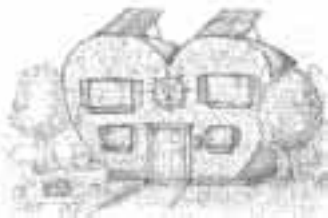


Home & Heart



Kathleen Jarschke-Schultze

©1998 Kathleen Jarschke-Schultz

Testing new solar cookers is always fun for me. My yard does look a bit strange, but I like that too. Some cookers do have a sculptural quality to them. Recently, I have been testing a couple of solar cookers that are different from the ones I have come to use regularly.

Fresnel Fryer

The Sundyne Solar cooker is not the usual parabolic solar cooker. It is a Fresnel reflecting lens design. As with conventional parabolic cookers, there is a focal point of intense heat. The focal point is roughly spherical, about 6 inches in diameter.

It really looks like some sort of Fifties-retro cooker of the future. I can just picture the Sundyne in an advertisement for the future family: an aproned and pearly mom cooks Sunday dinner on a Sundyne, while cowboy-costumed children frolic in the yard behind a white picket fence.

Assembly

The unit comes packed in a 24 by 24 by 10 inch carton, weighing in around 50 lbs. The cooker is made in The Philippines. All of the parts are painted—even the screws. I guess they did this because of the salt air and humidity there. The instructions were not the best I've seen, but the last page had a very useful exploded view. I would advise assembling the unit in the shade, as the glare, by design, is bright and hot. It took me about two hours to assemble the unit by myself, without hurrying. It would have taken less time with a helper to "hold this" and "hand me that".

I was worried about stability of the cooker because of the near constant winds that blow through our canyon. I shouldn't have been too concerned—the Sundyne is fixed on a low tripod with long, sturdy legs. All of the parts were included. In fact, after I assembled the unit, I had some screws and things left over. Since they are duplicates of other parts, I figure that they're spares.

Testing, Testing, 1, 2, 3

After the assembly, I immediately checked to see if the Sundyne could boil water. I ran two quarts of water out of the cold tap into an amber-colored Visionware® pot that had a black non-stick coating inside. I placed it in the focal point and put a lid on it. I went inside, got a basket of laundry together and brought it downstairs to the washer. I took the clothes out of the dryer, transferred the other load from the washer into the dryer, then started the new load in the washer. Then, I took the dried clothes upstairs, went outside, and checked on the water. It was boiling. This was excellent.

Popcorn was the next test. I had this cool idea of putting a bag of microwave popcorn on the focal point, and having it work. Not a chance. I put the bag on the potholder. As I watched, it burst into flame. I got out a pot with a lid, and tried again. When the popcorn started popping, I shook the pot. Everything went fine, until the pot got hot—then I realized that I hadn't brought my cooking mitts. In that short time that it took for me to dash inside the house to grab the mitts, I burned the popcorn. It was totally my fault—I wasn't prepared.

Below: Kathleen fries with sunshine.



Versatility

Using the Sundryne, I found that I could start dinner after work, and still have enough sun to fix a Chicken Stir Fry. Earlier in the day, I cooked the rice. I set the rice in the focal point and left it, so that the focused heat would get it boiling. As the sun moved its position, the diffused light finished cooking the rice.

I even cooked pasta. This is something that other types of solar cookers have trouble with. I got the water to a good boil and added the pasta. These weren't flat egg noodles either, they were dried, cheese-stuffed tortellini. After I dumped them in, the water came back to a boil. Twenty minutes later, the pasta was done.

Notes on the Sundryne

I think that this solar cooker is going to be very useful, especially on those clear but cold days of winter when our canyon has abbreviated hours of sunlight. It's a different type of solar cooking, but it's very versatile.

When not using the cooker, keep the lens pointed directly up so as not to fry something by accident. Even if you don't move the lens, the movement of the sun will change the focal point throughout the day.

There are only fifty of these cookers in the USA. Blackhawk Solar has them for \$199. This cooker has opened up some new cooking techniques for me.

Sun Toys

I have also been testing the Sun Toys Solar Panel Cooker. This cooker folds into a 14 by 14 by 2 inch packet, and weighs only eight ounces. It is patterned after Solar Cookers International's CookKit, highlighted in the *HP66* article on Solar Cooking in Africa. Instead of reflective cardboard, this one is made from bubble wrap with foil laminated to both sides. This makes it more weather-proof.

To cook with the Sun Toys unit, use a turkey roasting bag as the glazing around the cooking pot. Replace the bag after about 20 uses. The bags are commonly available at most grocery stores. Place sticks, stones or a trivet in the bottom of the bag, to allow the heat to circulate and to keep the pot and the bag separate.

Cooking

This cooker cooks quite well, although it's slow. I used it to make rice, vegetables, and a whole chicken, unstuffed. With the Sun Toys unit, use the old solar cooking rule of thumb: it takes twice as long in a solar cooker as in a conventional oven. The beauty of this cooker is in the portability, effectiveness and low cost—it was only \$18.98.

Solar Pioneers

While we're on the subject of solar cooking, I was lucky to see and talk with Tom Burns and his wife, Betty, at

the Midwest Renewable Energy Fair this year. This is a couple who have devoted years of their lives to promoting solar cooking on a large scale. Not only here in the USA—they've also contributed to other countries worldwide. These two people are the reason that seven villages in Haiti have fresh solar baked bread every week. It is highly inspiring to see that kind of dedication and commitment.

Solar Lard

Bob-O and I had occasion to butcher some pigs that were given to us. I highly recommend Carla Emery's *Encyclopedia of Country Living* and the inimitable *Stocking Up* for reference and recipes. See Emery's review in *HP42*, page 96. I used my Solar Chef cookers to render the fat into lard. Long slow heat with occasional stirring worked perfectly. I did not use the Sundryne—the heat would have been too intense.

Access

Kathleen Jarschke-Schultze is turning 45, and is okay with that, at her home in Northernmost California, c/o Home Power Magazine, POB 520, Ashland, OR 97520 530-475-0830

kathleen.jarschke-schultze@homepower.org
or kjs@snowcrest.net

Blackhawk Solar, POB 1468, Quincy, CA 95971
530-283-1396 • Fax: 530-283-4675

Sun Toys, 14837 206th Ave SE, Renton, WA 98059

Solar Chef, 220 Southridge Way, Grants Pass, OR 97527 • 800-378-4189 • 541-471-6065

Burns-Milwaukee Sun Ovens, 4010 W. Douglas Ave, Milwaukee, WI 53209 • 414-438-1234
Fax: 414-438-1604

