



June 2014 Bee-Mail 



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Spring Mason Bee Activity

What's going on?

Your spring mason bees live 4-6 weeks. Depending on when you released them, they should be about done laying eggs (and pollinating your fruits and plants). After their work is completed, they die.

Thankfully, their eggs are your bees for next season!

Inside the holes, the eggs are hatching, and you should find little larva slowly consuming pollen within each chamber. In the picture below, the larva on the right was laid last, and therefore is smaller.



Later this month they'll begin spinning their cocoon.

You can see their whole life cycle by reading [here](#).

Your next project: Protect these developing bees!

Many of our BeeGAP partners found holes in their cocoons in the fall harvest. This is a result of parasitic wasps that emerge in June and July and attack your developing bees. Parasitic wasps will have multiple generations in a year. You'll find them chewing through tubes in the summer (see holes in tubes) or overwintering as larva. There's an easy solution to protect your bees.



Place all tubes, reeds, and wood trays into fine-mesh [BeeGuardian bags](#). These bags should protect your developing bees from the parasitic wasp, ants, and other pests. The larva are fairly robust at this point so you do not have to be super careful with how you handle them.



Next, place this bag into an ambient temperature room/storage area. You want your bees to develop at normal summer temperatures, not too hot, not too cold. In the wild, the bees might be nesting in a tree trunk which changes temperatures just a bit. *Do NOT place your bees in any place cool.* A few of our BeeGAP partners did this last year. Their bees stayed as larva or under-developed bees and died over the winter. 😞



Thanks, farmers!

Five Washington/Oregon cherry farmers pollinated with mason bees this season. We're extremely pleased with the feedback.

If all goes well, these farmers will see better crop yield, increased profit, and share their success with friends and other farmers.

We know from studies conducted in the 1980's, that cherry orchards double to triple the yield when using mason bees. Things take a while to be tried out...

We are already reaching out to other orchards around us in the NW. Later, we'll be reaching out to orchards around you!

Summer Leafcutters!



We have record numbers of BeeGAP gardeners using leafcutter bees for garden pollination. More pollinators equals more beans, peas, squash, and yes, more zucchini!

This is our second year selling leafcutter bees, and we're still learning how best to use them in gardens.

Your feedback has been very helpful to us and other gardeners. I just wrote a simple overview on "[Leafcutter Success](#)" Monday. It is short, concise, and hopefully helpful!

We are also learning more about pteromalus, a parasitic wasp that is a natural pest across the leafcutter producers growing fields. Briefly mentioned in the last Bee-Mail, this wasp patiently waits until the female bee has laid her egg within the pollen mass. Then, it races in to inject her tiny eggs within the leafcutter bee egg. As the leafcutter larva grows, the wasp larva consume it from the inside, and will sit in larva form for the following year. Yikes! 🤢



About 1-2% of leafcutter cocoons are thought to have these wasps... double yikes! 😞

Fortunately, our LeafGuardian bags allows you to see them emerge after about 10 days. Squish them while still within the bag.



Three quarters developed!

Many gardeners don't want to wait 4-6 weeks for the leafcutter bees to incubate. We listened and now have an option for "premies", or almost mature leafcutter bees. We've incubated them for about 2+ weeks leaving just a week or so to finish developing in your yard.

As a result, all of our [complete leafcutter kits](#) and [leafcutter bees](#) have this option for only \$5 more. We'll be selling these awesome & gentle pollinators into early July.

What pests are bugging your bumble bees?

Margaret in the NE, had a challenge with ants crawling into her bumble bee hive.

"Help!!! Does it matter, and what do I do?"

I really had to ponder that one through... Bumble bees live naturally in mouse holes in the ground, and surely they must have a defense against ants, earwigs, and other pests.

However, we helped her think through a simple solution.

Place the whole bumble bee house in a bath of water, and elevate the legs just slightly. Margaret used little sandwich containers to keep the feet dry. (It worked fine, no ants...)

She also was nervous about birds and had enclosed the house with chicken wire. Bumble bees have no issues flying through the wire holes.

Her last solution was to glue a little wood "porch" right below the entrance (not shown) so that the bumble bees wouldn't drown. A few had fallen into the water, that's why the stick was propped up here.



We have been able to send [bumble bees](#) to gardeners within a week of ordering recently. Sorry west coast teammates... you'll have to wait until next year!

Understanding a balanced yard ~ beneficial wasps

Several BeeGAP partners recently sent us pictures of beneficial wasps in action. This first photo is viewed from within one of our [BeeObservers](#). Each chamber is packed with parasitized caterpillars from the yard. Not only does this yard now have less pests, the gardener has supplied means of ridding her yard of more pests next year.



