



March 2014 Bee-Mail 



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When to place out your bees



We're receiving questions about placing out your spring bees. "Is it time yet?"

This is the fun part! Since you've kept your bees in your refrigerator, you're in control of release. Here's the rule of thumb:

1. Is it steadily in the mid 50's (10°C) during the day?
2. Is there adequate pollen outside?
3. Is what you want to pollinate almost in bloom?

If you are missing one of the above, wait. Don't forget to add a bit of water and watch for moldy cocoons (if you find mold, [visit here](#).)

If you've kept your bees outside, you may find them emerging with the first warm day only to have no pollen available for them. Move your bees to the coldest place possible.

What's going on with your hibernating bees: Their stored fats are probably ok, but getting low. Your bees should be able to last through April. About now, I recommend placing your HumidiBee in a lunch sack. We want things dark. This isn't a science recommendation, but in discussion with peers, we believe any dark/light at this

stage might have bees moving around in their cocoons. Once a bee starts moving, it warms up its tiny area, which causes other bees to warm up... and so on until you have a lot of warm bees chewing out of their cocoons.

You may find males will nibble out of their cocoons even in your cool refrigerator. *Now what?*

4 years ago we had about 10,000 males emerge from cocoons because our cooler became unplugged. What a disaster!!!! 😱. I found that bees out of their cocoons can survive about 7 weeks. This isn't an experiment I'd recommend you try...

Place a cotton swab dipped in 50/50 white sugar/water in the HumidiBee to feed your escaped bees. Keep them in the dark! You can also close most of the holes in the Humidibee with tape to keep them from roaming for leftovers in your refrigerator. Enough air can move through the cracks between the top and bottom sections. Set them outdoors and following above directions.



MUD. Your key to success

DO NOT UNDERESTIMATE THE IMPORTANCE OF MUD.

I hope that you notice this was in big capital letters, bold, and red. It's that important.



We want your bees to thrive, not survive. Bees that can't pick up mud with their mandibles, fly with it, and then pack it in their hole, will nest elsewhere. (In this picture by Anna Howell, the brown ball in her mandibles is mud!)

It's that simple. It's one of the three basic requirements. No **holes**, no **pollen**, or no good **clayey mud** has your bees searching elsewhere until they find these.



My niece Kate, while an undergrad at UW, helped me analyze mud from 15 different sets of mason bee tubes raised miles away from each other. The mud was different colors ranging from light gray to dark red. This told us that different material was gathered by the nesting females.

While the material was different, the *mud composition* was constant. We didn't find any pieces of sand or humus. All of the mud, when dried and rubbed between fingers, was smaller than pieces of sand.

What's this mean to you? *Mud is important.* The mason bees are all looking for the same thing: clayey mud that a bee can pick up and is relatively sticky (moist) so they can pack it easily in place within the nesting hole. I believe mud found in the ground is much better than mud in a bowl. If you have sandy or loamy soil, think through this solution:

Dig a small hole (shovel wide/deep) in a spot of your yard that's 50' (15m) or closer to the mason bee house. If there's some clayey mud in there, the bees will mine it. If it's loamy/sandy, consider finding some clayey mud from a nearby river/stream bank. Try mixing potters clay, or experiment with unscented kitty litter (very cheap litter is made of clay) and placing this on the shady side of the hole. Keep this moist.

We have some [videos](#) about this on our website. Or read more [here](#).

Introducing our newest product: the BeeBungalo!

What happens when you cross two of our best sellers?



(The [BeeAdventure](#) and [Chalet w/wood tray](#))

You get the BeeBungalo!



Perfect for the small yard, yet still easy to harvest cocoons from.

This will hold about 70 cocoons from 8 nesting females.

We have an introductory 10% discount off the [complete set](#) (which includes mason bees & accessories)

Because you're a Bee-Mail user, we're also giving you an extra 5% off our on-sale spring blue orchard mason bees. Use coupon code **BeeMail**. Tell a friend! *(Be sure to have them sign up for Bee-Mail.)*

A perspective on protecting our food supply. [Please read](#)

Our mission, “*To protect our food supply with mason bee pollinators in orchards*”, is even more important as food demands increase with population growth. We need billions of mason bees to supplement the troubled honey bee in commercial fields!

That means we need more gardeners raising bees. It also means our success in protecting the food supply requires understanding the challenges to changing pollination practices within the next decade.

A Message Everyone Needs to Read!

Crown Bees has developed a [mini-series](#) of perspectives on bee and food challenges. Below is an overview of Part 1 with details posted on our website. We’ll add to it twice a week on the website.

How You Can Help! First, let us know what you think about our direction in this series. Second, and most important, **help us spread the message**. Please forward the series from our website to your friends. Creating awareness with everyone is the first step to creating lasting change. Thanks for your loyal support of our mason bees.

We need your help. Please read this section closely. There are several truths that are disturbing to learn. Crown Bees will be changing many pollination practices over the next decade. *This message needs to be read by as many gardeners as possible.*

What’s going on today ~ We are at an Agricultural Crossroad



Our current practice of farming huge tracts of land with only one food crop is called “monoculture”. In orchards, the current method to pollinate an orchard is with managed honey bees. The honey bee has a huge flight radius of 2+ miles. Farmers rarely use only wild bees because they only have a small flight radius. The inside of the orchard would not be pollinated.

