

The Valley Beekeeper

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A quarterly report from the Cowichan Beekeepers, Box 274, Cobble Hill, B. C., V0R 1L0, Vancouver Island

www.cowichanbeekeepers.ca

The opinions expressed are not necessarily those of the Club's Executive, Directors or all the members.

Meeting monthly, the third Thursday, 7:30pm, Feb.-Nov. Cowichan Agricultural Office meeting room, Clements St. Duncan

We need confirmation from our members ———

if you wish to be listed on the website as a Swarm Catcher or Honey Vendor.

The same if you would like to be removed from the listings.

Email to Showgun@shaw.ca

Harvest Bee Pollen From Honey Bees Bees-And-Beekeeping.com

Since many people believe that bee pollen benefits them in a number of ways, there's a ready market available to beekeepers that wish to harvest and sell bee pollen. Beekeepers can harvest pollen from their hives by using pollen traps.

Pollen traps are designed to remove the pollen pellets from the bees' hind legs as they pass through a narrow opening. The pollen pellets fall into a container that is screened so that the bees cannot retrieve the pollen. The beekeeper frequently – often daily – harvests the pollen pellets from the container of the pollen trap. Individual bees are not harmed as they pass through the pollen trap. And as long as the beekeeper is careful not to harvest too much pollen, the colony is not harmed. A strong colony is capable of gathering much more pollen than it actually consumes.

Should You Try Bee Pollen For Allergies?

Ultimately, that's a question that only you can answer. But it is true that bee pollen is a highly nutritious food, so for most people taking bee pollen will do no harm, and you might end up in the group of people who feel that they've been immensely benefited by taking bee pollen. Bee pollen can pose a very real risk for a very small percentage of people. Be aware of the potential side effects.

The more local the bee pollen, the greater the chance that it will have some affect upon your allergies. Bee pollen that was harvested from hives a great distance from you is less likely to contain some grains of pollen from the type of plant that's causing your allergy symptoms. The pollen is not likely to help with your allergies if it contains no pollen from the plants that cause your symptoms. That's why many people believe that eating local raw honey not ultrafiltered helps with their allergies.

New Book in the bookstores

It seems many beekeepers are also interested in gardening and really think about chemicals and pesticides. There's lots of evidence that says pesticides and chemicals are causing bees to die off all over the world, so the decision to go as natural and organic as possible is a good one. Another big bonus is you know your honey is as natural and organic as possible. Organic gardening can be simpler and easier than you may think. I came across Phil Nauta. He lives in the Toronto area and is a certified organic gardener. Phil is also the author of the book wrote "*Building Soils Naturally*." He even has a free newsletter on his website.

How to raise a queen bee by the Hopkins Method

by Khalil Hamdan Apeldoorn, The Netherlands

A Calendar for Raising Queen Cells - (see Newsletter Pages 2 — 4)

Day	Stages of queen development	Task
1-3	Egg	
4	Egg hatches into tiny larva	Remove the comb from the breeder colony. It should have been filled with just hatching larvae. Prepare one face of comb following the Hopkins plan. Transfer comb with prepared cells to a cell builder hive prepared 6-12 hours beforehand.
4- 8	Larva in unsealed cell	
8-9	Cell sealed	
9-12	Pupa in sealed cell (pre-pupa)	
12	Pupa stage	Make up mating nuclei.
13		Transfer ripe queen cells from cell builder to colonies that have been made queenless 1-2 days beforehand, or to mating nuclei.
14		
15-16	Adult virgin queen emerges	
20-23	Mating flights	
23-30	Queen begins egg laying.	

What is the Hopkins Method?

