

## McMaster and the Bee - Part 2

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### Background:

Solitary bees are critical pollinators, responsible for pollinating about 1/3 of the world's food. Despite their importance as pollinators, they don't have as high a profile as bumble or honey bees. Their populations are in decline, which could lead to potential food shortages. In order to help preserve the solitary bee populations, high school student Simran Jolly to founded the Solitary Bee Project in 2018

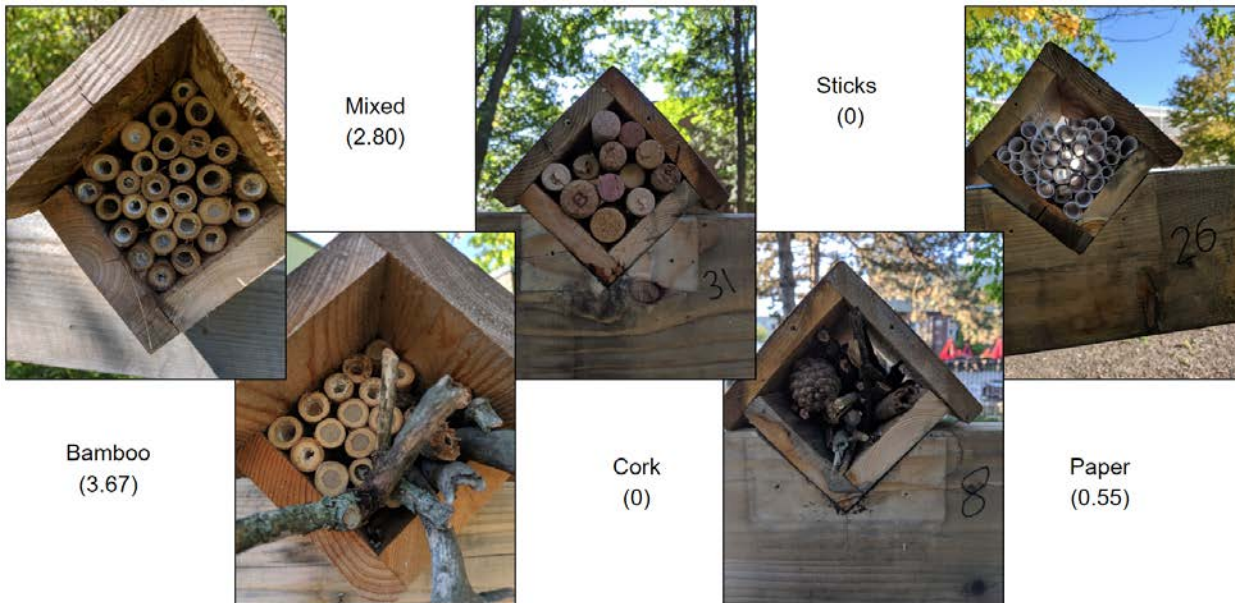
During the summer of 2019, as part of a 100in1Day Hamilton, the Solitary Bee Project and McMaster hosted a workshop to construct 50 bee homes from up-cycled materials. These home were installed throughout McMaster Campus.

With the help of McMaster's Facility Services, we surveyed all 50 bee homes on campus and evaluated them based on the degree to which solitary bees' nested in each.

### Results:

When surveying the bee homes, we found evidence that the homes with bamboo had the most activity. Houses with mixed fillings and paper had much less activity, and cork and sticks had none. We ranked each type of home out of 5 based on activity; the activity scores can be seen below, with 5 meaning most activity and 0 meaning no activity. A general trend we noticed was that bee homes closer to Cootes Paradise were more active than those surrounded by artificial structures and away from natural forestry. With the help of Luc Peters from Humble Bee, we created a list of the tree and plant species solitary bees need to thrive. Tree species such as Basswood, Honey Locust, and Crabapple are native and can be easily introduced to Cootes Paradise and around campus.

With the help of Craig MacDonald, from McMaster's Facility Services, we created educational plaques to be installed at high traffic bee homes around campus. These plaques will serve to highlight the importance of Solitary bees and bee homes and acknowledges the various collaborators who contributed to this initiative.



## FAQ

Q: Do solitary bees sting?

A: Solitary bees do not sting and are non-aggressive.

Q: Do solitary bees produce honey?

A: No; solitary bees are primarily pollinators.

Q: How can I see if a solitary bee has used the bee homes?

A: You can spot activity in the bee homes when the holes are plugged with a mud-grass-like mixture.

Q: What time of year is best to spot bee home activity?

A: The best time of year is near the end of November, just before it first snows.

Collaborators:

[The Solitary Bee Project](#)

[Academic Sustainability Programs Office](#)

[100in1Day Hamilton 2019 intervention](#)

[Facility Services](#)





