



The Jervenbag™

An Arctic Lifesaver



JervenGallery



Due to the Jervenbag, the Jerven Company has changed outdoor life



that was so flexible that it could be used for almost anything



photos that show great ingenuity. A product that takes care of



The only condition is that you always carry it with you!



By the way; new photos can be sent to jarle@jerven.no We just love to share..



for more than 100,000 users. The idea was to design a product



proven by the photos we receive from users around the world;



large and small, two and four-legged anytime, anywhere...



Explore the world with the Jervenbag and remember your camera!



...all your fantastic, creative use of the Jervenbag..:-) Thanks in advance...! 3



JERVEN

JERVEN TEXTILE

Reflective PU Alu coated technology

Original



Forest item-no: 1000
Mountain item-no: 1002
Orange item-no: 1003

The single, light Jervenbag, (without lining), which ought to be your steady companion on every trip. It's large enough to sit in - and excellent as a raincape -both for you and your rucksack.

Areas of use: Small game hunting, fishing, trips in woods and mountains. It's for easy tours during the milder seasons. It produces condensation.

Measurements as a bag:
143x143 cm
Weight: About 650 grams.



Figuren er
180 cm høy.

Thermo PRIMALOFT 60 g/m²

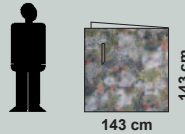


Forest item-no: 1006
Mountain item-no: 1007

Same as the Jervenbag, Original, but lined and wadded with PrimaLoft. Warmer and more snug, and the condensation problem is gone.

The same also applies to all of the Thermo-bags. If you are 1,90m (6'2") tall or taller, in your stockings, you ought to chose a larger Jervenbag. For all-year use.

Measurements as a bag:
143x143 cm.
PrimaLoft 60 g/m².
Weight: About 1300 grams.



Hunter PRIMALOFT 60 g/m²

Insulation Technology



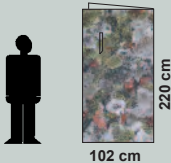
Forest item-no: 1034
Mountain item-no: 1033
Desert item-no: 1040
White item-no: 1043
Orange item-no: 1032

This is the big game hunter's best friend. This one is so long that you may lay in it.

The Jervenbag Hunter has become the Military's most popular model. Use it as a poncho, bag, sleeping-bag/ sleeping bag reinforcement.

For all-year use.

Measurements as a bag:
102x220 cm.
PrimaLoft 60 g/m².
Weight: About 1500 grams.



Extreme PRIMALOFT 170 g/m²

Insulation Technology



Forest item-no: 1030
Mountain item-no: 1031
Orange item-no: 1035

Identical to the Jervenbag Hunter, but this one has an extra thick wadding.

It's a special bag, which preferably is being used as an extra warm bag, or as a sleeping bag/ sleeping bag re-inforcement. For all-year use.

Measurements as a bag:
102x220 cm.
PrimaLoft 170 g/m².
Weight: About 2000 grams.



The Jervenbag®



Insulation Technology

Mini-Hunter PRIMALOFT 60 g/m²

Insulation Technology



Forest item-no: 1042
Mountain item-no: 1041

Identical to the Hunter, but is narrower and shorter. Ideal for persons 170 cm - 5'7" tall, or shorter. Use it as a poncho, bag (or in stead of sleeping bag).

For all-year use.

Measurements as a bag:
93x185 cm.
PrimaLoft 60 g/m².
Weight: About 1300 grams.

Delivered with Rescue flag, Arming, packing strap and compression bag



93 cm

185 cm

King Size PRIMALOFT 60 g/m²

Insulation Technology



Forest item-no: 1020
Mountain item-no: 1021
Orange item-no: 1026

This one gives room for two persons or as a handy bag-tent for one. This is the right Jervenbag for you, who want to have room for most. It's the first choice for many expeditions, also to the South-Pole. For all-year use.

Measurements as a bag:
143x220 cm.
PrimaLoft 60 g/m².
Weight: About 1900 grams.

Delivered with Rescue flag, Arming, packing strap and compression bag



143 cm

220 cm

The Jervenbag Exclusive (With silicone coated zippers)



Mountain item no: 1090

Silicone coated zippers, and the possibility to connect with PrimaLoft Sport insulation.

On Exclusive, you can tie in either a 60 or a 170 gram PrimaLoft padded lining.

All-year-round use:

Measures when used as wind breaker: 102x220 cm.

Weight: 750 gram.

Delivered with belt and belpouch, rescue flag and Arming.

The padded lining for the Jervenbag Exclusive is sold separately and comes with a compression bag.

It's easy to carry and easy to fasten on the outside of your rucksack.



item no: 1091
Primaloft 60 g/m2
(weight 850 grams)

item no: 1092
Primaloft 170 g/m2
(weight 1450 grams)



170 g/m²

60 g/m²

PRIMALOFT
Insulation Technology



102 cm

220 cm

... and here is how to use it

This is how the Jervenbag should look before leaving home:

Zipper A: Large opening (entrance)

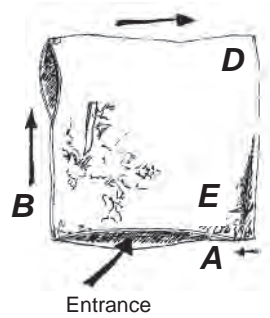
Zipper B: Small opening (window)

Zipper C: Closed

The arrows show the zipper closing direction.

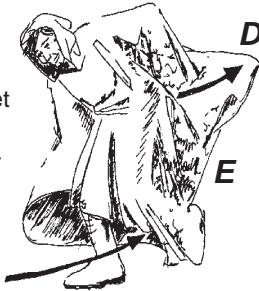
Follow this simple diagram, and you'll always be able to tell up from down and won't have to start doing up zippers with frozen fingers. **Note that the procedure is the same when used as a poncho and windproof bag.**

Important!



Windproof bag

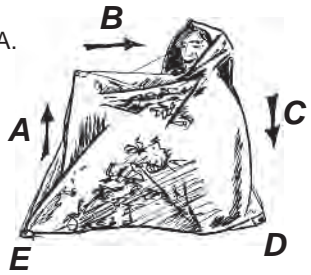
Pull the Jervenbag over your head and slip your feet into corner E. Bend forward, pushing your behind into the corner D.



Sit down and close zipper A.

The whole procedure take barely 15 seconds. Practice at home (it's no fun trying to

read instructions in a gale force wind)



..or poncho

Tie a knot here if the poncho is too long at the back.

