

CHOOSING CLOTHING SURVIVAL GUIDE

Layer smart. Stay dry. Stay alive.



LAYER

SHELL

DRY

REPAIR

KNOWLEDGE • SKILL • DISCIPLINE • SURVIVAL

Independent educational field guide • verify current laws, local conditions, and expert guidance

READ THE RISK, THEN CHOOSE THE LEAST COSTLY SAFE MOVE

How to Use This Guide

Survival work is a sequence, not a shopping list. Stabilize exposure, establish a clean water routine, protect fire and sleep, then spend energy on upgrades that reduce future work. Adapt every method to local terrain, law, weather, wildfire restrictions, wildlife rules, and your actual training.

1 STOP Check injury, weather, daylight, and exit.	2 STAY DRY Rain and sweat defeat insulation quickly.	3 BUILD SYSTEMS Water, wood, sleep, repair, and sanitation reset daily.	4 SAVE CALORIES Short lanes and boring routines beat heroic chores.
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IMPORTANT SAFETY NOTE

This material is educational. It does not replace hands-on instruction, emergency medical care, official water-treatment directions, local fire orders, or site-specific avalanche, flood, tree-fall, wildlife, and weather guidance.

FIELD CARD

SURVIVAL PRIORITY

1
 Stabilize exposure before spending calories on upgrades.

2
 Build repeatable water, fire, sleep, repair, and sanitation systems.

3
 Check current local rules and verify every high-risk method.

VENT • LAYER • DRY

RESET: vent • dry • repair • protect sleep set

REGULATE HEAT BEFORE CLOTHING BECOMES WET INSULATION

Clothing as a Survival System

Clothing must move moisture, trap air, block weather, fit without restricting circulation, and remain repairable. The goal is not maximum warmth at all times. It is controlled warmth across hard work, rest, wind, rain, and sleep.

OPERATING RULES - Start slightly cool before hard movement and vent early. - Add insulation before stopping, not after shivering begins. - Protect one dry sleep set whenever conditions allow. - Keep rain and wind layers accessible, not buried beneath camp. - Dry, repair, and rotate clothing as a daily system. - Treat hats, neckwear, gloves, and vents as fast temperature controls.	FIT AND SYSTEM CHECK - Layers need room to trap air without compressing loft. - Boots and gloves must allow circulation and liner changes. - Cuffs, waistbands, harnesses, and pack straps should not create pressure points. - Test the full system while bending, chopping, kneeling, climbing, and wearing a pack. - Make zippers, hoods, cuffs, and pockets usable in gloves. - Keep loose fabric away from flame, saws, axes, and rotating equipment.
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CLOTHING RULE

The warmest garment is the one that still has loft, and the driest layer is the one you did not sweat through.

FIELD CARD

CLOTHING AS A SURVIVAL SYSTEM

1

Start slightly cool before hard movement and vent early.

2

Add insulation before stopping, not after shivering begins.

3

Protect one dry sleep set whenever conditions allow.

