

Winterizing Your Top Bar Hive for the Colder Months

http://www.backyardhive.com/Articles_on_Beekeeping/Featured_article/Insulating_Your_Hive/

Here in Colorado we experience very cold winters. Most of the content in this article is directed toward those who live in cold winter climates. Insulating the beehive, and keeping a full hive of honey is important in areas where you will experience below-freezing temperatures for many days at a time. Obviously, if you live in a very warm climate like Florida it will not be necessary to winterize your hive. Understand that you may need to adjust this information for your specific climate and area.



Because of how the bees use honey over the winter, we have changed our thoughts on when the best time to harvest honey actually is. We find that it is more supportive of the bees to harvest honey in the spring instead of in the fall in colder climates because the bees will need the honey for warmth. Not only do the bees eat the honey, but they also take advantage of the honeys' incredible heat storing properties as thermal mass. During the day, the honey absorbs warmth from the radiating sun, stores it, and slowly releases that warmth back into the hive throughout the coolness of the evening and night. That being the case, we feel the last honey harvest in the fall should only be to prevent the bees from attaching their comb from the false back. Do not remove more than 1-2 honey combs. Labor Day is a good reference date to keep in mind as around the last time you want to harvest honey.

There are four fall "chores" to prepare your hive for the winter:

1. Move the false back forward
2. Install a feeder cup if your bees don't have enough honey stored
3. Install the winterizing entrance reducer
4. Insulate the hive

Move the False Back Forward

The false back is included with both Back Yard Hives. It is a top bar with a thin sheet of wood suspended below it. The false back is kept in the back of the hive in the summer to make getting into the hive easier and is then moved forward up against the last comb for the winter months in order to create a smaller space in the hive that the bees have to keep warm. Ideally you would want to install the false back before the first snowfall or extended period below 32 degrees Fahrenheit. The false back should be installed on a day that is warmer than 50 degrees Fahrenheit so that the hive doesn't lose too much heat. For reference, in Colorado along the front range Halloween would be the absolute latest that one should put the false back in position.



To install the false back, look through the window and determine where the last of the combs have been drawn out. Usually this is near the back of the hive. Remove the top bar at this location and insert the false back snug against the last top bar with comb on it. The next step is to gently loosen all the top bars

at the back of the hive from the edge of the hive body. Try to keep them as one unit as you slide them forward against the false back. Keeping the empty top bars together as one unit will ensure that the propolis seal between them is left intact.

If you haven't already, you may need to move your bees forward in the hive. Moving the bees forward is only necessary if the bees have created their brood combs in the center of the hive and have left empty space in the front of the hive (i.e. no combs drawn on the top bars at the front of the hive). Moving the bees forward decreases the hive volume and is an additional protective measure in cold climates. It is quite important that this is only done during a time that is warm enough to see many bees flying from the entrance. This is an additional step and is more involved, requiring that you are comfortable with your bees and your skill level is developed. In a climate like Boulder, Colorado, mid-September is the last time that one should move the bees forward in the hive.

To move the bees forward, start by removing the empty top bars at the front of the hive until you get to the first drawn comb. You will begin moving each comb forward, detaching the combs from the sides of the hive as necessary to enable them to be moved.

Pry the top bars with the hive tool. Continue moving the combs forward one by one, like a filing cabinet, until you have successfully moved all the combs to the front of the hive. When the last comb is repositioned insert the false back behind it. Then take the remaining empty top bars that you removed from the front of the hive and put them behind the false back. Because "robbing" may be a problem in the fall, it is important that all the spaces and gaps are sealed in the top of the hive



Installing a Feeder Cup if Your Bees Don't Have Enough Honey Stored

The general rule is that if your hive has less than 7 honey combs you may need to offer honey to your bees over the winter. We recommend feeding the bees honey instead of sugar syrup or sugar water, as sugar is not a natural food for the bees. If your hive is in its first year you can use store bought honey, but ideally you would want to use honey you have collected from that hive.