The Hopkins method is the removal of a frame with eggs or newly hatched larvae from a selected breeder queen. This frame is then given to a queenless cell builder colony. But it is not hung in the normal way; it is placed in a horizontal position above the brood nest. Realizing that they are queenless, the nurse bees will be stimulated to feed these larvae with an abundance of royal jelly and raise queens from them. The Hopkins method of raising queen bees is a simple method requiring no special equipment that can be employed easily by those who wish to raise queens for their own use. It works pretty well and can be counted on to produce good quality queens just as good as those purchased from a commercial beekeeper. The Hopkins method can be used when a small number of queens are to be raised. Although the method allows the beekeeper to raise as many as 20 to 30 queens or more from one frame of brood, for a good quality queen it is best not to allow the bees to raise more than 20 at a time.

The Procedure

Pre-Requisites:

- A breeder queen
- A cell builder colony
- A mating nuclei.

Getting young larvae from the breeder queen Choose a colony containing your best breeding queen, for example, one that lays well and produces a lot of brood.

Remove a comb from the centre of the brood nest and replace it with an empty comb of light wax that the queen will lay eggs into. Some prefer to use a shallow frame. Leave this there for 3-4 days or until it is filled with very small larvae, less than three days old.

Remove it from the breeder colony, and brush off the bees.

A comb filled with freshly hatched bee larvae, 4 days after the queen has laid eggs.

A larva that has just started to lay with a slight curve in the bottom of the cell is the proper age larva for raising queens. Larva which fills cell is too old.

Preparing the surface of Hopkins comb

The best side of the comb is selected for the queen cells and rows of cells on the face of the comb are squashed flat. Three rows of cells out of four are destroyed using a matchstick or scored out to the midrib with a sharp warm knife. Then two out of three cells in these remain-

ing rows are destroyed to the midrib, leaving the third standing as a potential queen cell. If a small number of queens are needed, simply reduce the number of undamaged cells. This preparation leaves sufficient space between the remaining cells in which the bees can easily draw them out into queen cells and aids in cutting them out. If the brood comb is used without this preparation the queen cells will be built attached to each other and will be impossible to separate without damage. The comb is now ready to be placed into a specially prepared cell-building hive.

Preparing a cell-builder hive

A cell-builder hive is a strong colony without a queen. A colony will only build queen cells if it does not have a queen. If a comb of eggs or young larvae were to be put into a normal queen-right colony with the intention of create queen cells, then this colony will not do so. Bees can be encouraged to make queens by deliberately making a colony queenless. In this condition the bees will attempt to raise a number of queen cells when given eggs or young larvae. That is what the cell-builder colony is for.

Select a strong colony well supplied with honey and pollen, and many young bees. A single hive body colony can be used when only a few queens are to be raised.

Temporarily remove the queen and the comb she is on with bees and place in a nucleus hive. The cell-builder hive is prepared overnight before the comb is put into the cell-builder. It takes a few hours for the bees to decide they need a queen before you put in the freshly prepared comb.

The prepared comb is placed flat over the middle of the brood nest of the cell-builder hive with the prepared side facing downwards, and raised up on small wooden blocks about 3 to 4 cm (1¼ inches) between the comb surface and the top bars of the frames below, so that the bees can draw queen cells down from the face of the comb. The comb is covered with a cloth to protect it from cold and an empty hive box or a shallow honey super is placed over it. All that is left to do is to put the lid on the hive.

If there is no honey flow, feed with sugar syrup during the cell building process, which takes about 4-5 days. This will help stimulate the production of wax. The young nurse bees will draw down many queen cells on the horizontal frame, nurture larvae and complete the work. A larva destined to become a queen is fed lavish amounts of royal jelly throughout her larval development, which causes her to develop large ovaries and gives her the ability to lay eggs. It is very nourishing allowing queen bee larvae to grow faster and larger as well as live for longer periods than other bees. Queen bee larvae floating in a pool of creamy white jelly in open queen cells. Royal jelly is crucial in queen raising. Without this rich food, queen bees would not be able to develop properly.

Transferring the queen cells

When the cells are sealed on day 13-14 of the queen raising process (or on the 10th day after the prepared comb is given to the cell builder), they should be cut out with a sharp knife and transferred to hives to be requeened or to mating nuclei. Handle ripe cells carefully. To avoid injury to the tender queen pupae the comb should never be shaken; gently brush the bees off. Mishandled cells result in deformed or dead queens.

