

Mason Bees Information

The gentle mason bee is an efficient pollinator for spring flowers, fruit trees, berries, cherries, and nuts. A single mason bee can pollinate as many as 100 honeybees as she is more efficient by gathering pollen and nectar during the same flower visit. Mason bees make food while honeybees make honey.

Of the 4,000 species of bees in North America about 130 of them are “cavity nesting” bees, like the mason bee. She builds nests instead of a typical honeybee hive. About the size of a black fly, she’ll look for existing holes to use for her nest around 8mm in diameter. Placing a bee house with nesting holes will greatly help the survival and pollination of your mason bees.

Protective gear isn’t needed with these gentle bees. You can hold the female but be gentle. Handling her roughly will result in a mosquito bite like a sting. Males do not have a stinger.

The males are the first to emerge, typically when day temperatures reach at least 50° (10° C). They begin mating with emerging females a few days later. Having done their job, the male will die about two weeks later.

After mating, each female is a queen, and she occupies 3 – 4 tubes alone. She gathers nectar for energy and pollen for food for herself and her young. She then begins packing mud at the rear of her nesting hole where she will lay a single egg with a pea-sized bit of pollen for nourishment. She repeats this process, laying another egg and pollen until the entire hole is filled. Between mid-March and June, she can lay 20 to 35 eggs during her 6-week lifetime.

Over the summer, each egg will transform into an adult Mason bee. To prepare for winter hibernation, each bee will spin a protective cocoon starting in September. Warm spring weather and early blossoms bring them out of their slumber to repeat the cycle for next season’s bees.

We all need more of these wonderful garden pollinators to supplement the challenged honeybee. It’s easy and by spending a couple of hours a year, you can more than double the bee population.

Here’s how to create a nesting space:

- Choose a nesting box. Place it near fruit blossoms facing the morning sun about 5 feet high. The warmth will awaken your bees. Be sure it is under an overhang to protect it from wind and rain.
- Add nesting holes. Choose easy opening tubes, reeds, or stackable wood trays. Avoid drilled blocks or bamboo as you can’t harvest bees from these, and over time pests move in.
- Set out bee cocoons, staggering cocoons at 2 – 3-week intervals to extend season. Place cocoons on top of or behind nesting holes when day temps are 50°(10°C) and blossoms are out.
- Release pheromone for individual tubes so bees will find their way to holes. (NOTE: Keep bees refrigerated until ready to set out.) Keep moist clay-like mud (shovel depth) nearby for the female to seal egg chambers in nests. A hole in the ground near the nest works best.
- After bee activity stops, store the filled nesting holes in an unheated garage/shed.
- Bees develop into adults over the summer. Handle tubes carefully at this stage, stand them on end with mud opening on top. This is recommended for the healthiest cocoons.
- As an option, harvest cocoons. In the fall, open holes, remove cocoons and refrigerate until spring.

Plants that attract Mason Bees to your garden

Perennials / Bulbs

Botanical Name	Common Name	Botanical Name	Common Name
Arabis	Rockcress	Narcissus	Daffodils
Camassia	Camassia	Nepeta	Catmint
Crocus	Crocus	Papaver	Poppy
Erigeron	Fleabane	Penstemon	Beardtongue
Erythronium	Fawn Lillies	Perovskia	Russian Sage
Geranium	Wild Geranium	Phlox subulata	Creeping Phlox
Helianthus	Woodland Sunflower	Polemonium	Jacobs Ladder
Helleborus	Hellebore	Primula	Primrose
Hieracium	Indian Hemp	Pulmonaria	Lungwort
Iberis	Candytuft	Rudbeckia	Black Eyed Susan
Lavendula	Lavender	Trillium	Birthroot
Lupinus	Lupine	Tulipa	Tulips
Mertensia	Virginia Blue Bells		Native Wild Flowers
Muscari	Grape Hyacinth		

Shrubs

Botanical Name	Common Name	Botanical Name	Common Name
Amelanchier	Serviceberry	Lindera	Spicebush
Aronia	Chokeberry	Oregon Grape	Mahonia
Azaleas	Azaleas	Physocarpus	Ninebark
Camellia	Camellias	Pieris	Lilly of The Valley - Shrub
Ceanothus	California Lilac	Rhododendrons	Rhododendrons
Erica / Calluna	Heather	Ribes sanguineum	Currant – Flowering
Forsythia	Forsythia	Salix discolor	Pussy Willow
Ilex glabra	Inkberry	Sarcococca	Sweet Box
Ilex opaca	American Holly	Viburnum dentatum	Arrowhead
Ilex verticillata	Winterberry	Viburnum trilobum	American Cranberry Bush

Trees

Botanical Name	Common Name	Botanical Name	Common Name
Acer	Maple	Prunus - Fruiting	Cherry Tree - Fruiting
Acer circinatum	Vine Maple	Prunus - Fruiting	Peach Tree - Fruiting
Acer marcrophylla	Big Leaf Maple	Prunus - Fruiting	Plum Tree - Fruiting
Cercis	Redbud	Prunus - Flowering	Plum - Flowering
Cornus	Dogwood – Flowering	Prunus - Flowering	Cherry – Flowering
Crataegus	Hawthorne	Prunus - Flowering	Almond – Flowering
Filbert	Hazelnut	Pyrus	Pear Tree - Fruiting
Malus	Apple Tree - Fruiting	Quercus	Oak Tree
Malus – Flowering	Crabapple - Flowering	Salix discolor	Pussy Willow
Pinus	Pine Trees	Sassafras	Sarrafras

Common Weeds

Common Name	Common Name	Common Name	Common Name
Chickweed	Henbit - Lamium	Blackberries	Raspberries
Clover	Purple Deadnettle	Blueberries	Strawberries
Dandelion	Speedwell	Huckleberries	

Farm Crops / Berries

Annuals

Common Name	Common Name
Forget Me Not	Canola
Garden Primrose	Turnips

Cover Crops

Groundcover

Botanical Name	Common Name
Actostaphylos	Kinnickinnick
Fragaria	Wild Strawberry
Gaultheria	Salal
Violas labradorica	Labrador Violet