Sunny Side Up

Solar cooking is more than just good for the planet.

It's getting harder and harder to save the world, particularly in the meteorogicially challenged Northeast. Intrigued by my friend the writer Patricia Bosworth's fervor for solar cooking — using the sun alone for fuel — I contacted one of its best-known and most passionate proponents, the figurative painter and sculptor Mary Frank. She enthusiastically invited me to lunch.

But what sort of daffy cuisine would this be? And why would anyone want to cook this way anyhow, unless they were climbing Everest or paddling the Amazon? Don't most meals cook with an environmentally acceptable amount of fuel that's readily available?

Maybe in North America and Europe. But in the third, or emerging, or developing (choose your p.c.) world, solar cooking could be a bona fide revolution. In sub-Saharan Africa and large parts of India and China, one chief source of cooking fuel is wood, and women traditionally spend much of their day collecting or buying it. Forests are stripped, erosion destroys the arable land and the air fills up with ozone-damaging vapors. Diseases caused by fumes from burning wood range from cancer to respiratory problems to blindness.

The good news is, there's good news.

At the first sign of sun, I dashed up to Woodstock, N.Y., to the 11 lovely acres Mary shares with her husband of 10 years, the musicologist Leo Treitler. They had set up two kinds of solar cookers on the back patio of their one-story house-cum-studio: the first, called a CooKit, was a lightweight, folding reflector made of cardboard to which laminated aluminum foil has been attached, looking much like one of those reflectors from the good old days when we thought too much sun at Jones Beach wasn't nearly enough. The second was more elaborate, a 26-by-21-by-9-inch box whose bottom was painted black to absorb the heat, and which was connected to a shiny reflector panel perched at a 45-degree angle above. Sunlight of relatively short wavelengths bounces off the reflectors into the black interior, where it is trapped and turned into heat. "Cooking With Sunshine," by Lorraine Anderson and Rick Palkovic, points out that it's not unlike the heat in a car with its windows closed on a hot summer day. The cookers can be used anywhere between the 60-degree parallels — say, most of Canada down to Tierra del Fuego — and the closer to the equator, the

There is an enormous range of solar cookers, from the cheapest single-pot reflector, called a CooKit, $25, to one on which 600 meals can be prepared twice a day. To test these recipes, we used the SOS Sport Solar Oven (above), about $150, at www.solarovens.org.

Photographs by Elinor Carucci

Mary Frank's Solar-Cooked Shrimp

1½ pounds large shrimp, peeled and deveined
1 red bell pepper, cut into ½-inch dice
1 small tomato, cut into ½-inch dice
Juice of 1 lemon
10 basil leaves
6 star anise pods
3 cloves finely chopped garlic
1 cup coconut milk
½ teaspoon salt.

In a large, dark pot with a tightly fitting dark lid, combine all ingredients. Bake in solar oven just until shrimp are cooked through, about 1 to 1½ hours, checking after 45 minutes and then every 15 minutes or so. Spoon on top of rice. *Serves 4.*
NOTE: To make this in a conventional oven, bake at 250 degrees.

Max Treitler's Fesenjan (Chicken With Pomegranate and Walnut Sauce)

1 4-pound organic chicken (or duck), boned and skinned by your butcher and cut into 10 pieces, or 2 pounds boneless, skinless chicken thighs
½ teaspoon salt
1 cup chopped yellow onion
1 cup chopped walnuts
¾ cup pomegranate syrup
1 tablespoon sugar
⅛ teaspoon ground cardamom.

If using a whole bird, set wings aside for another use. Trim all excess fat from remaining chicken pieces. Toss poultry with salt. In a large, dark pot with a tightly fitting dark lid, combine poultry with remaining ingredients and bake in solar oven until poultry is cooked through, 1½ to 2½ hours, checking after 1 hour and then every 20 minutes or so. *Serves 4.*
NOTE: To make this in a conventional oven, bake at 250 degrees.

Peach Cake

3 tablespoons unsalted butter, cut into small pieces
¾ cup unbleached white flour
½ cup light-brown sugar
1 teaspoon baking powder
½ teaspoon ground cinnamon
½ cup buttermilk
3 cups peeled, chopped peaches (about 3 medium).

