

Crafting Log Homes Solar Style

AN INSPIRING GUIDE TO SELF-SUFFICIENCY

Rex A. Ewing and LaVonne Ewing



PIXYJACK PRESSLLC

FOREWORD

Fiction often reveals fact. Take the 1944 Sherlock Holmes movie *Pearl of Death*, where the detective declares: “Electricity. The high priest of false security.” How prophetic that casual utterance seems more than 60 years later, for look at how we depend on this precious power. Plugged-in gadgets proliferate, most of them superfluous. We squander electricity as if it were generated magically inside the wall sockets that our appliances cling to like lampreys rather than many miles away at plants that burn exhaustible fuels. False security indeed!

A recent newspaper headline caught my eye: “High Winds Cause Power Failures.” I’d seen similar stories for years and thought nothing of them, but this time, having just read about the spread of wind power, I wondered whether, if more people relied on it, the headline might have read: “High Winds Cause Power Surge.” I imagined folks scurrying through their gust-rich homes, looking for every electrical appliance they own to see how many they could plug in at once, at no cost to them and no harm to the planet.

That playful thought never would have occurred to me before I met Rex and LaVonne Ewing at a log-home show in Denver. They were touting their new book, *Logs, Wind and Sun*, about building a handcrafted log home and using the sun and wind to generate electricity. It caught my eye more because of the log home aspect. Building your own log home is hard work, I reckoned, but electricity comes easy wherever it flows from.

Talking with Rex, I realized I had it backwards. Living off the grid is the real challenge. Log homes by now have moved well beyond slapdash cabins stacked by countercultural back-to-landers into today’s housing mainstream. To many people, however, solar and wind power still seem one step up from gerbils scampering on a wheel in a cage.

What makes the two facets of this book so compatible is that many log-home owners build in rural, even remote locations, where electricity comes at a steep price. What’s more, energy efficiency and conservation have become pillars of the Green Movement. Log homes seem suited for off-the-grid living because they are built of a natural, renewable resource and are proven energy efficient.

Some people regard log homes as trophies and status symbols, but they are the exception. Most log-home owners I’ve met over the past 20 years as the editor of two log-home magazines rarely go overboard because, first, they aren’t the overboard kind and, second, log homes cost enough nowadays that the people buying them rarely can afford to indulge in extravagance.

For all the different sizes and styles of homes they choose, they share one trait: individualism. It’s what drives some to want to build their log home themselves, a desire that Rex and LaVonne understand because it led them to build their own home and seek an alternative to the grasping grid. That attitude now underlies the Green Movement.

Plenty of people nowadays pay lip service to

going green, but Rex and LaVonne long ago put their money where their mouths are. They live green day in and day out, year after year. Doing so takes not only commitment, but also a great deal of learning about subjects the rest of us have little concern with. When Rex starts rhapsodizing about inverters, amps and photovoltaic thisses and thats, he sounds like television kid-show scientist Don “Mr. Wizard” Herbert.

Another TV show pops to mind, too: *Green Acres*. In the first-season episode “You Can’t Plug In a 2 with a 6,” Lisa tells Oliver “the fooz blew.” He explains that for their generator to handle the power load, each electrical appliance has a rating from 1 (can opener) to 6 (washing machine). The total value of the items that Lisa plugs into the wall cannot exceed 7. Realizing she can’t use the coffee pot (2) and refrigerator (6) at the same time, Lisa ends up melting the electric coffee pot on the stove while trying to make coffee.

It’s an entertaining premise, but in a solar and wind home, you have to make these sort of calculations. You must be disciplined about turning off any electrical device you aren’t actively using at the moment. Those who grew up with Depression-era parents remember their constant admonitions not to waste electricity. It isn’t about sacrifice, though, so much as it is about adjusting to a new way of looking at appliances and seeing them for the energy hogs that many are.

If we had to chop down trees, haul home the wood and load it into a furnace to generate electricity to power our toys, we’d probably decide we could get along just as well without them, especially after we found ourselves brawling with neighbors as the local supply of trees dwindles.

What will work, ultimately, is what already works: sun and wind. All it takes is a change of attitude by people who consume energy. Forty gazil-

lion solar panels might keep the Las Vegas strip aglow, but a more constructive attitude is questioning whether we should be generating electricity to light neon signs.

Renewability, sustainability, recyclability—these are all noble-sounding ideals, but they mask the greater problem: over-consumption. Ever since World War II, Americans have shown no restraint or ability to resist merchandisers of superfluous products and services. “If enough isn’t enough,” teacher Ram Dass observes, “then more won’t be better.” It’s a lesson we all need to learn. Rex and LaVonne Ewing are happy to teach us.

