

Honeybee Habitat Management Primer

Enjoying and protecting honey bee colonies has been a tradition passed down through many generations. In keeping with this heritage, this primer provides a starting point for learning about beekeeping.

Learning the basics

Education is the starting point if you want to be a beekeeper.

The internet is a knowledge base. Look for beginner beekeeper topics.

My favorite book for beginner beekeepers is: "[Beekeeping for Dummies](#)" This book describes how to get started, how to care for and safely handle bees, and how to maintain healthy and productive colonies of honey bees.

Find a local beekeepers association in your area and mentor with an area beekeeper. TBA or Texas Beekeepers Association website has a listing of [affiliated beekeepers associations in Texas](#). Go to a meeting to meet area beekeepers.

Many of the larger beekeeper associations put on one day beekeepers schools. Attending a bee school is a wonderful opportunity to gain experience beekeeping and find vendors for bee equipment. Check their websites for planning.



Let Us Begin

Having honeybees around the yard and garden adds many wonders. Bees pollinate your flowers, vegetable plants, fruit trees and berry bushes. Pollination of plants at this level is essential if you want to grow your own food.

Harvesting raw, local honey is a joy and a medicinal food as honey has many special qualities including being anti-bacterial. Local honey is an amazing natural sweetener that is known for thousands of years as a medicine that soothes the sore-throat, and is a natural energy booster that contains valuable antioxidants

The buzzing sound we hear is because bees can flap their wings at a pretty impressive 230 beats per second. This rapid wing beat causes the air around the bee to vibrate, ranging from 10 - 1000 Hz, and that vibration travels to our ear and we interpret that vibration as a buzzing sound. These frequencies that bees emit resonate with organic tissues and promote healing and these sounds have an overall calming effect on your mood and well being.

Equipment

There are all kinds of various sizes and options but the boxes, frames, lids and bottom boards are the essentials I recommend to purchase these and begin with a [Langstroth hive design](#) which is the most common bee equipment. Some people really enjoy wiring frames and handling real beeswax foundation. The hard plastic foundation is vastly more durable, especially after it has a good solid wax comb build over it.

Order your honeybees for Spring delivery and gather your bee equipment. Basic bee hive kits are available from bee supply companies with website and catalogs:

[The Bee Supply](#) and [Rossman Bee Supply](#) are my favorite websites.



You can buy bees locally from someone who raises them for that purpose or has decided to cut back or sell out. Buy your bees from a recommended beekeeper by visiting the local beekeepers' meetings and asking for references.

Order honeybees in the Fall for Spring pickup/delivery. I build [nuc colonies](#) for sale to beekeepers in March-April-May. A 5-frame nuc includes drawn wax-comb with capped and open brood, two frames of pollen and honey, and a working queen.

