles and is primarily used when harvesting honey. Use it to safely remove bees that cling to the comb and hive.

- When you remove a honeycomb, the bees will cling to it. Gently brush the bees that are on its surface back into their hive using slow, gentle strokes.
- Once you finish inspecting the honeycombs but before you replace the last top bar, use the brush to brush any stray bees back into the hive. Then replace the bar and slide the cover onto the hive.

Questions about Beekeeping?

Submit any questions for Jacob in the Q&A section on the course homepage or post it to our blog at www.sustainlife.org/blog/category/beekeeping/

Additional Videos

Other Videos in this Series

- Introduction to Beekeeping
- Tools of the Trade
- Setting up a Hive
- The Hive – Langstroth vs. Top Bar
- The Bee Caste – Ranks & Tasks

Related Videos

- Harvesting Honey

Beekeeping Suppliers

Beekeeping Tools and Supplies

Texas Hives

This company is owned and operated by Jacob and his family. You can buy his Top Bar Hive as well as other tools and supplies you'll need for beekeeping from Texas Hives.

1094 Far Paddock Rd.
Waco, TX 76705
254-495-4480
BrazosRiverHoney@gmail.com
www.TexasHives.com

Better Bee

8 Meader Rd.
Greenwich, NY 12834
1-800-632-3379
www.betterbee.com

Bees

R. Weaver Apiaries – Bee Seller

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1-936-825-2333
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Brushy Mountain Bee Farm Inc

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1-800-456-7923
beekeeping.glorybee.com

Bee Weaver Apiaries – Bee Seller

Navasota, TX 77868
1-866-547-3376
info@beeweaver.com
www.beeweaver.com

Recommended Bee Books & Journals

ABC and XYZ of Bee Culture

by Amos Ives Root

First Lessons in Beekeeping

by C.P. Dadant

Starting Right with Bees

by Henry G. Rowe
A.I. Root Co.
623 W. Liberty Street, Medina, OH 44256

The Bee Keeper's Handbook

by Diana Sammataro & Alphonse Avitabile

The Hive and the Honey Bee

by Joe M. Graham

American Bee Journal

51 S. 2nd Street, Hamilton, IL 62341
1-800-637-7468

Bee Culture

The Magazine of American Bee Keeping

A.I. Root Co.
623 W. Liberty Street, Medina, OH 44256
1-800-289-7668