A – completely open

B – small opening

C – completely closed



Using the Jervenbag King Size as a poncho, use the strap as a belt. (applicable for people less than 2,5 tall!!!)



We combine our innovations with ideas and experiences from our suppliers around the world, to deliver products with remarkable quality and maximum comfort. The collection of products for 2013, are our best ever...

Our customized Jerven fabrics are so incredibly strong that you can lift a hefty fifty pounds with a two inch strip of Jerven fabric. This fabric has been fire-tested and approved by the SIFO (The National Institute for Consumer Research).

In 2011 we have upgraded all our Jervenbag thermal products with PrimaLoft Sport insulation. Basically PrimaLoft gives you more warmth and less packing volume. Under wet conditions PrimaLoft has better properties than down, making it the ideal insulation material for a product that is designed to protect against rain and freezing conditions. ...

Over many years the Jerven Company has been using nothing else but the world's best zippers from YKK. Our latest model, the Jervenbag Exclusive, has silicone-coated zippers, specially designed for the Jerven Company. It's important for us to constantly improve and optimize the Jervenbag.

A Jervenbag is designed to increase and give comfort to you in your outdoor life.

And we guarantee that it does!

JERVENTEXTILE™
Reflective PU Alu coated technology

PRIMALOFT™
Insulation Technology

YKK
Little zippers. Big differences.



Our invention from 1982, the very first Jervenbag

Photo: Tom Daae

The Jervenbag™ Original

A piece waterproof of fabric, with zippers around the edges. Aluminium-coated on one side, camouflage colored on the other. A big enough poncho, big enough to be used as a wind sack - for sitting in it.

That's the way it all started, and The Jervenbag Original has been, and will remain unchanged! To put it in another way; the wheel cannot get to be more round.

Admittedly, we have made several new models of The Jervenbag, but those will always be in addition to, not instead of The Jervenbag Original. This the single layer, light Jervenbag, which is permanent contents in the backpack. And that's the trength. It's there! The minus is, that it creates condensation. The outer-fabric is completely tight, but that is deliberate. Breathing materials are not tight enough when you're sitting in the soaking wet marsh. In addition, the materials let out heat.

Oh, well. When you don't want to carry more than 600 grams, that's what you get. Yet, a single layer bag is still a thousand times better than no bag! This is the bag for the small game hunter, the fisherman, the hiker and others, who are spending time outdoors.



Skarvheimen: Bodil Daae was the summer of 2011 on a 19-day trip through Aurlandsdalen, Skarvheimen, Jotunheimen and Breheimen in Norway. With her on this adventurous trip she had The Jervenbag Original, and her husband & photographer: Tom Daae.

The Jervenbag™ Thermo

This is the same bag as The Jervenbag Original, about 1,45 x 1,45 meters, folded as a bag. And, it's lined and wadded with PrimaLoft.

That means, that it is not only heat reflecting, but also heat insulating. In addition we have almost eliminated the condensation problem.

During testing in the winter of `2010 we had, inside The Jervenbag Thermo with Primaloft, a rise in temperature of unbelievable 30 °C. Outdoor temperature -15° C. and inside the Jervenbag +15° C.

The only heat source was the person inside the bag!

The Jervenbag Original reached +9 C. in the same test.

Outdoor temperature: -14°C
Inside the Jervenbag: +15°C





*The Jervenbag makes the outdoor waiting-ours more comfortable..
Photo: Samu Sinervo, www.varusteleka.com*

Some tips for you:

Lower sweating speed and walk til you are dry and warm, before sitting down.

If you have the opportunity, be seated inside the Jervenbag before you begin to freeze.

Do not fire for crows. Get your feet on the inside and “close the door” (the zipper in the bottom of the Jervenbag). If you dont want muddy shoes in the bag, just place a couple of plastic bags over them.

If you are staying in the Jervenabag for a while, it’s sometimes good to take off the boots, and instead use some light and roomy slippers.

Photo: Stein Ø. Nilsen





Campfires: We have no documentation on this issue, but some youngsters claim that the Jervenbag enhances the taste of potato chips ...(!)

The Jervenbag™ Mini-Hunter

Identical to the Jervenbag Hunter, but shorter and narrower - about 94 x 186 cm – 37” x 6’3” as a bag. It’s perfect for all persons shorter than 170 cm - 5’7”.

During the later years Hunter has become an obvious favourite among all who are engaged in big game hunting. We are now introducing the same bag, in a smaller format, the Mini-Hunter. This results – for the shorter of us - (the ones who are shorter than 170 cm, 5’7”) get a two to three hundred grams lighter rucksack.

Otherwise the Mini-Hunter is 100 % identical to the “big brother”, the Hunter. Mini Hunter are delivered in mountain camouflage colours, only.



Foto: Knut Nylend

You would never believe that these pictures have been taken in the same place only two hours apart – and you are correct, they weren't. But the weather can change very fast in the mountains, therefore do not forget your Jervenbag!



Foto: Johannes H. Sekse



The Jervенbag™ Hunter

This has become the "good-natured bag" for the hunter on watch...

..and that's not without reason. To be able to stretch your legs when the hours become long is worth its weight in gold. The measurements as a bag are 102 x 220 cm – 40" x 87".

Two-way, separable zippers offer a multitude of possibilities. It's light too. Weight only 1500 grams. The Jervенbag Thermo Hunter has become the Military's most popular model. Use it as a poncho, bag or sleeping/sleeping bag re-inforcement.

Available in 5 different variants:

Mountain, Forest and Desert camouflage, and White and Orange.

Which one is suitable for you?



Using The Jervenbag while on watch has a number of definite advantages:

1. **Camouflage:**

You are equal to the terrain, and you have lost the shape of a human being.

2. **Smell:**

Your body odour stays inside the bag. The odour is not so easily spread in the terrain.

3. **Movement:**

It is easier to sit still and quiet when you're staying warm. The more practical and comfortable you are, the easier it is to keep going. Should it become too comfortable, you might risk falling asleep. We have heard of several such cases.

4. **Sound:**

Let be chattering via the hunting radio in season and out of season. But, that has, strictly speaking, nothing to do with The Jervenbag. Simply had to mention it.

You may also use The Jerven Hunter bag this way. Stylish clothes!



The Jerven Hunter bag is 2,2 meters long, and you need a belt/pack strap around the waist. It functions well with a large sack under.



...and it is in fact no problem to use the gun. Mini skirts offer better walking steps.



NORWEGIAN COFFEE BREAK: *Norwegians share adventures, their coffee and of course, their Jervenbags...Photo: Birgit Ryningen, Norway.*

The Jervenbag™ King Size

It has been told about a guy from Odda, that he was too big to be human, and too small to be a troll.