The trial and error of establishing and maintaining their lifestyle taught the Ewings plenty. Recognizing that others might be more inclined to convert to alternative energy nowadays, they have updated their original book with recent advances in sun and wind power. Plus it recounts the true-life experiences of other off-gridders who live in log homes.

Not everyone who reads this book will wind up living in a log home. Those who do will benefit immeasurably from Rex and LaVonne’s insights and inspiration. Those who don’t can still benefit by becoming aware of what’s involved in living self-sufficiently. However much you embrace this lifestyle, it requires very little sacrifice, mostly just forethought. Don’t underestimate that quality, however. If preceding generations had looked ahead a little better, perhaps our predicament wouldn’t be so critical. It isn’t too late, fortunately. Homes powered by the sun and wind offer true security. That’s a fact.

— Roland Sweet
MOUNT VERNON, VIRGINIA

PREFACE *to the* NEW EDITION

When *Logs, Wind and Sun* was first published in the fall of 2002, LaVonne and I had no way of knowing just how much it would change our lives. But the book, like the two-year log-home-building odyssey that spawned its creation, was a labor of love, and one should never be surprised if auspicious events spring from such impassioned endeavors. Looking back on it now it all seems like a logical chain of events. Of course we would go on to produce several more books on alternative and renewable energy (RE); certainly I would begin writing columns for *Log Homes Illustrated* and *Countryside* magazines; surely people would write to us from all around the world to let us know just how much our simple book touched their lives...

Like I said, we had no way of knowing.

And so we were more than a little sad to let *Logs, Wind and Sun* go out of print in early 2007, but it was something that had to be done. While the log home building section remains as timely (and as timeless) today as it was then, the renewable energy section had become dated by five years of technological advances from an industry that continues to grow at an exponential rate.

We could have simply updated the renewable energy section, of course, but since we had already produced two sperate books on solar and wind energy (*Power With Nature* and *Got Sun? Go Solar*) it seemed folly to cover the same ground again with the same exacting attention to detail.

Instead, we hit on a much better idea: we decided to cover the broad aspects of renewable energy in a succinct little primer designed to give any RE neophyte a tight handle on the subject without bogging him or her down in a quagmire of detail. The rest of the space we devoted to the real-life stories of others LaVonne and I have met who have, each in their own way, done what we have done. These stories are interesting because they're about real people, individuals who prove that there are as many ways to go about solar-and-wind log-home living as there are adventurous souls willing to give it a whirl. They're intriguing because every home comes with its own challenges and every future log-home dweller meets these challenges in a unique fashion—sometimes grandly, sometimes minimally, oftentimes ingeniously. But always in the way that works best for them.

The very words “log home” evoke a time-honored sense of freedom; they conjure up mental images of life in the bosom of nature beyond the reach of the tentacles of urbanization, where simplicity is demanded and being true to oneself is obligatory.

If that is what you are after, you're in good company.

— Rex A. Ewing
JANUARY 2008

PROLOGUE *to the* ORIGINAL EDITION:
LOGS, WIND & SUN

the contagious dream

Years ago, in a past that seems far more distant than it really is, I owned a small spread with a rich, verdant pasture, a hay field, and far more Thoroughbred horses than any man in his right mind ought to own. I was a rancher and a businessman—a manufacturer of nutritional supplements for horses. And I was a farmer.

My father, driven man that he was, took precious little delight in any of my childhood antics, but even after I was grown he enjoyed telling new acquaintances the dialog he and I used to have when I was four or five. “Rex,” he’d say, way back when, “what’re you gonna do when you grow up?”

I’d stand up straight as a rod (so he’d say), stick my lip out resolutely, and answer with a certainty that would make anyone believe I could fly if I so intended, “I’m gonna get \$500 and be a mountain man.”

Anyone who ever heard this story would laugh at the little boy in rolled-up Levis and red cowboy boots who seemed to know his mind so well. But not me. I was serious. I was serious then, and I was serious later, when I bought a small acreage and build an octagon log home and a small log guest house. It cost more than \$500, but it was worth every penny. Then, as fate would have it, it was all whisked away to the four winds, and I returned again to the flat dusty plains of eastern Colorado.

There I raised horses, made supplements,

wrote articles for horse magazines, and harvested hay. And fought back a yearning to return to the mountains. Finally, when I could fight it no longer, I bought more land than I ever thought I’d need in a place I rarely ever had the chance to go. But whenever I did get the chance, I’d head for the hills and enjoy a day or two of heaven. I built a small frame cabin that encouraged the faraway dreams I nurtured, and when I wasn’t there I daydreamed of the wonderful things I would do if I were.

