

Solar oven photos – 2008

This is a photo of two ovens that I have built. The one on the right has a black corrugated metal panel to help store some heat. I have plans to incorporate a coil of copper to act as a water heater into this design. The one on the left uses a combination of a simple box oven, with a parabolic reflector at the bottom. As I used the parabolic oven, I found that my choice of insulation was not a wise choice. The 1" rigid foam began to deteriorate from the heat over a period of time.

Also, as the sun changed position during the cooking period, the concentrated light from the parabolic mirror began to burn the wood frame on the lower window.

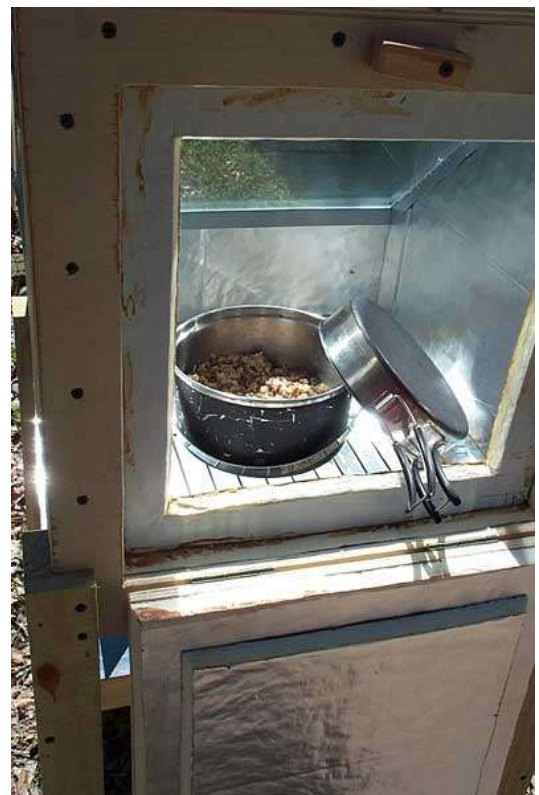
A newer design was requested by a school, so I eliminated the lower window, and used aluminum printing plates with low VOC fiberglass insulation for the interior of the oven. The new oven is being used by Urban Harvest in their school programs.



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These photos are of the portable oven for the school program with Urban Harvest. The inside is aluminum printing plates with a black oven paint. I used mirror coated plastic for the reflectors, and double insulated tempered glass for the window. The reflectors fold over on each other, and the oven can be carried by the handle.

The photo at the bottom is a pot of rice and lentils. At 250 to 300 degrees, it takes about 40 to 60 minutes to fully cook.



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