

Mushroom Log Plugging Instructions

Log Selection:

Logs must be cut from healthy living trees. **NO ROT AT ALL!** Plugging your logs must take place zero to two months from the date that the tree was felled, but the sooner the better. Best time of the year to cut is winter into spring when the trees are completely dormant. However, you can inoculate at any time during the winter months. Keep the bark undamaged and as intact as possible. Keep the logs clean and off the ground by stacking on a crate or scraps of wood.



Log Type:

Suitable wood species: White Oak, Red Oak, Sweetgum, Ironwood, Maple, Tulip Poplar, River Birch, Cherry, Black Gum, Honey Locust, Black Walnut (lions mane only). In general, oak is THE best for most mushroom varieties. NO black locust, apple, cedar, or Osage Orange. Hemlock will work for reishi and possibly shiitake, provided that it is fresh and free of rot. We highly recommend running all oysters on softer hardwoods like tulip poplar, and saving your oak for other species.

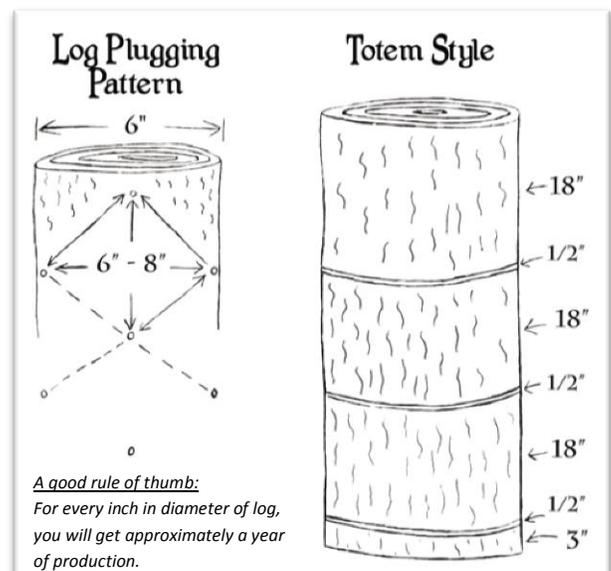
Log Prep:

Soak your logs for 12-24 hours AFTER plugging with spawn. This means starting the soaking immediately after plugging them. Note: if the logs are less than a ten days old, soaking is not necessary.



Log Drilling:

Drill holes starting two inches from the end of the log and spacing approximately six inches apart. Make the rows of holes three to four inches apart along the girth of each log. For example, a four inch diameter log will have three rows of holes in a line, with each hole in the line six inches apart. Use 5/16 inch bit for plug spawn. Drill the holes 1 1/4 inch deep. If you are using sawdust spawn to inoculate your logs, use a 7/16 drill bit. Drill the holes 1/2 inch deep. Use an inoculation plunger to insert the sawdust into the drilled holes. Once all the holes that you drilled have been inoculated with either plug or sawdust, wax over with bees or soy wax immediately. Also wax over the ends of the logs, anywhere the bark was nicked or damaged, and anywhere that branches were cut off of the log.





Log Storage:

Stack criss-cross in full shade during the colonization period, preferably off the ground (a pallet works well for this). Keep your logs in full shade in a place with access to water. Keep your logs outside in the elements and do not cover them. Let the rain fall on them.

DO NOT ALLOW THE LOGS TO DRY OUT! However, it is not necessary to soak the logs during the colonization period, unless it is exceedingly dry (If you do not receive rain at least once every 2 weeks, you will need to water your logs). If necessary, a deep soaking is best. This means 12-24 hours of rain, sprinkler, soaker hose or roll them into a stream, pond, kiddie pool, barrel, bath tub, watering trough, etc. Note: The chlorine in municipal water will not hurt the logs. Make sure the bark dries out between soakings. Remember, fewer deeper soakings are best.

DO NOT SOAK THE LOGS FOR LONGER THAN 24 HOURS!

Spawn Run:

Takes anywhere from four months to two years, depending on mushroom and wood species. Eg. Oyster on poplar- four-six months. Shiitake on White oak -12 months. Be patient.... keep your logs hydrated and they will eventually make mushrooms. Look for the ends of the logs to turn white with mycelium after a soaking rain as a sign that the spawn run is nearly complete. At this point, you can force your logs to fruit by soaking them for 24 hrs. If the weather conditions are right for the species that you are cultivating they will fruit naturally on their own. If you continuously force fruit your logs they will not last as long.

Extra Notes

1. Oysters, Shiitake: The easiest to fruit species; can be fruited above ground stacked in a pile or leaning against a fence or tree. Soak, stack, harvest. Soak, Stack, Harvest. Keep in mind that the more often you force your logs to fruit the shorter their life expectancy is. We recommend a 4-6 week resting period between forced fruitings. Shiitake logs benefit from a strike to initiate a good flush. Strike the ends with a baseball bat or wooden mallet after soaking, but avoid damaging the bark.
2. Reishi: More of a challenge to fruit; half bury the logs either horizontally or vertically once the spawn run is nearly complete. You can bury short sections in planters with potting soil. This is especially effective for Reishi. Reishi can also be fruited directly on the ground, without burying.
3. Lion's Mane: Patience! Depending on the wood species it can take 1-3 years for it to start producing. The woods that produce the fastest (but will not last as long) are softer woods such as: maple, tulip poplar, willow, or pawlonia. Woods that take longer to start producing (but will last longer) are harder woods such as: any oak species, hickory, or black walnut.

Special notes: Providing shade. North side of house (but not under the eaves, as it needs the rain) is excellent. A simple piece of 80 percent shade cloth draped over the logs works well. Or under the cover of bushes, evergreen trees, etc.

The logs will get lighter in weight over time as the fungus eats the lignin and cellulose and converts it into mushrooms. Eventually they will fall apart and be recycled into the earth. A six inch white oak log inoculated with shiitake will produce for five to six years. You can expect roughly a year of production per inch of diameter of log for oak, less for softer hardwoods like poplar.

Of course, never consume a mushroom that you haven't positively identified!

Have questions, problems, or would you like more information?... Email us at info@ashevillefungi.com