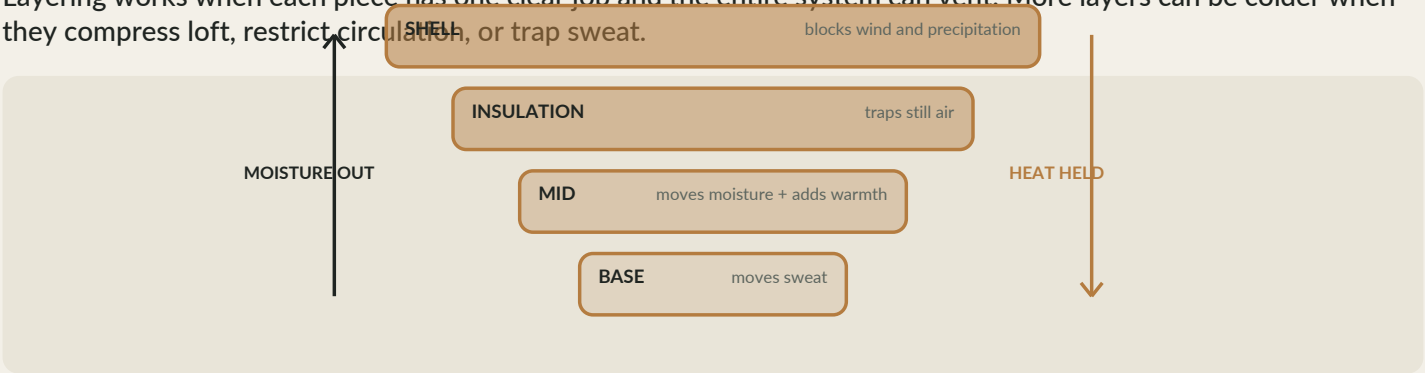
VENT • LAYER • DRY

RESET: vent • dry • repair • protect sleep set

MOVE MOISTURE OUTWARD AND KEEP WEATHER OUTSIDE

Layering Architecture

Layering works when each piece has one clear job and the entire system can vent. More layers can be colder when they compress loft, restrict circulation, or trap sweat.



BASE TO SHELL • Base: manages sweat and reduces clammy skin contact. • Active mid: transports moisture and adds flexible warmth. • Insulation: traps still air during low output and cold exposure. • Shell: blocks wind, rain, and snow while vents release excess heat. • Head, hands, feet, and lower body need the same modular logic.	SYSTEM CONTROLS • Front zip, pit zips, side zips, cuffs, hood, waist, and hem are temperature controls. • Open before sweating; close before chilling. • Use removable hat, neck, and hand layers for fast adjustment. • Do not expect a waterproof membrane to transport unlimited vapor during hard work. • Add an overlayer at the first minute of a stop while the body is still warm.
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VENT EARLY

Moisture management begins before sweat is visible. Once insulation is wet, the drying bill arrives with interest.

FIELD CARD

LAYERING ARCHITECTURE

1

Base: manages sweat and reduces clammy skin contact.

2

Active mid: transports moisture and adds flexible warmth.

3

Insulation: traps still air during low output and cold exposure.

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CHOOSE BY CLIMATE, OUTPUT, DRYING TIME, AND FAILURE MODE

Fabric Selection

Materials trade warmth, drying speed, odor, durability, flame sensitivity, bulk, and cost. Good systems blend materials rather than treating one fabric as a religion.

MATERIAL	BEST AT	WATCH FOR
Wool	Odor control, warmth when damp, broad comfort range	Slow drying in heavy weights; abrasion
Synthetic knit or fleece	Fast drying, hard activity, lower cost	Odor retention; melts near sparks and radiant heat
Down	Highest warmth-to-weight when kept dry	Major performance loss when soaked
Synthetic insulation	Reliable damp-weather loft	Bulk and gradual loft loss from compression
Cotton	Hot, dry camp comfort only	Holds water and chills in cold or wet conditions
Leather	Durable hand and foot protection	Needs slow drying, conditioning, and fit room

WOOL AND BLENDS

- Merino works well next to skin; heavier woven wool offers durable midlayer protection.
- Wool remains useful when damp and generally tolerates sparks better than many synthetics.
- Thick wool can become heavy and slow to dry after saturation.
- Protect elbows, cuffs, shoulders, knees, and seat from abrasion.

SYNTHETICS, DOWN, AND FLAME

- Synthetic knits and fleece dry quickly and perform well for high output.
- Many synthetic fabrics melt or shrink near flame. Keep them away from sparks, stoves, and radiant heat.
- Down is excellent when moisture can be controlled; synthetic insulation is often safer in persistent wet.
- Choose the material by the consequence of getting it wet, not by catalog adjectives.

FIELD CARD

FABRIC SELECTION

1

Merino works well next to skin; heavier woven wool offers durable midlayer protection.

2

Wool remains useful when damp and generally tolerates sparks better than many synthetics.

3

Thick wool can become heavy and slow to dry after saturation.

VENT • LAYER • DRY

RESET: vent • dry • repair • protect sleep set

WARM ENOUGH TO MOVE, BREATHABLE ENOUGH TO STAY DRY

Base Layers and Active Midlayers

Base layers should fit close without binding and move moisture. Active midlayers handle moderate output in cool weather. Weight and ventilation should match the work, not the morning temperature alone.