Okay. Grown up guys shall also have a Jervenbag. The Jervenbag King Size is 143x220cm, connected as a bag. This normally gives room for two. Or, you may stretch out all you want and sleep a little. With such a large “single unit-dwelling” the options are many.

The insulation are the same as in the smaller Thermo bag, Primaloft Sport 60 g/m². If you are over 190 cm and 100 kilo, choose the KingSize.

The King Size is probably due to its size, the most useful bag. The possibility to stretch the legs and really rest is sometimes worth its weight in gold. If you turn the inside out, you'll have a warm quilt, for use at the cottage. Tie the closed bag up with rope on both eyelets-ends, and you get a simple tent.



The Jerven bag Fjellduken Extreme:

Extremely good extremist

We have become nicely acquainted with the Jerven bags earlier, and here is one of the most solid models, namely The Jerven bag, Thermo Extreme. The bag measures 100 x 220 cm, folded, and this sleeping bag like shape, combined with a strong 200 grams' (0.40 lbs) padding separates it from the others, (the common thermo bag has 80 grams per m²). This also eliminates much of the condensation, which tight bags will produce. The Bag has solid two-way zippers on three sides. The bag has – like the other models – a high degree of application options. Here you've got all in one, a bivouac sack, a tarp roof (half shelter), heating pouch for the dog, a sail for the canoe and even a sleeping bag. With the thick padding, you may namely, stand an overnight stop, until the snow flings begin to be of the dry kind.

The producer's promises of well over twenty warm degrees inside the bag, regardless of outdoor temperature, is perhaps a bit too optimistic, but warm it is. The shape of this bag folded is also preferable, contrary to the regular thermo model. It's tops when you shall sleep or lie still and look through the binoculars for long. You may also make the most of the bag while sitting. Weight and volume makes it possible to bring the bag as a replacement for tent and sleeping bag, and not as additional equipment. And that is the whole point with the commission that private Melkeråen at Jerven got from the Military. It takes up some space and weighs a little, but in return it does the job in Norway's demanding climate. Here it is not enough with thin, questionable silver paper blankets, with fancy names. The eyeholes may be leakage points, but they are necessary for the stretching of the bag, with elastic baggage straps, or as fastening points for tent pegs (only thin pegs will fit). I would think that sewn, outside loops would have done the trick, just as well. The Jerven bag, Thermo Extreme is a very good and most useful bag. If you're looking for a replacement for the tent and the sleeping bag, this is the model for you. The conclusion is, that as much as 5,5 whole reindeers are being offered to the "jervene" (wolverines)!([!]) (That is a play on words, since "jerv" in Norwegian means wolverine).

The Jerven bag, Thermo Extreme

Material: PU-coated polyester, thermo wadding. Measurements: 100 cm x 220 cm (folded)
Colors: Mountain Camou (flage), Forrest Camou (flage), olive green. Weight: 1900 grams (4.2 lbs). Price: NOK 2410. Producer: Jerven AS (tel. 53 64 20 18).

PLUS:

Shape, Solid, Warm,

MINUS:

Volume, Weight

Responsible for testing and photography: Cato Hemmingby

Tested by Norway's biggest hunting magazine



“A soldier, who stays dry and warm, performs better than one who is wet and cold.”

The Jervenbag™ Extreme

This variant of the Jervenbag was earlier developed upon a wish from the Military. “Make a Jervenbag which is warm enough to replace the sleeping bag at winter time.”

Well, some think we have succeeded, others don't. We have gotten feedback from avid open-air campers, who seem to be able to take the most of what you might throw at them of low temperatures. Others shiver when the night temperatures get close to + 5°C (41°F) If you use a light sleeping bag in addition, you ought to do just fine.

As a wind sack it is quite superior. When you sit in this bag, it is close to impossible to get under +20°C (68°F)!. About 25 degrees°C (77°F) is common. But, then you're awake. It will no be quite the same when you sleep. You will fall asleep, but you may also wake up rather early. Most of us are very spoiled with the comfortable quilt at home. In any case, it is definite alternative to the sleeping bag.

As windsack the Jervenbag Extreme is 102x220cm. It has Primaloft Sport 170 g/m² insulation. All the other insulated bags have 60 g/m²

Created for extreme conditions.

This solid herd was from nature side well prepared for -17° C degrees and extreme vind at Dovrefjell a few years back ..



The photographer was, however, delighted that he had the proper equipment: ***“- It could actually become scary without the Jervenbag that time, says Geir Otlo Jartveit. The Jervenbag saved me from a sudden, cold change in the weather.”***





When only the best is good enough... !

One small step for the Jervenbag evolution...one giant leap for your outdoor-life:

The Jervenbag Exclusive

I would think that an exquisite cognac and the high tech binoculars would enjoy being portrayed together with the Jerven Bag Exclusive - because we've never made a better product!..

The Jervenbag Exclusive has no padded lining. The PrimaLoft padded lining must be purchased separately and is available in both 60 g/m² and 170 g/m²

The padded lining may be zipped on to the outer bag. It may also be used as a sleeping bag. (Many people prefer this to a narrow, figure-shaped sleeping bag).

The measurements for the Jervenbag Exclusive are the same as on the bestselling model, "Hunter": 102 x 220 cm, zipped together as a Jervenbag.

Included with the Jervenbag Exclusive

Jerven Armings (arm protectors) are included with the Jervenbag Exclusive. You will be able to keep your sleeves dry with your arms through the openings of the Jervenbag. What is also convenient is using the bag during the butchering of an animal.

Jerven packing pouch, with belt and packing straps. Allows you to carry the Jervenbag Exclusive on short trips when you do not want to carry a rucksack.

The Jerven Rescue Flag is a 50x50cm orange reflective signal flag. There are ties in each corner - recommended by the Rescue Coordination Centre in Southern Norway.Sola/Norge. (Sea-King)



The padded lining is wrapped in compression bags.

The padded lining for the Jervenbag Exclusive is sold separately and comes with a pillow bag. The pillow bag has room for the Jervenbag Exclusive and its appropriate padding, if you want to have both items in the compressed bag.

It's easy to carry and easy to fasten on the outside of your rucksack.





On the Jerven Bag Thermo you have to use the openings for your arms.



On the Jerven Bag Hunter, Mini, Extreme, and Exclusive you can...



Buckle a belt around the bag, thus regulating the length...



Open up the long zipper ...all the way down to the belt..



