## Solar Funnel Cooker

Supplies needed:

- Aluminized Mylar, aluminum foil and cardboard, or reflective car visor
- 3 metal brads
- White plastic support container (ice cream bucket works)
- 1 or 2 quart wide mouth canning jar with lid spray painted with **<u>Flat</u>** black spray paint
- Wire mesh and a few pieces of sturdy wire
- Large plastic cooking bag
- Twist-tie

1. Cut the reflective material (you can use cardboard with aluminum foil glued to it, aluminized mylar with shiny side in, or a reflective car visor) to 40" x 20" cutting a half circle in the center and punching small holes as shown:



Insert one brad in each hole and fasten together (A1 to B2 and so on). It doesn't matter which way the brads are inserted. You will end up with a funnel.

2. Place a piece of reflective material in the bottom of the white plastic support container. Put the small end of funnel into the container.

3. Make a ring slightly larger than the base of the jar from the wire mesh and fasten it together. Run wires across the center to support the jar.

4. Put food item or water inside black jar and screw lid on snuggly.

5. Place the cooking bag into the funnel. The wire mesh support goes inside the cooking bag with the black jar on top of it. Blow air into the cooking bag to puff it up so that it does not touch the sides of the jar and

tie the top with a twist-tie. This creates a small "green house" around the jar.

6. Adjust the funnel to maximize the exposure to the sun's rays. For long cooking times you may need to readjust the position to follow the path of the sun. You can stabilize the funnel on windy days by tying a string from each of the small holes in the top corners to a tree or stake in the ground.

7. Use care when handling because it will get very hot. The cooking bag is reusable. The solar cooker works best then the UV index is 7 or higher. Optimal times are between 10am – 4pm. Increase cooking times on partly-cloudy days or for larger amounts of food in the jar. Stirring is not necessary for most foods. It is difficult to burn food in the solar cooker.

8. You can pasteurize water (heat to 150° for 10 minutes), cook stews, soups, beans, meats (no need to add water), and bake breads. You do not need to add additional moisture as the top of the jar acts like a pressure cooker.

\*\*This is adapted from BYU's Professor Steven Jones' funnel cooker.\*\* \*\*Contact Jonathan or Kylene Jones at 374-9985 if you have any guestions.\*\*