Monoculture, while producing low cost food for the consumer, is a breeding ground for pests, fungus and disease. This is accentuated by close proximity of the same plant in a huge area. Farmers need to

control many of these problems with chemicals. We're not debating the need to spray, rather, we're concerned with how it impacts bees, wild pollinators nearby and our food supply.

Commercial honey bee keepers place bees in an environment that isn't always healthy.



- Honey bees gather pollen from miles away. (The flight range of honey bees is 2 miles.) This photo shows only a one mile radius for a 15 acre orchard with a circle for each of 18 hives. *Look at the overlapping that occurs from just one orchard. Add nearby orchards and you have an even bigger overlapping situation. The almond industry has thousands of hives overlapping.*
- Too many hives in one place allows disease, virus, mites, etc. to move from one hive to another. Unhealthy bees pass their sickness to other bees through touching the same flower or entering into the wrong hives.
- Most farmers try to keep restrict spraying while honey bees are present, yet overspray from neighboring crops contaminates the pollen and nearby wildflowers.

Crown Bees envisions changing pollination practices over the next decade through our BeeGAP program. It will take your teamwork through word-of-mouth support. We also need you to continue teaming with us by sending us your excess bees through the [Bee BuyBack](#) program we implemented last year.

We'll explain the benefits of mason bees in orchards on our website. Here is an overview:



- Mason bees are local pollinating bees, not regional. There is significantly less overlapping and more efficient pollination. When reducing half the honey bees hives, the environment is healthier. This same 15 acre orchard, as in the above photo, now includes about 8 mason bee nests for each acre. The circles are about 50' diameter.
- Farmers receive better pollination with both bees, and thus more yield and profit.

- With less traveling, the honey bee's overall stress is reduced.
- Healthy bees collected from BeeGAP teammate yards help ensure the overall genetic health of our mason bees.

Please help your friends understand this message. **Solutions to change our pollination challenge starts in your backyard.** BeeGAP is an action oriented program with progressive change for our food supply.

Our bees need you! Please pass this Bee-Mail to your friends. Our [mini-series](#) can be found on our website. We'll be introducing this series over the next few weeks.

Crown Bees will now carry eastern bumble bees

We're the Gentle Bee Company. Until now, we've focused on the gentle mason bee. Many gardeners have asked for help pollinating their summer gardens. While the leafcutter is a wonderful solution, the bumble bee is equally a superior pollinator.



We had a wonderful conversation with the producers of the eastern *Bombus impatiens* this week and will carry this bee on our website later this month.

Although the bumble bee is a social bee (one queen with a hive) they are one of the more gentle bees. Lumbering and slow, they don't communicate and rarely defend the nest. We'll explain more on our website next week.

Bumble bees are a great spring/summer pollinator, but only hang around one season. When the queen dies late in the summer, the brood create 3-5 new queens, which then fly off to nest elsewhere the following season. Thus, you will need to purchase new bumble bees each year. Unlike mason bees which we have in our coolers here, the bumble bee hive is created for each order. Orders taken this month will have the bees to your home between 6-10 weeks from the request. I was told that the bees may ship earlier. Plan ahead!

We have two really nice house designs that specifically designed for the bumble bee hive container. We want your bees protected!

How this will work:

- Order the house and bees later this month through July.
- We'll send you the house immediately with the bees following 6-8 weeks later.
- We'll let you know the specific shipping date.
- Your bees will include installation and care instructions.

We're excited about these bees. Not only will they pollinate your yard, they spread their future queens within your community.
Thank you for caring!

Communities can change. Students learn.

A Bee-Mail teammate sent me a link to his community's drive ([Collingswood, NJ](#)) to become a certified Community Wildlife Habitat® through the National Wildlife Federation's [Community Habitat Program](#). In reading this program's intent, it seemed like a great project to educate and look for change in each community.

Community Wildlife Habitat™, a national recognition program for neighborhoods, towns, cities, and counties, recognizes and celebrates community-wide efforts to green landscapes and buildings, improve air and water quality, restore vital wildlife habitat and improve the health and well-being of inhabitants one property at a time.

While not approved yet for Collingswood, we salute their efforts!

Students from a Portland, OR, elementary school (Roseway Heights) conducted a test to determine what type of holes mason bees prefer.

The experiment was well done. Not only did it involve 4th & 5th graders in learning about gentle mason bees, it also provided Crown Bees with some interesting data.

Using paper tubes, reeds, plastic and wood trays:

- Which type of holes did the bees prefer?
- Which type of holes were filled more often?
- Which type of holes had the most cocoons?
- (The answers are shown in our [science section](#) of the website)



Teams made up of three students recorded mason bee visits to their nest box over 5-minute intervals. Student closest to the box calls out observations. Student with clipboard tallies them. Third student keeps time and monitors the process.

The results were mostly in line with our thoughts, though I had to call Stephen, the experiment lead, on why he felt there were more mites in their wood trays. (I don't believe the trays were cleaned adequately, so mites could have still been present from the previous year.) Mason bees are a great educational tool to learn about gentle bees!

[You can see the experiment write up here!](#)