## FUNGI!!

GROWING SPECIALTY MUSHROOMS

# SETTING UP THE "SHROOM ZONE" MUSHROOM LOGS



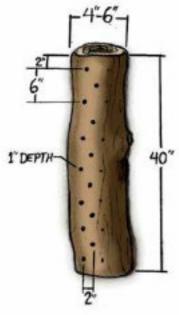


### Setting Up the "Shroom Zone"

Before the big bucks start to roll in from your mushroom sales, a bare bones work area is needed. Come late March/early April, I set up my super low-tech mushroom inoculation area outside the garage. It's comprised of a few straw bales laying flat, a strong electric drill, a hammer, an old camping stove, and a nasty old fondue pot.

#### **Material List**

0	Hardwood logs (6 inches by 40 inches)	0	Wax (cheese or bees)
0	5/16" wood drill bit	0	A small bristle brush, small paint brush, or wax dauber
0	Electric drill	0	Spawn
0	Straw bales as work bench or other low surface to work on	0	<u>'</u>
0	Hammer	0	Optional: metal label tags
0	Camping stove or other outdoor heating		



**Drilling Pattern** 

### **Drilling Diamonds**

Once you have your shroom zone set up and first brew poured, it's time to arm yourself with a drill. The logs are going to be drilled in a diamond pattern for the plug spawn. Start the first row two inches from the log's end. Space the holes every six inches. The depth of the hole is important. Ideally, the plug will be inserted to a depth just below the bark, almost flush, but not sticking out, about 1 inch deep. Field & Forest sells ninja drill bits that have stoppers on them for the correct depth, but I have used a piece of tape or a pen mark on the bit to eyeball the depth. It's good to drill a few holes and check the depths by tapping in the spawn to see how it fits. Soon, you'll get the feel for it.

Use caution not to drill too deep, as that leaves a dry air pocket. Once you have your first row done, rotate the log two inches and begin the next row, starting between the first two holes of the previous row, approximately five inches down. Continue rotating the log two inches for every new row and offsetting the holes to create a diamond pattern.

The inches here are approximate, so don't get worked up, just pull on the brew for balance. Drilling this many holes is a bit overkill, but it's necessary to make sure that our chosen fungi is the one that colonizes and out-competes any other funky airborne fungi. Whacking in spawn plugs is fun. Those skills you built up playing the fair game Whack a Mole are about to pay off. As fun as whacking stuff may be, we need to be careful not to damage the bark. The bark on your log is the skin that keeps the moisture in, so handle it gently.

Oaks, with their thick bark, are favored in this process; poplars, with thin and brittle bark, not so much. Some folks recommend using rubber mallets, but I find workshop participants tossing them aside in favor of the metal hammer. Now, armed with your hammer and bag of spawn, let's get to it. Keep in mind that the bag of spawn is sensitive to drying out and should be protected from sun and wind while working.

About the time I'm ready to start whacking in spawn, I set up my hybrid wax-melting station. This station uses an old Coleman, two-burner propane gas stove. I set this up about 20 feet from the drilling and whacking stations, as the wax smoke can get thick and the wax will inevitably drip. I've seen set-ups in the garage with a plug-in burner and tarp underfoot, but that somehow loses the outdoors mystique. Both approaches work. For a pot, I use an old fondue pot, but really any pot will do. Some more legit folks might recommend using a double boiler and putting water in the bottom of the first pot or even just placing a metal bowl in a pot with water as a makeshift double boiler.

I use a cheese wax that I get in big chunks cheaply from Field & Forest, and it seems to last forever. Start off with a fist-sized chunk. I crank the heat to medium high and watch until the wax melts clear and starts to fine bubble. Then, turn the heat to low, around 300 degrees. You want the wax to be as hot as possible without catching on fire. I judge the heat by the smoke; a thin smoke is good, while a thick one is getting close to the flash point. Often during workshops, where I have a small army of first-time drillers and whackers, I forget to turn the wax down and it catches on fire. It's no huge blaze, but you cannot salvage the wax once it's caught fire. I carefully take it off the burner, dump it on the gravel drive, and start again. The flash point is easier to control with a double boiler set up. The trick is to have the wax as hot as possible to ensure a good seal that traps moisture and keep critters out; otherwise, the wax can dry and peeloff.

Once your wax is hot, use a small bristle brush, a steel baster, or wax daubers (which are a dollar a pop from Field & Forest) to dab the wax over each spawn. If you have, or plan to have, multiple types of mushrooms, it is a good idea to label the logs with aluminum tags nailed into the log's end. Put the type, variety, and date. It will help to track what does well, to make recommendations to others and be sure you are harvesting the right fungi.



Drilling log with good beer.



Whacking in spawn plug.



Waxing logs.





If you like this and are keen to learn more, head over to our <u>online Mushroom course</u> for a visual treat and all you need to know to grow!



### WIN, WIN, WIN!

Working with fungi is one of the rare win, win, win scenarios where every step of the process has a myriad of benefits. By thinning trees for growing mushrooms, you help rebalance the forest; by inoculating wood with fungi, you speed up the soil building process; and by spreading more fungi in the landscape, you strengthen ecosystems and increase runoff filtration. On the economic side, growing mushrooms for market is as lucrative as a legal crop gets. Local farmers markets and restaurants pay top dollar for outdoor fungi. Value add the harvest into a bottled sauce or oil and you'll be rolling.



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### **THANK YOU!**

We hope you've enjoyed this short intro to the fantastic and amazing wine cap mushroom.

It gets more delicious the more you explore..

Check out the Growing Gourmet Mushrooms Mini Course - 25% off!



For more resources, videos, books, and courses on easy to grow fruits, mushrooms, food forests, and much much more visit:

### www.EcologiaDesign.com

Stayed tuned to for new guides, videos and courses that will help make your life more fruitfull!



**Blessings, Michael & Ashley Judd** 





### WHO IS MICHAEL JUDD?

Michael Judd has worked with agroecological and whole-system designs throughout the Americas for over two decades, focusing on applying permaculture and ecological design. His projects increase local food security and community health in both tropical and temperate growing regions. He is the founder of **Ecologia Edible & Ecological** Landscape Design, Project Bona Fide, an international nonprofit supporting agro-ecology research, and co-founder of SilvoCulture, a Maryland based nonprofit which is helping plant 1 million nut trees in the Mid-Atlantic region. He is also the author of For the Love of Paw Paws – book and online course.

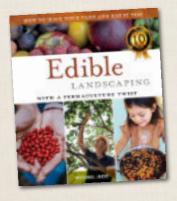
Michael lives with his family on a permaculture haven nestled along the foothills of the Blue Ridge Mountains near Frederick, Maryland. The Judds' homestead consists of 25 acres of mixed woodlands, food forests, gardens, and a nursery designed for experimentation and education.



Above: Michael Judd in a PawPaw Patch
Below: The Judd Homestead during PawPaw Fest



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