



The Original Awesome Bee Feeder! - UPDATED for greater stability



NicG

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Summary

My son and I wanted to create a Bee Feeder and this is what we came up with.



34.30 hrs



6 pcs



0.20 mm



0.40 mm



PET



372 g



Prusa
MK3/S/S+

[Household](#) > [Outdoor & Garden](#)

Tags: [garden](#) [bee](#) [gardening](#) [bees](#) [beefeeder](#)
[beesupplies](#) [honeybee](#)

***** **UPDATE 7th February 2023** *****

Due to requests from some people who have made the Awesome Bee Feeder I have now updated the design to have the bottle holder and base plate combined as one item. This greatly increases the stability of the design when the bottle is screwed on and is easier to print.

I have kept the grid separate for ease of printing (Still on it's 'back') and also so it is easy to remove for cleaning if it gets dusty etc.

I teach a weekly, small class of dyslexic kids at my son's school about design thinking. The aim is to encourage them to think big and realise that even though they may not excel at school they can still imagine and then create amazing things - it is super rewarding for us all!

This summer the kids wanted to create bee feeders to sustain our local bee population to help to maintain the general ecosystem where we live in New Zealand.

We wanted this design to be as friendly to the environment as we could given we were aiming to help Bees so my son and I came up with a design that uses an old PET bottle as the source of water - a bee refuelling station to help them get back to their hives without getting too thirsty!

It is designed to keep the feeding tray full but to always make sure that there is plenty of space for the bees to land and drink from without drowning or getting stuck. We love the fact that it looks like a honeycomb and we designed it to be printed in purple PETG as this is a colour that is very visible and attractive to bees. Plus PETG is better suited to hot summer days.

Note if you are using the original model and want to use a large PET bottle you may want to add a couple of dabs of CA glue or Gloop etc to keep the bottle holder from getting pulled out of the grid. We used a small bottle and the friction fit worked fine for us.

Also we have now added a version with a smaller base and landing grid so that it can be printed on beds that are able to accommodate at least 176mm x 153mm.

Note - when assembling the new design with the integrated base and bottle holder you will note that there is an arrow both on the bottle holder and the grid. Be sure to line these two arrows up for a perfect fit. The new version may require supports at the water outlets on the bottle holder part - no need to use supports for the screw threads.

You will want to make sure the grid is printed upside down with the top surface on the bed- that way you won't need support and will get a nice clean finish

We really hope you print one for the bees where you live!

Model files

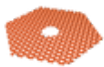


Updated Version 7th Feb 2023

4 files

new-base.stl

grid.stl



new-base.step



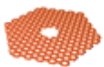
new-grid.step



Max 176mm Version

3 files

grid-max-176mm.stl



☐ This version will print on a Prusa Mini or a machine that has a max size over 176mm

base-max-176mm.stl



☐ This version will print on a Prusa Mini or a machine that has a max size over 176mm



bottle-holder.stl

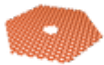


OLD VERSION

3 files



bottle-holder.stl



grid.stl



base.stl



awesome-bee-feeder-revised-for-bambu-lab.3mf

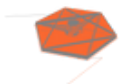
☐ Print File for Bambu Lab X1C or P1P

Print files



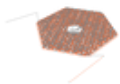
Updated Version 7th Feb 2023

2 files



new-base.gcode

PET 0.40 mm 0.20 mm 6.87 hrs 111 g Prusa MK3/S/S+



new-grid.gcode

PET 0.40 mm 0.20 mm 7.14 hrs 36 g Prusa MK3/S/S+



Max Size 176mm

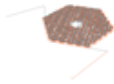
2 files



basebottle-for-176mm_02mm_petg_mk3s_4h48m.gcode

PET 0.40 mm 0.20 mm 4.80 hrs 73 g Prusa MK3/S/S+

☐ This version will print on a Prusa Mini or a machine that has a max size over 176mm



grid-for-176mm_02mm_petg_mk3s_3h56m.gcode

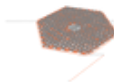
PET 0.40 mm 0.20 mm 3.93 hrs 26 g Prusa MK3/S/S+

☐ This version will print on a Prusa Mini or a machine that has a max size over 176mm



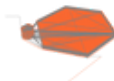
OLD VERSION

2 files



grid_02mm_petg_mk3s_5h27m.gcode

PET 0.40 mm 0.20 mm 5.45 hrs 36 g Prusa MK3/S/S+



basebottleholder_02mm_petg_mk3s_6h8m.gcode

PET 0.40 mm 0.20 mm 6.11 hrs 90 g Prusa MK3/S/S+

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