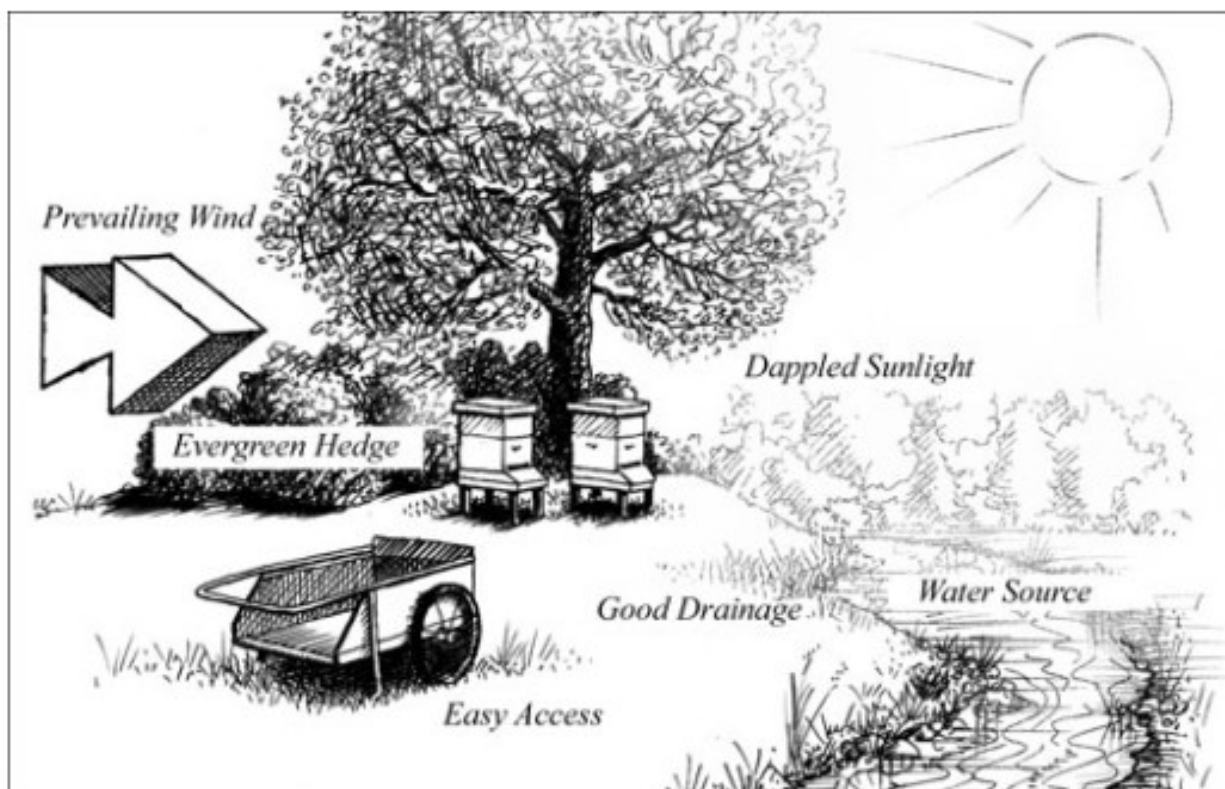
This nuc colony contains approximately eight thousand hatching honeybees that fill a new hive box very quickly. New beekeepers order during the previous Fall-Winter year and install nuc colonies in their beehive boxes in the Spring when the weather is great for honeybee colony expansion.

If you do not know exactly what to look for, try to get an experienced beekeeper to go with you.

Placing Your Apiary

Place the hives in a spot that is fairly level and slightly lower at the entrance to allow for moisture to be expelled.

To avoid the cold North wind entering the hive during the Winter, the hive entrance should not face directly North. I like to orient the hive entrances to the East or South East.



It is nice to have some sort of barrier, dense vegetation or paneled fence to separate the hives from people. A physical barrier of dense trees or shrubs separating hives from neighbors allows a space to walk through to “brush” bees off if they are following the beekeeper when leaving the hive. The beekeeper needs to create adequate distance to walk from the hive to allow bees to leave them before returning indoors.

Beehives can be in full sun in the morning and dappled shade in the afternoon.

Set up your honeybee apiary in the best location possible with attention to dappled sun and a water source.

Water Sources

Honeybees also require a reliable water source, especially in the Texas Summers. Colonies can consume up to a gallon of water a day. I provide a water source if there is no natural or artificial source within one hundred yards of the apiary.

Bees like “dirty” water instead of clean, fresh water and will often be seen at a muddy puddle or birdbath, as opposed to a clean bucket of water. If providing a watering bucket or bowl, be sure to place pebbles in the water so the bees have a spot to land and avoid drowning.

Picking Up Your Bees

I recommend buying a nuc colony in a box or container. The most popular type of nuc box is a white waxed box designed to hold five frames and contain the bees for a while. Plan to pick up your nuc colony early in the day. The sooner you get the honeybees into their regular hive is best. Protect your bees from extreme temperatures. I like to keep a spray bottle with sugar water and a couple of drops of lemon grass oil to spritz the colony while transporting or installing. Tie down the transport box in the bed of a truck or place the transport box in a large mesh, netting bag to contain any loose bees.

I enjoy the day that beekeepers visit the farm to pick up their nuc-colonies and we have fun mentoring new beekeepers.