It wasn’t until I met LaVonne, however, that I even dared to rekindle the long-held dream of a life far above the hay fields and horse pastures. There was so much to leave, it seemed, that I could never in a lifetime leave it all. But lifetimes, I’ve since learned, are far more expansive than the petty things that somehow seem to cling to the mind’s coattails, demanding—though hardly deserving—constant attention.

Besides, the baler was getting moody, the hay swather was held together with good intentions and questionable welds, and the horse herd was in serious need of thinning.

And whenever LaVonne was alone, her eyes would drift to western mountains.

I knew what was going through her head.

She was dreaming about getting \$500 and becoming a mountain woman...

Dreams; it always starts with dreams.

Every beautiful thing ever wrought by the hands of humankind began as a dream, growing of its own volition from formless and fluid places, where disparate things can exist without contradiction in impossible relationships to one another.

Dreaming is something we all do too little of in a tight-minded society where the rules simply must be followed, even though no one is quite certain why. Dreams are, after all, just intangible wisps of errant energy. How ironic, then, that dreams—most of which are never nurtured to fruition—are exactly what keeps the lid from blowing off the pressure cooker we call humanity. If we can entertain in our minds the possibility of better days and better places, then the rat race becomes a little less ratty, and the rays of tomorrow's sun can find a way through to brighten the gloomy environs we inhabit today.

If you are reading these words, it's because you are a dreamer. You dream of living where you don't, and doing things you've never done. Compelling as it is, it's a frightening thought. But so is life; it's a risky business. And yet you push on, regardless. You weren't born knowing how to run a chainsaw, set a log, or wire a solar module to a charge controller. But neither were you born knowing how to run a computer or thread your way through rush-hour traffic in a rolling steel cage at 100 feet per second. If you can do the one, you can do the other, as long as you hold tight to your dreams. The trick is in not letting your self-limiting notions hamstring your abilities.

This is a book for dreamers, it's true, but only those who are ready to cast their airy aspirations to the fertile earth and nurture the seeds with sweat and toil. You may end up doing all the work yourselves, or you may simply use this book as a guide

for determining the best way for others to proceed. Whichever path you follow, once you make the commitment you're halfway there.

LaVonne and I created this book with one idea in mind: to write the book we wished we'd had before beginning our adventure into uncharted territory. And what an adventure it's been! I thought I knew a thing or two about this business before we set out on this latest foray into the unknown, but I was mistaken. If this book were a comprehensive personal memoir of the knowledge we've picked up in the past three years, it would not come close to fitting within these pages.

Though we unabashedly relate a number of personal experiences—the good, the bad, and the comical—throughout the book, *Logs, Wind and Sun* is certainly not a memoir. It's much better than that. It's a hands-on, dirt-under-your-fingernails guide to making your dreams a reality.

This won't be the only book you'll buy to help you through the journey ahead, but with enough common sense and practical knowledge it could be. It was written to be used by skilled people whose experience allows them to fill in the gaps, as well as those less steeped in the trades who want to know how it all goes together, and what to expect of the crews doing the actual work. We can't all be builders, plumbers, roofers, cement workers, solar and wind installers or electricians, but we can—and should—know enough about each of these facets of construction that we can direct those who are doing the work.

Logs, Wind and Sun was written and compiled in a logical, orderly fashion. For that reason, it can be used as a reference book. But it's more than that. I find writing to be too much fun to restrict myself to the same, plodding style used in all the boring text books I so despised in school. So, while

this book was designed to be used, it was written to be read; to make learning a pleasure, and knowledge a joy.

This book covers all the major aspects of building a log home and making everything work together as a cohesive whole. By reading the sections on foundation and log work, you will know how to build a home log by log. You will also know what's hard and what's easy, and why. And, just in case you might feel left out in the woods all alone, you'll learn about many of the successes and foibles LaVonne and I have experienced, walking the same path you are about to set foot on.

Other areas are less comprehensive. Heating and water pumping are covered in a way that presents the systems you may want to consider—and those you definitely want to avoid—without actually telling you how to install any of them.

Plumbing is a can of worms we peek into from time to time, without giving any of the worms a chance to slither out. I know enough about

plumbing to discourage anyone who isn't already a plumber from trying their hand at it. Just the same, plumbing issues unique to log homes are clearly addressed.

The point is, I don't drone on about things I know little or nothing about. It wouldn't be fair to you. No one knows everything about this business, and if they did, I'm sure they wouldn't be any fun at parties.

So take a breath and get ready for the adventure of a lifetime. By the time you finish your new home, you'll be satisfyingly amused at the person now reading these words because you will have grown in ways you never thought possible.

— *Rex A. Ewing*
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