



The Camp Bed - Part 2

By Steve Watts and David Wescott, 2025

The good camper prides himself not on his ability to endure hardships but on his ability to make himself comfortable where ingenuity and resourcefulness are required. He knows that any tenderfoot can lie out on the frozen and rocky ground and rise stiff and sore and sleepy, with a grouch and no energy the next day for the day's activities. The experienced woodsman it is who is particular about his bed and who knows that time spent in preparing it is a wise insurance for the next days' work. There is a good deal of art in making the camp bed... an experienced camper always takes pains to get a good night's rest, and the more experienced he is the more care he will take in preparing his bed.

Winter Camping, 1917

Two-thirds of the effectiveness of a sleeping combination relates to the [bedding] and one-third to the mattress and bed.

Mors Kochanski

Whether you go to the woods to rough it or to smooth it, a good nights sleep should never be missed. How you deal with the problem of creating a comfortable bed is a measure of one's woodcraft. If you choose to sleep on the

ground, you encounter a number of problems that come into play from moisture control to loss of heat through conduction. When choosing to utilize a cot, hammock or stretcher bed, the mechanics of how to create a taught bed while minimizing heat loss through convection now become the problems. Either way you go, you need to know what it takes to get a good night's sleep. Part 2 will focus on the importance of making a good bed.



CAMP BEDS

FOR SLEEPING IN TENTS OR SHELTERS.

In cold weather make your bed on the ground so no cold draft can get under you.

For SOLID COMFORT dig a trench for hips and shoulders and lay your bedding over it. A 2" or 3" deep trench will suffice for hips.

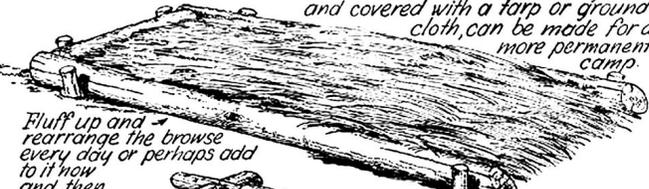
A SIMPLE MATTRESS can be made with a piece of canvas, ground cloth or a blanket folded over dry grass or leaves.



A BETTER ONE is a bag that can be filled with dry browse.

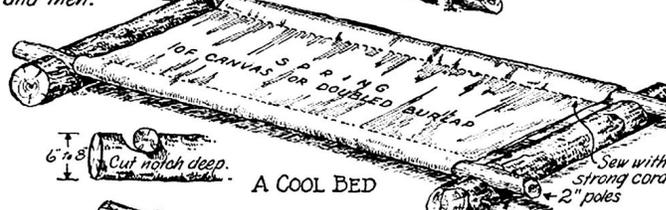


Mattresses can be made of any light material, such as muslin. You may want a hip trench even when using a mattress pad.



A LOG BED filled with soft dry browse and covered with a tarp or ground cloth, can be made for a more permanent camp.

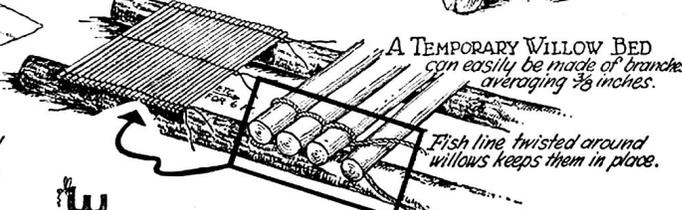
Fluff up and rearrange the browse every day or perhaps add to it now and then.



A COOL BED

6" x 8" Cut notch deep.

Sew with strong cord. - 2" poles



A TEMPORARY WILLOW BED can easily be made of branches averaging 3/8 inches.

Fish line twisted around willows keeps them in place.

A waterproof ground cloth is a good thing to use at any time of the year.

