

Charcoal Production

Pit-Kiln



niulife.
FOUNDATION

The Charcoal 'Baking' process:

- Dig a pit
- Start a fire
- Pile on fuel
- Seal it
- A charcoal treasure trove!



Because the pit-kiln is so simple, cheap to 'build' and can be of any size, it is particularly suited to village or even individual household use.

A Canberra ACT (Australia) trial of the Pit-kiln

Dig a pit with vertical sides, of almost any desired size.

This pit is 1.5m wide x 2.5m long & 1m deep = 3.75 cubic meters.

Save the soil that is removed



Start a fire in the base of the pit using split coconut logs if possible, but if not, use timber as shown in the photographs.



A Canberra ACT (Australia) trial of the Pit-kiln

When the fire is at a good burn start to throw on coconut trunks. (This example is using old timber). Fill the pit with the coconut trunks cut into lengths as this will burn more quickly than entire coconut trunks.



Leave for 48 hours then uncover and use.



When the pit is full, burning well and showing ash, seal it to snuff out the fire. Old corrugated iron is good for this (flattened 44 gallon drums are even better) covered by the soil excavated from the pit.



The Koivu Community

To prove the efficacy of this baking process, Tony Matelaomao, CTC Project Manager, negotiated with the villagers at Koivu (Solomon Islands) to allow us to use some of their land, and arranged delivery of **nine** truck loads of 'dead' palm logs.





The Koivu Charcoal Pit-kilns

Villagers at Koivu dug two pits of 1.5m wide x 6m long x 2m deep = 18 cubic metres. They estimate using the equivalent of 50 palms with their first burn to 'bake' the logs.

A good base fire pit



Load & 'bake' through
the night



Final layer put on the
following morning

