

# Protectabee™: An All-In-One Adjustable Hive Entrance

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What do Play-Doh, chocolate chip cookies, microwaves and penicillin all have in common? They were all accidentally invented while trying to develop something else.

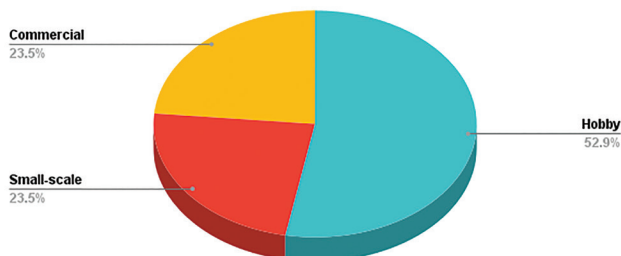
The Protectabee, the patent-pending adjustable hive entrance, can be added to that inspirational list (although we will admit it is not chocolate chip cookie good!). We never intended to make a multi-functional bee product. In fact, it wasn't until we were close to the end of our two-year project and testing with beekeepers that we understood the wide range of applications for the Protectabee.

In this month's *Bee Culture* article, "Bee Vectoring with the Protectabee," we outline the invention and functional testing of a device for delivering powders into a beehive with the ultimate long-term goal of improving bee health.

Integrating a new product into beekeeping requires more than functionality; it must also be easy to use. We posted on the Southern Ontario Beekeeper Facebook group to recruit a few beekeepers to test the

Figure 1

## Beekeeper Category



Protectabee. To our surprise, within twenty-four hours, we had over 200 volunteers! Seventeen hobby, small-scale and commercial beekeepers field-tested the Protectabee in their apiaries, answered follow-up questions online and in an interview (Figure 1).

Overall, the beekeepers said they would likely purchase the Protectabee and found it very easy to use (Figure 2). As the Protectabee was built with the intention of bee vectoring, and powders are not currently sold, we were shocked when several beekeepers asked to keep the device after testing. The beekeepers found that the Protectabee decreased robbing by wasps and deterred skunks, among other advantages (Figure 3).

The Protectabee removable insert design allows the beekeeper to slide the cone inserts in on either side (Figure 4). Feedback from several beekeepers was that addition-

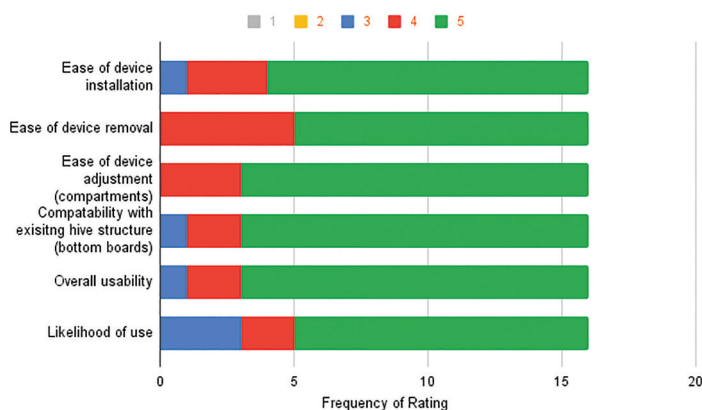


Figure 2  
Questionnaire responses.  
1 lowest rating – 5 highest rating.

al inserts could be designed to act as robbing screens, entrance reducers, closing up the hive and trapping small hive beetles. In fact, we received so many recommendations for the Protectabee that we realized we had an all-in-one device that could go to market immediately before bee vectoring powders were available.

Currently, we have designed four different inserts to be delivered with our first Protectabees to be sold in February 2022 on Indiegogo: Cones, solid, and two sizes of entrance reducers. Both inserts and the drawers can be removed to allow maximum bee traffic while leaving the casing on the hive (Figure 5).