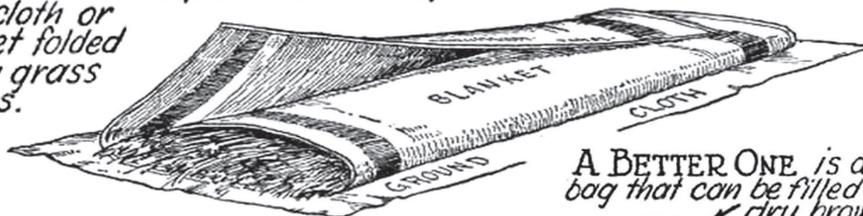
PART 2



This panel is adapted from the original Camp Beds illustration by W. Ben Hunt, from Boy's Life, February 1950.

The Browse Bag or Tick

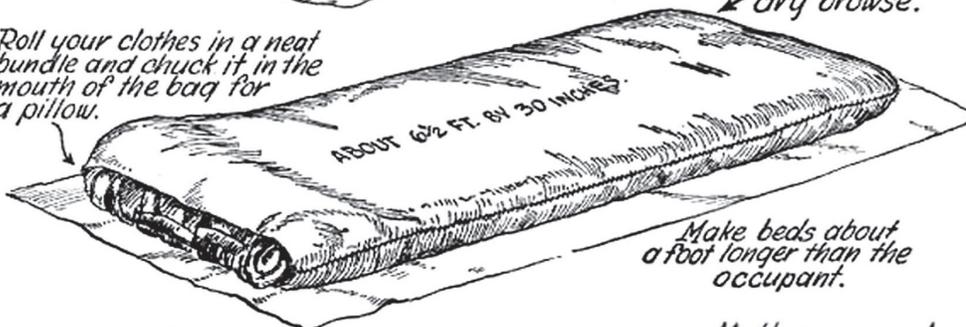
A SIMPLE MATTRESS
can be made with a piece of canvas,
ground cloth or
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In cold weather make
your bed on the ground
so no cold draft can
get under you.

A BETTER ONE is a
bag that can be filled with
dry browse.

Roll your clothes in a neat
bundle and chuck it in the
mouth of the bag for
a pillow.



A waterproof ground cloth
is a good thing to use at
any time of the year.

About 6 1/2 feet by 30 inches.

Mattresses can be made of any
light material, such as muslin.
You may want a hip trench even
when using a mattress pad.



A shelter without a mattress is no shelter at all.

Alan Kay

Lost Arts To A Modern World

Ben Hunt was an illustrator for the BSA from 1942 to 1962, contributing over 1,000 articles, for an average of three to four panels per issue of the *Boy's Life* magazine. Following in the footsteps of Dan Beard, Ben was a direct link to a legacy of frontier traditions and skills. His art was echoed by contemporaries such as Eric Sloane and Ellsworth Jaeger. One problem of carrying the old skills into a modern world was the impact they created when used inappropriately by too many enthusiasts.

*No camper is justified in "slaying" a young forest,
merely to find a comfortable place to sleep...*

Frank H. Cheley, 1933

The call to a life outdoors by authors like Elmer Kreps (*Camp and Trail Methods*, 1910) - *Much of the pleasure of camping is derived from taking things as we find them, of sleeping on a bed of boughs rather than a cot, sitting on an old log rather than on a folding camp chair, and of eating off of the ground rather than from a table* - was silenced in the early 1970s

when an attempt was made by the Boy Scouts to appeal to urban youth and "treat the real problems of real boys in the 1970s", resulting in "the worst Scout Handbook ever produced".

At the same time modern manufacturing was developing so many gadgets and lightweight technology for the growing number of backpackers and LNT enthusiasts, that many of the old tricks of the outdoorsman were feared lost. These new developments were really a two-edged sword. The 70's also gave us lots of new information about life outdoors through books like Gene Fears *Surviving the Unexpected Wilderness Emergency* and Gerry Cunningham's booklet *How To Keep Warm*, teaching both how not to die as well as the theory and science behind staying comfortable under any conditions.

