Productive Bees Documentation Documentation

Release 1.0b

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CONTENTS

Welcome to Productive Bees Wiki!

GENERAL INFO

General Information Here

1.1 Frequently Asked Questions

If you find yourself stuck, or with some weird issues, here are some things you should check over first. Bee-cause there is a chance someone has already asked that question before. . . possibly many times over.

**Q: Why do my bees not go into my hive? - Most of the bees found in the overworld are solitary bees and will not live in a hive. They need nests to live in, don't produce resources and are mostly used for breeding other bees. - Each bee has specific flower requirements, make sure they are met. Flower requirements can bee seen in JEI by right clicking or pressing 'U' on the bee - If your bees were living in a different hive, they might still remember it as their home. Put the bee in a cage and release it while sneaking next to the new hive. - If all else fails, try breaking the hive and place it again. Bees stay in the hive when broken, no need for silk touch.

**Q: How to get X bee? - Most of the bees are obtained from breeding two other bees together, recipes for breeding can be found in JEI or the Big Book of Bees. - Solitary and wild bees are obtained from nests found around the world. You can make a new bee move into a nest by placing the nest in the right biome and then use one or more Honey Treats on the nest. Each additional treat will lower the countdown by 10%. - Some bees can only be obtained by crafting their spawn egg. Check JEI for the recipe if this is the case. - Primasrine bees can be fished from oceans.

**Q: How to get a Neon Cuckoo or a Nomad Bee - Neon Cuckoo and Nomad bees are cuckoo bees and will only spawn from nests of other bees. Neon Cuckoo bee will spawn from the nest of a Blue Banded Bee and Nomad bees from the nest of an Ashy Mining Bee. There's a chance for a cuckoo bee to spawn each time the other bee brings back nectar, so make sure you have flowers around.

**Q: How do I get Skeletal or Zombees - Skeletal and ZomBees spawn during the night in empty advanced hives left in the dark - The spawn rate is rather low, so set up 6-8 hives in the dark and make sure the hives are chunkloaded

**Q: I can't find vanilla bees!!!

from Minecraft wiki: "As of Java Edition 1.15.2, occupied bee nests additionally have a 5% chance to spawn on oak or birch trees in any biome that were grown from saplings within two blocks of any flower at the same y-level. With a bit of luck and a large enough supply of oak or birch saplings and bone meal, one can obtain bees relatively easily without having to travel, by repeatedly growing trees near flowers until one spawns a bee nest as it grows. This is also an ideal way to obtain bees in older worlds created prior to Java Edition 1.15, as it saves players from having to locate anything."

**Q: How do I summon and kill bees Most of the bees are NBT based and will need more detailed commands to summon and kill - /kill @e[type=productivebees:configurable_bee, name="Diamond Bee"] - /summon productive-bees:configurable_bee ~ ~ ~ {"type":"productivebees:diamond"}

**Q: How do I get bee genes for the Incubator Put a piston above a bottler with bottles in it, squash the bee you want the genes of and you get a bottle of squashed bee. Put that in the centrifuge and you get the different bee attributes as genes as well as a bee type gene. Type genes can be combined with a honey treat and used in the Incubator to make spawn eggs of that type. The other genes can be put on honey treats and fed to other bees to transfer the attributes. Image

**Q: How to get Nocturnal and Metaturnal bees Leash a Diurnal bee to something during night and it has a chance to turn Nocturnal Leash a Nocturnal bee during day and it has a chance to turn Metaturnal Be careful though as they can take damage with leashed in an environment they are not accustomed to

**Q: How to improve weather tolerance Leash a bee outside during rain or storm and the bee might become accustomed to the weather Be careful as it may take damage while leashed in a hostile environment

1.2 Getting Started Guide

It's all about the bees

Cooldown for breeding the bees is the same as is in 'nilla.

There are several different types of bees.

Hive bees, which can live it either a standard, basic hive, or in the advanced one. Resources will only be produced when living in an *Advanced Hive*.

Wild bees, which can be found out and about in the world living in naturally spawning nests. Wild bees can live both in their natural nests and in hives as well.

Solitary bees, the loners. Found living in solitary nests found around the overworld. Solitary bees will not live in hives together with other bees and do not produce any resources.

Worker bees, a special breed of hive bees which are trained to do specific jobs like harvesting crops and gathering resources.

Among the hive bees are also *modded bees*, which can supply things added by other mods, such as copper, tin, and mod-specific resources.