This next photo was more of an educational moment for another gardener, Douglas. “For the last 3 days I have seen the critter in the photo using one of the reeds (the same reed each time). To me it looked like a wasp, so tonight I blocked it inside the reed and brought it to the house. I opened the reed (see attached photo) and found 16 larva. I am keeping the larva until I hear from you as to what this is. There was no pollen in the reed, only a mud wall on each side of the 16 larva.”



What a great find! We now see what this particular wasp looks like. ***Because these wasps are using holes, the wasps are solitary, not social.*** Thus, they are far more gentler than social wasps that protect their hive, queen, and eggs. Rather than spray chemicals to rid your yard of pests, consider placing out a variety of hole sizes to attract these wonderful predators! We have [large](#) and [small reeds](#), or the [summer variety pack](#) of tubes that allow large and small bees/wasps to use them through the summer.



Celebrating Pollinator Week



Pollinator Week was initiated and is managed by the Pollinator Partnership. Seven years ago the U.S. Senate's unanimous approval and designation of a week in June as "National Pollinator Week" marked a necessary step toward addressing the urgent issue of declining pollinator populations.

For this month, we're also going to be focusing on many of our unsung pollination heroes. Daily we'll be tweeting, posting on facebook, and adding to our [Pollination Heroes](#) on our website.

Who is an unsung pollination hero? To Crown Bees, these are people who progress the understanding of bees. Here are a few areas that we'll be drawing from. We know there are hundreds of candidates... we polled a few of the leads from these groups to provide us with their candidates.

USDA Bee Labs: These teams are government funded and do great research to help us understand problems and solutions with the bees. We tend to work primarily with the Logan Bee Lab in Utah under the direction of Dr. Rosalind James. Dr. Theresa Pitt-Singer & Dr. Jim Cane are our "go-to" teammates as they work with the leafcutter and mason bees. Dr. William Kemp, of the Northern Plains Area, leads another wonderful team of researchers focused on some really cool research with native bees.

University Entomology teams: We reach out to Dr. Rufus Isaac's team at Michigan State University, Dr. Neal William's team at UC Davis, Dr. Dave Bittinger at Penn State, and Dr. Bryan Danforth at Cornell for advice and wisdom. *(There are quite a few way beyond these people mentioned here.)*

Xerces Society: If you haven't supported this group yet, do so. Under the leadership of Mace Vaughan, we have independent research, field studies, funding, and many other great practices occurring with this great organization's Pollinator Protection Program.

Pollinator.org: Every great cause needs a political touch to ensure that our legislators in Washington DC are aware. Under the directorship of Laurie Adams, we see research, training, and touches to the Farm Bill. Pollinator week is their idea!

The National Garden Club: Under the leadership of their president Linda Nelson, 180,000 gardeners across North America are learning about mason bees. It's a huge undertaking which we're pleased to partner with them.

While we won't be able to highlight all of our unsung heroes due to lack of time and space, we are so thankful to have them there on the various paths to create understanding and awareness.

(Like us/follow us on [Twitter](#)/[Facebook](#) to see these posts!)

Lawns... beautiful, but why our obsession with them?

I'm slowly reducing the size of my backyard from 20' x 60' to now about 15' x 30. My wife loves seeing the lawn and I get tired of mowing it... A compromise has been to create 6 raised beds in one section and throw down wood chips on a back portion. We both enjoy raising the little bit of carrots, tomatoes, artichokes, brocolli, lettuce, beets, and spinach. Honestly, we kind of wing it... but the fruits of the labor are wonderful.



My question is “why do we (or the previous owners) have the lawn in the first place?”

With a little research, I found that America's love affair with lawns started in the late 18th century. Before that, front doors were packed with dirt or a “cottage garden” of flowers, herbs and vegetables. English estates with massive lawns were envied, but imported English grass seeds didn't adapt here. It took the US Dept. of Agriculture, working with the U.S. Golf Association 15 years to perfect grass combinations that worked.



However, the big push for lawns came from the American Garden Club in the 1900's. Their effective publicity and contest campaigns convinced home owners of their "civic duty" to maintain beautiful lawns for acceptable landscaping. The description was "a plot with a single type of grass with no intruding weeds, kept mown at a height of an inch and a half, uniformly green, and neatly edged."

Those requirements led to a cycle of pesticides, herbicides and fertilizers, as well as home owner lawn care equipment to maintain the "perfect" lawn.

What was lost in this vision was the impact on insects and animals, on water usage, air and soil pollution, and the cost to home owners in both time and money. More importantly, this barren green wasteland took away land to grow food for ourselves and nature.

As we look at what we have reaped from this never-ending lawn care cycle, isn't it time we changed the definition of yard beauty? In my backyard, we're moving to less lawn and more colorful flowers, plants and healthy food. And my goal is to spend more time enjoying the view, while dining on our home-grown food with my feet propped up!

In our next issue...

- What's going on with our cocoon spinning bees
- Mason Bees will be highlighted on PBS...

Thank you for caring about raising solitary mason bees! Your success is important to us.

Dave Hunter, Owner