Cunningham's little booklet was a trove of information stemming from research and development of outdoor safety knowledge by the 10th Mountain Division and The Army Air Core. The QMC graph shown below is the source for many camping and survival articles relating to insulation based on activity - here referring to hard work, walking, standing, sitting and sleeping. As it relates to this article, we now know that a minimum of 4" of loft is needed to stay warm while sleeping in cold temperatures, while Kochanski interpreted this to 4" of compressed insulation to stop conduction or convection under a bed.

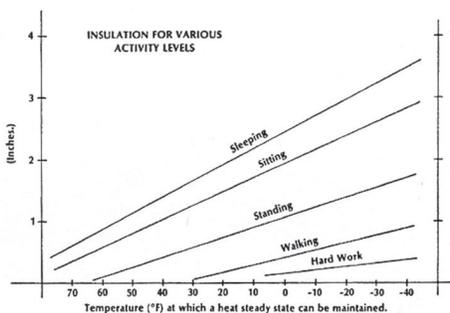


Chart illustrates how insulation thickness and activity relate.
Developed by the Quartermaster Corp.

Insulation

Mors also noted that at 4 inches - a minimum of a hands-width - modern sleeping pads lose any advantage for warmth or comfort over natural materials – “All materials cease to provide any higher insulative value beyond this compressed thickness.” With information like this, modern “bushcrafters” have taken to the hills with a simple cloth bag into which they can stuff leaf litter and browse, minimizing their impact while still working with what the outdoors has to offer. The modern market has since rediscovered the blessing of hot tent camping and down quilts, sparking a renaissance of interest in traditional skills and knowledge.



Grass mats used to line the floor of a Super Shelter allow campers to sleep directly on frozen ground without bedding at 10°F.

... a narrow bed-tick, filled with browse, or with grass or leaves where there is no browse, in combination with a rubber blanket or poncho, makes a better mattress than the Father of his Country had on many a weary night. Horace Kephart, 1908



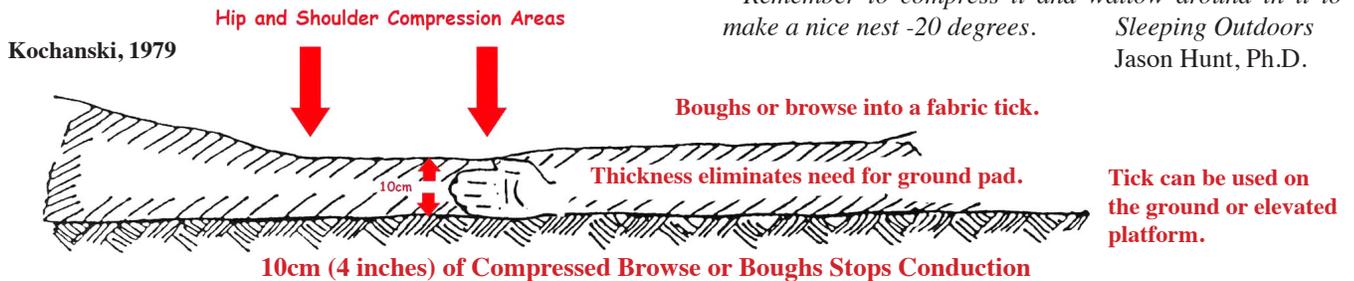
A straw tick can be made from any sheeting, 30” wide (60” folded and sewn) by 7’ long. Stuff it so full that it looks like you’ll roll off the side until it’s compressed. Make sure to put a vapor barrier underneath.

Anyone can fake it and suffer through one night on the ground. The second night is a testament to what they learned from the first night’s suffering....it won’t happen again.

I was plenty warm because it takes 4” of compressed insulation just to block conduction. To battle conduction and convection, look at your arm.

