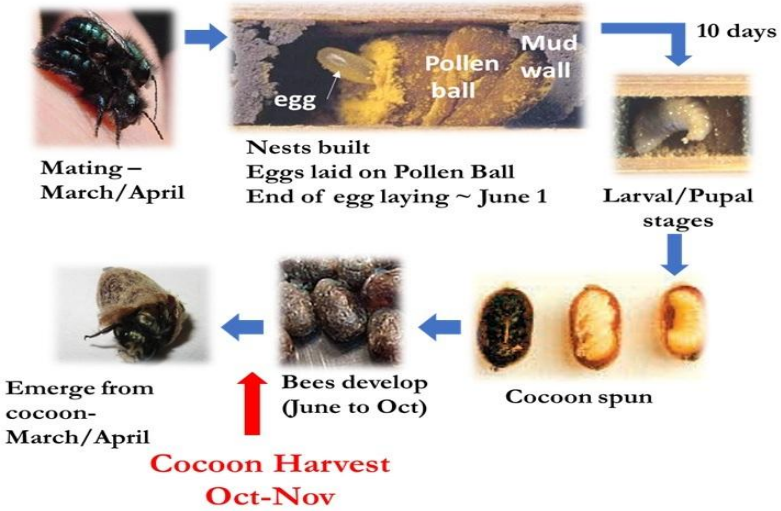
AMAZING Mason Bees

- Mason bees are solitary, rarely sting and are important pollinators of fruit trees and other spring flowering plants.
- One mason bee often pollinates apples and a few fruit trees with one contact to a flower vs 4-5 contacts by a honey bee.

- Males are smaller than the females and only live about 2 weeks. Once they mate with the female, their life cycle comes to an end.
- Females tend the nest, forms a pollen ball for each egg, lays one egg on the pollen ball and builds a mud wall partition between each pollen ball and egg before repeating the process. Each female lays about 24 eggs during her short but productive 6–8-week lifespan.
- The female Mason bee visits about 800 flowers to make each pollen ball. Her range is relatively small – only about 100 yards (a football field). This makes nearby pollen sources even more important. She is a generalist, so she will visit a variety of trees and plants available in her 100-yard range.
- She lays female eggs at the back of a hole and male eggs toward the outer end of the hole. Holes less than 6-inches in length will result in more male cocoons which is why we recommend 6-inch tubes or block channels for best results.
- There are approximately 80-85 species of Mason bees in Oregon alone although not all are in the Willamette Valley. Blue Orchard mason bees are common, but the non-native Japanese Horned-Faced bee is becoming more common.
- All mason bees are very effective pollinators.

Mason Bee Life Cycle

Dates for Willamette Valley



What Mason bees need:

- Access to mud, water, and spring blooming pollen and nectar sources.
- Housing facing the morning sun but protected from the afternoon sun (face opening toward the S-SE).

What to avoid:

- Bamboo – difficult to open.
- Plastic Straw – promote mold.
- Houses with holes less than 6" deep – will result in more male bees.
- Limit pesticide use. Before using pesticides, call your Extension Office for help to identify the issues and to explore possible best solutions

Blocks, Tubes, Stems, Reeds – What You'll See

Mud walls (made of clay), frass (poop) that looks like black pepper, cocoons (with a bee developing inside).

You may see mites (yellow powdery material), dead larva (infected and killed by chalkbrood fungus), an unused pollen ball (yellow clay-like ball) and other insects.

Blocks that are clamped tightly to prevent warping can be used for years. We recommend liners in the channels to make harvesting easier and foil tape on the back of the blocks to help mitigate pest movement.

Cardboard Tubes usually last 3-5 years using liner inserts. Replace cardboard tubes when there are signs of mold.

White Split Liners - replace every year if you see any signs of use. Use in blocks and in cardboard tubes.

