

Bee and Beekeeper Information-Month by Month



Northern Beekeeping isn't set in stone. How and when you work your hive will vary from year to year. However, you should have a general plan for what to do throughout each season. There isn't always a right way to do something when it comes to bees. Think it's too cold to open a hive? Starvation is bad and deserves prompt attention. So is disease. Learn which conditions to watch for. Use this as a guide and talk with local beekeepers to refine the timing. It's a good idea to take notes on each hive, that way you can review your progress at the end of the year and make revisions as needed. Work with the seasons, not the printed calendar.

Month	The Bees	The Beekeeper
January	<p>The bees are in a tight cluster staying warm and consuming food (honey stores). Winter bees live longer than summer bees, however, many bees die during the winter from old age. When bees die during winter, they fall to the bottom of the hive. In the summer, or on warm days, dead bees are carried outside the hive by their sisters. But in winter, when the hive is clustered, dead bees accumulate on the bottom board. If snow covers the ground, you may notice more dead bees around your hives. This is normal. It's a sign of a strong hive when they drag out dead bees. But, if you don't see anything, don't panic either. It just means they will do it later when the temperature is higher and they are able to break cluster. On days when the wind is calm and the temperature rises near 45°, you might see bees taking cleansing flights.</p>	<p>As a general rule, January is more of a hands-off month when it comes to interacting with the bees. However, there is still plenty of work to do.</p> <ul style="list-style-type: none"> • Ensure the upper and lower entrances are clear of snow or debris so the bees can continue to get enough ventilation and move freely in and out on warm days. • Check apiary for damage. • Fix any blown off covers or blocked entrances on hives. • On a warmish day, 45° or more, you can open the hive top and take a quick 'Steve Sneak & Peek'. Do not remove any frames, as this will chill the bees and brood. Upon inspection you can assess if the colony still has enough stored honey for food. If not, feed with frames of honey, sugar candy, dry sugar, or candy boards as needed. • Clean, assemble, paint and repair beekeeping equipment. Purchase new equipment if necessary. • Read beekeeping periodicals. • Join and attend your local beekeeping club. • Sign up for beekeeping courses. • Order packages, nucs, and/or queens. Many bee suppliers will sell out of package bees in January. You must place your bee order as soon as you can. Otherwise, you may not be able to get any bees.
February	<p>Sunlight is becoming slightly longer. The bee cluster will be working its way upward. (It's important that the bees started the winter in the lowest box.) The bees are behaving similar to January</p>	<p>Emergency feeding is just that...an emergency! So if needed, do whatever it takes to get some white table sugar into the hive. Of course, if you have frames of honey available, that's the best way to feed them.</p> <ul style="list-style-type: none"> • If you did not order your bees in January, do it now! • If you did not order your new equipment, hurry! You may find out equipment is back-ordered. You want your hive equipment ready by April. • Continue to research and read up on beekeeping. • Educate yourself on different size boxes for brood.

<p>March</p>	<p>If the hive was low on honey going into winter, then March is the month they may starve out. The bee population is likely very low due to normal die-outs throughout the winter. Their need for food increases because brood rearing has started. March is when many hives are lost due to starvation.</p>	<ul style="list-style-type: none"> ● Monitor food stores and continue feeding if needed. ● Keep entrances open; remove debris. ● All bee equipment should be ready (cleaned &/or assembled), as your new bee packages should start arriving in the month of April. ● Continue to educate yourself.
<p>April</p>	<p>The bees are flying more and they start to find pollen as the month progresses. The queen will start laying eggs at near full capacity mid-April. The entire hive begins to return to an almost normal operation now that winter is almost over. There will be cold snaps, but the bees will do fine as their numbers begin to expand.</p>	<p>Inspect your hives! April should provide you with a few days when the temperature will rise to 60° or higher. You can now do a more thorough inspection. Be careful not to chill any brood. If you have to wear a jacket, then it's probably too cold for the bees as well. A majority of packages are installed during the month of April. Make sure that you are familiar with the requirements for starting packages and provide sufficient care to ensure their success.</p> <ul style="list-style-type: none"> ● Check food reserves. Feed light syrup (1:1) and pollen substitute to hives low on stores. ● Determine if any of your colonies have died out over the winter. Clean out boxes of any winter losses and determine what may have caused their demise. This is a good time to look for signs of hive pests and diseases. If Varroa mites are detected on live bees, apply mite treatment(s). ● Check on queen quality. Check brood pattern and determine if queen needs replacing. ● If your hive is strong, remove entrance reducers and mouse guards as the temperatures become constant. ● An early start in brood raising also means that your hive strength will increase to the point of swarming much earlier. Pay attention and reverse your brood boxes if necessary! This is extremely important as it gives more space for the queen to lay eggs. Simply move the empty bottom brood box to the top. Do not divide the cluster or brood area. There will be an increasing amount of nectar gathered at this time, and the volume will increase as May approaches. ● Feed packages installed on undrawn foundation, as these bees have little to nothing to work with.