Slip into the bag and stick your head out of..



the unzipped rear end of the bag.



You will then get a "skirt" or a "cape" in front of you,



which is a great place to keep your hands dry, or for your weapon if you so desire.



You have warm and dry hands - and a dry weapon



Remember that you must have lens protection on your binoculars...



so that they do not steam



The belt ensures that one may move freely at any time,...



FINLAND: Også finnene har oppdaget Jervenduken. Photo: Samu Sinervo / www.varusteika.com



Desert camouflage.



Mountain/Stone camouflage.



Forest/green camouflage.



Signal orange/Rescue-version



There are unbelievably many areas of use of the Jervenbag. These drawings offer some tips, and a number of drawings we have received from satisfied users bear witness of great inventiveness.



As for example as "sails" for a whole canoe party on tour



..or as a "thermal blanket" in connection with anaesthesia-operations of animals, as the one here from an operation at Norges Veterinærhøgskole (Norwegian Veterinary College).....



..or as a kite-chute, when you need quick crossing over snow- and iced-over mountain lakes.

Included with the Jervenbag is:

(included in price).

Arming.



Arming - well, what else should we call it?

This way you do avoid getting wet when you sit with your arms sticking out of the Jervenbag, and you avoid making a mess of yourself when you slaughter.

If you close it in one end, you may pick mountain cranberries and put them inside the armings.

That's what you'd need along with the game meat, in any case.

(Note! Arming are also being sold separate!)

Here is a new twist for the compression pouch.



All Jervenbags with PrimaLoft-lining is now being delivered with a **compression pouch**.

We think it is better with an oblong "sausage" than a round ball – it's easier to bring along, kind of.

It,s simple to pack. You ought to keep the pouch readily available under the sack lid, preferably.

Note! The compression pouch are being sold separate as well.

Rescueflag



We have made a signalflag that may be used to attract attention.

The flag is equipped with reflective material, which makes searches in dark nights almost as simple as searches in daylight.

Strings in the flag make it possible to fasten it anywhere. (Note! The flag is being sold separate.)

Packing-strap



With the oblong Jervenbags “Hunter”, “Mini-Hunter”, “King Size” and “Extreme”, a packing strap is included. The packing strap comes in handy.

You may carry it in your belt, when you are going to use the Jervenbag as rain gear – or as an extra “piece of clothing”, in case it gets cold.

Notice: With Exclusive a belt is included instead of a packing-strap

10 year warranty

Jerven is only using the best of raw materials in their production of the Jervenbags. Both raw materials and sewing work are being controlled carefully. Therefore we give a 10 year warranty against possible defects with the Jervenbag, which have to do with the materials and sewing work.

All claims/warranty matters shall be directed to, and be approved by the place of sale/dealer - where the product has been bought. They have to contact Jerven (main-office) and together we will find a solution.

So, what can you expect from the Jervenbag?

Always dry and warm? Broadly speaking, yes. But, that will to a large degree be up to your self. Provided you've followed what's going on, you will in this brochure find many tips as to how you should use the Jervenbag. You should still be aware of the fact that the construction does not give 100% protection against long-lasting rain. Zippers, eyes and seams are spots where the water might seep in, which brings us over to an important point:

Care and maintenance

Before you put out for the mountains, there is something you shall make into a steady routine: To check that your Jervenbag is impregnated and ready for use! It might just happen that you get stuck for a few hours – in really bad weather. Then you should absolutely have had your bag impregnated.

There are a number of usable impregnating mediums in the stores, and we have had good experiences with Kiwi Camp Dry m/ 13% silicon. It is a spray-on and costs about NOK130 per can (2006). Nowadays it should strictly speaking not be necessary to impregnate a brand new bag, since we use already impregnated zippers, but do check it anyway, to be on the safe side. Better “safe” than “sorry”, right? Use the impregnation over the entire bag, especially after washing. The water will then glance off and you may shake the bag almost completely dry, after having used it in rainy weather.



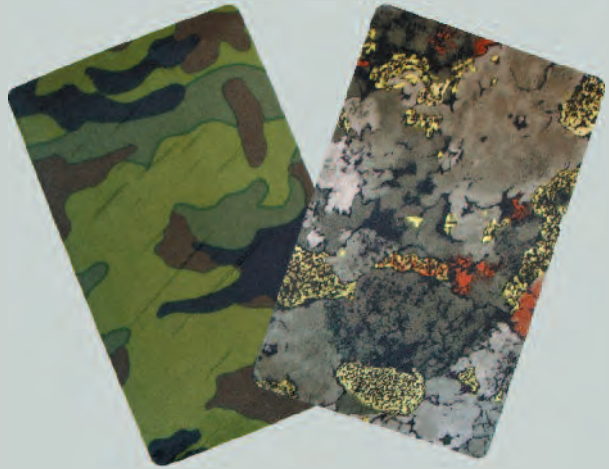
Washing and drying

Washing shall be done in lukewarm water, up to 30° C. - 86°F. Well, okay, 40°C – 110°F will do too,..... The Jervenbags should not be washed in a washing machine or be tumble-dried. But then, they may be tumble-dried, provided that you have used a very gentle washing program. But, by all means, do not use the spinning program! First, it is no point in trying to press water through a waterproof fabric. And secondly, the wadding in the Thermobags may be torn out of the seams and become lumpy.

Remember the impregnation after washing!

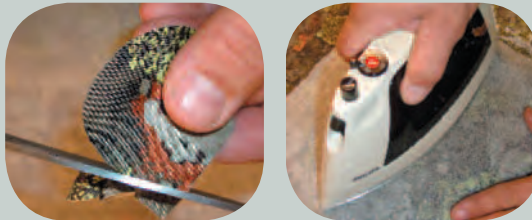


*Jerven-textile with adhesives.
7001: Mountain camo.
7002: Forest camo*



Holes and torn

We have now made some smart repair-kits, which you may use out in the field. This is a Jervenbag textile, with adhesives on the back. Should you get a hole in your bag, you just cut out the necessary piece of textile, with a pair of scissors or a knife, remove the cover paper and adhere it over the hole. Press and rub a little on the patch, since pressure and heat makes it fasten better. That's all. User instructions are included with the repair-kit.



Storage:

Store it dry and airy. Do not coil it hard. And, please remember, that if you should put away a coiled Jervenbag (this applies to tents as well) - it will look and smell like an old cheese!

Now you have been warned.

When things go wrong...

When you buy a new washing machine there is in most cases a page in the user instructions dealing with reasons for possible malfunctions. For example: The machine does not start? a) Plug in the power cord. b) Have you paid your electricity bill? c) Close the door to the machine.

