## Tastes like



# Sunshine!

**Quantum Solar Ovens** 

#### The Blazer Solar Oven



Cooking bread in a Blazer Solar Oven

### Tastes like Sunshine!

### Five years ago, I swore I would never eat store bought bread again.

So, I learned to bake bread from scratch, and I never looked back.

As summer approached, I looked for a way to bake bread outdoors so as not to heat up my house by baking in my oven. I looked at converting my barbeque to bake bread, but the heating was uneven and the bread would taste like smoke. Next, I acquired an old gas range, parked it out back, and converted it to propane. This worked fine for a while, until a mouse made a nest somewhere in the insulation, which I discovered when I tried to cook the next day. It didn't turn out well for the mouse family, or my propane oven, which now emitted an odor reminiscent of baked mouse.

That's when I started looking at solar. I searched the internet for everything I could learn about solar cookers. After much research, I started building my first solar oven. I was following plans I found online and had completed more than half of the construction when my son, who was looking over my shoulder, pointed out an important fact about the oven I was building. It would only get to 250F degrees. The recipe for my bread called for 375F degrees. So it was back to the drawing board.

Undaunted, I decided to try another strategy. More mirror equals more heat. So I constructed an oven with lots of mirrors. I started with mirror squares from IKEA, and scraps of Mylar glued to thin plywood that bounced the light into a plywood box with a galvanized inner cooking chamber. To my surprise, it got hot, really hot.

It quickly became obvious that the rudimentary materials that I had used to construct my oven would not withstand the high heat and constant steam exposure that this oven displayed. Everything would need to be of steel, and much of it would have to be stainless steel if it was to last.

Learning to cut and weld the steel, cut the mirrors, and fold sheet metal to make the boxes took a while, but eventually I produced my first Blazer solar oven. That was four years ago, and since then I have made many changes and improvements to both the design and the materials of the oven, in order to create the most practical and powerful solar oven possible.

This oven can realistically cook most anything that you would cook in your regular home oven, as well as most anything you might cook on your range top. And it can usually cook these things in the same time as called for in the normal recipe.

On a clear day in Sacramento, this oven has reached 435F degrees, although it will normally maintain about 385F with hourly aiming. 400+ is easily possible if you aim it every 15 minutes. High winds will lower your temps somewhat. 40 mph wind will drop it about 50 degrees, but you can still cook without any problems.

Unlike smaller ovens, this oven will not lose it's heat when food is added. A heavy 1/4" steel plate cooking platform provides a substantial heat sink to help maintain temps when clouds pass by, or food is added or stirred. This platform is also anchored to the outside yoke to ensure that it cannot tip or sway regardless of the size or weight of the cooking vessel.

Food is added through the large rear door, hinged to swing up to provide easy access.

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