The queen cells should be transferred in a Styrofoam container with drilled holes of 19 mm (¾ in) diameter to hold each cell, or a small box (with a lid) filled with sawdust or wood shavings to minimize vibration. Place them in an upright position in the box at all times. Keep queen cells at hive temperature until they are placed in queenless hives.

It is essential to introduce the queen cells into your hives or nuclei immediately after removal. A queen cell can be introduced at any time after a laying queen has been removed, but for best acceptance it is better that the colony has been queenless for 1- 2 days.

Destroy any emergency cells that have been started on the combs before introducing your queen cells.

In the **Hopkins Method** insert the cell gently between the top bars of two frames in the centre of the hive in a vertical position. Care must be taken not to squash the cell as this may kill the young queen.

A matured queen cell being inserted between two combs in the brood area in a colony to be requeened. These are mini nuclei contain 1- 4 small frames and about one or two cups of bees (1000- 2000), or larger 5 frames colonies.

You can place the queen cells into the mating nuclei in the same manner as described above. Leave one cell in the cell builder to replace the queen or reunite the original queen back with her brood and bees.

Hints on raising the queen bee

Successful raising of new queen bees requires suitable conditions. You can raise good-quality queens by following the basic principles outlined here.

1. Queens should be raised from the best colonies you have. Select a breeder queen of outstanding characteristic to breed from. Those characteristics will pass on to all her daughters. Such selection will improve your stock.
2. They should be raised from the smallest larvae possible, preferably larvae that are under 24 hours old. Larvae of this age will receive plenty of royal jelly (bee milk), so that they will be large and highly fertile queens. The age of the larvae plays a significant role in the quality of the resulting queens. The younger the larvae the better the queens.
3. They should be raised in a strong and populous colony. There should be plenty of food in the hive to feed the developing queen larvae. The quality of the resulting queens will depend on the care they receive in the cell-building colony. The advantage of raising queens in a strong colony is that the young queens are well nourished owing to the large number of young bees providing sufficient royal jelly, and the ability to accurately hold the necessary temperature within the hive.
4. The development of a queen from the time the egg is laid to the time she emerges from her cell takes 15 -16 days. Do not permit the sealed cells to remain in the cell-builder more than 10 days. Beyond this the first queen to emerge will kill the other queens that are still in their cells.
5. Queens should only be raised when drones are available. Generally in Europe drones are present from late March to the end of September. In some regions, drones appear from May until the end of July. A honey bee queen usually mates with 10 to 15 drones. A virgin queen is worthless to the colony unless she is successfully mated. Therefore you must have a sufficient supply of drones to insure successful mating of queens. The drone provides half of the genetic material to the new bees.

A colony possessing the desired quality should be encouraged to raise drones by giving it drone raising comb or frames with starter strips of foundation. A strong hive may have between 300 and 500 drones at peak periods. Drones take 24 days to hatch, and become sexually mature at 14 days of age before they are ready to mate. Therefore drone 'mother' hives must have drones hatching when starting to give queen cells to the cell-building colony. Mating does not begin until the virgin queen is sexually mature. This takes place about 5 days after emergence providing the weather is sunny and warm (20°C/69 F or higher).

HopGuard™ / varroa mite control / Natural Integrated Pest Management

<http://www.mannlakeltd.com/>

View the video located at the bottom of the Mann Lake website or go to YouTube/HopGuard, varroa mite control. Hopguard is another natural treatment for Varroa mites. The great thing about HopGuard™ is you can treat anytime, even during honey flow. HopGuard™ is composed of all food grade products, natural treatment made from an extract from the hop plant.



HopGuard™ used for varroa mite control is bee safe and easy to use. No strip removal is needed; the bees will do the job for you. HopGuard™ will not disrupt normal colony behavior such as queen egg laying because it is non-toxic to brood and bees.