Below we try the same tactics:

- Does it get soaking wet inside the Jervenbag when it is raining?



a) **The outer-fabric itself is not 100% waterproof?**

This is very seldom, but it may happen. In such a case it is cause for a claim. You may check this yourself, by pouring a few litres of water into the bag and let it hang for a few moments, in order to see if it is dripping through. If it is watertight, go on to the next point.

b) **The zippers may let water pass, and then it is spreading along the lining till everything is wet?**

To begin with, the zippers should be impregnated from the factory, but it does not hurt to help a little. Water may, furthermore, also trickle in through the seams – so, please impregnate seams and zippers before you go up in the mountains. This applies both to new and old bags. Use Kiwi Camp Dry m/13% silicon. It works. (The long seam in the back has been taped, so there is no danger there.) Other than that, you ought to spray some impregnation over the entire bag, because you may then be able to shake it almost dry, after having used it in rainy weather.

c) **The water comes in through the eyelets, etc, oh, well,... (hawking!)**

Zippers



The zippers in the Jervenbags are 6mm spiral-zippers of the best quality. It is difficult to destroy the spiral itself, but the gliders that you pull up and down may knock off, if they are exposed to excessive, rough treatment. But, do not despair, because such things may be replaced. For this you need a pair of pliers, since you must remove the stopper, which shall prevent the slider from falling out, and you must install a new stopper on the zippers.

But – a slider may be placed up or down, or back to front. Thus you have four possibilities. Only one is the correct one. And here we are at the core of the matter. If you take a closer look at the slider you will see that it is not indifferent how you tread it on to the spiral. You may also take a good look at the zippers that work, and then do it the same way!

Tip 1: Just spray some silicon on the zippers, when it is some degree of frost, and everything will glide so much better.



Tips 2: The eyes are practical for much, they do among other things see to a certain supply of air inside the bag. Loops on the other hand have a tendency to hook on to everything. But should you need loops in stead of eyes, for tent pegs, etc, just do as shown on the picture.

Winterseminar 2013, Gardermoen 4-6.february

NATO COLD WEATHER OPERATIONS

- Center of Excellence -



Illustrating photo:

Samu Sinervo - www.varusteleka.com

Jerven AS was in 2013, as one of few supplier participants invited to the winter seminar:

NATO COLD WEATHER OPERATIONS - center of excellence

This year the event, with more than 100 participants from a number of countries, focused on the difficult weatherconditions exploration personnel had after the tragic planecrash at Kebnekaise (SWEDEN), during NATO exercise "Cold Response" in March 2012.

After 30 years experience with The Jervenbag it was only natural for the Norwegian military organizers to invite Jerven AS to this seminar. This gave Jerven AS the opportunity to introduce the Jervenbag to international efforts- and rescue forces, including all NATO allies.

There are NATO numbers in a variety of models of the Jervenbag, with the Model Hunter as the obvious first choice for Norwegian and foreign soldiers. Some pleased soldiers have renamed the Jervenbag as "The Arctic Lifesaver.."



Insulation Technology

**Warmer - Softer - Drier
More compressible**



The U.S. Army gave Albany International the assignment to develop a water resistant synthetic insulation alternative til down. The result was PrimaLoft. Albany International became a leading supplier for PrimaLoft to the U.S. Army, Navy, and various other special forces. This gave them a tactical advantage over the enemy in extremely wet and cold areas. PrimaLoft's ultrafine fibers are water repellent and therefore retain their insulating properties, even in wet and extreme conditions.

The Jerven Company has since 1983 been a supplier for the Norwegian armed forces, as well as various NATO countries. Since then Jerven has provided its own country's soldiers and also allied soldiers with the Jervenbag. As the Jervenbag and our unique Jerven textile is now combined and complemented with PrimaLoft, we are talking about a product of the highest quality. There are none better!

"A soldier, who stays dry and warm, performs better that one who is wet and cold".
The same goes for hunters, base jumpers, or arctic explorers. (Info: www.primaloft.com)



The Armed Forces

The Army, the Navy, the Air force, The Norwegian

A soldier, who is dry and warm, performs better than one, who is wet and cold. Good tools make for half the job, and it would then be too bad, if our soldiers should not have just as good an equipment as Norwegian hunters do.

It began slowly, with various special units. But now, the Military is in a historic change, where its being emphasized, that Norwegian soldiers shall have the best of education, the best training and the best equipment there is. The number of soldiers is being greatly reduced, but the ones remaining shall be among the best in the World.

And they are!

Multinational forces meet, through commissions in various uneasy corners of the World. This way our allied within NATO has also opened their eyes for The Jerven bag. Both the Danish and the French special units have so far taken The Jerven bag in use.

Experienced mountaineers, and now we mean experienced, are of the opinion, that The Jerven bag ought to be just as mandatory an equipment in backpacks as the life jacket is in boats.

Whatever.

The Jerven bag is placed under the seat in the fighter plane F-16. Oh no, not as a parachute. As rescue equipment. It might happen, that the pilot would have to catapult. And if you then land, in inhospitable areas - far from people – in nasty and cold weather.

We include an excerpt from a letter from the brigade in Northern Norway:





use the Jervenbag™

Home Guard. They all use The Jervenbag.

Øverbygd 02.05.97
To Jerven

We are sending you a few words about how the Jegertroppen (the Specialist platoon) in Bn2 is using the Jerven bag in its service. This specialist platoon is the eyes and ears of the battalion, i.e. it performs field intelligence and monitoring.

Almost all of our soldiers have their own Jerven bag, and the most popular one is the King Size Thermo, with mountain camouflage. It is large enough for two, and warm enough for extreme weather conditions. The Mountain camouflage is very suitable during the winter times, and even better during the summer. The bag is also being used as a sleeping bag.

It is easy to pack and requires very little space. Since its very busy times for our specialist platoon when we're out training, we often sleep while we can, which may be on the snowmobile or on the terrain motorbike, during a possible break in the combat training, or when the patrol commander receives his orders. Then the Jerven bag is super to crawl into. It saves time and gives the specialist a possibility to catch up and regain some strength, without having to pitch a tent. While on patrol, on foot or on skis, the Jerven bag is fine to crawl into – during longer breaks or when eating smaller meals. As you may understand, the Jerven bag is contributing to making the military service considerably easier than it otherwise would have been. We, in the specialist platoon, Bn2, recommend the Jerven bag warmly.

It ought to be mandatory in every sack.

