Fuel, Clothing & Shelter

Fuel

Key technical elements to compare SOLAR UNITS:

Watts (Total watts it can handle at a given time)

Wh (Watt hours, capacity, or how much total charge it can hold)

Charging Input Max (how many panels/watts it can have charging it at a time - usually between 300W and 900W (latter can charge battery in as little as three hours of sun)

Battery Type (lead core may last around 300 cycles/charges, lithium 500 or more and LiFePO4 as many as 3000+ cycles/charges)

Traditional Fuels:

It's nearly impossible to safely store a year's supply of traditional fuels, which may include, propane, butane, gasoline, alcohols, etc. It's recommended to store a 2 to 4 week supply of these fuels. Storing a variety of traditional fuels can be good but that denatured alcohol is the best all around for cost and efficiency. Gas generators consume at least 20 gallons a day, so 280 gallons for 14 days.

Solar Generator Recommendations: (the longer-term key to the fuel problem)

500W - ROCKPALS Portable Power Station, 500Wh, Lithium ($400)

700W - Bluetti EB55 with LifePO4 ($460 unit only)

800W - BLUETTI Portable Power Station EB70S, 700Wh ($599)

1000W - Jackery 1000W ($1000 gen-$1500 incl two panels- can't use other brand panels)

1000W - Bluetti EB150 1500 Wh/1000 W ($799), Lithium ion 2500 cycles, 500W charging input.

Live Event Recording

2000W - Bluetti AC 200 Max 2048Wh/2000W EXPANDABLE to 8,192Wh with LiFePO4, 900W Max Solar charging Input, ($2,000 Retail, $1,650 if join bulk order), 3,500 cycles. Best on market. Base generator can sustainably power large hotplates, mini fridge or freezer, small heater, several lights, battery/phone recharging, small microwave or toaster oven, and power tool uses.

3000W - Bluetti AC300, 3,072 Wh ($3,700). Only a better value than the AC200Max if expanding to 6000W or more ($5,600, 6000W)

Solar panels - Proprietary panels expensive, generic can be $1/watt. Used 250W solar panels available for $62 plus shipping best deal found.

Clothing (Refer to Google Doc QR link for individual item details) NO COTTON !

Clothing Layering - Best materials include: **Polyester, Nylon, Wool & Spandex.**

Waterproof
Windproof
Wicking
Weight
Warmth

Base Layer (>60 degrees) - Light color to reflect sunlight on hot days. Polyester, nylon or wool best for wicking.

Mid Layer (>40 degrees) - Polyester, ECWCS - military grade by far best product for this layer

Third Inner Layer for extreme temps (below 40 degrees) - Fleece jacket (no cotton)

Outer Layer (Essential to stop wind, rain & snow) - Windproof, waterproof & breathable shell UNINSULATED, lightweight, breathable nylon rain jacket. NOT a ski parka.

Shoes - Weight, waterproof and good soles.

Socks - Smartwool brand, extra heavy is the best. Other high merino wool content thick socks also good. Polyester socks good for warm weather.

Hat - Windproof essential, usually poly. Even thin, but thicker windproof poly hats good also. NO COTTON!

Shelter

Tents - Weight is the largest determining factor for tents.

Tent Tarps (Rain Fly/Tarp) - Waterproof ground to ground tarp that is lightweight.
A good ground to ground rain fly/tarp is more valuable than the tent itself - wind/water barrier.
Rain tarps that come with tents are not usually good. It's recommended to buy tarp separately.

72 Hour Backpacks - At least 15 liter size pack for kids and 50+ liters for adults.
Lightweight packs with chest and waist straps are best.

Sleeping bags - Weight and temperature rating are determining factors.

Sleeping pads - Minimum of a 4 R-value (insulation) important, or ground will pull heat from you.
A good insulating sleeping pad is as important an investment as the sleeping bag itself.

Product Info Link

R-Value / Temperature Rating Comparison

R-Value	1.2	1.4	1.6	1.7	2.1	2.5	2.9	3.2	4	4.1	4.6	4.9	5.3	5.9	6	6.4	7	8	9.5
Fahrenheit	48°	48°	46°	41°	36°	34°	28°	23°	12°	10°	5°	1°	-4°	-11°	-13°	-18°	-26°	-36°	-54°

Recommended R-Value between 4 & 8