Nesting for Mason Bees

Osmia bees are found throughout North America and have similar nesting needs. They do not make their own nests, but use existing holes instead. These are provided by nature or man. Place the nests of these solitary bees close together. Nests located near streams helps, as mud for building their nests is to be found there. Mason bees earn the name "mason" because they construct their nests with mud and small pebbles.

Bamboo

Bamboo is a strong, fast growing, woody plant that is a member of the grass family.

Five-sixteenth (5/16th) inch diameter holes needed for orchard mason bees are inconsistent in bamboo. However, mason bees will adapt to slightly smaller or larger bamboo holes. Bamboo will last several years with proper maintenance.

A bamboo **Mason Bee House** is available at Gardener's Supply Company (www.gardeners.com).

Instructions to make a **Bamboo Bungalow** may be seen at Mountain Bugs (www.mountainbugs.com).

Bamboo Garden Nursery (<u>www.bamboogarden.com</u>), near Portland, Oregon, offers over 300 varieties of bamboo that you can grow

Binderboards

Binderboards were developed for loose cell management of solitary bees. They open like a book, thus the name binderboard. The best binderboards are made from wood. Binderboards allow solitary bee cells to be safely removed in the fall or winter, allowing removal of dead larvae and predators; and, using x-ray analysis, assess for diseases and parasites. Annual treatment of binderboards is also done at this time.

Binderboards are available at Pollinator Paradise (www.pollinatorparadise.com).

QuickLock Trays, which are similar to binderboards, are available at **Bee Diverse** (www.beediverse.com). Each QuickLock tray has a different color.

Condos

Use good quality, dry seasoned wood (i.e. fir, pine, or spruce) with as few cracks as possible. DO NOT use chemically treated, or aromatic (i.e. cedar, redwood) woods. You may paint your condo block, but allow the paint to dry thoroughly before drilling holes. Only use a sharp 5/16th-inch **brad point drill bit** to drill clean cut nesting holes. Drill holes 3/4-inch apart on a 4x4x7-1/2 inch wood block.

Mountain Bugs (<u>www.mountainbugs.com</u>) offers instructions on how to make a wood nesting block for mason bees.

Mason bee condos/blocks are usually available at local garden stores, and in several national garden seed and supply catalogs.

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Liners

Usage of replaceable liners helps reduce mite and fungal infestations. Liners may be used in straws or Orchard Mason Bee nesting blocks.

Liners are available at **Knox Cellars** Native Pollinators (www.knoxcellars.com).

Pollinator Paradise (www.pollinatorparadise.com) offers translucent and pre-split liners.

Reeds

Reeds have nodes similar to bamboo.

Hachi Ashi reed bundles are used for nesting by the Horned-Faced Mason Bee in Japan for commercial pollination of apple and cherry trees.

Dale Nielson (<u>www.osmia.com</u>) of Logan, UT, uses reeds to raise large mason bee populations. He is presently experimenting with large wild rye ornamental grass, as a pathogen is stunting reed growth in southern Idaho and Utah. Reeds, with proper annual cleaning, may last up to two decades.

Straws

Avoid using plastic drinking straws for raising mason bees, as they promote condensation and fungus detrimental to mason bees

Use a quarter-inch (1/4) wood dowel, or #2 wood pencil, to make your own straws. Parchment paper is suggested to make your own straws, as it is water resistant.

Instructions on making straws may be seen at **Mountain Bugs** (www.mountainbugs.com).

Foot long (12-inch) wax coated cardboard straws are available from Ruhl Bee Supply (www.ruhlbeesupply.com). These may be either cut or folded in half to make six-inch nesting holes for mason bees.

 $\textbf{Cardboard nesting straws} \text{ are also available from } \textbf{Bee Diverse} \text{ } (\underline{\text{www.beediverse.com}}).$

Observation Units

Bee Diverse (www.beediverse.com) offers the **Peek-a-Boo Nest**, or Mason Bee Observation Box. It features a removable wood block with six observation chambers, covered with clear plastic. The observation block is enclosed in a beautifully crafted (4-1/2 x 7-1/2 x 2-1/4-inch) wood chest, with a departure/entry hole centered on the right end. Instructions are included with the Peek-a-Boo Nest.

Gardens Alive! (www.GardensAlive.com) offers a **Mason Bee Nest** that comes with 10 glass and two replacement nesting tubes to observe mason bees. This decorative (6-1/4" H x 8" W x 7" D), durable cedar observation unit may be hung up, and comes with easy to read instructions.

Pollinator Paradise (www.pollinatorparadise.com) offers the **7 Hole Cabin**. This upright observation nest opens on the left side to reveal seven chambers with pre-slit liners. This allows folks of all ages to easily see development of mason bees inside the liners.