

Chapter 1: The Expensive Habit of Almost Freezing

Why Smart, Capable People Keep Bleeding Money on Heat That Doesn't Work

The propane tank was empty again. Third time that month, and it was only January.

I remember standing in a hardware store parking lot in a truck that had cost me more to heat that winter than it had cost me to buy two years earlier, doing math I didn't want to do. Forty dollars for the exchange. Forty dollars, again, for maybe five nights of warmth if I ran the heater sparingly. I wasn't stupid. I'd run a business for fifteen years before things went sideways. But there I was, buying the same fifteen-dollar-a-gallon problem over and over, like a man bailing water out of a boat with a hole he refused to look at.

This is the trap. Not stupidity. **Habit dressed up as necessity.**

People who end up living in a van, a truck cab, a single room, or a place they can barely afford to heat are, almost without exception, resourceful people. They've fixed their own transmissions. They've stretched a paycheck four ways past Sunday. And yet, when it comes to staying warm, the same sharp instincts go quiet. They buy fuel. They run the heater. They shiver anyway, and they do it again the next night, treating the symptom because the symptom is loud and the actual problem is quiet.

The actual problem isn't a lack of heat. It's an abundance of *escape*.

The Three Systematic Errors

There are three mistakes that show up again and again, in forums, in cold parking lots, in my own history before I learned better. Understanding them is the entire foundation this book is built on. Get these three wrong, and no amount of propane, wood, or willpower will fix your winter.

Error One: Buying Fuel Instead of Buying Time

Fuel is a recurring cost. Time is what you actually need — specifically, the eight hours between when you close your eyes and when the sun starts doing some of the work for you.

When you buy fuel, you are paying, night after night, to fight a battle that never ends. When you buy *time* — through insulation, sealing, and retained heat, which we'll build out in Chapters 2 and 3 — you pay mostly once. A five-dollar roll of foam tape doesn't run out at 2 a.m. A well-sealed door gap doesn't need a refill. Propane does, every single time, and it never stops asking.

Error Two: Treating Symptoms Instead of the Envelope

The "envelope" is a term I use for the entire skin of your space — walls, windows, door seams, floor, roof vents, everywhere air can move in or out. Most people never look at the envelope. They look at the thermometer, see it's cold, and reach for more heat. That's like trying to fill a bathtub with the drain wide open. You can run the hottest tap in the state and still end up with a cold tub.

I've watched people spend three winters chasing bigger heaters, better sleeping bags, thicker coats — all symptom treatment — while a single unsealed door seam was quietly bleeding out more warmth than any of those fixes could replace. We'll walk your own envelope, gap by gap, starting in Chapter 6. For now, just sit with this: **the leak is almost always cheaper to fix than the heat is to keep buying.**

Error Three: Copying Advice Built for a Different Climate or Vehicle

A guy in Arizona posting about "winter van life" and a woman parked outside Duluth in February are not living the same winter. Advice travels faster than context. Someone shares a setup that works beautifully at 35 degrees, and someone else tries the same setup at 5 degrees below zero and wonders why they're freezing.

Your climate, your vehicle or structure, and your actual overnight low are the three variables that determine what you need. A single-pane truck cab window loses heat differently than a shack's rusted seam or a van's steel roof. Chapter 2 will help you map your specific space onto what I call the four-layer model, so you stop borrowing solutions built for someone else's winter.

The goal was never "more heater." The goal is less escape. Every dollar spent chasing the first goal is a dollar you didn't need to spend if you'd solved the second.

The Real Math: What a Winter of "Just Running the Propane" Actually Costs

Let's do the arithmetic nobody wants to do, because the number is uncomfortable, and uncomfortable numbers are exactly the kind you need to see clearly.

Say you're running a small propane heater through a cold season, refilling or exchanging a tank every four to six days during the coldest stretch. At roughly \$20 to \$40 per exchange, depending on your region and tank size, that's potentially \$150 to \$250 a month for three to four months of real cold. Stack that up and you're looking at \$600 to \$1,000 for a single winter of "just running the propane" — and that's before you count the carbon monoxide risk of running any combustion heater in a sealed, unventilated space overnight, which we'll deal with directly in Chapter 7.

Now compare that to what it should cost. Not "should" in some idealized fantasy, but should in the sense of what people who've actually solved this problem report spending: pennies a night on retained-heat methods, a few dollars total on sealing materials that last the whole season, and propane reserved only for the genuinely brutal nights instead of every night.

A winter of nightly propane exchanges can run \$600–\$1,000 in fuel alone — money that never buys you anything permanent, because it burns off completely by morning.

That gap — between \$600-plus and something closer to \$40 — isn't a difference in toughness or tolerance for discomfort. It's a difference in where the money goes. One path pays for fuel that disappears. The other pays, mostly once, for materials that stay.

Case Snapshot: A \$3,000 Start and a \$40 Winter Heating Bill

Here's how the math can actually work when you build the envelope first and the heat source second.

Picture a used cargo van, bought rough but sound, for somewhere in the neighborhood of \$2,000 to \$2,500. Add \$300 to \$500 in basic conversion materials — insulation board, reflective barrier, some plywood, screws, sealant — and you're at roughly \$3,000 all-in before a single cold night arrives. That number isn't fantasy math; it echoes the kind of bare-bones builds documented in the vandwelling community, where people have converted vehicles into livable spaces for a few hundred dollars in materials on top of the vehicle cost itself.

Caso: Bob Wells, the vandwelling advocate later featured in *Nomadland*, moved into a box van with his last \$1,500 in savings after he couldn't afford an apartment¹. He went on to document van builds costing as little as \$365 in materials — proof that the entry cost for a livable, weatherproofed space is far lower than most people assume².

Now, inside that \$3,000 van, imagine the envelope is actually sealed. Reflective barrier behind the walls. Foam board where the steel meets the outside air. Door and window gaps closed up with dollar-bin weatherstripping. That van, properly sealed, doesn't need much propane at all. Maybe one exchange for the entire season, held in reserve for the one or two nights that genuinely demand it. Call it \$40, total, for the whole winter — the number we'll build toward, piece by piece, over the next several chapters.

The difference between the \$600-to-\$1,000 winter and the \$40 winter isn't luck, and it isn't a bigger budget. It's sequence. The person paying \$40 sealed the envelope *before* they worried about heat output. The person paying \$1,000 bought heat first and never got around to the envelope at all.



KEY TAKEAWAYS

- ▶ Stop buying fuel as your first move. Buying time — through sealing and retained heat — costs less and lasts longer than any tank refill.
- ▶ Find your envelope before you upgrade your heater. A single unsealed gap can undo the benefit of a bigger, more expensive heat source.
- ▶ Don't copy a stranger's setup blind. Match any advice to your actual climate, your actual vehicle or structure, and your actual overnight low.
- ▶ Run your own numbers this week: add up every dollar spent on propane, wood, or electric heat in the last 30 days, and write it down. You'll need that figure in Chapter 5.
- ▶ Remember the target isn't zero cost. It's near-zero cost, with the fuel budget held in reserve for the nights that truly demand it.

That \$40 number probably sounds impossible right now, especially if you're staring at last month's fuel receipts. It isn't. But it doesn't come from a better heater, and it doesn't come from toughing it out. It comes from a four-layer framework that most people have never been taught to see, and that framework is exactly where we're headed next.