

Chapter 1: The \$470 Machine Rotting in the Corner

It sits in the corner of the back bedroom. The little green light still glows. The tank holds a quart of gray water nobody emptied, and the filter smells like a wet dog. You paid \$470 for that machine because the man at the store said it would keep the cabin dry for good.

The walls still sweat every spring. The closet still smells like an old basement. The machine hums, drinks power and does less every year.

I want you to look at it for a minute. The mistake it stands for has cost you more than \$470 over a lifetime. This book is about undoing that mistake.

How the modern answer became a worse, weaker copy of the old one

Most of what we buy for the house is an old solution with a motor, a circuit board and a warranty bolted on. The dehumidifier does what a pan of salt did. The electric space heater does what a well-banked stove did. The bottled-water delivery replaces a clean barrel and a good filter.

The new versions are often more convenient on a good day. On a bad day they fail, because each one leans on a wall socket, a spare part or a store that stocks the refill.

Take moisture. The common store-bought moisture absorbers sold in little tubs are mostly **calcium chloride**, a cheap salt. It can soak up several times its own weight in water and turns into a brine that holds the moisture (Hunker, n.d.). There is no compressor, no fan and nothing to burn out. Plain **rock salt** does the same job more weakly and for less money. Ranked by strength, the common homemade drying agents run calcium chloride first, then rock salt, silica gel, baking soda and rice last (DoItYourself.com, n.d.).

So the humble answer was on the hardware shelf the whole time. We walked past it to the aisle with the lights and the brand names.

Ours was a dehumidifier too. It ran two summers in our cabin, then the compressor quit the same August week the back room smelled the worst. We hauled it to the curb and set a bucket of salt where it had stood. I have not bought another one since.

The Grandfather Test: before you buy, fix or depend on anything, ask one question. *Would this still work with no power, no store and no repairman for a week?* If the answer is no, you need a second way.

Bills, gadgets and the dependence built into both

A gadget and a monthly bill are two faces of the same deal. Each one trades your skill for somebody else's system. That trade feels fine while the system runs. The cost shows up later, in the refill you must reorder, the part that is back-ordered and the service call that costs more than the machine did.

The frontier ran the other way. On the Great Plains, settlers built sod houses with walls usually 2 to 3 feet thick. That mass of earth kept them cool in summer and warm in winter. It mattered because firewood was so scarce they burned corncobs, twisted grass and dried buffalo dung (Wikipedia, "Sod house," n.d.). They could not buy their way out of a problem, so they designed the problem out of the house.

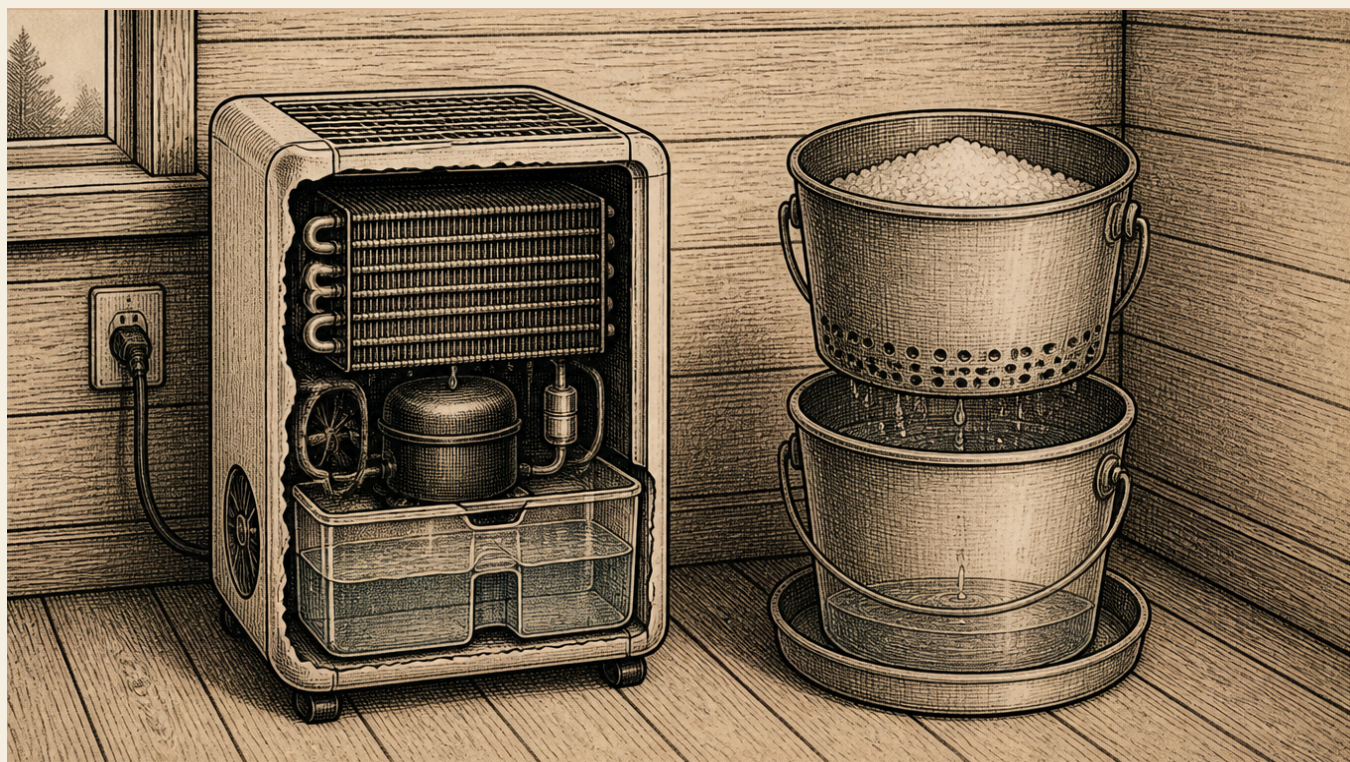
2 to 3 feet of packed earth in a sod house wall did the work that a modern furnace and a monthly bill do today (Wikipedia, "Sod house," n.d.).

