Summary Notes from All About Mason Bees Workshop

Tuesday, March 11, 2025, 7:30pm

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What types of bees are there?

1. Honeybees: not the best pollinator, from Europe

2. Bumblebees

- a. Make nests in the ground
- b. Make only enough honey for themselves
- c. Native
- 3. Native BC Bees: solitary & have nests (not hives)

Examples:

- a. Mining bees
- b. Bumblebees
- c. Carpenter bees
- d. Cellophane bees
- e. **Sweat bees** (attracted to scent of sweat!)
- f. Leaf cutter bees
- g. Mason bees
- 60 species of mason bees
- Blue orchard mason bees can be purchased locally for mason bee hotels.
- 450+ species of native bees in BC!

Why are mason bees so great?

- Males don't have a stinger & females only use them when crushed
- Great pollinators (100X more effective than honeybees!)
- Only 6 mason bees are need to pollinate one apple tree

Male Mason Bees	Female Mason Bees
Hatch first	Hatch second
Smaller (8-10mm)	Larger (1.3cm)
Have a patch of white fur on head	Thicker & longer and have a blue tinge
Males only live long enough to mate and then die	Live about 2 weeks
Cocoons are in outer part of row in house	Cocoons are in inner part of row in house

What are some general tips for having mason bees?

- Always purchase mason bee houses that you can open up and clean
- Hang your house with morning sun (south or east facing)
- When it is consistently 13 degrees is when you should place mason cocoons out (March -end of April)
- Can release cocoons in stages every 2 weeks, so you have bees throughout spring
- Have a food source nearby (cherry, pear, apple bushes and early spring blooms)

- Can optionally provide mud (can also be purchased from a BC Bee Supply shop)

What is the mason bee life cycle?

- Mason places a mix of pollen and nectar in mason bee hotel tube
- Female mason bee lays egg on top of this
- Packs it in with mud
- Egg grows into larva
- Larva eats pollen & nectar
- Forms a cocoon
- Adult bee is inside the cocoon
- Cocoons can be removed in November for cleaning and storage
- Dormant over winter
- Cocoons hatch in spring

What poses a threat to mason bees?

A. Houdini flies:

- Highly invasive!
- Flies sneak in to lay their own eggs, which starve bees
- Move and look like fruit flies, but have red eyes.
- **B.** Parasitic Wasps
- C. Chalkbrood Fungus: Germinates in larvae's gut and starves it
- D. Pollen Mites

How do you clean mason bee cocoons?

- 1. Sanitize your counter
- 2. Lay out paper towels
- 3. Open the mason bee plastic or wooden trays
- 4. Use wooden or metal angled-tipped scraper to scrape out the cocoons onto the paper towels
- 5. Use toothbrush to brush the trays and give them a bleach bath
- 6. With hands, pick cocoons and put them in a bowl
- 7. Any parasitic wasps, put in a bag, squish, and throw away
- 8. Wash & swirl cocoons in a bowl of cold water
- 9. Use slotted spoon to scoop out and repeat rinse 2-3 times to clean
- 10. Add a cap or two of bleach in a mixing bowl, soak for 30 sec-minute and then rinse off (this will kill any mold or fungus)
- 11. Air dry on a towel
- 12. Put in a clear dish and hold to the light to check if there are any larvae that didn't develop and dispose.
- 13. Store in back of the fridge in a container with airholes (small cooler)
- 14. Release in spring

Where can I purchase cocoons?

- Mandeville Gardens (Gardenworks)
- BC Bee Supply on Hastings in N. Burnaby