Best regards, the guys in the Specialist platoon.



HV-08 (The Norwegian Home Guard) – pioneers in the equipment field



A dry & warm soldier accomplishes more than one that is wet & cold. (Photo: Jerven)

After Jerven invented the concept and the product The Jerven Bag, in the beginning of the eighties, different models of The Jerven bag have become increasingly popular among Norwegian soldiers.

In May of 2004 Jerven delivers its hitherto largest order to the Norwegian Military; 4 000 units of The Jerven Bag model Hunter.

The soldiers in HV-08 in the Vatne Military camp at Sandnes, Norway are some of the many thousand Norwegian soldiers, who are using The Jerven Bag from Jerven.

Many things have happened after Jerven introduced the Jerven bag Original, at the wilderness trade fair Villmarksessen 1983. Today the Odda-based company offers a total of seven different models of The Jerven Bag, and also mountain tents and hunting clothing are included in the assortment of products. A few years ago the Military asked Jerven to develop a special bag, which could be used as a tent. The result has been launched under the brand name The Jerven Multimate bag. The play on words Multi-Mate and Ultimate, refers to the product's flexibility, a faithful follower in the mountains, as well as they made wit focus on quality rather than on cheap solutions.

When HV-08 in Sandnes, Norway was in the process of buying new Jerven bags, they chose The Jerven Bag Multimate. During the Jerven-demonstration at the Vatneleiren (Vatne military camp), the inventor, Audun Melkeråen explained and showed the soldiers the different details of the Jerven bags in general, and of the Multimate in particular. A planned short presentation turned into a full day, with practical test of and training on the Multimate bag, mostly because the HV-soldiers wanted the best possible information about these products. A consumer report on the Norwegian website “www.sluttstykke.com” shows, that 40 out of 59 norwegian hunters use The Jerven Bag while hunting. This shows what a position The Jerven Bag has created during 20 years among Norwegian hunters.

The inventor of The Jerven Bag is of the opinion, that the invention of The Jerven Bag in Norway has meant the most for the hunters during the later twenty years. Thus, Jerven AS receives exclusively positive postal and e-mail feedbacks every single year. Most write, that The Jerven Bag is a must when the backpack is to be packed, and many write, that The Jerven Bag has saved them from many dangerous situations, in connection with dramatic weather conditions and in cases of accidents, etc.

The Jerven Bag Multimate, as a wind sack is oblong, like a blanket bag. The size is 110 x 330 cm. On this advanced bag you make the lining off and on, as needed. Therefore, the Jerven Bag Multimate may be used as a single layer, unlined bag or as a warm thermo bag. In addition it is made in such a way, that you may make a freestanding two-person tunnel tent. As if that was not enough, the Jerven Bag Multimate may also be connected as a “bedroom” for The Mountain Igloo. The Jerven Bag Multimate also functions well as sleeping bag reinforcement.



“A soldier, who stays dry and warm performs better than one that is wet and cold ”

Good equipment is important A soldier, who stays dry and warm, performs better than one, who is wet and cold. Good tools makes for half the job, and it would then be too bad, if our soldiers should not have just as good an equipment as Norwegian hunters do, says Melkeråen. Following changes sketched out for the Military, its being emphasised that the Norwegian soldiers shall have the best education, the best training and the best equipment there is. And, in fight against low and freezing temperatures and precipitation of various kinds, nothing can compare with The Jerven Bag.

This being supported in an independent Sintef-report, which may be found on the website “www.jerven.no”. Several NATO-countries have opened their eyes for The Jerven Bag. The Jerven Bag has been placed under the seat in the fighter plane F-16 – oh, no, not as a parachute, but as rescue equipment. It might happen, that the pilot would have to parachute. And might land, in rather unfriendly environments – far from people – nasty and cold weather....

Butchering reindeer and testing the Jerven Bag.

The Hardangervidda 25-28/9-2009



I have slept like a log. Photo: Bjørn Yngve Eriksen

The hunting party of five people hanging out in the upper regions of Krokavasshadlet in the Kvennadalen valley were pretty frustrated when there was not a single reindeer in sight, either on the north or south side of the valley. Most of the herd at the time had gathered on the border between Vinje, Odda / Ullensvang and Røldal. From Brasfet to the southeast and Simletind to the southwest, but on the wrong side of the border. The temperature was down to zero degrees, meaning effective degrees (with the so-called chill factor in mind) down towards -10 to -15°C cold...

Hoping to find some reindeer we decided to try our luck as borderline hunters. In the early hours of 26 September we left Krokavasshadlet for Eltareen by the Urdavatnet lake, 1400 meters above sea level. On arrival we saw the herd, but they were moving fast with the wind up their butts, crossing the border by Urdavatnet. It was getting late, so four of us decided to spend the night in the open, while the fifth guy carried on to the Hellevass cabin.

The sky was clear, but there was a strong westerly gale blowing. It was not easy to find any shelter, so we just lay down on the ground in our Jervenbags. At three o'clock in the morning the weather changed to a mixture of rain and sleet. At the same time a mist set in..

Various Jerven products were thoroughly tested that night. We had different types of Jerven Bags. Two of us had the test version of the Jerven Bag Exclusive, one had Jerven Bag Extreme including the Jerven Bag Double (the old version) and the last guy had the Jerven Bag Thermo and a sleeping bag. None of us had adequate ground sheets, and the cold and chilly undergrowth left its mark on us.

Spending the night outdoors in a Jervenbag.

Person 1:

The Jerven Bag Thermo (143 x 143 cm) with sleeping bag. Had a nice and warm night, but had a problem finding a comfortable sleeping position. What I missed mostly that night was being able to stretch my legs

Person 2:

The Jerven Bag Extreme (102 x 220 cm) + the Jerven Double Bag (143 x143 cm). Lay right on the ground without a groundsheet. He kept warm at first, but got a bit cold around midnight. He covered the doubled Jerven Bag over himself as a blanket inside the Extreme. This did the trick and for the rest of the night he was warm and comfortable.

Person 3:

The Jerven Bag Exclusive (test model) (102x220) with 80 gram padding and waterproof (rubber) zippers. Lay on a 60x40 cm seating mat. It was cold and damp in the morning and I had to put a Jerven Mountain Man jacket over my legs. This worked well, but the comfort level could have been better.

Person 4:

The Jerven Bag Exclusive (test model) (102x220) with 200 gram padding and waterproof zippers and 80 gram thermo-padded lining as a cover. This worked great all night even though he was lying on the ground. (It got almost too warm .).

