

Charcoal fridge

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This is a picture of my charcoal fridge. You can make any size you want. It cools fruits, vegetables and drinking water.



Make two timber frames of different sizes and secure wire mesh to the sides and bottom of each. Put some charcoal in the bottom of the larger frame, and then place the smaller frame on this charcoal and in the centre so that the top is level with the top of the larger frame. Fill the space between the two frames with charcoal, packing it tightly to maximise the cooling effect.

At the top connect the two frames with strong wire mesh, leaving the cooling chamber open so that you can put your water and food for cooling. Surround the cooling chamber with foam rubber to prevent charcoal particles and dust falling into the cooling chamber. Make the lid by covering a timber frame with wire mesh and filling the space with charcoal, again using some material to stop the charcoal dust falling into the cooling chamber. Use hinges at the back to make opening easy.

For the most effective cooling place a container full of water on top of the fridge and partly immerse a cloth in this water. Water drips from the cloth slowly onto the charcoal. The charcoal absorbs the water. As the water slowly evaporates, the charcoal cools. Then the cooling chamber with its food or water also becomes cool.

This is an excellent appropriate technology for people living in rural settings where either there is no electricity, or where there are power cuts.

Place the fridge in the shade and on raised ground to prevent ants and termites.