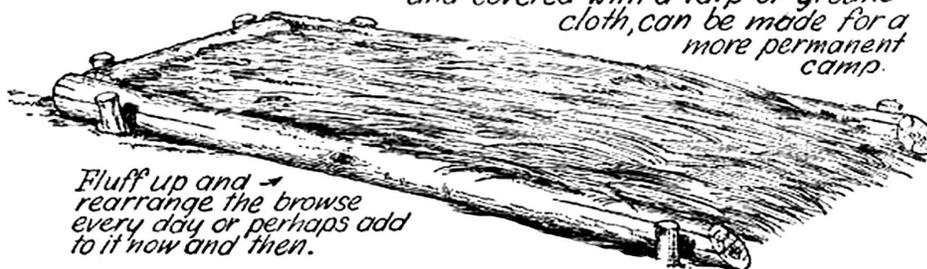
- At wrist depth, you have enough insulation to get you through cool nights.
- At elbow deep, you have enough for cold nights. Late fall, early winter and spring.
- Armpit deep is what you need when the temperatures are below freezing.
- Remember to compress it and wallow around in it to make a nice nest -20 degrees.

Sleeping Outdoors
Jason Hunt, Ph.D.



Insulated Ground Bed

A LOG BED filled with soft dry browse and covered with a tarp or ground cloth, can be made for a more permanent camp.



Fluff up and rearrange the browse every day or perhaps add to it now and then.

Structures may be made from dead and down materials for a permanent camp but must be completely dismantled before leaving.

Make beds about a foot longer than the occupant.



Raised Beds



Give a man a good bed and he will do more, do it better, and have a lot more fun doing it than his neighbor who throws himself down anywhere and upon anything....

The Way of the Woods – Edward Breck 1908

A tick can be used on the ground, snow or raised platform.

“It is not he who praises Nature, but he who lies continually on her breast and is satisfied who is actually united to her.” Olive Shriener, 1916

The second law of thermodynamics states that heat is attracted to cold. If you lie in contact with the ground, you will lose heat uncontrollably through conduction. In fact, you will lose three times the amount of heat to the ground as you do to the air. This means that you need three times more insulation under you than over you. Insulation efficiency may be increased by materials that reduce the conduction of heat and moisture. A good ground bed or pad can't be discounted.

Modern ground pads will never match the comfort of a primitive bed, but when impact to fragile areas is the alternative, we need to consider their value and weigh the consequences of using either.

When outdoors always sleep on the earth for comfort. Make your bed there as comfortable as time and circumstances will permit. If the ground is cold, or wet, or covered with snow, you must provide some kind of a foundation. It may be of hay, straw, weeds, brush, corn stalks or fence rails, but in any event stick to the ground. Don't roost on a perch like a chicken and get every breath of air that blows and chills you from every side.

H.H. Soule (Seneca) 1891

Raised Beds

Suspending bedding on a cot, hammock or stretcher allows air to move freely around the body, convecting warm air away from the bed. Beds that suspend the body are notoriously cold, requiring almost as much insulation as one would use on the ground.

There are literally hundreds of descriptions and testimonials of the virtues of the stretcher bed. *The Tent Dwellers* describes how great they thought their nightly bedsteads were - so comfortable (of course it rained almost daily,

so wet ground and bedding were a poor alternative). Designs that would never work are common in many woodcraft volumes – poles suspended in mid-air, frames that would never withstand the forces created by a sleeping camper, etc. So, what actually does work.

There are 4 basic requirements:

1. A fabric that will support your weight and not stretch too far.
2. Poles that are thin enough to pass through the sleeves, yet stout enough to resist sagging.
3. Some sort of head and foot stretcher that will remain in place without too much engineering.
4. The ability to insulate the camper.

If comfort is your goal, and good browse and dry ground are available, use them. If it's cold and dry, stay close to the ground but insulate yourself as convection in a suspended bed will cool you as fast as uninsulated ground. If it's wet and there is nowhere dry to sleep, then by all means try the stretcher or hammock. Just remember to practice this skill. The forces and vectors created by the poles and fabric allow the bed to sag and deform in all sorts of ways if you don't know what to expect.