Our conclusion:

For optimal comfort when sleeping out in the open, we recommended:

- a) A Jerven Bag with full body length.
- b) A thick as possible groundsheet (preferably 2 cm foam) - placed inside the bag
- c) Fleece bag, mattress sheet, sleeping bag or something similar as well.
- d) Keep the zipper facing down towards the ground (under the groundsheet) for extra security in bad weather.

Testcrew: Peter Gravdal, Lars Nå, Steinar Lund & Arne Mæland. Odda / Hardanger.

(NOTICE: After this test the Insulation is renewed. 80 gr earlier, replaced with 60 g/m Primaloft Sport. - 200 gr earlier, replaced with 170 g/m2. Primaloft Sport. Primaloft is warmer, drier, softer and more compressible than down and other insulation)



Spending the night outdoors in the Jervenbag

Everyone ought to spend a night out in the open, under the stars – without a tent. Maybe philosophize a bit about life. Are we alone, or is there anybody out there? Are they just as macho as me?..



The Jervenbag, for spending the night outdoors.

In contrast to our previous models of the Jervenbag, the latest versions are lined with PrimaLoft. A big difference from “normal” polyester padded lining is that PrimaLoft does not absorb water. This means that fabric with PrimaLoft retains its insulating ability much better than the Jervenbags that don’t have PrimaLoft insulation. But remember, if you wrap yourself up in a bag which is 100% waterproof, you’re going to have a hard time getting rid of any condensation. Should you be missing sun and wind for the drying process, just read on, .

Combining a non-lined conventional sleeping bag with a Jervenbag is also a possibility. All you have to do is to unfold the Jervenbag and use it as shelter. The same applies to a non-lined Jervenbag Exclusive. Do not let the fabric come in contact with the sleeping bag, or else the sleeping bag will get soaking wet due to condensation. If you don’t believe this, you will find reference to this in the Natural Science Law of phase change from gas to liquid.

Is there a risk of rain at night, find some shelter. Although the Jervenbag is waterproof, it is not designed to be so.



Professional equipment is twice as fun. Photo Marius Nergård Pettersen

So, what about breathing inside the Jervenbag: “Can you for example suffocate with lack of air while sleeping inside the bag?” For safety, we asked an experts. There really is no danger. Your body is created in such way that you will wake up if you feel you are not getting enough air. Anyhow you should try to have a small opening in front of your nose. Fresh air is really okey..!

More tips for the outdoor outliers:

Wash your feet and put on clean stockings. Then you become faster warm. A jacuzzi in a nearby Mountain-lake is a good thing. (For the toughest).

For those who do not have the Jervenbag Exclusive: Make sure the zippers is well impregnated before before your mountain-trip, and remember that in the winter you should lubricate them with silicone, as you do on car doors. Then you will have functional zippers also in cold weather.

Put your sleeping pad into the Jervenbag, not beneath. Put your boots into the bag as well. Use your jacket as a blanket, it is hottest. A lightweight fleece blanket increases the effect and takes up little space, but how much bedding you need to have a good night sleep, you will have to find out yourself.

Try it! Sleeping pad is very important and it must be 1.5-2 cm thick. It is sometimes more important what you have under you, than over you. On snow, also use 2 cm thick sleeping pads. Air mattresses are colder.



Tested by Carsten Thies, Germany.
Official Yukon Quest photographer.

With a running length of 160mil between Whitehorse, Yukon territory, and Fairbanks, Alaska, through the harsh arctic winter, "The Yukon Quest" is considered as the world's toughest dogsled-race in the world.

"The Jervenbag – a life insurance"



- First I want to mention that the Jervenbag Thermo Extreme is the best addition to my equipment.

At the start of the YukonQuest 2007 I had no idea that it would become one of the coldest races ever. The first half of the race the temperatures were around -20 to -30 Celsius. Normal temperature for Canadas Yukon Territory and Alaska in Februar.

Mostly I used the bag to sit in while waiting next to the trail for mushers. Sometimes it took hours before a dogteam appeared. I kept all my layers on. Long heavy underwear, skipants, fleecepullover, light downjacket and my Refrigiwear Overall, belaclava and light gloves. As boots I used Sorels and if it was real cold, below -35, I use Bunnyboots. I left all my clothes on and crawled in the Jervenbag. At -30 it was so warm that I had to open the zipper. Soon the temperature dropped to -40, it was nice and comfortable in the bag that sometimes I dozed off. Since I wore my heavy Refrigiwear Overall I didn't use a ground sheet and I didn't miss it. No change when the temperature dropped to 49 below. I was sitting or laying in the bag without moving. On the Yukon River I used the bag directly on the snow, or I dug a little trench. In the hills I used spruce twigs as an insulation.

I didn't think of pitching a tent and I didn't miss my down sleepingbag, although in the long run a down sleepingbag will be more comfortable.

I never felt cold or miserable. The biggest disadvantage was the humidity inside, at all temperatures. I tried to use a candle. The candle was in an empty can which I held in my hands. It worked as far as it felt drier and more comfortable. But in the narrow bag I had to move carefully, I didn't want to set the bag on fire.

I also used the bag to change a shirt or socks. It was so much nicer to it inside than exposed to the cold. The zippers worked fine all the time, since I followed your advice and greased them with silicone grease.

I had hoped to store the cameras with me in the bag. But that was not easy, since the cold-soaked cameras would fog up immediately. Just like if you would take them into a cabin. I had to put the cameras into plastic bags to prevent them from condensation. Or I left them outside in a special camera backbag which I heat with chemical heating pads. I wished I had the Jervenbag Thermo Kingsize, since the Thermo Extreme was close to the limit. I am 187 cm and 92kg, the heavy wintergear added to the diameter. A bigger size would be a plus. The armings didn't fit over my arm with the downjacket on.



I wished I had the Jervenbag Thermo Kingsize, since the Thermo Extreme was close to the limit. I am 187 cm and 92kg, the heavy wintergear added to the diameter. A bigger size would be a plus. The armings didn't fit over my arm with the downjacket on.



When I traveled on the Quest trail by snowmachine it felt good to have the Jervenbag with me. I look at it as my most valuable piece of survival equipment. It sure helps you to stay warm. I don't want to miss it and I think it is a must for every trapper, hunter, dogmusher or snowmachiner who is outdoors at very low temperatures.

-This bag is a life insurance!

*Carsten Thies, official YukonQuest Photographer
Londoner Str. 40, 13349 Berlin, Germany
info@carstenthies.com*



Jerven participating at the annual-seminar for rescue crews at Ål, Southern Norway.