1. Melt the butter in a dark, 9-inch round cake pan in a solar oven.
2. In a large bowl, whisk together flour, sugar, baking powder and cinnamon. Stir in buttermilk, stirring until smooth. Scrape into the pan over the butter (do not stir). Sprinkle peaches over top, cover with a tightly fitting dark lid and bake in solar oven until puffed and just bubbling around the edges, about 2 hours. Serve warm or at room temperature with ice cream or whipped cream. *Serves 6. Adapted from "Cooking With Sunshine," by Lorraine Anderson and Rick Palkovic.*
NOTE: To make in a conventional oven, bake at 250 degrees.

longer cooking time you have. Since food safety is a factor of time and temperature, the hours it takes to solar cook renders the food risk-free.

Mary, a soft-spoken and very political 72, was mixing a pound of shrimp with some vegetables and coconut milk in one pot and a chicken with some spices in another. She prepared this in front of her fire-engine red vintage-40's Chambers range, which is right next to her G.E. fridge, on whose aluminum door she has painted orange-and-green nasturtiums because "I don't see why people want things that look like airplanes in their kitchen," she said, placing the ingredients in a black pot and covering it.

"You don't need to add water to anything except grains because the food makes its own liquid. It tastes so good because nothing dries it out." The temperature of these cookers hovers between 200 and 275 degrees Fahrenheit, resulting in a slow process not unlike that of a crock-pot, so that all the juices and flavors are nudged together.

Like a car, a solar cooker traps sunlight and turns it into heat.

"Europeans always ask, 'How does it taste?' and Ame icans ask, 'How long does it take?'" She placed the pot i side a plastic bag, twist-tied it and put the pot in the Coo it. That was it.

"I cooked for 14 Afghan women when they came to vi it for a conference — lamb, tomatoes, onions, pepper, da rice. The sun went in and out, like today, but was ou enough for everything to cook, and they couldn't believ how good it was!"

We waited.

And waited.

And waited.

Clouds covered the sun, then floated away, then climbe back. The sun came out, went back in. Out! In. Out! I And so it went for three and a half hours, which is a lon time to wait for lunch. The cookers never did manage t get a sufficiently hot temperature for anything that day bu the shrimp. And the shrimp was gorgeous.

Undaunted, I drove back up a month later, lured by un characteristic altruism and the memory of the intensel flavorful shrimp. I was greeted by Leo and his son, Max who's a cellist, and wonderful CD's of old French music hall artists — Chevalier, Piaf, Mistinguet, Jean Gabin — playing in the living room. The sun was raging, and a newl confident Mary and Max threw together a pot of mush rooms and potatoes with sherry splashes, a Persian *fesenjan* (chicken with pomegranate syrup and crushed walnuts) scallops with peppers and peas and a classic peach cake.

As the dishes baked in the sun, Leo sat at the piano, an Max joined him on cello. Light streamed through the win dows, and a fan cooled the room, as they duetted o Fauré's "Romance," then Ravel's "Piece in the Form of Habanera." Was there ever a summer afternoon like this?

Mary retrieved the mushrooms after 90 minutes. Beautiful, juice packed portobellos, made slightly mellow by the sherry. Then the scal lops were done, soon followed by the chicken. "That looks like some thing out of Bosch," Mary said of the scallops, which were swollen an silky. The chicken was piercing and hearty, the peach cake just wha you'd want on a summer afternoon.

You can cook almost anything in these things — breads and cakes, eggs, soup, soufflés, fish, stews, almost every vegetable. I've never seen a simpler method of food prep. Not much clean-up either. And you'll in furiate Con Ed, which is always worth doing. There are so many uses for solar cooking — at picnics or on a rooftop or, on a more profound level, in needy villages all over the world. Mary said, quoting Peter Mat thiessen, "Anyone who pushes a button to turn on the gas or turns a spigot for water doesn't know how most of the world lives." ■

PHOTOGRAPH BY ELINOR CARUCCI FOR THE NEW YORK TIMES