<p>May</p>	<p>The bees are nearly at full swing. There will still be a few cold snaps, especially in early May, but by the last two weeks, the weather is good for bees to rapidly expand and to start bringing in more and more nectar and pollen. The queen should be laying well now. The hive should be expanding rapidly.</p>	<p>This is a great time to equalize your hives. You may have to combine weak hives with strong ones. Even though they know better, every year some beekeepers seem to become too compassionate toward a struggling hive, and try to nurse them back to health. Although some success may be experienced, it is usually not worth it. It is costly to spend too much time on a struggling hive. It would be far better to combine it with another hive if it is disease and pest free, and the newly combined single hive has a much better chance of thriving. Take the chance that the new hive may be strong enough to split during the summer. After all, a weak hive is an invitation for pests and disease. Strong hives work best. Keep your hives strong.</p> <ul style="list-style-type: none"> • Consider marking your queen if she is not already marked. • Inspect hives every 7-10 days. Monitor colonies for queen cells, pests, and diseases. • You must continue to inspect all hives and take appropriate action based upon the condition of the hive(s). • Continue feeding nucs and packages until they have drawn out comb in the brood chambers. • Keep feeding weaker hives until a heavy nectar flow is in progress. No additional supers should be on your weaker hives. <p>Strong overwintered BEES SWARM in May (sometimes late April)! You may have to implement a swarm management strategy. Keep in mind that bees swarm as a way of multiplying. It is not a sign of being a poor beekeeper. However, there are some important steps to try to prevent swarming.</p> <ul style="list-style-type: none"> • Provide room for your hive to expand. In strong, overwintered hives, put on honey supers no later than May. If you have extra boxes, put on as many supers of drawn comb as you'd like or add more brood boxes. Some experts think it is good practice to have a minimum of two drawn honey supers on all hives as the bees are now collecting nectar from a growing number of sources. Don't wait to add your supers or you may miss a particular nectar flow. Some beekeepers add a queen excluder between the brood and the honey boxes. • Consider having extra, empty hives on hand to capture a swarm. You will want to capture your own swarms or you might receive phone calls once your neighbors learn you are a beekeeper. Some beekeepers receive several calls each week all spring and summer. • Keep feeding package bee's syrup until they have about 18 frames of comb drawn out.
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June	<p>The hive is expanding rapidly. The brood chambers are filling up fast and the bees will be working hard filling supers. If insufficient space has been provided, the brood chambers are becoming crowded and congested, and your bees are probably preparing to swarm.</p>	<p>Bees need water, so be sure to keep a water source near your hives. Bird baths filled with water help ensure your bees stay out of the dog's water bowl and your neighbor's pool. Some beekeepers maintain their feeders full of water (no syrup) to make it easier for the bees to keep cool.</p> <ul style="list-style-type: none"> • Continue to inspect hives every 7-10 days, or as often as you wish. There's a balancing act between too little and too much. • Monitor colonies for queen cells, pests, and diseases. Check brood pattern to make sure your queen is laying well. • Inspect weak hives and try to figure out why they are weak. • Attempt to control and capture swarms. • Once 75% of a honey super is capped over, consider adding another box. Continue to provide plenty of supers for your bees. • Try raising your own queens if you like your stock.
July	<p>You may see bees hanging out on the front of the hive. This is normal. During hot, and especially humid evenings, many bees may spend the night on the front of the hive, or they may form a beard on the ground in front of the hive. This is called 'bearding' and is normal.</p>	<p>Most beekeepers begin to consider the amount of varroa mites within hives during July. Based upon mite count results, some beekeepers begin to treat. Make sure the treatment you choose can be administered while honey supers are on. Certain treatments can contaminate the honey with chemical residue. If possible, do not use chemicals in your hives.</p> <ul style="list-style-type: none"> • Continue to check and monitor your hives every 7-10 days. • Check honey supers, remove and extract any capped honey and replace supers as necessary. • Check for queen cells, especially in colonies used for queen rearing. • Major nectar sources may begin to disappear late in July.
August	<p>The bees may become more defensive as they ripen the last incoming nectar. Hot days and humidity are upon us which also agitates the bees. The bees may go through a dearth period.</p>	<p>If you have multiple hives, be careful not to let a strong hive rob a weak hive. Be careful not to open up the hive for extended periods as other hives may attempt to rob the hive while it is opened. If it's necessary to open a hive for an extended time, have a plan in place to protect the hive before you open it.</p> <ul style="list-style-type: none"> • Continue to check and monitor your hives. • Do a thorough mite check and treat, if needed. In today's world, all Honey Bees have varroa mites. Learn how to calculate a mite load. • Check your honey supers, remove and extract any capped honey. Be sure to leave the bees with