1.3 Common Issues

Why do my bees not go into my hive? - Most of the bees found in the overworld are solitary bees and will not live in a hive. They need nests to live in, don't produce resources and are mostly used for breeding other bees. - Each bee has specific flower requirements, make sure they are met. Flower requirements can bee seen in JEI by right clicking or pressing 'U' on the bee - If your bees were living in a different hive, they might still remember it as their home. Put the bee in a cage and release it while sneaking next to the new hive.

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JEI is not showing all the bees - The bees are not always indexed in JEI the first time. If you are an op you can run the /reload command - If you are not op, it usually works to disconnect and connect again

1.4 Genetics

Genetics.

1.5 Datapack API

Roll your own Bees!

Productive Bees support has extensive datapack support making it possible to add your own bees or to overwrite and even remove existing bees or to change their production output.

1.5.1 Datapack API information

Datapack File Structure

```
├─ data
──├─ productivebees
──├──├─ productivebees
──├─ recipes
───── bee_breeding
───── bee_conversion
───── centrifuge
```

Bee Definition

JSON file for containing the config for the bee, required for all bees.

Primary Color

Hex Color Code for the primary color of the bee and spawn egg.

Required

Value: String (Hex color code)

```
"primaryColor": "#f2f24f"
```

Secondary Color

Hex Color Code for the primary color of the bee, and spawn egg.

Required

Value: String (Hex color code)

```
"primaryColor": "#f2f24f"
```

Particle Color

Optional

Hex Color Code for the particles the bees emit when having nectar. If not provided, the default vanilla particle color will be used.

Value: String (Hex color code)

```
"secondaryColor": "#d0581f"
```

Bee Texture

Optional

If you would like to use a custom texture for your bee, other wise the default one with the colors will be used instead. Custom textures can be put in a resource pack.

Value: String (resource location)

```
"beeTexture": "productivebees:path_to_your_texture_file"
```

Name

Optional

By default, the filename will be used to create the name. If you want a different name from the filename, you can define it here.

Value: string

```
"name": "Patrick SwayzBee"
```

Nesting Preference

Optional

This option is used by wild bees to define which nests and hives it can live in. The value is a blocktag resource location.

Value: string (resource location)

```
"nestingPreference": "productivebees:nests/nether_quartz_nests"
```

Create Comb

Optional

Whether or not to create a comb for your bee. Most of the bees provided by default output comb items from the item registry. For custom bees you can have the mod make an NBT based comb by setting this to true.

Value: boolean

```
"createComb": true
```

Attack Response

Optional

This is for if you would like your bee to use a special attack response. Current options are:

> "fire" - sets the target on fire "lava" - drops lava on the target

Value: string

```
"attackResponse": "fire"
```

Model renderer

You can pick different models for your bee besides the default.

Available models: "default" - the default value giving a normal bee model "default_crystal" - default sized bee with glowing crystals growing out of it "translucent_with_center" - used for slimy bees, renders the bee with a translucent skin and a blob in the center. Custom texture is required for this model. "thicc" - big boi bee "small" - smaller size, requires custom texture "slim" - smaller size, requires custom texture "tiny" - requires custom texture

Value: string

```
"renderer": "default_crystal"
```

Flowering

Define what your bee will use as flower. Most bees are set to use a block of the type of resource it's producing, but you can choose any block or tag. Only one of the two entries should be used. If you have a tag, use the flowerTag, for single blocks use the flowerBlock option.

Value: string

```
"flowerTag": "forge:storage_blocks/iron"
"flowerBlock": "minecraft:dirt"
```

Size

Optional

If the model is not your desired size you can adjust it here. Don't make the bee too small as it will start going through walls.

Value: float

```
"size": 1.0
```

Additional Attributes

These are additional attributes for your bee. Such as weather tolerance, productivity, etc. Each of these key: value pairs are optional. You can include none or all. Default values will be applied for the attributes not defined.

Value: boolean

```
"attributes": {
        "temper": 1,
        "endurance": 2,
        "behavior": 2,
        "productivity": 2,
        "weather_tolerance": 2
}
```

Conditions

Bees can be conditionally loaded. Conditions follow the same rules as recipe conditions. The example value can be used to disable a bee.

Value: array

```
"conditions": [
    {
        "type": "forge:not",
        "value": {
            "type": "forge:mod_loaded",
            "modid": "productivebees"
        }
```

```
    }
]
```

Translucency

Optional

Bees can be translucent. A custom translucent texture must be provided as well.

