

## Message from the Bee-house - winter

Things are slow with the bees for the next couple of months. If you are in a cool part of our state you may find the bees will not fly for a number of days. This is the time when you want to keep the smoker handy - the smell of burned Hessian! Makes you dream of spring.

There is a lot to do in the bee house!

The busy swarming season starts as early as August and you probably will remember that last time you did not have enough boxes ready and you had to rush to wire some old frames and there was a waiting list for foundation too.

Make sure all is ready by early August and you will be a happy beekeeper.

### The last 3 months in the Bee-house.

The figures are for Maleny but I understand that it may be even worse for the coast and not much better in the Mary Valley.

January: 17 days with rain

February: 23 days with rain

March: 27 days with rain

April: 18 days with rain

What does it all mean?

Well, there was not much honey to be harvested. Bees don't fly in the rain. Indeed as soon as the sun comes out for a few minutes the bees will be off and may get rained on on the way back - and this could mean the end of the bee.

In any case the bees will be eating into their store of honey and pollen trying to stay alive. Here, at Crystal Waters we did have some partly sunny days most of the time and the bees could bring back a bit of the much needed supplies but not much surplus. In Maleny and along the coast I have heard of beekeepers losing new hives. Newly established hives had not had a chance to build up stores and under such extreme conditions may well not make it. In the US and Europe ( and down South) it is common for beekeepers to feed bees with sugar water and pollen substitute. I never had to do this. Our policy is to never be to greedy and only take a fair share.

### What is a "Fair share"?

This is a difficult one to answer. A very general rule for us here in the Sub-Tropics is to expect about 1/3 of the two supers to be brood and pollen. We leave another 1/3 of the frames of honey for the bees and we take 1/3 of the frames full of honey for us - 1/3 brood and pollen, 1/3 honey for the bees and 1/3 honey for us. . If the conditions are good and the outlook (the weather and the likely flowering) is promising we may take a little more. If

we are not sure, we take a little less. This assessment may well vary from hive to hive. If in doubt - leave more for the bees!

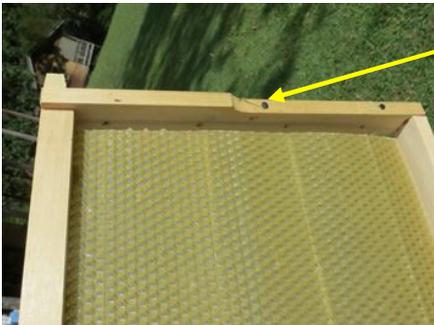
### *A little trick I learned from a professional*

Some time back I walked in on Bruce as he was wiring frames. I have been doing this rather tedious job for many years and it proves that you can do the wrong thing for a long time.



I used to place the tacks here (at the wider part of the side bar)

It works but when you uncap the frame and clean the side bars the knife or whatever tool you are using often gets stuck on the nail - a real nuisance.



Bruce showed me that he places the tack here (at the narrow part of the side bar):

Yes, it will take a few cm of wire but the tack will never be in your way. No more frustration!!

### **8 or 10 frame super??**

When I started to keep bees the question never even entered my mind. I was young and strong and pretty well everybody kept bees in the 10 frame full size boxes.

An 8 frame super is obviously lighter to lift and handle. I can tell you that a 10 frames box full of honey is heavy. All my equipment is 10-frame and I had to learn to manage as I have to take care of an old back and a few other ailments!

Just as a rough comparison:

- A 10 Frame Super with honey will weigh about 40 to 50 kg all inclusive
- An 8 Frame Super with honey will weigh about 30 to 35 kg all inclusive

There is only one drawback with 8 frame equipment - availability. Probably all professional beekeepers (in Australia) would use only 10 frame equipment. This means that manufacturers produce mostly 10 frame supers and queen excluders. Indeed it is quite difficult to find 8 frame plastic excluders and we just cut 10 frame excluders to suit.

Think about it. Beekeeping is a hobby you should be able to enjoy well past your retirement age - indeed most beekeepers I meet at gatherings are about retirement age!

## Get ready for spring -NOW!

The work with bees starts in the Apiary in earnest in August when the first swarms are emerging. This is the time when I get urgent phone calls for beekeeping equipment. This year, make sure you are ready in time.

- Got some old supers? Clean up the supers and maybe even give them a new coat of paint. The bees don't care much but they do look nice.
- Old frames? Give them a good brush and you may need to rewire them. Use Stainless Steel wire - much better and lasts longer
- Bottom Boards and Lids? Maybe they too could do with a spruce up.

