

## The Kamloops Area Beekeepers' Calendar

### Beekeeper Checklist for January

- Check weight of hives to ensure adequate honey stores. If light, feed fondant or sugar.
- Order packaged bees, queens, nucs and supplies.
- Clean, build and repair existing equipment.
- If temperatures permit, oxalic acid can be used to treat bees for varroa mite control.

### Beekeeper Checklist for February

- Check the weight of hives to ensure adequate honey stores. If light, feed fondant or sugar.
- Above 15C daytime temperature, peek between frames in the top brood super for honey stores. If bees fly up, they are likely hungry, so feed.
- Pollen feeding may start as early as mid-February for some microclimates. This applies to beekeepers that want early population build up for spring bee stock sales and/or pollination contracts. *Caution: early feeding may cause early swarms.*
- Order bees, queens and hive materials.
- Build or buy new equipment.

### **Beekeeper Checklist for March**

- Attend the beekeepers' meeting, field day, and the BCHPA semi-annual conference in Kamloops.
- Check weight of hives to ensure adequate food stores.
- *Bees may start flying at daytime temperatures of 12C to search for pollen.* For later splits and nucs add pollen supplements to increase brood production.
- Monitor for signs of varroa mites; the sugar shake method or alcohol wash are best. If needed, treat with an approved miticide. (\* Note: formic acid should not be used in conjunction with syrup feeding, it can harm the bees.)
- Replace old or damaged comb.
- On single brood chambers add a second brood super when the bees have covered 7 of 10 frames, or reverse the brood boxes. If brood is in the middle between the two supers do not reverse as you will disrupt the colony. If you prefer to run single brood chambers, add a queen excluder and honey super.
- Above daytime temperature of 16C, do a quick check for eggs and brood. Observe whether the bees are bringing in pollen. *Pollen foraging can indicate that there is a live queen.*
- If night-time temperatures are above 10C, you may feed the bees a 1:1 sugar syrup. *Beware that large colonies may create early swarms.*
- New beekeepers should register their apiaries. By law, established beekeepers need to renew their registration every two years. This can be done online through the Ministry of Agriculture - Apiculture Office: <https://forms.gov.bc.ca/industry/beekeeper-apiary-registration/> or call for a form to be mailed to you. Phone: 604-556-3129
- Clean, seal up and store away from the bee yard any hives that have died.
- Inspect all frames with dead brood for signs of disease like American Foul Brood (AFB). If suspected call the bee inspector. AFB is a reportable disease. The spores can survive in a vegetative state for decades on old equipment.

## **Beekeeper Checklist for April**

- Inspect your frames and supers for signs of disease, and for rodent damage. If anything is suspicious, consult the bee inspector. Apply medication only if brood disease has been confirmed.
- Above 16C daytime temperature clean bottom boards, if not already done in March. Take off empty brood supers and clean frames and supers to remove burr comb.
- Monitor for signs of varroa mites: the sugar shake method or alcohol wash are best. If needed, treat with an approved miticide. (\*Note: formic acid should not be used in conjunction with sugar syrup feeding, it can harm the bees.)
- Replace old and damaged brood frames.
- Install bee packages. Make nucs and add new queens when the brood population is high in the second brood super (usually during the dandelion bloom period).
- If a bee package or nuc is placed on foundation only (versus drawn comb), feed 1:1 syrup continuously. (\* Note that formic acid mite treatment should not coincide with sugar syrup feeding.)
- Have a clean continuous shallow water source.
- On single brood chambers add a second brood chamber when the bees have covered 7 of 10 frames. Or add a queen excluder and honey super if you run single brood chambers.
- For double brood chambers, if brood is in the top super then reverse them.

### **Beekeeper Checklist for May**

*A heavy dandelion nectar flow often starts in late April and the bee population will expand rapidly. Sugar syrup feeding is usually not required by dandelion time.*

- Put wasp traps around your bee yard to help prevent future wasp and hornet problems.
- Keep feeding any weaker hives to encourage the increase in bee population. *If a colony size is not increasing or you see a scattered laying/brood pattern, the queen may be running out of eggs.* Replace the queen.
- Consider equalizing your hives (that are free of pests and disease), by either combining weak hives using the newspaper method, or by boosting smaller colonies with frames of brood from your stronger colonies. Typically it doesn't pay to nurse weak colonies. They are more vulnerable to pests and disease and may spread disease.
- Develop your plan to prevent swarms or to deal with them if they occur. Have a swarm catching box ready and available.
- *Varroa mite treatments must be completed and removed before adding honey supers.*
- As the brood chamber fills 7 out of 10 frames with bees, brood, pollen, and honey, add a honey super with drawn comb above the top brood super. Add a queen excluder between the brood and honey chamber if this is your practice. If you are adding a honey super with foundation (versus drawn comb) do not use a queen excluder.
- Take out and replace brood chamber frames with excessive drone cells and replace with worker comb or with full sheets of foundation.
- Put on extra honey supers when the first honey super that you added this spring has 7 out of 10 frames filled with nectar and/or honey.
- Check regularly (every 10 days), for signs of swarming. Remove queen cells and create space for the queen to lay eggs in the brood chamber.
- Some beekeepers place swarm boxes near their apiaries. Note that open access to comb is against the Animal Health Act whereas bee pheromone lures are effective and meet biosecurity requirements.
- If a queen excluder is used, place it above the second brood super. If foundation is used to start the honey super, do not use a queen excluder until the comb is built out and the bees are storing honey in the first honey super.

