

Plug Spawn Care

Plug spawn can be stored for up to at least 6 months in cold storage and still be viable.

TIP: Be sure to take the plugs out of cold storage 1 day before inoculating your logs.

What You Will Need

Logs

- Cut your logs from a living tree and use them within 6 weeks of cutting the tree down. This is going to give the mushrooms you choose a better chance of inoculating the log before any other mycelium from the environment gets to it.
- Look for trees around 4" - 8" in diameter and cut them into logs approximately 3' - 4' feet long. Your logs should last one year for every inch in diameter. The larger the log, the longer it will take it to colonize and fruit.

Drill bit for PLUGS - 5/16" (8.5mm)

Drill bit for SAWDUST - 1/2" (12mm)

Inoculation tool for sawdust spawn is not necessary by any means, but does make life easier if you are doing a large amount of logs.



You can also use a wooden dowel and a funnel to get the spawn into the holes, just make sure you get the spawn nice and snug in there.

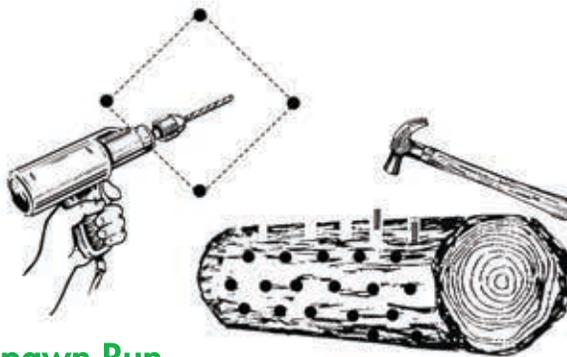
Canning wax – Use natural waxes like bee, soy or cheese wax. You may add a little bit of mineral oil to the wax so that it doesn't dry and crack, but this is not necessary.



Inoculation

When you inoculate a log, you are putting the mycelium you chose into the tree that you want the mushrooms to grow from. It's much like planting a seed. The mycelium then colonizes the log. Your log should be dry on the outside, and be free of dirt. Moss and lichens are OK.

The plug is a 3/4" long dowel. You will want to drill your holes 1 1/4" into the log to create an air pocket below the plug. Drill the log in a diamond pattern with holes 5-6" apart.



Spawn Run

When you notice a white growth on the cut edge of the logs this is the mycelium and it signals the end of the spawn run. You should see this around 6-9 months after you inoculate the logs, longer for larger logs.

Dry or Lightweight Logs

A word of advice: Do not soak your logs before they have fruited the first time. When you cut your logs, they are full of moisture, as this is how trees transport nutrients from roots to leaves and back during their lifetime, so you should not have to soak them before inoculating. If you have let your logs sit for the whole 6 weeks before inoculating, they might be dry.



Log Arrangement

- A method called log cabin style is where you set two logs on the ground, and then stack another two on top perpendicular (criss cross) to the two below.
- Another method is to lean them against living trees. This works best for logs that are longer than 3 feet.
- A third way is to run a strong rope or cable, preferably between two trees, on which you can lean the logs on both sides.

Fruiting

After around 6-9 months, or longer for larger logs, your spawn run should be complete and your log will be ready to fruit.

Leave your log outside to fruit naturally when the conditions are right. Heavy rainfall or a drop in temperature will cause your log to fruit. You will notice that the wood around the plugs will become spongy, this is the mycelium eating the wood and taking over the log.

Force Fruiting

This is a method used in large scale cultivation. Let's say it is Monday and you need mushrooms for the weekend market for sale. You can force your log to fruit by creating good fruiting conditions.

Soak your log by fully submerging it in a large bucket or container for 12 hours. Return the logs to their upright position and the log will begin fruiting within a few days. Take care to not leave them submerged for more than 24 hours because it will drown the mycelium. Once you remove the logs from the container, arrange them again using one of the discussed methods.

Log Life

A log is like a battery. After you harvest your mushrooms from the log you are going to want to allow it to rest for 2 months without water.

After 2 months, soak your logs for 12 hours and arrange, repeating the cycle again. Your log will fruit faster during the second and third flush.

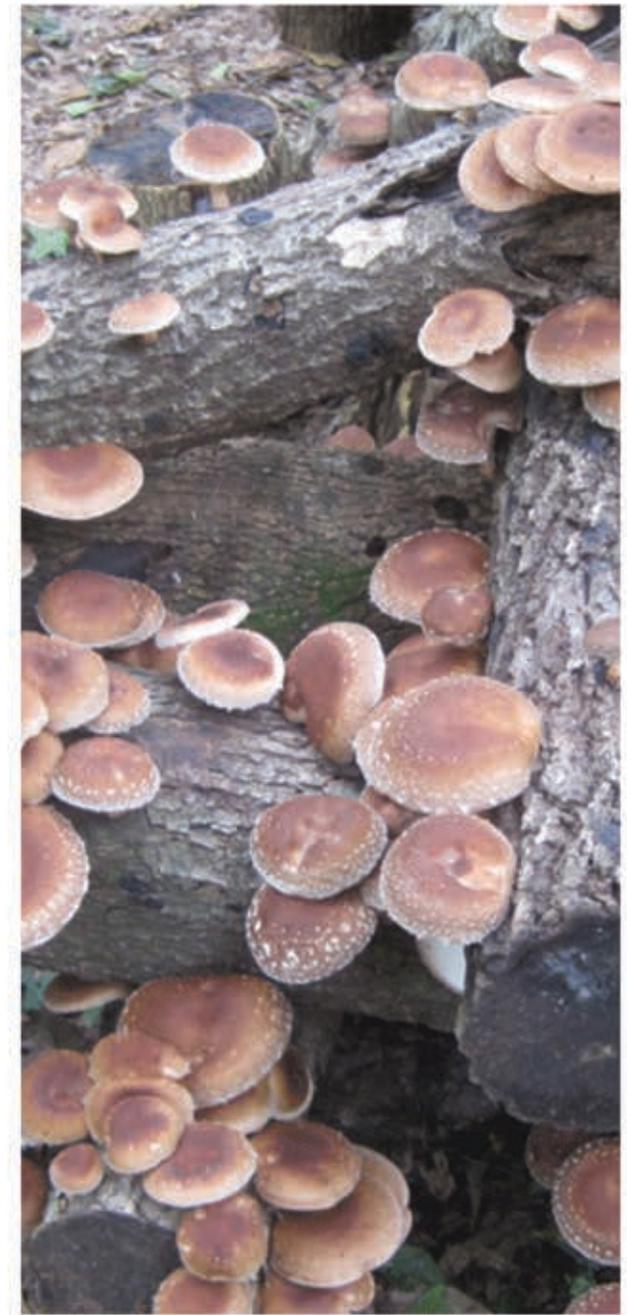
You can expect around 3-5 flushes per year, using this method. The log normally lasts 1 year for every inch of its diameter, but if you are using the force fruit method you will shorten its lifespan.

Storing Mushrooms

Store your fresh picked mushrooms in a paper bag in the fridge for up to a week or dehydrate them. Dehydrated mushrooms should be stored in an airtight container. They reconstitute well in warm water and you can use them like you would fresh mushrooms.

Do not freeze your mushrooms fresh, they will suffer cellular damage and spoil.

Exposing the gills to the sunlight will increase its vitamin D content tremendously.



Growing Mushrooms on Logs

MUSHROOMS SUITABLE FOR THIS METHOD

Oyster, Shiitake, Lion's Mane,
Turkey Tail, Enoki