

Stage 2: Drilling, Inoculation, Waxing

Drilling



BEST PRACTICE

'3 people, using GWM's two-stroke Professional Drill and Zip-stick Log Wax, are able to drill, plug and wax 75 to 100 prepared logs per 8 hour shift'.



TIP...

'In place of a depth gauge a piece of electricians tape wrapped around the drill bit will work as well'.



TIP...

'Using a greater number of plugs per log will achieve quicker colonisation'.

Use an **8mm (5/16")** self-clearing HSS 'jobber' drill bit. Set the drill depth gauge to 2" or 5 cm. Logs are best drilled at waist height on a flat stable surface. When drilling more than 50 logs, GWM's 2-stroke Professional Drill is strongly advised (visit our website for more details).

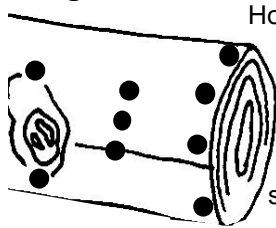
Take care when drilling: accuracy is more important than speed.

Ensure the drill bit 'bites' at right-angles to the log, so that a straight hole is drilled. This makes the task of plugging quicker and easier.

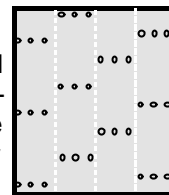
50 plugs will inoculate on average:

- 2 logs, measuring: 2 ft long (60 cm) & between 2½" to 5" (7 to 11 cm) in diameter.
- 1 log, measuring: 4 ft long (120 cm), & between 5" to 12" (12 to 30 cm) in diameter.
- 2 or 3 tree stumps

Large Diameter Logs: 20 to 30 cm (8" to 12")



Holes should be drilled in groups of three, evenly spaced down the length of the log. Rotate the log by a ¼ turn (90°) and drill another set of holes which are offset diamond pattern. Additional holes should be drilled at the log ends and around any stubs or wounds.



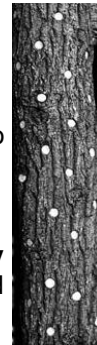
Small Diameter Logs: 5 to 17 cm (2" to 7")

To work out the number of holes and the best spacing follow this rule:

'no less than one row of holes for every inch (2.5 cm) of log diameter, with holes spaced every 6 inches (15 cm)'

Drill holes evenly spaced, and **off-set** each row to make a diamond pattern as pictured. Drill additional holes at the cut ends, and also round any stubs and wounds.

Regularly check the drill bit for signs of disease. If the clearance is **anything** other than **white to yellow** in colour, and has a **musty odour** then the log is showing sign of disease. It should not be used, and the rest of the batch carefully monitored.



Plugging or Inoculation

Plugging should occur **immediately** after drilling. Squeeze the contents of the bag to break up and loosen the plugs. It is best to break up the contents prior to opening the bags. To open: cut off the top just below the white square.

Bags should not be left open for extended periods of time as mushroom mycelium is prone to drying. With clean hands, insert the plug so it stands up by itself, then whack it in a with a hammer or mallet. **Remember to wash hands between different species.**

Waxing

Apply wax as soon as practically possible. The priority is to seal all the plug sites with a thin coat of wax. If the timber has a good moisture content, cut ends can be sealed over with the remaining wax. Remember: *bark acts as a barrier to moisture loss, hence moisture is not absorbed through the bark.*

Once all the logs have been handled, choose **ONE Reference Log** for every **20** drilled logs. Reference logs should be a good representative of the size, diameter and weight of the remaining batch of timber. Prominently mark this log and screw in a 'eye' hook at one of the cut ends. This log will be periodically weighed to determine how much moisture has been lost, or gained, and will be used to determine the **Log Moisture Level.**



BEST PRACTICE

'A rubber mallet is better than a metal hammer as it is more forgiving on the bark'.



TIP...

'Drill and chain saw slips can be sealed over with log wax to help prevent moisture loss, and weed fungi growing'.