Anytime is fine to install your bees and I suggest you place the travel nuc box next to your regular beehive as the bees will be eager to conduct an orientation flight in their new surroundings.

If your schedule does not permit an immediate transfer of the frames to your regular hive, open the little access door on the travel box so the bees can fly in and out. This is okay for a few days but remember that a good nuc is full of bees that might swarm.

Transferring Your Bees to Your Regular Hive

Light your smoker. Always use a smoker when working around bees. A little puff of cool smoke around the entrance and area calms the bees and reduces the alarm response. Prepare yourself by putting on your beekeeper's veil or suit.

Pick up the frames of bees slowly and vertically when transferring to the regular hive. Place your nuc frames of bees in the center of the regular hive box. Add blank frames to complete the 10-frame hive.

Shake any remaining bees from the transfer box into the regular hive and place the empty travel nuc box next to the regular hive. The stragglers will find the queen and the other bees soon. Use the 3-inch entrance reducer for now. Add a hive top feeder and lid to your new colony of bees.

I always give my new honeybees some feed to support their growth. This can be with a little pollen powder sprinkled on top of the frames or 1:1 ratio sugar water placed in a hive top feeder.

Feeding

A hive top feeder is the easiest way to give resources to new honeybee colonies to promote fast growth. A hive top feeder fits on top of the beehive so the bees can get feeding resources and treatments internally with no disturbance. The beekeeper can just lift the lid and add sugar water without disturbing the honeybees.

Bees are fed in early spring before flowers develop nectar, during times of drought and in preparation for winter if they do not have enough stored honey.

I treat my bees with a custom treatment that my beekeeper friends and I have developed that include small amounts of thirteen different essential oils, amino acids, and vitamins for bees, mixed with 1:1 ratio sugar water. This is a natural way to treat honeybees for any disease or pest that enters the beehive.



Honeybees require both pollen and nectar from plants for their survival. When setting up an apiary, learn about the local flowers and when they bloom. I like to sprinkle local wildflower seeds near my apiaries to ensure that the bees have reliable nectar and pollen resources without flying long distances and using internal energy. If you live in an area with exceptional pollen and nectar resources, you will have surplus honey to sell.

Inspection – What to Look For

Always light your smoker before inspecting the colonies or what we call “reading the frames.”

I like to begin by loosening an outer frame with my hive tool and placing it leaning next to the hive. This gives room to work on the other frames in the hive.

The next frames might be fresh white wax-comb or dark brown if the comb is older.

Look for fresh larvae of varied sizes around the capped-over brood. The pattern of different sized larvae tells you that the queen is present and laying an egg pattern from larger larvae to smaller larvae. A good queen will lay in a tight concentric manner. This can be seen in the placement of the eggs, the larvae, and the capped brood.

Rings of fresh pollen will circle the open brood, carefully distributed by the hive bees so that the nurse bees have exactly what they need, close by, to produce fresh royal jelly for the thousands of larvae in their care.

Look for glistening nectar-honey and capped over honey cells to indicate the bees are building honey stores. The presence of fresh eggs and larvae is an excellent indicator of a working, laying queen. But it is always fun to search for the queen.

When I raise my own queens, I mark the back of the queen with a drop of non-toxic paint, for ease of spotting.

Final Thoughts

I began my beekeeping journey in 2014 to establish an agricultural exemption on my family farm. I was a “New Bee” with no knowledge about honeybees.

Now I mentor beekeepers and homestead-minded families that have mini-farms and honeybee apiaries. I raise Spring nuc colonies for sale in the Spring-Summer months and I raise gentle cordovan queens for my colonies and other central Texas beekeepers’ needs.

Beekeeping is fun and addictive!

I raise gentle bees and I rarely get stung. There is no reason for beekeepers to raise “hot” bees. The solution to hot beehives is to find the queen and squish her. Then you add a new queen with gentle genetics. Within 45 days, the old bees have died, and the hive is full of gentle honeybees.



Bruce Ford the beekeeper

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