Make absolutely sure that any old equipment has never harboured bees with a serious disease like American Foul Brood. AFB can hang around for decades and it is wise to either have the equipment irradiated or burned.

- Not much equipment hanging around? Now is the time to order some ( have a look at our price list here: [http://ecologicalsolutions.com.au/bees/?page\\_id=8](http://ecologicalsolutions.com.au/bees/?page_id=8) ) and get it all assembled and when the first swarms turns up there is no need for panic!

We mostly use white paint (or a light colour) which we find in re-cycling depots some Council Dumps have. It is FREE in Maleny!

Make sure you air the boxes for a few days. Bees don't like the smell of new paint. I always drip a little Lemon Grass oil in the bottom of the box before I use equipment. Bees like it. Just a couple of drops are plenty.

Winter is also a good time to melt down your cappings (if you have not done this already using the Solar Melter). We are using an old electric boiler with a pretty good result.



It is best to choose a cool evening when the bees are home a little early. You don't want 100's of bees watching you! Make sure you clean everything up when you are finished (it is one of the messier jobs) before you close shop for the night.

This article below, has been submitted by my mate Bob:



### [Raw Honey: Liquid Gold in Your Pantry](#) Daisy Luther

When selecting foods for your stockpile, the most budget-friendly, space-conscious way to do it is by selecting items that multitask. This criteria places honey high on your "to-buy list". [Tess Pennington of Ready Nutrition](#) lists honey as one of [the top SHTF sweeteners](#) to store. Honey is indeed nature's sweetener, but don't write it off as

just a condiment. The sticky sweet substance is far more than something to stir into your tea or spread on your toast.

Since ancient times, the healing properties of honey have been documented. Some of this knowledge seems to have been forgotten (and purposely marginalized), and drug companies have replaced honey with chemical ointments, antibiotics and antivirals. (This is, as always, about money – they can't patent honey, can they?)

- Honey has been used in Ayurvedic medicine for more than 4000 years. Honey is an ingredient in 634 remedies in ancient Hindu vedic texts.
- The Ebers Papyrus of ancient Egypt expounded on the medicinal properties of honey, and it is contained in nearly every ancient Egyptian remedy.
- In ancient Greece, Hippocrates, the "Father of Medicine" wrote, "Honey and pollen cause warmth, clean sores and ulcers, soften hard ulcers of lips, heal carbuncles and running sores."

### **Just Because the Label Says "Honey" ...**

Now, you can't go and get the ubiquitous squeeze bear full of honey at the grocery store and expect it to cure all your ills. In fact, the some of the squeeze bears don't even contain real honey at all. Our good friends at [the FDA](#) have defined honey as "anything containing pollen.

Even with that broad definition, some of the Chinese companies have "ultrafiltered" the honey that goes into those little bears to the point that there isn't even any pollen left.

### ***I bet you wonder why – I did.***

Ultrafiltering removes the pollen so that the source of the honey cannot be determined. Providers of cheap honey do this so that consumers cannot discover the origin. Often the cheap honey is tainted with pesticides, illegal antibiotics, and heavy metals. Some of the cheap honey is watered down with High Fructose Corn Syrup. Much of the questionable honey originates in China.

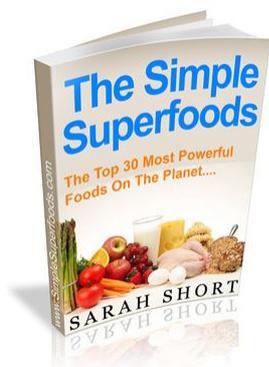
According to [independent testing ordered by Food Safety News](#) and performed by Vaughan Bryant, a professor at Texas A&M University and one of the nation's premier melissopalynologists, or investigators of pollen in honey, 76% of the golden stuff sold in grocery stores as honey doesn't contain even one little drop of pollen.

- 76 percent of samples bought at groceries had all the pollen removed, These were stores like TOP Food, Safeway, Giant Eagle, QFC, Kroger, Metro Market, Harris Teeter, A&P, Stop & Shop and King Soopers.
- 100 percent of the honey sampled from drugstores like Walgreens, Rite-Aid and CVS Pharmacy had no pollen.
- 77 percent of the honey sampled from big box stores like Costco, Sam's Club, Walmart, Target and H-E-B had the pollen filtered out.
- 100 percent of the honey packaged in the small individual service portions from Smucker, McDonald's and KFC had the pollen removed.

