

The column at <http://www.orsba.org/htdocs/questions.htm> is full of useful and helpful information, but the comments made about Top Bar Hives (TBHs) suggests a lack of experience with them. As one who has played with both Langs and TBHs, here is another perspective on TBHs.

TBHs have a long history which goes back as far as the Egyptians, who used them in pipe hives about 8" in diameter. The Greeks documented movable frames in straw baskets during the 1600's (<http://tinyurl.com/7qrof>). Langstroth studied these and other developments en route to his development of the hive we accept as the standard in beekeeping today.

| Look up "top bar hives" on the internet. They are very usable
| by bees if you don't expect to take honey from them.

Beekeepers around the world (some in the U.S) are making a living out of TBHs. Although not typical, in some situations TBHs out-produce Langs, as shown by the experience of Rupert's Honey in South Africa (<http://tinyurl.com/bjyrf>). Rupert's Honey in South Africa handle African bees in TBHs without fear of attack by using light smoke at the entrance to direct the attention of the guard bees from the beekeeper who works from the back.

TBHs require consistent attention to maximize productivity, so the biggest factor in TBH productivity is management. Instead of leaving supers filled and stacking higher, TBH beeks have to remove filled frames throughout the flow/year in order to maintain expansion space for the hive. The bees either swarm when a hive is approaching capacity, or they slow down on honey production. Both negatively impact productivity.

| 5. Top bar hives are not all that efficient because you are
| limited in size.

A TBH can be small or large, there is no innate limitation on size.

In general however, TBHs tend to be small, and a search of the web will show that most are less than 20 gallons in capacity. Two Lang deeps are 22 gallons, and four medium supers are over 30 gallons so the typical Lang hive is 2.5-3 times larger than a TBH.

Dennis Murrell in Wyoming (<http://tinyurl.com/a56vl>) builds TBHs which are over 40 gallons in internal volume. At the other end of the scale, Scott McPherson in Florida (<http://tinyurl.com/dxxfd>) runs a commercial operation with hundreds of TBHs and his 'standard' size is 14 gallons. Les Crowder in New Mexico (<http://tinyurl.com/dsclv>) runs over 100 TBHs that are slightly larger at 16 gallons

Maximum production with TBHs requires more consistent and constant attention during a flow, which is easier for a backyard beek to provide than a commercial operator with hundreds of hives. The Langstroth lends itself to higher productivity, but the downside is heavy lifting.

| They [TBHs] are mostly horizontal and bees like vertical.

Although this is an accepted truth of beeks everywhere, there are so

many exceptions in nature that this can be challenged. Vertical expansion is definitely the norm in Langs, but that is an artificial environment. One factor in the queen wanting to move up is her preference to lay in fresh comb, not old comb.

If you start a swarm in the top box of a 3-box hive, the bees will move down as the top box becomes filled but if supers are added on top of the 3-box hive, the bees will use the supers above.

Feral nests do not follow the vertical rule. A nest removal from a garage wall with the entrance at the top clearly showed that the bees had built their comb down. You could track where the queen had moved the brood chamber lower and lower because brood comb at the top was filled with honey and the brood chamber was almost 3' below the entrance. Another removal involved bees which had started their nest in the cavity above a doorway, and had a choice between moving up or moving sideways between the joists. The bees chose sideways instead of going vertical.

| As for top bar hives, they are unlawful in many states because you
| can not remove the frames to search for disease, and since there
| is no standard with top bars it is hard to apply medication in
| proper dosages.

The laws vary by state but do not necessarily specify the type of frames, they require only that the frames be movable. TBHs meet that requirement.

Medication dosage should be based on bee population not size of hive, and it is straightforward to calculate TBH capacity.

| It is also hard to move your hives.

Depends on the design of the TBH. Those that are built with shallow sloped sides and side entrances can be stacked side-by-side and on top of each other. There is plenty of room for air flow to avoid suffocation.

You do have to remove frames full of honey before transporting otherwise they will collapse because the wax is fresh and has little strength. On the plus side, removing the honey makes the TBH lighter.

Brood chambers can take a huge amount of abuse from being bounced around in a pickup because the wax is hard and TBHs do get used for pollination. It is additional work to remove the honey-filled combs before movement, but on the upside TBH beeks do not have to invest in hive loaders.

| Top bar hives only work for wax where the bees can work for food
| all year round.

TBHs can be found anywhere that Langs are, and although it was once thought that wax production lowered honey production, recent research suggests otherwise. Although bees produce most wax during a nectar flow, bees build comb as needed, even during winter in mild climates like California.

There are all kinds of variations within TBH-land, and many beeks work with hybrids. In areas where there are strong honey flows, it is not uncommon to see supers sitting on top of TBHs. This is similar to the practice of using double wide deeps by Lang beeks.

It is hard to generalize about TBH dimensions because there is no de facto standard.

- Sloped sides and square sides both have proponents
- 19" top bars (like a Lang) are common but many are shorter or longer
- 8"-9" deep makes comb handling easier, but TBHs can be 16" or deeper

Working TBHs is definitely a different world. For the backyard hobbyist it involves lower cost and less physical effort. There is no bee gap between frames so bees cannot pour out when the lid is lifted. Since filled frames are removed from the rear, the nest area is left alone unless there is some reason to investigate.

Medication tends to be lower, and more often than not TBH beeks claim to have never medicated. Many reasons have been given, and amongst the most persuasive are that that the brood nest is seldom disturbed, the cell sizes vary in a frame because there is no foundation, and regular replacement of brood comb gives the queen fresh comb to lay in.

Based on the experiences of beeks in the mid-West who keep both Langs and TBHs, the TBHs tend to overwinter better.

Honey extraction by crushing comb requires less investment and effort than uncapping and extracting frames. All it takes is a pair of buckets, preferably a 2-gallon and 5-gallon. The 2-gal either has a strainer installed and the bottom cut out or a series of holes drilled in the bottom. It sits on top of the 5 gal and the honey drains down. With a sealed top on the 2-gallon and no gap where the two fit together, there is no problem with bees robbing. It is a good idea to sit the 5-gallon in a basin of water to prevent ants. The 5-gal will hold 2-3 drainings of the 2-gal, and if it has a honeygate is as easy to empty as an extractor.

TBHs are unlikely to replace Langstroth hives in popularity, but they are influencing beekeepers around the world. Rupert's use Langstroth frames in TBHs and claim TBHs have higher productivity than Langstroth hives.

TBHs are more forgiving for hobbyists than Langstroth's, and both the initial and continuing investment is much lower. Also, there are no concerns with wax moth and rodents chomping on frames over winter because there are no supers to store.

The enjoyment of beekeeping comes from being involved with an amazing insect and the sheer unadulterated pleasure of tasting 'real' honey. TBHs are not competitive with Langstroth technology but are complementary.

For the children, elderly, and disabled persons who do not have the physical strength and capability to handle Langstroth hives, TBHs are the only viable way to pursue beekeeping as a hobby. For the rest of us, TBHs are simply one more way to keep bees.