BASE LAYERS - Use merino, synthetic, or a tested blend; avoid cotton in cold and wet conditions. - Choose flat seams, a nonrestrictive waist, and a top with a deep venting zip. - Use lighter weights for hard movement and heavier weights for low activity or sleep. - Change into a dry sleep base layer before bedding. - Rotate, air, or rinse work layers when drying conditions exist. - Patch holes early with flat stitches that do not rub skin.	ACTIVE MIDLAYERS - Fleece, grid fleece, wool shirts, and breathable synthetic jackets are common options. - Choose full or deep front zips and low-bulk cuffs and shoulders. - Protect delicate fleece with a durable work layer in brush or around tools. - A light wind shirt can reduce convective loss with less condensation than a full rain shell. - If the midlayer is drenched at every stop, vent earlier or wear less insulation. - Add the static layer immediately when output ends.
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BASE RULE

A base layer is a moisture tool, not an insulation contest. The wrong weight can soak every layer above it.

FIELD CARD

BASE LAYERS AND ACTIVE MIDLAYERS

1

Use merino, synthetic, or a tested blend; avoid cotton in cold and wet conditions.

2

Choose flat seams, a nonrestrictive waist, and a top with a deep venting zip.

3

Use lighter weights for hard movement and heavier weights for low activity or sleep.

VENT • LAYER • DRY

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TRAP AIR DURING REST WITHOUT TRAPPING WATER

Insulation Layers

Insulation is most valuable during low activity, wind exposure, camp chores, and emergencies. Put it on before cooling. Keep it dry, preserve loft, and select fill by the likelihood and consequence of saturation.

DOWN AND SYNTHETIC - Down: excellent warmth-to-weight and compressibility; demands disciplined moisture protection. - Synthetic: retains more useful warmth when damp and often dries faster; bulkier and gradually loses loft. - Store lofted garments uncompressed when possible. - Use durable shell protection around brush, sparks, grease, and sharp tools. - Choose an over-jacket cut that fits over active layers without crushing them.	WOOL, PILE, AND USE - Wool and pile are breathable, repairable, and tolerant of damp; they are heavy when saturated. - Full or two-way zips and large arm openings improve use over work clothing. - Add insulation at the first minute of every rest stop. - Remove it before hard movement restarts. - Use a dry sitting pad or bench so the garment is not asked to insulate against wet ground. - Protect static insulation as carefully as the sleeping bag.
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STOP LAYER

The correct time to add insulation is while you are still warm enough to warm the garment.

FIELD CARD

INSULATION LAYERS

1

Down: excellent warmth-to-weight and compressibility; demands disciplined moisture protection.

2

Synthetic: retains more useful warmth when damp and often dries faster; bulkier and gradually...

3

Store lofted garments uncompressed when possible.

VENT • LAYER • DRY

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WEATHERPROOF ENOUGH OUTSIDE, BREATHABLE ENOUGH INSIDE

Shells, Rain Protection, and Lower Body

A shell manages wind and precipitation while mechanical vents manage the vapor the body produces. Fit, hood design, closures, durability, and venting matter as much as membrane marketing.

SHELL FEATURES - Adjustable hood with useful brim and head movement. - Pit or side zips for real heat dumping. - Cuffs large enough for gloves but sealable against runoff. - Hem and waist compatible with rain pants or bibs. - Reinforced shoulders, elbows, knees, seat, and lower legs where abrasion is constant. - Repairable face fabric and access to patches or seam tape.	LOWER-BODY SYSTEM - Use a wicking base, durable active pant, and rain or wind protection. - Articulated knees and a gusseted crotch improve movement. - Vents reduce sweat during climbing and wood work. - Full or long side zips allow rain pants over boots. - Bibs improve overlap but complicate sanitation and venting. - Avoid tight thighs, waistbands, and stacked layers that restrict circulation.
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SHELL REALITY

A shell is not a climate-controlled room. It is weather armor with zippers. Use the zippers.

FIELD CARD

SHELLS, RAIN PROTECTION, AND LOWER BODY

1

Adjustable hood with useful brim and head movement.

2

Pit or side zips for real heat dumping.

3

Cuffs large enough for gloves but sealable against runoff.

VENT • LAYER • DRY

RESET: vent • dry • repair • protect sleep set

FAST CONTROLS FOR HEAT, DEXTERITY, CIRCULATION, AND SKIN

Head, Hands, and Feet

Headwear, neckwear, gloves, socks, boots, and gaiters are modular systems. Protect at least one dry hand and foot reserve, and inspect skin before small problems alter movement.

