

Solitary-Nesting-Bees Project Proposal to Sustainable Blacksburg

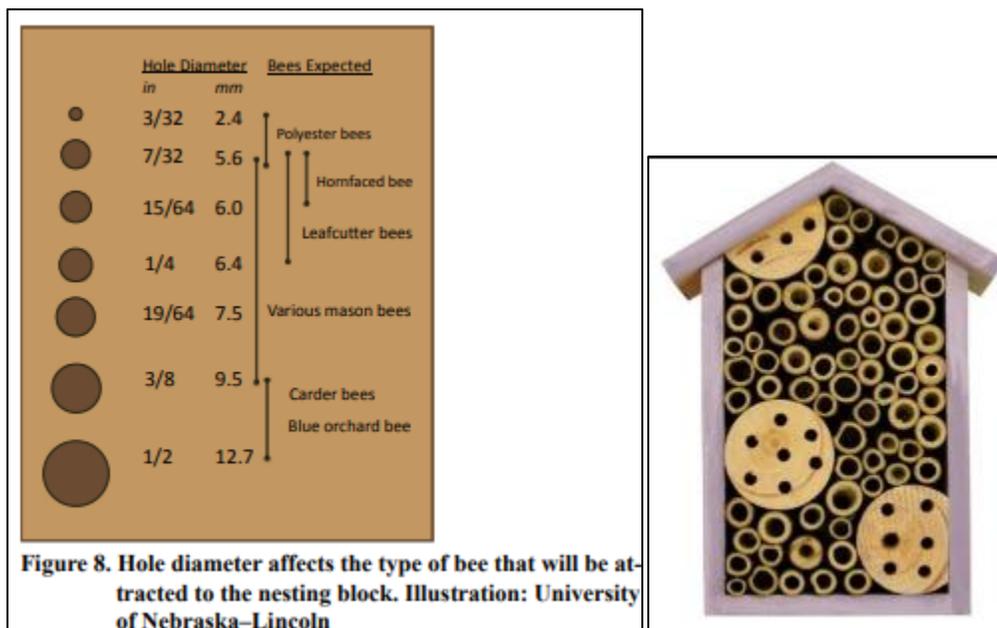
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Introduction

This is an inexpensive proposal for increasing nesting places for solitary bees in Blacksburg. Solitary bees are a very important part of a sustainable environment as explained below. I think that 100 or more locations could be part of the project in Blacksburg. Citizens of Blacksburg would be encouraged to install nest boxes for solitary bees.

Solitary Bees (SolBee)

- One SolBee is equivalent to 10-100 worker honeybees in pollination, depending on the SolBee species.
- 98% of bees are SolBees; 30% of SBs are nesting, the rest are “mining” with nests in the ground.
- SolBees are non-aggressive and do not swarm. Their range is up to 1/3 mile.
- SolBees are safe around children and pets, as only the female SB has a feeble sting and is not aggressive.
- SolBees do not live in colonies, produce honey or have a queen.
- SolBees do not produce wax to construct cells; they use small cavities in which to lay eggs surrounded by different materials.
- SolBees drink nectar and collect pollen from flowers to be mixed together for future food for offspring.
- SolBees lay an egg on a nectar-pollen mass and enclose it with a material, then lay another egg, etc.;
- Some SolBees are communal and build solitary nests close to each other.
- Book: [Mason Bee Revolution: How the Hardest Working Bee Can Save the World-One Backyard at a Time](#), by Dave Hunter



- Workshops for kids and parents could make simple SolBee houses.
- Plans for building SolBee house could be made available.
- Specific SolBee houses could be recommended for purchase.

Farming Solitary Bees or Just Providing Nesting

The book [Mason Bee Revolution: How the Hardest Working Bee Can Save the World-One Backyard at a Time](#) provides great detail about managing solitary-bee houses and cocoons for maximum pollination. However, my inclination is to just provide more nesting holes for solitary bees than are available in the average back yard. The only management I plan to do is to use a long drill bit to clean out the nesting tubes after the baby bees exit the tubes in the spring.

References

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- <https://www.almanac.com/content/bee-houses-solitary-bees#>
- [Creating a Solitary Bee Hotel](#)
- [Solitary-Bee houses on amazon.com](#)
- [Solitary-Bee houses on lowes.com](#)
- [Solitary-Bee houses on homedepot.com](#)
- <http://content.yardmap.org/learn/bee-hotels/>
- [The Cavities You Want To Have](#)
- <https://beegarden.ucdavis.edu/wp-content/uploads/2018/04/How-to-build-and-use-bee-blocks.pdf>
- <https://beebuilt.com/blogs/backyard-beekeeping-blog/everything-you-need-to-know-before-keeping-mason-bees>
- <https://masonbeesforsale.com/pages/do-it-yourself-bee-house>
- <https://beekeepclub.com/best-mason-bee-house/>
- [Removable inspection trays for easy viewing:](#)



- [Movie showing solitary bees at work](#)