

High Plains Homestead

by REX A. EWING

(originally published in *Log Homes Illustrated*)

When I first met Bob Butler he was helping out at the TJ's Wood Products booth at the 2002 Log Home Expo in Denver. A lean, wiry man with a trim, grey beard and an affable smile, Bob immediately struck me as a man who ought to live in a log home. And, in fact, that's exactly what Bob had in mind, for upon the show's conclusion, the custom, hand-hewn two-level home TJ's had set up inside the enormous showroom was delivered to Bob's 36-acre home site near Como, west of Denver.

And what *is* west of Denver? As anyone who's ever watched TV can tell you, it's all steep mountains and dense evergreen and aspen forests. At least until you crest the 10,001-foot summit of Kenosha Pass, and look down. Then, a mere 500 feet below, you'll see a sparsely-forested rolling plain fan out for miles and miles in every direction. It's as if a mischievous deity had excised a large chunk of eastern Wyoming dropped it into a Colorado alpine valley. Locally, this expansive geographical oddity is known as South Park; to Bob Butler it's simply Home.

Living on a dirt road several miles off the highway, Bob's 1,400 square-foot house is situated on a gentle rise that looks down on most of the rest of South Park. Standing on a carpet of sage and buffalo grass, surrounded by distant, snowcapped peaks on all sides, you get the feeling you're pretty close to the top of the world. Seclusion with a view. If you

look closely you can see the nearest utility pole without binoculars, but just barely. Not that it bothers Bob any.

“Oh, the power company gave me a rough estimate. Around \$30,000, as I recall. That was more or less the end of our negotiations.” Instead, Bob learned to make do without what most of us consider essential. For two years Bob lived in a small camp trailer below his building site. For companionship he had his dog, Boomer—a bundle of energy wrapped up in the guise of a Brittany Spaniel—and Kitty, a cat so exquisitely black the ravens overhead seem pale by comparison. While Bob's work schedule—as a truck driver for TJ's Woods Products and as owner and chief laborer of Don't Chink Twice chinking company—took up most of his time, he used what little was left to bring his new house to the stage owner-builders often wishfully refer to as “livable.” And still he managed to find a few hours each week to haul bathing and cooking water from a spring running in a distant draw, and to gather façade stone for his foundation.

The last two years have been a long, tough haul for Bob, but he's hardly one to complain. “You just do what you have to,” he says with the pragmatic resolve of a man who's not a stranger to work, “and if there's any time left, you do what you *want* to.”

While the notion of relying on solar electricity to power a home may, for many people, evoke thoughts of sacrifice, for Bob Butler it was the long sought-after brass ring at the end of an arduous journey. Sort of a luxury, you might say, since until quite recently all of Bob's electricity came at the mercy of a Honda 6,500-watt gasoline-fired generator.

Here's how it worked: every day Bob would run the generator for a few hours; maybe in the morning to brew coffee and make toast, and in the evening to watch satellite TV for a couple of hours. Since the home's only source of heat is a Quadra-Fire secondary-combustion wood stove, there are no blower fans or zone pumps that require electricity during the day while Bob is at work. For refrigeration, Bob uses a vintage Servel propane-fired refrigerator, painted the same shade of maroon as the Heartland propane stove that sits regally beside it. The generator pumps water from a 400-foot well into a 350-gallon tank beside the house, and then into the house with a smaller pump. That leaves the lights. Rather than running outside to turn on the generator every time he wanted to light a room, Bob installed Paulin gas lights—quaintly stylish fixtures that run on propane—he found in the Lehman's catalog. A small freezer in the full basement would run whenever the generator did. Bob swears that a couple hours of AC each day is enough to keep everything nicely frozen.

The day I visited Bob at his home he was just in the process of installing his solar-electric system. A ground-mounted array consisting of a dozen Solarex 64-watt modules has unobstructed access to the abundant sunshine on the home's south side. At Bob's latitude and altitude, this is enough solar power to generate up to 4.5 kilowatt hours of electricity on a day of full sun, more than he would generally use with the few electrical appliances he depends on.

A Trace charge controller monitors and moderates the 24 volts of DC power going into the bank of eight L16 batteries, and a Trace 2524SB inverter churns out 120 volts of AC in the form of a modified sine wave—a stepped, squarish waveform that works well enough for most loads, except for things that employ sophisticated electronics, like computers and printers.

The thought of clean, quiet power is a whole new experience for Bob, one that he eagerly looks forward to. “For the past two years I've equated electricity with the din of a generator,” he observes. “It'll be a welcome change to turn on the coffee pot in the morning without having to trudge outside and start a noisy engine.”

Though in no particular hurry, Bob is already thinking past his modest solar setup. At 9,500 feet, the winds that sweep down off of the Mosquito Range to the west pack a hefty punch, and Bob figures it just might be worthwhile to put some of that raw power to work. “It's just there for the taking,” he says. “There's no point in letting it all just blow on by.”

It's probably just a matter of time, something Bob always manages to make the best of.

BYLINE: Rex Ewing, author of two books on renewable energy (LOGS, WIND AND SUN, and POWER WITH NATURE; PixyJack Press), lives with his wife in a handcrafted log home powered by the sun and wind in the foothills of Colorado. He can be reached at www.pixyjackpress.com