- Bryant found that every one of the samples Food Safety News bought at farmers markets, co-ops and “natural” stores like PCC and Trader Joe’s had the full, anticipated, amount of pollen.

The [FDA](#), despite their definition, doesn’t seem to care about the false labeling of these products. The FDA has ignored requests from Congress, beekeepers and the honey industry to develop a U.S. standard for honey. Less than 5% of honey on store shelves has been tested by the FDA for purity.

### How can you be sure you are actually buying honey?



As with most products, the closer you can get to the actual source, the better off you’ll be. Short of scooping the sticky stuff directly from the hives, purchase as locally as possible, directly from beekeepers or at your favourite farmer’s market.

There are more than 300 varieties of honey sold in the US. The difference in these varieties is the source of the pollen. Buckwheat honey is reputed to have the most healing properties of any type of honey. As a general rule of thumb, the darker the honey is, the more benefits it has.

### Pasteurized vs. Raw

The FDA seems more concerned that honey be pasteurized (i.e. heat processed) than that the honey actually be honey. The problem with pasteurization is that it kills off many of the beneficial components in the honey, most particularly propolis.

The processing of honey often removes many of the phytonutrients found in raw honey as it exists in the hive. Raw honey, for example, contains small amounts of the same resins found in propolis. Propolis, sometimes called “bee glue,” is actually a complex mixture of resins and other substances that honeybees use to seal the hive and make it safe from bacteria and other micro-organisms. Honeybees make propolis by combining plant resins with their own secretions... Other phytonutrients found both in honey and propolis have been shown to possess cancer-preventing and anti-tumor properties. These substances include caffeic acid methyl caffeate, phenylethyl caffeate, and phenylethyl dimethylcaffeate. Researchers have discovered that these substances prevent colon cancer in animals by shutting down activity of two enzymes, phosphatidylinositol-specific phospholipase C and lipoxygenase. When raw honey is extensively processed and heated, the benefits of these phytonutrients are largely eliminated...

Despite the important benefits of raw honey, there are some caveats.

- Infants under the age of 1 should not be fed raw honey because of the risk of botulism. Their underdeveloped immune systems cannot prevent the Clostridium botulinum spores from multiplying. Botulism can cause paralysis and death.
- People with bee venom allergies sometimes suffer an allergic reaction to honey. These allergic reactions can easily become life-threatening.
- There is a higher risk of food poisoning when you consume raw honey vs pasteurized honey.

With the knowledge of the above warnings, I still purchase only raw honey for my household. The pros outweigh the cons for me.

### **The Benefits of Raw Honey**

Raw honey is anti-viral, anti-bacterial, and anti-fungal, making it one of the most healing substances on earth. It is also highly nutritious. Honey is a natural multivitamin. It contains significant amounts of: B1, B2, B3, B5, B6, C, magnesium, potassium, calcium, sodium, chlorine, sulphur, and phosphate.

- Honey has been used historically both internally and externally for a variety of concerns:
- Apply honey liberally on a wound to speed healing.
- Apply honey to a rash, burn or scrape, and cover loosely.
- A tsp taken 3 times per day can help prevent seasonal allergies.
- A tbsp of raw honey sprinkled with cinnamon taken 3 times per day can boost the immune system and fight off a cold or sore throat.
- A spoonful of honey can soothe a cough caused by a tickle or sore throat.
- A couple of tablespoons of honey stirred into hot tea can lessen the symptoms of a cold or flu.
- Honey mixed with equal parts coconut oil makes a wonderful skin conditioner.
- Some studies say that honey can help control blood sugar fluctuations.
- Raw honey increases the production of antioxidants in the bloodstream.
- Recent studies proved that honey reduced overall cholesterol levels when taken daily.
- Honey applied topically to a wound or incision moistens the skin and helps prevent or reduce scarring.

### **Recipe: Homemade Cough Syrup**

I keep a honey-lemon-ginger remedy in my refrigerator all winter long. Learn more about honey as a flu symptom remedy here: <http://www.theorganicprepper.ca/avoid-the-pharmacy-fight-the-flu-with-remedies-from-the-kitchen-01092013>

I always keep a jar of this homemade cough syrup in my refrigerator. It tastes so good that I don't have to ask my kids twice to take it. You can also stir a few tablespoons of the syrup into hot water for a homemade "Neo-Citran"-style hot drink without all the nasty chemicals.