Cardboard strips impregnated with the extract are hung between frames using two strips per 10 frames. Up to three applications can be applied per year. Hopguard is approved under section 18 emergency use exemption in some, but not all states. It may be used up to 3 times per year. It is most effective when used during periods of minimal brood rearing. Be sure to read and follow all directions when using Hopguard. It is necessary to monitor mite levels in order to determine when colonies need to be treated.

World's Largest Dedicated Honeybee Health Company

Vita (Europe) Ltd.

Apimondia report in Kiev, Ukraine *20 August, 2013*

Vita gave the latest news on the pan-European approval process for HopGuard, a natural plant extract-based varroa control treatment, and on developments with the Asian Hornet Trap which will have had its first limited production run for France where the Asian Hornet problem is at its most acute. Vita staff talked about its involvement in fascinating new research on gene knockdown techniques to combat varroa, the secrets of the honeybee bite and on a completely new finding about honeybee swarming behaviour that has been revealed by studies involving the Vita Swarm Lure.

Over the past two years, Vita has been expanding and developing its multi-lingual online presence. Its new web app for smartphones, in both English and Russian, will be accessible online and in a special Vita Online Zone.

Vita researches, develops, manufactures and markets a range of honeybee health treatments and products worldwide. Vita's product range includes the approved benchmark *Varroa* treatments Apistan and Apiguard; nutritional supplements Vita Feed Gold and Vita Feed Green; AFB and EFB Diagnostic Kits for fast and accurate field testing; Swarm Attractant Lures and B401 for Wax Moth control.

Vita has a rigorous and ethical approach to research and development into honeybee health, and has no commercial interests in crop pesticides or crop breeding that may be harmful to honeybees. Its products are thoroughly researched so that they are effective and safe, and where appropriate products undergo rigorous official national registration procedures. Vita promotes sustainable beekeeping through Integrated Pest Management (IPM). Its treatments are designed to inhibit the build-up of resistance and wherever possible contain natural compounds and biological controls that are benign to all but the target pests.



Beekeeping Questions and Answers

Question:

I am reusing frames from last year (lost the queen in late fall). how quickly will they need the next brood box in comparison to a hive where the frames were all new and not largely drawn out?

Answer:

Whether you've started with foundation or drawn combs, I'd add the next box when roughly 3/4's of the frames in the first box are being used - either drawn or being drawn, in the case of foundation, or being used for brood or nectar storage in the case of drawn combs.

=====Beekeeping Questions and Answers

Question

Hi, I bought a house from a beekeeper and every year bee's swarm from a tree with a hole in it. What is the best way to catch these bees?

Is it feasible to nail an empty bee hive over the hole or should I try to tempt them into a hive close by?

Answer:

If you mean remove the colony from the tree, I am afraid neither method will work. Your best bet would be to contact a beekeeper to remove the colony from the tree.

The colony in the tree will not leave their brood. Therefore, the only way to remove the colony from the tree is for someone to cut out and remove the entire comb for relocation into a hive. However, if you are asking if you can catch a swarm that issues from that colony, then yes, you might be able to do that.

Probably your best chance would be to buy a bait hive, and set it up near the tree. (Most bee supply companies sell bait hives.) Then when the colony in the tree throws a swarm, there is a chance the swarm will select your bait hive as its home. Of course, there is a chance it won't.

In addition, if you happen to be around when the swarm issues, you might be able to catch it even if it doesn't go into your bait hive. Swarms usually settle in an intermediate location not far from the parent colony while deciding on a permanent location. If the swarm settles in a location where you can reach it, you can shake the bees into a hive box. However, if you've never kept bees, I highly recommend that you don't try that without the assistance of an experienced beekeeper.

Moreover, don't bother with nailing a hive in front of the colony's entrance. That will likely just result in the bees becoming defensive, and you being stung. It will NOT result in the parent colony or its swarm moving into the hive.

