



Biochar Oven

Construction dimensions:

- 200 L Drum (88 cm x 59cm).
- 70 L Drum (partial) as afterburner chamber (73cm x 41 cm).
- Stainless steel stove pipe (20 cm diam.) as fire box with mesh grate
- Pyrolysis tray with mesh bottom (84cm x 54cm x 16cm high).
- Perforated steel pipe (10cm diam.) for afterburner air ingress.
- Stainless steel flue pipe (14.5 cm) entering into 20 cm diam. afterburner flue.
- Afterburner chamber could have 2 more flue pipes for more even heat flow distribution.

Biochar Oven developed at the second Annual Biochar Bootcamp was held on Apr 20-22, 2012, at Star Seed Gardens Nursery (<http://starseedgardens.com>) in Byron Bay by Stephen Joseph, Paul Taylor and other participants. The new oven design was not finished in time to fire at the workshop, but was fired up by Paul in a test run on a rainy evening a week later. He reported *"I thought it would be a failure with damp sticks for the firebox. I used a leaf blower to get it going and blast some initial heat up the chimney. I used 1/3 tray of dry bamboo, scrap wood blocks and maca shells for feedstock.*

Surprisingly after only 30 mins I had a flare out the top of the chimney into the night. After another 30 mins I doused it all with water. Found a tray of char with no ash (although any ash formed may have been washed away)".

The outcome may be a design optimized for dual purpose biochar and pizza/bread oven. Just convert by swapping the pizza plate with a biochar tray!

For additional information contact Paul Taylor, potaylor@bigpond.com