Even the old fuels carry a bill, and I won't pretend otherwise. Retail heating kerosene in the U.S. typically runs about \$3.00 to \$5.50 a gallon in 2026, before delivery²³. What separates a frontier method from a modern dependence is simple. You can store it, you understand it, and you control when you use it. A man with a full can of kerosene and a heater he knows how to run safely is in a different position from a man waiting on the power company. We cover safe heater use, ventilation and carbon monoxide alarms properly in Chapter 18. Until then, never run any fuel-burning heater in a closed room without fresh air and a working CO alarm.

Real people are already making this swap. On the Budget101 community site, do-it-yourselfers describe a **5-gallon-bucket calcium chloride setup** as a cheap stand-in for buying tub refills for basements and outbuildings (Budget101, n.d.). On the Forest River RV forums, owners who winterize their rigs report that after a couple of months the calcium chloride containers are half full of water. They also say the musty smell is gone when they open up in spring (Forest River Forums, n.d.).

That is a machine's whole job, done by a bucket.

A word of care before anyone reaches for a bag. Calcium chloride irritates skin and eyes, so wear rubber gloves and safety glasses when you pour it. Keep it where children and pets cannot reach it. The brine it makes will corrode metal and stain floors, so set any container on a tray or in a second bucket, never straight on wood or near tools. We build the proper two-bucket version, step by step, in Chapter 8.



The night the machine failed at the exact wrong moment

Every man who has lived out past the end of the pavement has a version of this night.

Case (illustrative): Picture a cabin owner in January. An ice storm drops a line at dusk. The electric heater goes dark, the well pump stops and the dehumidifier falls silent. By midnight he is standing in the kitchen with a flashlight, working out which of his machines he could run without power. The answer is none of them.

The storm is not the lesson. Storms are ordinary. The lesson is that every one of his answers ran through the same wire, so they all failed together.

Experienced off-grid people plan around exactly this. The standard advice is to keep **two sources for every essential**, heat above all. A propane heater backing up a wood stove is one common pairing (The Cool Down, n.d.). One homeowner in a remote Maine cabin, writing on Reddit after a fifth winter there, called it a dream life. He still stressed keeping backup systems, especially for heat (The Cool Down, n.d.).

The old methods come with a catch, and I will be honest about it. They ask something of you. One newcomer to wood heat wrote that a stove is nothing like a thermostat. You build the fire slowly and in stages, you tend it, and you only learn it with practice (Sara Burdick, Substack, n.d.). That is the price of independence: a little attention, paid every day, in place of a bill paid every month.

A cabin owner on the TractorByNet forum put the damp problem plainly. His place stays damp and turns very damp in wet springs. He was weighing charcoal against the store-bought tubs to fight mold in a building with no heat (TractorByNet, n.d.). He had put his finger on the real question. He did not ask what to buy. He asked what would still be working while he was gone.

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A tool you understand will outlast a tool you merely own.

What this book asks of you, and what it doesn't

This book will not ask you to throw out your furnace, cancel the power or move into a dugout. It will not ask you to dress like a trapper or buy a wall of gear. Most of the methods in these pages cost a few dollars and an afternoon.

It asks for three things.

First, **honesty about numbers**. Where a method has a real figure, I will give it to you with its source. Where the old-timers believed something that turned out to be wrong, I will say so. Several popular "survival" tricks do more harm than good, and we will take them apart.

Second, **one small job at a time**. You finish a thing before you start the next. The homesteaders who last are the ones who kept their projects small.

Third, **respect for danger**. Fire, fuel, chemicals, cold and animals can kill you. Every method in this book that carries a physical risk will come with its safety rule right beside it, never in a footnote.

Your Dependence List (do this tonight, 20 minutes):

- ✓ Walk every room with a pencil and a sheet of paper.
- ✓ Write down each machine or service that solves a problem: heat, light, water, dryness, food storage.
- ✓ Beside each one, write what happens if the power is out for three days.
- ✓ Circle every line where the answer is "nothing works."
- ✓ Keep the sheet. The circled lines are your curriculum for this book.

KEY TAKEAWAYS

- ▶ **Run the Grandfather Test** on every appliance you rely on. Ask whether it would work for a week with no power, no store and no repairman.
- ▶ **Keep two ways to meet every essential**, starting with heat, so that one failure never becomes a crisis.
- ▶ **Choose the humble answer first.** A bucket of calcium chloride, handled with gloves and eye protection and kept away from kids and pets, can do the steady job of an electric dehumidifier.
- ▶ **Write down what things really cost**, fuel included, so you are deciding with numbers and not with the salesman's promise.
- ▶ **Finish your Dependence List before Chapter 2.** Every circled line is a skill you are about to learn.

Here is the uncomfortable part. Your grandfather knew most of this without a book. So did his neighbors. So how did a whole country's worth of practical know-how disappear in a single generation, and why did nobody think to write it down before it was gone?