### **Beekeeper Checklist for June**

*Usually this is the time of the main nectar flow and the bees are working non-stop filling supers with honey.*

- Add extra honey supers as they fill up with honey. When they become capped with honey supers can be removed, the honey processed, and the “wet” supers put back on the hive.
- Ensure that the bees have a clean continuous source of water.
- Have plans in place for honey extraction, honey storage containers (pails, jars, etc.)

### **Beekeeper Checklist for July**

*Nectar flows will usually be at their maximum in the first two weeks, depending on elevation and temperature.*

- Check your honey supers for capacity. If near full, add another super.
- Check your honey supers for capped honey. Once a honey super's frames are two-thirds capped with a layer of wax, remove the super for processing and replace it with another honey super that has drawn comb. A refractometer tool can be used to confirm that the honey is properly ripened.

### **Beekeeper Checklist for August**

- Check your honey supers for capped honey. Once a honey super is two-thirds capped with a layer of wax, remove the super for processing and if it's early in the month, replace it with another honey super that has drawn comb.
- Once the nectar flow is over, usually by mid-August, take off all remaining honey supers for processing.
- Watch for robbing, where a stronger hive raids weaker hives. Avoid opening up hives for extended periods because this invites robbing.
- Install a wasp screen to minimize robbing by wasps and hornets. In some microclimates an entrance reducer can be installed.
- Colonies may be requeened with young laying queens after you remove the honey. Feed heavy sugar syrup (2:1 ratio) after requeening. Avoid spilling syrup as this attracts wasps and other bees to rob. (\* Note that formic acid mite treatment should not coincide with syrup sugar feeding.)
- Once honey is taken off, monitor for varroa mites and treat if warranted. Use an approved miticide. Be sure to also monitor at the end of treatment to check for efficacy.

### **Beekeeper Checklist for September**

- Install entrance reducers to minimize robbing by wasps and hornets and to prevent mice from moving in.
- Take off all your honey supers if you have not done so in August. Once your honey is taken off, monitor and treat the bees for varroa mites using your preferred method. Be sure to also monitor at the end of the treatment period to check for efficacy.
- As cooler weather begins bees are busy gathering stores of pollen and nectar before frost. Look for signs of brood to ensure that there is a laying queen.
- Combine disease-free weaker colonies with stronger hives. Only exchange or combine equipment from different hives if they are disease-free.
- A hive requires 70 to 80 lbs of honey for the winter. Weigh the hives. If needed, feed a 2:1 sugar syrup to increase stores. (\* Note that formic acid mite treatment should not coincide with syrup sugar feeding.)
- While daytime temperatures remain above 8C, continue feeding with sugar syrup. Below that, feed with fondant or sugar candy as required.
- Consider using an upper entrance for moisture control.

### **Beekeeper Checklist for October**

*Bees are leaving the hives less, due to fewer nectar sources and cooler weather. On warm days they may be bringing final stores of pollen for the winter. The queen is laying fewer eggs, and the colony is raising long-lived winter bees to help keep the hive warm. The queen is usually in the bottom super.*

- Ensure that the upper brood super is packed full of honey. Add capped frames of honey if necessary. An alternate method is to put a one-inch riser above the top super and put 5 to 15 kg of bee fondant on top of the frames.
- Add a wind break around your bee yard, wrap the hives or use a bee cozy, and weight down the top covers with a rock or brick. Reduce the entrance if you have not already done so.
- Manage moisture by ensuring air flow into the hive. *Remember it is moisture in the hive, condensing, and dripping onto the bee cluster that kills bees, not the cold.*
- Clean up your apiary by removing any wax, pads, strips, old frames and unused equipment. Sort and store equipment for cleaning and maintenance. Store supers in freezing temperatures to control wax moth.

**Beekeeper Checklist for November**

*The bees will likely be in a cluster. On warmer days they may break cluster and move closer to the south side of the hive for warmth, then recluster at night. They'll often take cleansing flights on sunny days.*

- Weigh your hive to ensure adequate stores of honey. Add fondant or sugar cakes if necessary.

**Beekeeper Checklist for December**

*The bees will be in a tighter cluster now. On warm, sunny days they may do a cleansing flight. It's not unusual to see dead bees outside the hive entrances, worker bees are cleaning out the hives.*

- Some beekeepers may choose to manage varroa mites by using oxalic acid at this time of year. Either the vapour or dribble method can be used depending on daytime temperatures.
- Sort and repair equipment. Order or build new equipment and supplies to replace old equipment.
- Used frames in supers can be sent to Sterigenics in Port Coquitlam to be irradiated. This process eliminates disease buildup in the beeswax comb, wooden frames and bee boxes. With minimum 100 supers, often a group effort is required. (2021 price \$7.50 each + GST)