HEAD AND HANDS • Use a light wicking cap for movement and a warm hat for stops and sleep. • Add a hood for wind and precipitation; use neckwear that can vent and dry quickly. • Hand system: liner glove, durable work glove, insulated glove or mitt, and waterproof overmitt. • Mitts are warmer; gloves provide dexterity. Use both rather than forcing one pair to do everything. • Dry gloves from the inside out and keep leather away from hard heat. • Store one dry liner or mitt system with sleep clothing.	SOCKS, BOOTS, AND GAITERS • Use a tested merino or synthetic sock system without folds or excessive stacking. • Boots need toe room, heel hold, swelling allowance, and circulation with the intended socks. • Remove and dry insoles daily when possible. • Use insulating insoles to reduce ground conduction. • Gaiters block snow, mud, rain, and brush at the cuff; inspect straps and buckles. • Check feet daily for hot spots, blisters, maceration, numbness, discoloration, and circulation.
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FOOT RULE

Warm feet require room. Adding socks until the boot becomes tight can make the feet colder by reducing circulation.

FIELD CARD

HEAD, HANDS, AND FEET

1

Use a light wicking cap for movement and a warm hat for stops and sleep.

2

Add a hood for wind and precipitation; use neckwear that can vent and dry quickly.

3

Hand system: liner glove, durable work glove, insulated glove or mitt, and waterproof overmitt.

VENT • LAYER • DRY

RESET: vent • dry • repair • protect sleep set

CHANGE THE SYSTEM BEFORE THE ACTIVITY CHANGES YOU

Moisture Management by Activity

The same clothing should not be worn the same way while hiking, chopping, sitting, sleeping, and standing in rain. Adjust at transitions, not twenty minutes afterward.

ACTIVITY	STARTING SYSTEM	TRANSITION ACTION
Fast travel / climbing	Light base, breathable mid or wind layer, vents open	Slow down or remove layers before heavy sweat
Wood processing	Durable work layer, eye and hand protection, minimal insulation	Add warm overlayer immediately when stopping
Steady rain travel	Base + light mid + vented shell; rain pants as needed	Open mechanical vents; protect dry camp insulation
Camp chores	Drier active layers; wind protection; task gloves	Rotate wet items to rack; keep sleep set untouched
Long rest / glassing	Static insulation, weather shell, dry seat	Protect hands, feet, and head before cooling
Sleep	Dry base, dry socks, clean compatible insulation	Vent moisture; keep wet work clothing outside bedding

START COOL

- Begin movement slightly cool, especially uphill or under load.
- Use hat, gloves, neckwear, and vents as quick controls before removing core layers.
- Keep rain protection accessible for sudden exposure.
- Reduce pace when the system cannot move moisture fast enough.

STOP WARM

- Add insulation before cooling begins.
- Replace wet gloves, socks, and headwear.
- Open the shell briefly to vent vapor when precipitation allows.
- Eat and hydrate before shivering starts.
- Move wet layers to a rack rather than into bedding.

FIELD CARD

MOISTURE MANAGEMENT BY ACTIVITY

1

Begin movement slightly cool, especially uphill or under load.

2

Use hat, gloves, neckwear, and vents as quick controls before removing core layers.

3

Keep rain protection accessible for sudden exposure.

VENT • LAYER • DRY

RESET: vent • dry • repair • protect sleep set

CLOTHING ONLY PERFORMS WHEN THE MAINTENANCE SYSTEM DOES

Drying, Repair, Rotation, and Selection

Drying uses airflow, mild heat, time, and rotation. Hard heat can melt synthetics, shrink leather, damage membranes, destroy adhesives, and ignite fabric. Repair small failures before weather turns them into equipment loss.

DRY, ROTATE, REPAIR - Press water from wool and insulation rather than aggressive wringing. - Open zips, pockets, cuffs, boots, and removable liners. - Hang with airflow and rotate inside-out. - Maintain work set, camp recovery set, and protected sleep reserve. - Carry needles, strong thread, patches, repair tape, seam sealer, spare laces, cord locks, and safety pins. - Clean and dry surfaces before adhesive repair; round patch corners and extend beyond damage.	SELECTION AND FIT TEST - Choose for the coldest rest, wettest work, highest output, and longest drying time expected. - Test all layers together without compressing insulation. - Raise arms, squat, kneel, and wear the actual pack. - Test boots with intended socks after feet have warmed and swollen. - Operate hoods, vents, zips, cuffs, gloves, and pockets with cold hands. - Nothing should create pressure points, snag tools, or expose delicate fabric to sparks.
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REPAIR HOUR

Small tears become major losses when cold and wet have a vote. Schedule repair before the item forces the meeting.