Value: boolean

```
"translucent": false
```

Teleportation

Optional

If you would like for your bee to be able to teleport. Such as the *Ender* bee for example. (This could prove to make things interesting lol.)

Value: boolean

```
"teleporting": true
```

Fire Proof

Optional

Is your bee fireproof? Prevents damage from fire and lava.

Value: boolean

```
"fireproof": false
```

Translucent

Optional

Should your bee be translucent?

Value: boolean

```
"translucent": false
```

Draconic

Optional

Allows for your bee to live in egg hives and gives them protection from dragon's breath attack;

Value: boolean

```
"draconic": false
```

Redstoned

Optional

Should your bee emit a redstone signal when having nectar, triggering contraptions below it?

Value: boolean

```
"redstoned": false
```

Slimy

Optional

Randomly emit slime particles

Value: boolean

```
"slimy": false
```

Withering

Optional

Whether or not your bee gives a withered effect when attacking. Also provides immunity to wither damage.

Value: boolean

```
"withered": false
```

Blinding

Optional

Whether or not your bee gives a blinding effect when attacking.

Value: boolean

```
"blinding": false
```

Munchies

Optional

Does your bee give hunger to targets?

Value: boolean

```
"munchies": false
```

Bee Production Recipes

Recipe defining what a bee produces inside an advanced hive.

Type

Required. This will always be this value.

```
"type": "productivebees:advanced_beehive"
```

Bee Ingredient

Required. The id of the bee.

```
"ingredient": "productivebees:coal"
```

Results

Required. The array of output items. min, max and chance are optional.

```
"results": [
    {
        "item": {
            "tag": "forge:honeycombs/fossilised"
        }
    },
    {
        "item": {
            "item": "minecraft:coal"
        },
        "min": 1.0,
        "max": 2.0,
        "chance": 30
    }
]
```

Conditions

Optional. Typically used as a check for a mod being loaded / available. Conditions should match that of the bees used.

```
"conditions": [
    {
        "type": "forge:mod_loaded",
        "modid": "simplefarming"
    }
]
```

Bee Breeding Recipes

Defining recipes for bee breeding.

Type

Required. This will always be this value.

```
"type": "productivebees:bee_breeding"
```

Parents

Required. The two parents for creating your bee.

```
"parent1": "productivebees:glowing",
"parent2": "productivebees:blazing"
```

Offspring

Required. The bee offspring. The name of the bee is the filename used for the bee definition.

```
"offspring": [
    "productivebees:your_bee_name"
]
```

Breeding Items

Required. An array (list) of usable items for breeding. While they are not used at the moment, it's a planned feature so it's better to include them now. First item will be for parent1, second item in the list will be for parent2.

```
"breeding_items": [
    {
        "item": "minecraft:dirt"
    },
    {
        "tag": "minecraft:flowers"
```

```
    }
]
```

Conditions

Optional. Typically used as a check for a mod being loaded / available. Conditions should match that of the bees used.

```
"conditions": [
        {
                "type": "forge:mod_loaded",
                "modid": "simplefarming"
        }
]
```

Bee Conversion Recipes

Bee conversion is the second way available for providing a means to create your bee.

Type

Required. This will always be this value.

```
"type": "productivebees:bee_conversion"
```

Source Bee

Required. The bee to bee used for the conversion recipe.

```
"source": "minecraft:bee"
```

Result

Required. The bee produced from the conversion recipe.

```
"result": "productivebees:bacon"
```

Conversion Item

Required. The item or itemtag used for the bee conversion.

```
"item": {
        "tag": "forge:rawpork"
}
```

Conditions

Optional. Typically used as a check for a mod being loaded / available. Conditions should match that of the bees used.

```
"conditions": [
        {
                "type": "forge:mod_loaded",
                "modid": "simplefarming"
        }
]
```

BLOCKS

Section on all of the blocks available, some of which are still a WIP.

2.1 Bottler

Used to fill up bottles with honey. Honey can be piped into the side and bottles put in the bottle to be filled with honey.

The bottler together with a piton can be used to bottle up bees as well.

See *Genetics* for more information on this.

2.2 Centrifuge

Processes resource combs into resources and honey. Holds 10 buckets of liquid which can be pumped out or extracted by putting bottles or buckets in the output slot.

The Powered Centrifuge takes FE to run, but will process items 3 times as fast. The centrifuge is also used to separate genetic material from bottles of bee material into genes.

Accepts the *Time Upgrade* as well.

2.3 Feeder Slab

Can be used as a collection point for feeding bees.

