



Beekeeping Equipment

There are various types of beekeeping equipment in use but it is recommended for beekeepers to use only standardized and common equipment for ease of operation and higher resale value. A comprehensive guide called "Beehive Construction" is available from the Apiculture Office upon request.

Hive Bodies (Supers)

Supers are the wooden boxes that hold the frames of comb. For Langstroth or standard equipment the outside length of the hive is 20" (50.7 cm) and the width 16 1/2" (41.8 cm).

There are three common depths in use:

Standard	9 1/2" deep	24.0 cm
Dadant (Also called "3/4" depth" boxes)	6 5/8" deep	16.8 cm
Shallow	5 13/16" deep	14.7 cm

Frames

The lengths of the frames are the same for all depths of hive bodies. The depth of the frame varies with the hive body used/ The end bar length equals the depth of the frame.

Frame Depths

Standard	9 1/8"	23.0 cm
Dadant (Also called "3/4" depth" boxes)	6 1/4"	15.8 cm
Shallow	5 3/8"	13.6 cm

Beeswax Foundation

Since all frames are the same length, all foundation is also the same length – 16 3/4". Depth varies according to size of frame:

Standard	8 1/2"	1.5 cm
Dadant (Also called "3/4" depth" boxes)	5 5/8"	14.3 cm
Shallow	4 3/4"	12.0 cm

Foundation

- Plastic foundation inserted into a standard wooden frame, or one-piece plastic frame with foundation (~Pierco frame) are widely used because of durability and cost. No assembly is required and it is excellent in disease control.
- For beeswax foundation, the pre-wired wax foundation is recommended.
- Unwired foundation is available and widely used for candle making. When used in the hive, only apply to brood frames, as it is not strong enough for honey extraction.

Types of Frames

Standard (self-spacing) frames	Most popular. Good resale value but difficult to make the end bars
Non-spacing (i.e. no shoulders)	Easy to make. Frame spacers are used as frame rests, or staples are sometimes used to provide spacing.
Plastic frames	Labor saving and durable. Foundation can be wax-coated to improve acceptance. Excellent for honey supers.
Plastic foundation / Standard Wood frame	The same as the plastic frame except that a conventional wooden frame is used with a plastic, wax-coated foundation.

Hive Lids

The telescoping lid with metal covering is standard. Plywood is most often used and is durable when well painted. Lids may also be insulated with wood shavings, Styrofoam or fibreglass within the construction.

Migratory lids are temporary and used during transportation. The lid is flat with lips only on the front and back which allows hives to be placed close together.

Bottom Boards

Standard reversible has a deep side and a shallow side, for summer and winter use respectively. It is designed for use with a hive stand. Most new equipment is not reversible, but has two cleats fastened to the hive floor either crossways or length wise to the bottom board. This keeps the bottom board off the ground, and makes for one less piece of equipment to construct, buy or maintain.

Inner Covers

The standard inner cover has rims on both sides around the perimeter which makes it reversible; one rim is solid and uninterrupted and used in the winter. The other side may have a 2 inch (~5cm) section removed and is used in the summer as a top entrance for added circulation.

Queen Excluders

Metal or plastic excluders are used to prevent the queen from moving up into the honey supers. The space between the wires of the grid is sufficient to allow worker bees to pass through, but not queens or drones.

Bee Hats

A well-ventilated sun helmet is usually used, made from plastic or woven material. Cloth or felt hats should not be used as bees may become defensive. **Bee Veils**

The folding wire veil is used in combination with a bee hat. The veil can be folded up when not in use. It is durable and provides for good air circulation and visibility. The nylon net veil is also popular as it can be rolled up and placed in a pocket. It is very good for air movement, but can easily be damaged by sparks or contact with a hot smoker. Some other designs include hat-veil combinations that are zippered onto the coverall.

Coveralls

Coveralls are considered essential. White or pastel colours are most suitable because of coolness. Dark colors cause defensive behavior in bees.

Smokers

A smoker is essential. Several types and sizes are available. A variety of fuels can be used including burlap (~jute) and rolled-up pieces of cardboard. The smoke bomb (an aerosol container) is useful for quick checks and for areas with high (forest) fire hazard.

Hive Tools

A suitable hive tool is essential; several types are available, all made of durable spring steel.

Pollen Traps

Used for short periods of time for the collection of pollen. Various types are available.