Get a shallow bowl or container - it can be a plastic container reused from a grocery store purchase. It is important that it is shallow enough to slide under a comb or 3, but deep enough so that you will not have to fill it too often (opening the hive in the winter may dangerously cool the bees). Slide your container under 1-3 combs. This is important, because when the bees are cold they cannot move very fast or far, so their food source needs to be close. Place sticks in the container so that when the bees visit the feeder they will not fall in or drown. Besides the combs that the feeder is under, the feeder should stick out 1-2 empty bars or partial combs in the back of the hive.



Place your false back as close to the feeder as you can. Mark on the top of the empty or partially-combed top bar that is above where your feeder is located so that during the cold months of the winter if your bees need more honey you can quickly pull off just that one bar, and pour honey into the hive. Remember, you should install the feeder in the fall on a warm day. If the bees are warm enough to be

flying from the hive - about 50 degrees - then it is a good time to do the install. Be sure to move quickly so the hive temperature doesn't drop too much.

Installing the Winterizing Entrance Reducer

The entrance reducer comes with both BackYard Hives and slides easily into the entrance leaving a small "door" for the bees to come in and out of. This serves two purposes. It helps to keep cold winds from entering the hive and it also reduces the amount of robbing your hive may be experiencing. It is best to watch the bees to see if they naturally begin to reduce the entrance on their own with propolis. If the bees have the genetic ability or memory they will best know how much they will need to close their entrance. If by the end of October you have not observed the bees closing up the hive, you will need to help them with the entrance reducer. The majority of bees seem to have lost this capability.



Bees that know how to close up the hive entrance will have closed up the entrance with propolis, leaving a few small openings. There is no need to insert the entrance reducer if they have closed up their entrance with propolis.

Insulate the Hive

There are actually many different materials you can use to winterize your hive. You can be pretty creative with this process and find the perfect solution for your climate and situation. However, here at www.BackYardHive.com we typically use the Hive Cozy. We like to give the bees the best insulation protection we can; we find that it gives them a real boost when spring comes.

If there is a good store of honey for the bees, insulating the hive is not absolutely necessary but there are many benefits in doing so. Insulating the hive can actually add to your spring harvest because the bees will not need as much of their honey for fuel or warmth to get them through the winter. Another advantage to insulating the hive is that the bees will be able to start their brood earlier in the spring, so there will be larger numbers of bees ready to head out for the spring nectar flows.

You may wonder why we need to insulate our hive when in nature they do not need insulation. Well, actually they do. Wild bees that survive in a harsh winter climate tend to live inside hollow trees with thick walls (insulation) protecting the bees from the harsh winter elements.



For climates similar to Boulder, Colorado, you will want to have the Hive Cozy or other option in place by the end of October. The Hive Cozy is R-19 fiberglass insulation that is protected by plastic and wrapped around the hive. A good protective plastic solution is to use roofers' trash bags. These bags come in a large roll and are approximately 4 1/2' feet x 2 1/2' feet. Because they may be difficult for you to purchase,

we sell them on our website. [Click here](#) to access our shop page, and just scroll down to find the plastic cozy covers. For the insulation part, we suggest putting two strips of R-19 insulation side by side in the bag. Position the cozy over the hive so the brood combs will be at the center of the cozy. Make sure the cozy is snug against the sides of your hive and tie 2 bungee cords at both ends of the cozy, or use staples to secure the cozy to the hive. However you decide to attach your cozy, make sure the window and entrance into your hive are accessible.

If you need a bit more insulation you can place 2 straw bales next to the hive to insulate the bottom portion of the hive from wind chill. Another option for maximum insulation is to stack straw bales around your entire hive. Make sure that the entrance to the hive is opened all winter to allow the bees to come and go. During the winter the bees may need to leave the hive on warmer days to gather water, or to go on a cleansing flight. So after heavy snowfalls, check your hive entrance to make sure it is open for the bees.



We consider winterizing the hive a crucial part of the bee guardian method. This simple and fun maneuver insures that our partnership and exchange with the bees continues into the next year. In the spring you may congratulate yourself for assisting the bees as you once again witness your environment come alive with the delightful hum of the honey bee.