		<p>enough honey to overwinter. This could be as much as 100 pounds.</p> <ul style="list-style-type: none"> ● Reduce the size of entrances on weaker hives.
September	<p>The bees are busy gathering available nectar from Goldenrod, Asters, and other fall-flowering plants. This is the bees' final opportunity to gather stores before the first frost.</p>	<p>This is the last month of nearly uninterrupted flight opportunity for your bees. Take the time to conduct a thorough inspection before the start of cool temperatures. What you do here will influence the success or failure of your colonies for the coming winter.</p> <ul style="list-style-type: none"> ● Take off all your supers. There is no need for them now, and you will want to tighten up the hive by removing excess supers. Partially filled supers can be fed back to the bees above the inner cover and inside a dummy box to prevent robbing. ● Evaluate queen. Check several brood combs for brood quality, which is an indicator of queen quality. A good queen will lay a solid brood pattern with few empty cells. The fewer empty cells, the better the queen. All of the comb doesn't have to be good, but most of them should have solid patterns. ● Consider re-queening. You don't have to, but it is advisable to re-queen in late August through September. If you can afford to re-queen your hive each year, do so. A new queen is younger and has stronger pheromones which reduces swarming next spring. New queens are also more likely to lay eggs more efficiently next spring. ● Check Varroa mite infestation & take action to reduce the mite load. If your bees are not healthy going into winter, they have less chance of surviving. ● Consider applying brood medications by feeding 2 gallons of 2:1 sugar syrup (by weight) with Fumidil-B for control of Nosema (no honey supers can be on). ● Estimate hive strength and combine weak hives with stronger ones. Only combine bees and equipment after establishing that they're free of disease. ● Weigh your hives. For winter, 85-100 pounds of honey and 3-5 frames of pollen is desirable. Unless you have a hive scale, this is guess work. A way to estimate is to determine the average weight of each frame and add everything together. ● If you do not have enough honey stores, you will want to start feeding the hive 2:1 sugar/water. ● Reduce entrances to help prevent hives from being robbed and keep mice out.

		<ul style="list-style-type: none"> ● NOTE: Never treat or medicate bees with honey supers on!
October	<p>There are fewer reasons for the bees to leave the hive. Flying is minimized because of colder temperatures. The queen is laying fewer eggs. They are now shifting to winter mode. The bees may form a loose cluster if temperature is less than 60°. If bees are clustered, do not break them apart.</p>	<p>During the fall honey flow, the goal is to have the bees fill the upper brood chamber with honey. What this does is force the queen down into the bottom brood box. However, if there is not enough space in the hive, the bees will fill the upper AND lower brood boxes with honey. So too much honey will deprive the hive of space needed for brood rearing. If this happens, instead of having lots of young bees for the winter, you will have lots of older bees, and the colony will not survive the winter. Therefore, it is best to err on the side of too much room; rather than too little.</p> <ul style="list-style-type: none"> ● Continue feeding 2:1 syrup to your light hives, if necessary, to get to weight. ● A common contributor of winter die outs is starvation. This is why it's so critical is make sure your girls have enough food stores going into the winter. ● Remove any mite treatments in accordance with the label. ● Begin winter preparations.
November	<p>The bees begin to cluster for winter, however; they may not go into a full winter cluster. They may break cluster frequently on warm days and re-cluster at night.</p>	<p>A large, healthy hive will not die from cold weather as they will stay warm by clustering in the hive. However, moisture will kill them. The heat generated from the cluster rises above the bees and forms condensation, which can drip down onto the cluster. This is what kills bees during the winter. Wet + Cold = Death.</p> <ul style="list-style-type: none"> ● Prepare your hives for winter. ● Tilt hives forward a little to allow water to run out. ● Provide protection from the wind. ● Provide an upper entrance for ventilation and escape in case lower entrance becomes blocked. ● Ensure all treatments and queen excluders have been removed. ● Place a quilt box or moisture board to absorb moisture above inner cover. ● Insulate below outer cover. ● If concerned about having enough winter stores, a candy board can be used also.

		<ul style="list-style-type: none"> ● Consider wrapping hives with tar paper or commercial wrap, ensure the entrances are not covered. ● Winter winds can be strong, so place a heavy concrete block on your hives or strap them down.
December	<p>The bees are happily clustered in the hive staying warm. They will only leave the hive to take cleansing flights on warm, sunny days. Older, dying bees, will pile up at the bottom of the hive. If it's warm enough, other bees will carry their bodies outside to dispose of. The circle of life!</p>	<p>Relax and give yourself a pat on the back then get ready for next year.</p> <ul style="list-style-type: none"> ● Review your bee lessons learned throughout the year. ● Order bee packages and equipment as needed. ● Keep the snow away from your hive entrances. ● Check hives for damage after any high winds or storms. ● Consider expanding your apiary. ● Help your local beekeeper organization plan their next year. ● Get some bee books...Read them?

Keeping bees is hard. Keeping them alive is even harder. Have a good year and welcome to beekeeping.