REEMS CREEK NURSERY

Mushroom Log Cultivation

A Garden Guide



Fungus among us! Fungi are spore-producing organisms that breathe in oxygen and release carbon dioxide. Mushrooms are the fleshy, fruiting bodies of a fungus, and they are found on the ground, on logs, or other preferred food sources. Not all fungi produce mushrooms, and of those mushrooms that are produced, only a selection are safe for human consumption.

The safe mushrooms have a very long history of use by humans for food, medicine, dye, and more. Some of the oldest medical texts from ancient China are devoted to the health-promoting benefits of mushrooms. Here in WNC, local foragers gather multiple delicious and nutritious types from our bountiful forests. They can also be cultivated at home using a variety of methods. Different types of mushrooms have preferred hosts, or substrates, which are their food source. Whereas we have a complex digestive system inside our bodies to digest our food and extract nutrients, they consume their food by growing into it, secreting enzymes to break it down, then reabsorbing the enzymes.

In order to cultivate mushrooms on logs, one needs mushroom spawn, the appropriate and healthy logs to use as hosts, a drill, sealing wax, and a moist location. To make this process even easier, we sell pre-inoculated logs sourced from a local supplier using wood that would otherwise go to waste.

Growing Tips:

- Soak your logs when you first get home, then pick them up and feel how heavy they are. This will provide you with baseline information - you do not want your logs to EVER dry out. Remember how heavy they feel when fully saturated.
- Unchlorinated water is best. You can use tap water that has been left sitting out for a couple of days.
- Keep your inoculated logs in a cool, moist location. Some gentle air flow can be beneficial.
- Be patient. The mushroom spawn must grow into the log and then wait for appropriate conditions to emerge. This can range from about 4-24 months. There may be multiple flushes of mushrooms per year.

- The north side of a house or shed, near a water source, where you can keep an eye on them is ideal. If the logs feel light, water the logs. Unsure? Water the logs. Check their weight often.
- Once they have produced one flush of mushroom, you can try to "shock" the spawn to produce mushrooms by soaking the logs in water for 24 hours (but no more than 24 hours or the spawn can drown). It is generally recommended to only do this a few times a year, allowing at least a month in between. Shiitake logs can also be whacked with a rubber mallet to induce a flush.
- Harvest your mushrooms before the caps have turned concave. Do not water your mushrooms on the day of picking, as they will be more prone to rotting.
- Eating raw mushrooms can lead to indigestion. It is generally recommended to only eat cooked mushrooms. They can be sauteed, roasted, baked, fried, added to soups or casseroles, marinated, stuffed, added to hot water and spices for mushroom tea, smoothies, oatmeal, and much, much more.
- Harvested mushrooms can be refrigerated, dried, or pickled. They can also be frozen, but are best cooked first. If you're growing them for medicinal purposes, you can dry them for later use or use them fresh in tinctures.
- Generally speaking, the thinner the log, the sooner you'll get mushrooms, but you'll have fewer flushes overall. For every 1" diameter of log, you'll get 1 year of production.
- By adding more inoculated logs to your collection every year, you can ensure a plentiful mushroom supply.
- Finished logs can be composted and added to the garden.



Stacking: The best method depends on what is being grown.

- Log cabin style: Lion's Mane, Oysters, Shiitake.
- Lean them against trees or fences: Oysters, Reichi, Shiitake, Turkey Tail.
- Bury them upright in the ground orienting the log to how it was originally growing as a tree: Chicken of the Woods, Lion's Mane, Oysters, Reishi, Shiitake, Turkey Tail.

- In a creek with only one end of the log in the water: Oysters, Reishi, Shiitake, Turkey Tail.
- Avoid leaning the logs up against wooden structures, as that can invite termites.
- Mushroom logs can be grown indoors in a dark, moist location, standing up in dishes of water. A humidifier may be helpful. As soon as the baby mushrooms emerge, they are extremely sensitive to dry air and may abort unless near a humidifier or constantly misted. A fan for air flow can be beneficial as well.

Troubleshooting:

- Birds and insects may eat the sealing wax where the mushroom spawn was inserted. This is okay as long as you can see white mycelium (that look like thin white threads) in there.
- Slugs can be hand picked, excluded with cloth, or a defensive ring of Sluggo® applied to the ground.
- Chicken of the Woods can be more challenging to grow. If you're having difficulty, you might try an easier type, such as Oysters or Shiitake.
- If the ends of the logs turn black, cut them off until you can see white mycelium inside.
- If you see unfamiliar mushrooms growing on your logs, do not eat them without first identifying them. They may or may not be safe to eat.

Further Resources:

We have helpful books in our Garden Shop.

Asheville Mushroom Club - https://ashevillemushroomclub.org/

Field & Forest Products - https://www.fieldforest.net/

Mushroom Mountain - https://mushroommountain.com/

Resting Point Farms - https://restingpointfarms.com/

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