It holds 3 items blocks. When *Lumber* or *Quarry* bees feed from this, it will produce from a random item in the feeder.

2.4 Incubator

Provides a safe space to speedily grow baby bees into adults.

Place a baby bee in a cage and some honey treats inside and let it do it's magic.

(Still a WIP)

2.5 Power Generator

A basic and simplistic power generator that merely runs off of honey.

Provides 3,000 FE @ 60 FE / T, from one bottle of honey.

Output amounts are configurable.

ITEMS

Information on items available.

3.1 Bee Cage

Holds bees for transport

3.2 Honey Treat

Feeding this to an angry bee will calm it down. It will also heal the bee and if the bees is a child, it will boost the growth a little.

Honey treats can be used as a way to transfer attributes from one bee to another. see *Squashed Bee Material* for more info.

3.3 Squashed Bee Material

Bottles of Squashed Bee Material contains a mix of genetics from a bee. You can get a bees genetic material by first squashing the bee into a bottle using a piston on top of a bottler. Make sure the bottler has empty bottles and then contain the bee you wish to extract genes from between the bottler and the piston. Bottles are small, bees are big so it takes a lot of force to get it in. Bees usually do not survive this kind of treatment.

Take your squashed bee material to the centrifuge and extract gene samples for each of the bees attributes. Combine a gene sample with a honey treat and feed it to a bee to transfer the gene.

Squishy!

HIVES

There are 3 craftable types of hives, and a handful of wild ones.

4.1 Bamboo Hive

It's a solitary bee hotel.

Unlike other hives which can only house one 1 bee, this particular nest can hold 9 solitary ones.

4.2 Basic Hive

Basic Hive

4.3 Advanced Hive

Advanced Hive

NESTS

Overview and Information and references on nests.

5.1 Dirt Nest

Useful for spawning *Ashy Mining*, *Chocolate Mining*, and *Leafcutter* bees.

5.2 End Stone Nest

Attract *Ender* bees. Only works in the End Dimension.

5.3 Glowstone Nest

Used to attract or spawn *Glowing* bees. Must be placed in the nether to work.

5.4 Nether Brick Nest

Attracts *Magmatic* bees. Must be placed in the nether to work.

5.5 Obsidian Nest

Tough living environment only suitable for some bees native to the end.

Attracts *Draconic* bees.

5.6 Quartz Nest

Attracts *Crystalline* bees.

Must be placed in the nether to work.

5.7 Reed Nest

Used to attract *Reed* bees.

5.8 Sand Nest

Attracts bees that are native to the desert.

5.9 Slimy Nest

Can be found in swamp biomes. Is used to attract the slimy bee.

5.10 Snow Nest

Must be placed in a cold biome. Used primarily for *Sweaty* bee.

5.11 Soul Sand Nest

Attracts the *Ghostly* bee, inside the nether.

5.12 Stone Nest

Useful for spawning both the *Digger* and *Mason* bees.

5.13 Wooden Nest

Can be found on occasion out in the wild, and also crafted from the standard wood types.

Works in any overworld biome, and is useful for spawning the following bees;

Blue Banded, Resin, Yellow Black Carpenter, Green Carpenter

UPGRADES

Section on Upgrades

6.1 Anti Teleportation

Prevents bees that are activly living in the hive from teleporting.

6.2 Breeding Upgrade

Gives a 5% chance for a new baby bee to be spawned every time honey is delivered to the hive.

The type of bee is based on what is currently in the hive.

Multiple upgrades do stack for a greater chance of a new baby bee spawning.

6.3 Comb Block

Changes the output produced from honey combs, to comb blocks. Having this upgrade in the hive increases the time bees spend inside by 40%.

6.4 Productivity Upgrade

Increases the production output rate for the bees in the hive by 80%. Multiple upgrades can be stacked for a greater increase in yield.

6.5 Time Upgrade

Reduces time bees spend in the hive by 20%. Can also be used in the *Centrifuge* as well.

Multiple upgrades stack to further decrease overall time.

WORKER BEES

Intro Work Bees

7.1 Farmer

Farmer bees will harvest nearby crops and leave them on the ground.

Is breed from *Rancher* and *Lumber* bees.

7.2 Hoarder

Will collect (hoard) nearby items dropped or left on the ground and deposit into a hive.

Pair with a *Farmer* bee for an automated farm!.

Hoarder bees are converted Honey Bees, using a Shulker Shell.

