



Beekeeping Equipment and Tools

Langstroth Hives

- **Brood boxes with a full complement of frames**, two deep or three medium; 8-frame or 10-frame. Be careful to buy frames that fit the boxes — deeps ($9 \frac{5}{8}$ ") for deep boxes, mediums ($6 \frac{5}{8}$ ") for medium boxes, and enough of them to fill the brood boxes.
- **Honey super(s) with a full complement of frames**. You will probably not need more than 1–2 the first year if you are starting package bees on new foundation, but if your hive survives its first winter you could need 5–8 for the following spring/summer. Be sure to get the same type (8-frame or 10-frame) as in your brood boxes! You can use deep, medium, or shallow boxes for supers, but be aware that when full of honey, a 10-frame deep super will weigh ~80 lb, while an 8-frame medium super will weigh ~35 lb. Plan ahead — how much weight can you comfortably lift?
- **Plastic or beeswax foundation**. Although some beekeepers do not use it, foundation is a good thing for a beginner because it helps the bees build straight, well-spaced combs. You'll need one sheet per frame, either beeswax or plastic. Plastic is easier for the beginner, as it is less prone to being damaged during installation and honey extraction. Be careful to buy foundation that fits your frames — $8 \frac{5}{8}$ " for deeps, $5 \frac{5}{8}$ " for mediums, and $4 \frac{3}{4}$ " for shallows.
- **Wooden inner cover**.
- **Telescoping outer cover**. "Telescoping" means the cover fits down over the edges of the hive to keep the rain out. These can be made of wood covered with metal, or plastic.
- **Screened bottom** with a removable mite-counting board (optional, but highly recommended).
- **Entrance reducer**. This allows you adjust the size of the entrance. It is especially useful in the winter and during robbing season.
- **Queen excluder** (optional). A wire grid placed between the brood boxes and honey supers, to prevent the queen from moving into the honey supers and laying there. Some beekeepers swear by them, others swear they prevent even worker bees from accessing the honey supers.
- **Bee escape** (optional). Essentially a one-way door to let bees out but not back in. Used to get bees out of honey supers before harvesting them. Be sure to get the same type (8-frame or 10-frame) as in your brood boxes! There are chemical alternatives (Bee-go, fume pads, etc.). The advantage of a bee escape is the bees stay calm and no chemicals are near your honey; the disadvantage is it can take a day or so for the bees to all vacate the super.

Top-Bar Hives

- **Top-bar hive** with full complement of bars, two follower boards, and a solid roof/top over the bars. The follower boards are used to restrict the size and shape of the hive chamber, a huge help in getting the bees to draw comb straight along the bars. We recommend hives with a window in the side — you can learn a great deal about bees by watching them going about their daily activities.



Tools & Equipment

- **Hive stand.** A platform that keeps the hive off the ground. It can be fancy or cobbled together from wooden pallets or concrete blocks.
- A **water source** for your bees. If your bees have a dependable supply of drinking water, they are less likely to be a nuisance in your neighbors' birdbaths, swimming pools, etc. They don't care if the water is clean, and they need something to stand on while drinking. A bucket with corks or bark floating in it works well. Be sure to locate it at least 10' from the hive, if it's too close they won't use it. If you have an irrigation system, consider adding an emitter to top up the bee water so you don't have to remember to do so.
- **Bee feeder.** There are many options for feeding sugar syrup to your new package of bees. Some feeders can also be used as watering devices after the initial feeding period.
- **Smoker and fuel.** Some beekeepers don't use them, but most do. A beginner shouldn't be without one.
- **Hive tool.**
- **Bee brush** (not essential, but helpful).
- **A long, thin-bladed serrated knife.** Not essential, but very useful for cutting comb loose from the sides of the hive and separating cross-combs without causing comb damage. Thrift stores often have them.
- **Harvest equipment.** If using Langstroth hives, at a minimum you'll want a 5-gallon food-safe bucket with a honey gate. A fine-mesh strainer (metal drum-type or nylon bag-type) is also quite useful. For top-bar hives, a large pan/bowl, potato masher, and fine-mesh sieve are the usual harvest tools.

Essential Tools for the Beekeeper

- **Bee suit**, or at least a bee jacket.
- **Helmet with veil**, if your bee suit/jacket hasn't got one integrated.
- **Gloves** (optional but highly recommended for beginners). No gloves are sting-proof, but leather is sturdy and wears well. Nitrile gloves are easier to work in, and wearing two pairs will cut down on stings. Or take a hybrid approach and put a pair of nitrile gloves under your leather ones.

A Note About 'Complete Beekeeping Kits

While it can be tempting to simply buy one of the 'complete beginner kits' sold by many beekeeping suppliers, some contain lower-quality components that won't last well. Choose carefully!

Where to Buy?

The Beekeepers' Guild of San Mateo web site's Suppliers page (www.sanmateobeeguild.org/suppliers.html) lists a number of beekeeping suppliers. Please note that inclusion in this list does not indicate promotion by the Guild – the list is provided as a resource only.