Cocoons – Purchase locally-sourced cocoons. If you have your own, harvest them from the tubes and liners or blocks in October and November, inspect and clean cocoons in a bleach-detergent solution using 1 Tblsp of bleach and 1 drop of ordinary dish detergent (such as Dawn) to 1 quart of water. Dry the cocoons for 1 hour and store them in the refrigerator in a container that also has a second small container with a wet paper towel in it. Store the container with cocoons in your veggie bin until you have lots of flowers in bloom. The constant temperature of a refrigerator helps the bee in the cocoon

conserve energy. Check periodically for mold and check the 2nd small container to be sure it has not dried out. Do a quick 1-minute bleach wash if you find mold. Dry and return the cocoons to the refrigerator.

A Serious Threat: The Houdini Fly – Report Them and Help With the Research

Word Press – Oregon State

RED EYES - About half the size of a fruit fly. Kill, smash, boil, or freeze fly or maggots.

Sticky white maggots with orange-brown frass in cell.

Please report sightings and location to local Master Gardener Entomologist Rich Little.

Send an email with the location and a picture if you have one.	**Subject line: Houdini Fly- Oregon Study** **To: Rich Little** sweethomerich@comcast.net

Also report to this second study at UC Davis on Houdini Flies in the Pacific Northwest. This has links to additional resources.

https://docs.google.com/forms/d/e/1FAIpQLScwkcEVe6CfNoaoTDcSlXmIpX0HYUTmhOsZJihPvn8rCXNn8A/viewform

Planting for Bees

Are early blooming plants missing in your garden? Native plants evolved with native bees. Bees are most attracted to yellow, white, purple, and blue flowers. Update your garden to support pollinators. Start with these general guidelines and refer to the reference websites listed below:

- Use a combination of trees, shrubs, plants and bulbs
- Plant for all seasons – Use a variety of flower shapes, colors & sizes. Pollinators have seasons too!
- Plant clusters with 3, 5, 7 or more plants. Clusters are pleasing to the eye and are less work for bees.
  We can help fill that gap by adding pollinator-friendly plants for all seasons .

Planting Information Resources https://GardenEcology.OregonState.edu

These are great pollinator plants you might want to add to your garden.
Ecology Garden Lab -10 native plants that are particularly attractive to bees:

Varileaf phacelia, Globe gilia, Douglas' aster, California poppy, Farewell to spring, Rose checkermallow, Common madia, Canada goldenrod, Oregon sunshine, Yarrow


Rose checkermallow
Yamhill SWCD

Additional Useful Resources: www.LinnCountyMasterGardeners.com

- **Shrubs and Trees for Bees | OSU Extension EM 9391**
- **Native Plant Picks for Bees | OSU Extension EM 9363**
- **Trees and Shrubs for Fall and Winter Bloom | EM 9277Service**
- **5 Common Bees in Oregon | OSU Extension Service**
- **Enhancing Urban and Suburban Landscapes to Protect Pollinators | OSU Extension EM 9289**

Have more questions? Please contact Rich Little or Ranee Webb

Rich Little sweethomerich@comcast.net **&/or** **Ranee Webb** RaneeWebb66@gmail.com

Other Ways to Help Pollinators

- **Get a "Pollinator Paradise" Bee License Plate** available at all Oregon DMV branches. The plates cost $40 to order or renew. $35 of that goes to the Oregon Bee Atlas ($24.50) and the Honeybee Research and Extension programs ($10.50).
- **Donate to the Garden Ecology Lab.**

  By Check : to Oregon State University Foundation. Write Oregon Garden Research Fund in the check memo line. Mail to Oregon State University Foundation, 4238 SW Research Way, Corvallis, OR 97333

  By Credit Card: https://give.fororegonstate.org/PL1Uv3Fkug, select the amount and frequency, type Oregon Garden Research Fund under "I want to give to". Complete the rest of the form.

Oregon State University Extension Service

GROWING TOGETHER Linn County Master Gardener Association LCMGA