7.3 Lumber

Nibbles on nearby wood, and collects the chips into nearby hives. These chips can then be crafted into logs.

Breed from *Yellow Black Carpenter* and *Green Carpenter* bees.

7.4 Racher

Rancher Bees will milk nearby cows and deposit milky combs into hives.

Breed from *Lumber* and *Sweaty* bees.

7.5 Quarry Bee

Nibbles on nearby stone, sand, and gravel, and collects the chips into nearby hives. These chips can then be crafted into their counterpart blocks.

Breed from *Chocolate Mining* and *Digger* bees.

HIVE BEES

These little guys can live in either a standard, basic hive. Or in the more advanced one.

8.1 Blazing

Creates Blazing combs, which when processed produces blaze powder.

Breed from *Nomad* and *Magmatic* bees.

8.2 Coal

Produces coal combs, which when processed creates coal or coal dust.

Bread from *Blazing* and *Leafcutter* Bees.

8.3 Diamond

Creates diamond combs, which when processed produce diamonds or diamond dust.

Bread from *Lapis* and *Ender* bees.

8.4 Dye

Brings home lots of flowery bits, in particular those that it pollinated from.

Breed from *Lapis* and *Skeletal* bees.

8.5 Emerald

Creates emerald combs, which when processed produce emeralds or emerald dust.

Bread from *Slimy* and *Diamond* bees.

8.6 Explosive

Creates powdery combs, which when processed produce gunpowder.

Converted from Honey Bee, using TNT.

8.7 Gold

Creates gold combs, which when processed produce gold dust.

Breed from Mason and *Crystalline* bees.

8.8 Iron

Creates iron combs, which when processed produce iron dust.

Bree from *Ashy Mining* and *Crystalline* bees.

8.9 Lapis

Creates lapis combs, which when processed creates Lapis Dust.

Breed from *Blue Banded* and *Redstone* bees.

8.10 Redstone

Creates lapis combs, which when processed creates Redstone Dust.

Breed from *Chocolate Mining* and *Glowing* bees.

WILD BEES

9.1 Crystalline

Creates cystaline combs, which when processed produce nether quartz or nether quartz dust.

Comes from *Quartz Nests* placed in the nether.

9.2 Draconic

Creates draconic combs, which when processed produce draconic dust.

Comes from *Obsidian Nests* placed in the end.

9.3 Ender

Creates ender combs, which when processed produce ender pearls.

Comes from *End Stone Nests* placed in the end.

Pro Tip: Use an *Anti Teleportation Upgrade* in your hives, so as to prevent these guys from teleporting!

9.4 Ghostly

Found in the nether living inside a *Soul Sand Nest*.

Produces Ghostly Comb, which when processed provides ghast tears.

9.5 Glowing

Creates glowing combs, which when processed produces glowstone dust.

Comes from *Glowstone Nests* place in the nether.

9.6 Magmatic

Found in Netherbrick Nests placed in the nether.

Creates magmatic combs, which when processed produce magma cream.

9.7 Skeletal

Creates bone combs, which when processed produce bone meal.

These bony little buggers will move into an empty, dark unlit nest.

9.8 Slimy

Creates slimy combs, which when processed produce slime balls.

Comes from *Slimy Nests* either found in swamps, or placed anywhere in the overworld.

9.9 Zombie

Creates rotton combs, which when processed produce rotton flesh.

These rotton little buggers will move into an empty, dark unlit nest.

SOLITARY BEES

These bees are only found roaming in the wild. *Remember* That if you place an artificial nest down, you *must* prime it with a Honey Treat! The more treats used to prime it, the faster bees are attracted to it.

10.1 Ashy Mining

Prefers sand, gravel, and dirt nests.

10.2 Blue Banded

Prefers wood nests.

10.3 Green Carpenter

Prefers wood nests.

10.4 Yellow Black Carpenter

Prefers wood nests.

10.5 Chocolate Mining

Prefers sand, gravel, and dirt nests.

10.6 Digger

Prefers stone or gravel nests.

10.7 Leafcutter

Prefers reed and dirt nests.

10.8 Mason

Prefers reed and dirt nests.

10.9 Neon Cuckoo

These sneaky little buggers will lay their eggs in nests belongiong to Blue Banded Bees.

10.10 Nomad

These sneaky little buggers will lay their eggs in nests belongiong to the Ashy Mining Bees.

10.11 Reed

Prefers reed nests.

10.12 Resin

Prefers wood nests.

10.13 Sweaty

Can only be found in cold areas, living in snow nests.