FIELD CARD

DRYING, REPAIR, ROTATION, AND SELECTION

1

Press water from wool and insulation rather than aggressive wringing.

2

Open zips, pockets, cuffs, boots, and removable liners.

3

Hang with airflow and rotate inside-out.

VENT • LAYER • DRY

RESET: vent • dry • repair • protect sleep set

BUILD FOR THE WORST CREDIBLE TRANSITION, NOT THE AVERAGE FORECAST

Climate and Activity Selection Matrix

Use the matrix as a planning start, then adjust for physiology, shelter, trip length, rescue access, and the actual drying environment.

CONDITION	PRIORITY	SYSTEM EMPHASIS
Cold + dry	Loft and wind control	Wicking base; breathable mid; high-loft insulation; windproof shell; warm mitts and boots
Cold + wet	Dry reserve and damp-tolerant materials	Multiple bases; fleece or wool; synthetic insulation; durable rain shell; overmitts; gaiters
Warm + wet	Ventilation and skin management	Light base; minimal mid; highly vented rain shell; quick-dry pants; foot rotation
High wind	Seal gaps without sweating	Wind layer or shell; adjustable hood, cuffs, hem; face and hand protection
Low activity	Insulate before cooling	Oversized static layer; insulated lower body; dry seat; mitts; warm headwear
Heavy work	Moisture escape and durability	Light base; vents; abrasion layer; task gloves; immediate stop layer

CORE CHECKLIST

- Base layers and dry sleep reserve.
- Active midlayer and static insulation.
- Rain shell and lower-body weather protection.
- Work pants and durable task layer.
- Light and warm headwear; neck protection.
- Liners, work gloves, insulated mitts or overmitts.
- Multiple sock systems, boots, gaiters, insulating insoles.
- Repair and drying kit.

RED FLAGS

- Cotton or saturated insulation in cold wet exposure.
- Tight boots, gloves, waistbands, or stacked socks.
- No dry sleep set or backup hand system.
- Shell buried where sudden weather cannot be reached.
- Hard drying heat or unattended clothing near flame.
- Numbness, confusion, uncontrollable shivering, loss of coordination, or unusual behavior: stop exposure and seek emergency care.

FIELD CARD

CLIMATE AND ACTIVITY SELECTION MATRIX

1

Base layers and dry sleep reserve.

2

Active midlayer and static insulation.

3

Rain shell and lower-body weather protection.

VENT • LAYER • DRY

RESET: vent • dry • repair • protect sleep set

USE, INSPECT, RESET, AND VERIFY

Field Checklist and Sources

This guide consolidates the project’s long-duration ALONE-style field-manual iterations and updates high-risk claims with current public-health, fire-safety, cold-stress, and Leave No Trace guidance. Practice before relying on any skill and check current local orders at the point of use.

FINAL CHECK ❑ Full system fits without compressing insulation or circulation ❑ Vents, zips, hoods, cuffs, pockets, and pack interfaces work with gloves ❑ Dry sleep base, socks, headwear, and emergency insulation protected ❑ Hands and feet have modular task, insulation, and weather layers	FINAL CHECK ❑ Rain and wind protection accessible before conditions change ❑ Wet items drying with airflow and safe heat separation ❑ Damage, hot spots, numbness, and fit problems corrected before the next work block
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AUTHORITATIVE REFERENCES

Occupational Safety and Health Administration: [Cold Stress Guide](#)
Centers for Disease Control and Prevention: [Carbon Monoxide Poisoning](#)

USE WITH JUDGMENT

Independent educational fieldcraft reference. Not affiliated with or endorsed by the television series ALONE, its producers, broadcasters, or participants. Local rules and emergency guidance always control.

FIELD CARD

PRACTICE BEFORE DEPENDENCE

1

Full system fits without compressing insulation or circulation

2

Vents, zips, hoods, cuffs, pockets, and pack interfaces work with gloves

3

Dry sleep base, socks, headwear, and emergency insulation protected

VENT • LAYER • DRY

RESET: vent • dry • repair • protect sleep set