#### **Ingredients**

- 2 lemons, scrubbed and thinly sliced
- 6 tbsp of grated ginger root
- Honey as needed

#### **Directions**

In a glass jar, layer the lemon slices and grated ginger until the jar is full.

Pour honey into the jar, using the blade of a kitchen knife to move the lemon and ginger around and make room for it.

Store it in the fridge for at least 2 weeks before using it. Then, take 1-2 tsp 3 times per day, as needed, for coughs or sore throats.

## Long Term Storage of Honey

The great news about buying honey for your stockpile is that it stores forever: Literally. Honey was discovered in the pyramids of Egypt – over 5000 years old – and still edible. Given that, I strongly suspect it will remain viable in your stockpile for as long as you care to store it. The only thing that will happen is that, in time, it will crystallize. You can resolve this issue by placing the jar of honey in a bowl of hot water until it returns to liquid form. However, you can also use it in its crystallized form – you can stir it into tea, spread it on hot toast, or take a spoonful of it as one of the remedies mentioned above.

Frequently heating and cooling honey can lessen its nutritional potency, so I recommend putting honey in a small jar for regular use and using the big jars just to restock your little one.

Store your honey in an airtight container in a cool, dark place.

*Daisy Luther is a freelance writer and editor. Her website, [The Organic Prepper](#), where [this article first appeared](#), offers information on healthy prepping, including premium nutritional choices, general wellness and non-tech solutions. You can follow Daisy on [Facebook](#) and [Twitter](#), and you can email her at [daisy@theorganicprepper.ca](mailto:daisy@theorganicprepper.ca)*

## From the brushy mountain newsletter

### Question of the Month

A difficult occurrence for bees and beekeepers is swarming. About 80% of all swarms occur in spring (April-May). Beekeepers will try to prepare their hives to prevent swarming. What are the best practices to reduce the tendency of swarming?

It is hard to anticipate when a colony might swarm but a good indication is swarm cells. Swarm cells are obviously produced in preparation for swarming and are typically located along the bottom edge of the frame. At this stage it may already be too late to prevent the colony from swarming. Beekeepers want to be proactive and prevent swarming before it even begins.

Full frames of brood with some pollen and nectar around the edges is a great sign of a healthy hive that is queen, right. The brood nest will consist of the majority of the central frames in the hive and will include all stages of the brood process (eggs, larvae and capped brood). If it is obvious the brood nest is shrinking and more frames are consisting of pollen and nectar (similar to a honey bound hive), it is a good indication your hive is preparing to swarm.

Honey bees instinctively decrease the size of the brood nest in preparation for swarming. If a full colony is capable of caring for full frames of brood, then after swarming, about half the colony will only be able to maintain half the brood, therefore, honey bees will shrink the brood nest in preparation for half of the bees. There are three conditions which can induce swarming preparations:

**Congestion.** Bees love to be crowded but not overcrowded. Having your brood chambers well populated allows the bees to maintain a constant hive temperature, prevent robbing

and manage pests. A well-populated hive will be a healthier hive. Once a hive becomes congested (i.e. heavily populated), the population can support being divided in half without compromising the survivorship of the parent or the swarm, and they will swarm to a new location to better satisfy their needs. Continue adding [supers](#) to accommodate your colonies expansion. Once the two outside frames are beginning to be worked, it is time to add the next super.

**Abundance of Resources.** During a heavy nectar flow, bees are gathering the resources they think they will need to survive during the winter months. This is what beekeepers hope for so that honey may be extracted but beekeepers do not want the abundant resources to overrun the brood chamber. Once bees are hatched and the cell is filled with pollen and nectar, the queen will not have room to lay. Replace some of the honey filled frames with empty frames, allowing the queen to build up the brood nest.

**Old Queen.** As a queen ages, her pheromone levels will decrease. A colony will have previously prepared queen cups along the bottom of some frames. If a colony notices a drop in her pheromones, the queen will lay eggs in these partial cups and the workers will close them off. Workers will then slow the queens laying by reducing the amount she is fed, slimming her down for flight. Queens going into their second laying season are more apt to swarm and to help prevent swarming, beekeepers will replace them. A two year old queen is 3X more likely to swarm.

Beekeepers will split their hives to accommodate an abundance of resources and a growing population. Using frames (filled with brood) from the mother hive and a new queen, beekeepers are able to create a split and begin raising a new colony.

You have to watch this: [https://www.youtube.com/watch?v=oJ5riRX1\\_3w](https://www.youtube.com/watch?v=oJ5riRX1_3w)

Max and Trudi Lindegger