Pros and Cons of Raised Beds

Pros -

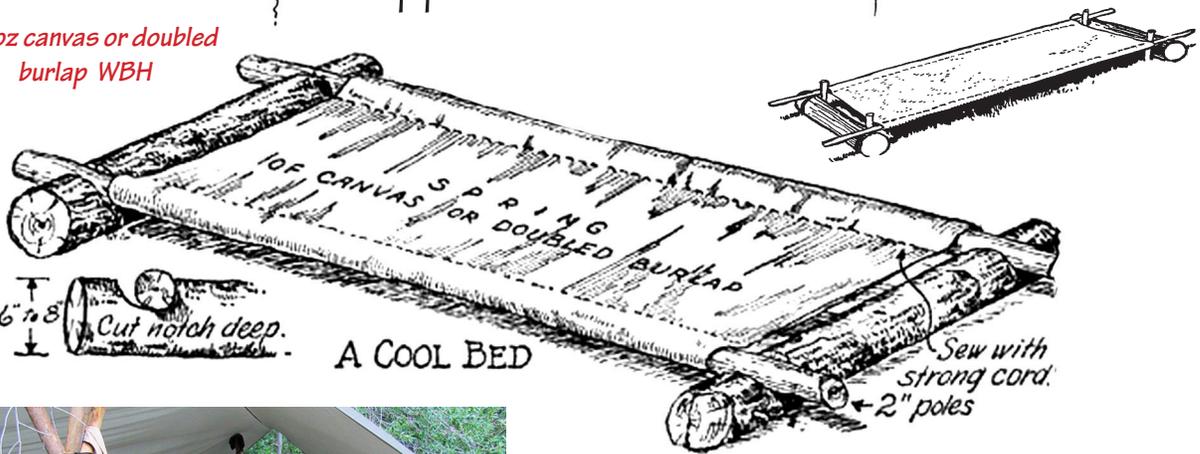
- Great for areas with crawling critters.
- Dry, Dry, Dry.
- Perfect when age makes the ground farther away than it used to be.
- Springy poles can create a softer bed.
- A chair-high bed in a shelter makes living in stormy weather bearable.

Cons -

- Requires poles to be cut.
- A fair bit of engineering may be involved.
- Difficult to move unless built to do so.
- A tick is quicker and easier on all counts.

Trapper or Stretcher Beds

10 oz canvas or doubled
burlap WBH



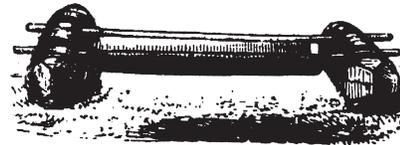
A COOL BED

Sew with
strong cord.
← 2" poles



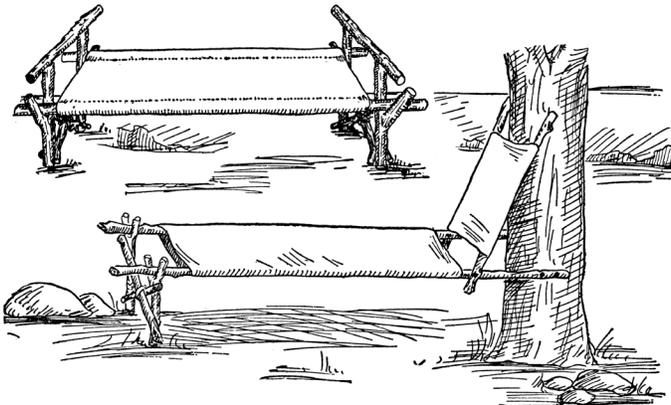
An elevated stretcher set up on tripods, similar
to ones made popular by Warren Miller.
Set up at Woodsmoke 2012.

Stretcher beds are made from a piece of canvas.
35" wide by 7' long. 4" wide pockets are sewn down
each side to allow poles to be inserted and held
in place by notched logs at each end. Tripods, A-
frames, stakes or cross poles at the ends can also
be used to keep the bed stretched.