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Question:

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I started with a 3 lb box of bees; install went good, three days later queen is out of her cage. But I couldn't find her. I was looking for about 15 minutes. I didn't want to disrupt them too much, they are starting to draw comb. I want to wait a few more days before I look for her again. Is it a good idea to wait?

Answer:

Yes, it is indeed a good idea to wait. You're right to not want to disturb the bees any more than necessary. That's true at any time, but *especially* for a newly installed package. Instead, wait several more days, and then do another hive inspection.

But don't worry about finding the queen. It can take quite a bit of time, and can involve going through every single frame of the hive to find her. Especially if you're new to beekeeping - though even experienced beekeepers can take quite a bit of time to find a queen. And though there are occasions when it is essential to physically find the queen, this isn't one of them. All you really need to do at this stage is verify that she's out of the cage and that she's laying eggs.

So when you open the hive next, I wouldn't even bother to look for the queen. Instead, just look for eggs at the bottom of the cells. They can be hard to see, but you should be able to



spot them. And if some of the eggs have hatched, you'll be able to see the little larvae curled up in the bottoms of the cells.

When you see that (eggs or larvae) then you'll know that the queen is doing her job, and all is well. No, need whatsoever to find the queen.

If you *don't* have any eggs or larvae in the hive within a week to week and a half of the queen being released, then you have cause for concern. At that point, I'd recommend that you contact

[Shock finding: More than 75 percent of all 'honey' sold in grocery stores contains no honey at all, by definition](#) 2012/07/30 *NaturalNews* By Ethan A. Huff, staff writer

Be sure to read the entire FSN report at:

<http://www.foodsafetynews.com/2011/11/tests-show-most-store-honey-isn...>

Just because those cute little bear-shaped bottles at the grocery store say "honey" on them does not necessarily mean that they actually contain honey. A comprehensive investigation conducted by *Food Safety News* (FSN) has found that the vast majority of so-called honey products sold at grocery stores, big box stores, drug stores, and restaurants do not contain any pollen, which means they are not real honey.

For the investigation, Vaughn Bryant, one of the nation's leading melissopalynologists, or experts in identifying pollen in honey, and director of the Palynology Research Laboratory at Texas A&M University, evaluated more than 60 products labeled as "honey" that had been purchased by FSN from ten states and the District of Columbia. Bryant found that 76 percent of "honey" samples purchased from major grocery store chains like Kroger and Safeway, and 77 percent of samples purchased from big box chains like Sam's Club and Wal-Mart, did not contain any pollen. Even worse were "honey" samples taken from drug stores like Walgreens and CVS, and fast food restaurants like McDonald's and KFC, 100 percent of which were found to contain not a trace of pollen.

So what is all this phony honey made of? It is difficult to say for sure, as pollen is the key to verifying that honey is real. According to FSN, much of this imposter honey is more likely being secretly imported from China, and may even be contaminated with antibiotic drugs and other foreign materials. Most conventional honey products have been illegally ultra-filtered to hide their true nature.

According to FSN, the lack of pollen in most conventional "honey" products is due to these products having been ultra-filtered. This means that they have been intensely heated, forced through extremely tiny filters, and potentially even watered down or adulterated in some way prior to hitting store shelves.

The US Food and Drug Administration (FDA) hold the position that any so-called honey products that have been ultra-filtered are not actually honey. However, the agency refuses to do anything to stop this influx of illegitimate "honey" from flooding the North American market. It also continues to stonewall all petitions to establish a national regulatory standard for verifying the integrity of honey.

Ultra-filtering eliminates and destroys all medicinal properties of honey.

The removal of pollen and other delicate materials via ultra-filtering renders them medicinally dead. Ultra-filtered honey is nothing more than a health-destroying processed sugar in the same vein as white table sugar or high fructose corn syrup.

The good news is that all of the honey products FSN tested from farmers markets, food cooperatives, and "natural" stores like Trader Joe's and Whole Foods, were found to contain pollen and a full array of antioxidants and other nutrients. Local beekeepers are another great source of obtaining raw, unprocessed, real honey.