## CONE INSERTS:

A. The cone inserts (Figure 6) can be used for **robbing prevention**, and in fact, similar cones are used to trap wasps into soda pop bottles. With the cone inserts,



Figure 3 (above)

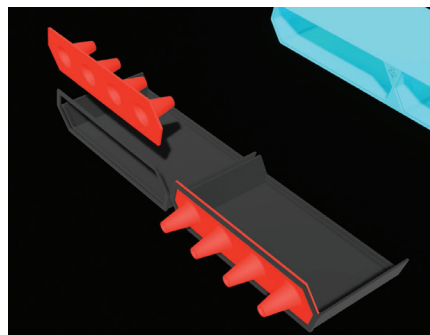


Figure 4 (above)  
Inserts can be easily slid in and out of the drawer

Figure 5 (below)

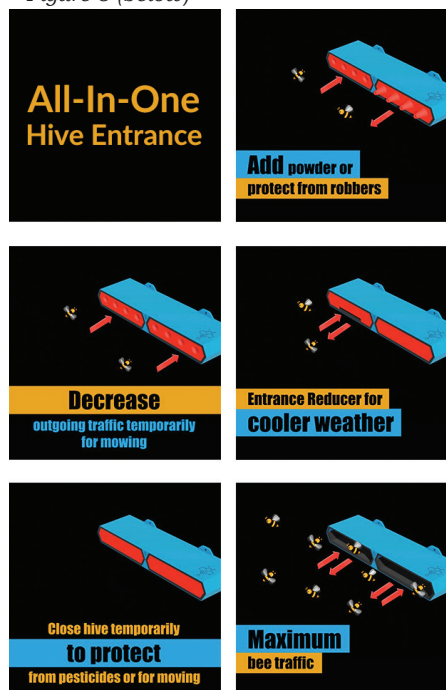


Figure 6  
A bee exiting a cone

the bees can easily defend their entrances. Powders can also be used with the cone configurations, and as powders are approved for bee vectoring, they will be made available to beekeepers.

B. Another option with the cones is to turn both cone inserts "in" to **reduce outgoing traffic**. This "double in" configuration would only be used for a short time, but it can be helpful for mowing or other activities near a hive that can agitate the colony. It's important to note that the bees can go in the small end of the cone, so not all outgoing traffic is blocked (Figure 7).

#### ENTRANCE REDUCERS:

A. The Protectabee currently has two entrance reducers with the

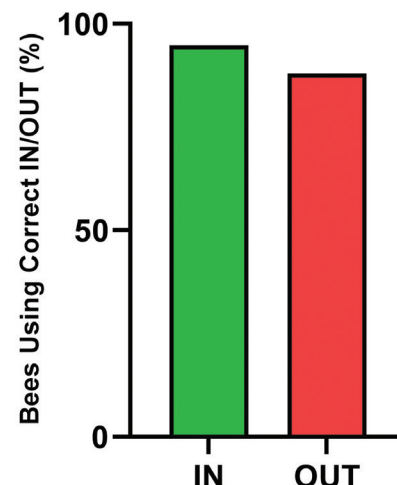


Figure 7  
Average bee traffic in and out of cones was measured over three minutes. Correct usage would be entering the wide end of the cone or exiting the small end of the cone viewed from outside the hive.

exact dimensions as those found on standard wooden entrance reducers. The drawer only needs to be slid out a small way to add in the entrance reducer. The entrance reducer can be combined with a solid insert for a single entrance, or two entrance reducers can be used on either side for two smaller openings.

#### SOLID INSERTS:

- The solid inserts can be combined with the entrance reducer. Pollen patties or supplements can also be added to the drawer without disturbing the colony.
- Two solid inserts can be used to close up the colony. This can be useful for moving or if pesticides are being sprayed nearby.

The Protectabee is currently compatible with 10-frame Langstroth and seven frame Flow hives.

To follow our journey or be notified when the Protectabee is available for purchase, please visit our website at [bestforbees.com](https://bestforbees.com).