There is an ancient partner of mine, an old side-kick who often goes to the wars with me, and he seldom overlooks an opportunity to remind me that I am constitutionally lazy, not to say averse to the vigorous use of the axe. (So I am, except for good and specific reasons.) He tells me that I would rather scratch browse around the woods like a chicken than cut me a good stretcher bed pole frame with the axe like a man, and that that is the real reason why he so seldom finds me inhabiting a stretcher bed. I plead guilty. I have slept in almost every contrivance on the market, and in not a few home-made inventions, in a laudable effort to avoid scratching browse or, worse yet,

knocking off the powdery snow from a few innocent balsams and denuding them forthwith of all their soft, feathery plumage in order to provide comfort for the family when the snow is knee-deep and the blizzard is roaring outside the tent. Except for the standard camp-cot, which is very flat and comfortable, most stretcher-bed devices are apt to become like canvas bathtubs in shape, and are altogether too prone to fold the sleeper up in himself until he resembles a human sardine to entice me into using them overmuch, and this is the real reason why I avoid them, not because of the labor of cutting a few paltry poles.
Warren H. Miller, 1915



Just a couple of the many stretcher variations.

How-To Sources – Here are a couple of interesting tutorials to watch. The first one is a modification of a classic stretcher bed. The second is Kelly Harlton and Mors Kochanski building a movable raised bed. If you are interested in the equipment history part of this article, be sure to visit Sarge Vinings *History of Camp Gear*, WW2 series.

- Canterbury Stretcher Bed Setup
https://www.youtube.com/watch?v=Sw_U-V7cwZA
- Bough Bed to Stretcher - Kochanski and Harlton
<https://www.youtube.com/watch?v=rMwyRr-9cLfE&t=46s> - This is a great bushcraft design.
- Sarge Vining History videos
<https://www.youtube.com/@sargevining>

The Debris Nest

By Vern Page, © 2025

One's health and comfort in camp depend very much upon what kind of bed he has. In nothing does a tenderfoot show more discreditably than in his disregard of the essentials of a good night's rest. Horace Kephart,

The focus of this article is on comfort rather than survival; however, the principles are the same. This is a ground bed that works with simple pieces of equipment you might have and is a direct application of the principles discussed in Parts 1 & 2 of this article. SW/DW

The debris nest sleeping system is designed to protect an individual(s) from the natural elements. The debris nest consists of dry insulation under a protective covering that an individual can crawl into. It is constructed in such a way as to be warmed by the occupant's body heat (although heated stones or other heated heavy objects can be added for additional warmth) - heated objects can be placed to provide maximum heat effectiveness. It applies the survival adage, "do as the animals do".

The debris nest sleeping system (DNSS) provides:

- 1. Cold protection** – the system is built small so it can be warmed by body heat.
- 2. Precipitation protection** – the system has a waterproof covering or is constructed in a naturally protected location.
- 3. Wind protection** – the system is designed to allow little to no air from the outside to move into or through the nest.

- Clear a comfortable level area 7'X 3'.
- Dig a trench 3" to 4" deep on three sides of the cleared area.
- Stake/bury the cover into the trench on one side.
- Pull the cover material over the bed, but do not stretch it tight. Keep loose enough to allow for feet and plenty of insulation.
- Fix the foot of the cover in place, but leave the second side unstaked until ground cover/bough bed has been laid.
- A log placed at head end of nest will enclose the bedding material.
- Lay 2" to 4" of insulation on the ground inside the framed nest (i.e. dry pine needles, leaves, mosses, etc.).
- Construct a bough bed that is made from the soft ends of fir branches starting at the head end log and moving down to the feet.
- Place soil, duff or logs into trenches to seal from air flow.
- Stuff insulation (dry leaves, needles, grasses, cattail seeds, etc.) into enclosed feet and leg area. Mixing different materials often will improve the efficiency of the insulation.
- For insulating upper body: (a) place a pile of insulation outside nest's open end, (b) carefully slip into nest and get comfortable, (c) then place insulation, from outside pile, around torso, neck, and head.