The JervenbagTM Rescue

The Jervenbag is a highly acknowledged and used product in the various Norwegian rescue environments. Both the Jervenbag Original, Hunter, King Size and Extreme are standard stock items, in the orange rescue-version.

Jerven is today supplying the two Rescue-bags, among others, to: Norges Røde Kors (Norwegian Red Cross), Norske Redningshunder (Norwegian Avalanche dogs), Norsk luftambulans (Norwegian air ambulance), various helicopter companies, Norsk Folkehjelp sanitet (Norwegian People's Aid), Norwegian alpine rescue environments, Norwegian alpine ski centres. Some police departments, in the mountain areas in Southern Norway, bring the Jervenbag Rescue with them on all snowmobile operations.

As a starting point; Norwegian sports-, leisure-, and weapon dealers, which are selling the Jervenbag, in forest- and mountain camouflage colours, also experience an increased demand for orange coloured rescue bags.

Not everybody wish to hide, many would rather be seen....

Newelty!

The Jervenbag King Size in orange, 143x220cm²- with Primaloft Sport insulation.



*The Norwegian, **Aif Lund**, and one of the 90 approved avalanche dogs in Norway, **Taivo**, know how to stay nice and warm between the many vital rescuemissions representing Norwegian Avalanche Dogs (Norske Redningshunder/NRH). The Jervenbag Original, Hunter, King Size and Extreme are all available in orange/Rescuecolour. Three of these with PrimaLoft insulation. The dogbag (called Jervehiet) in orange is for dogs up to 40 kg. For the dog-bag, the Primaloft insulation is sold separately, and easily attached as a inner thermal bag.*





The Jervenbag is standard equipment for a number of helicopter-services in Norway.



At Svalbard, an emergency-sack/Jervenbag has been recommended as necessary equipment in a booklet about safety, produced and issued by the Sysselmannen (the Governor) at Svalbard, Svalbard Reiseliv (Svalbard Travelling), Norsk Polarinstitutt (Norwegian Polar Institute), as well as Longyearbyen Røde Kors Hjelpekorps (Red Cross Rescue Team). The recommendation applies both to short and long trips.

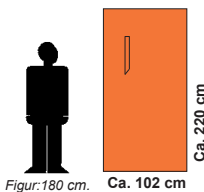
In the fall of 2006 Jerven participated at a specialist meeting for rescue personnel in Southern Norway (Hallingdal), under the direction of Norwegian air ambulance, region south and the air ambulance at Hallingdal. At this meeting there was great interest for the Jervenbag Rescue, as well as increased focus on all rescue environments and rescue equipment, for persons found with serious hypothermia.



More and more Norwegian private alpine ski centres realize the advantages of having the Jervenbag Rescue as readily available rescue equipment. It is, furthermore, not only persons being hit by accidents who may benefit from the Jervenbag Rescue. Also the search and rescue crews get cold and they do from time to time need a break. This also apply to the many rescue dogs that often have a tough job, when the search and rescue crews are fighting against time, in order to save lives.

When the purpose is not to camouflage oneself, but rather to be seen, the following is recommended: The Jervenbag Hunter, orange colour: item no. 1032 and the Jervenbag Extreme, orange colour: item no. 1035.

The Jervenbag in orange - for the sake of safety.





Commander of the 330 squadron, Lieutenant Colonel Nils Frøisland (on the left) and Senior Rescue Man, from the 330 squadron, Captain Fritz-Ivan Gulbrandsen, are hoping for fewer Sea King-searches in the mountains.

“Rescueflag – increases the chance to be found...”

“The 330 squadron (the rescue helicopter service in Norway) often assists the Police and The Main Rescue Central, in connection with searching for missing hunters in the mountains. When the Rescue Helicopter Service receives a message about a “missing hunter”, many factors play a role in order to carry out an effective search, with a positive find as the result. One of those factors is the color of the hunter’s outer clothing.

As we all know, most hunting clothing is colored green and in worst cases, the hunter has chosen a camouflage variant, which is adapted to the hunting terrain. All hunters ought to carry emergency aids, which make it possible to be easily seen in the terrain, should an accident occur.

The Main Rescue Central and the 330 squadron are of the opinion, that a “rescue flag” will enhance the chances for a positive find. Other emergency aids, which might also come in handy, would be a reflective safety vest, a strobe light (small flash light, with strong, flashing blitz light) or a powerful flash lamp.”

Commander of the 330 squadron, Lieutenant Colonel Nils Frøisland
The Main Rescue Central at Sola, Norway.



Visible or invisible? The Rescueflag comes along with every single one of the Jervenbags.

Jerven Rescueflag

- for the sake of safety!

But here we are at a distance of only four meters and only 50 meters above sea level, on a mountainside, in the west side of the country. Therefore, the mountain camouflage is not quite in its best element. Only close.

What we wish to point out is, that without the signal flag it is particularly difficult to find people, who uses The Jervenbag. If you do have The Jervenbag, but not the signal flag, you just buy one! It's available in the sporting goods store – or directly from Jerven.

An other thing is, that it might be practical to mark the spot where you left the backpack, when you took off to catch up with the reindeer herd (or other animals). A flag, which is visible in the terrain, is perhaps not the craziest thing you might carry in the backpack. And, it does not weigh much either.

Throughout the years, many people have saved their lives, because they had carried The Jervenbag with them. We've both heard and read about it,

.. but we shall be the first ones to admit, that it is not easy to find someone, who is sitting still in a Jervenbag, with the camouflage colors.

We have, therefore, developed an orange flag, which may be used to attract someone's attention. The flag has, in addition, been equipped with reflective materials. Searching with a light (flashlight) in the dark almost becomes easier than searching in daylight. The flag has also got strings in it, making it easy to fasten to the backpack, ski pole or other places.

And then we have the following advise:

Should you be so unlucky and break a leg (or a ski) and you'd have to sit in The Jervenbag for three days, before you're being found, you ought to, in addition to The Jervenbag, have a groundsheet and a couple of candlelights. Some food and drinks would not be too crazy either. And then, something like the U.S.Today – you know, the day would not be quite the same without the news....



In daylight



At night

Summary of the SINTEF-Report

Over the years both Jerven and others have made trials and tests of the various models. In 1997 we decided to do this scientifically.

Scientists at Sintef Unimed in Trondheim were given the task of finding precise answers to the thermal properties of the various Jervenbag models. Even though the Jervenbag has multiple uses, it is its property of retaining the body-heat which is the most important.

The project was split into 4 main parts:

Laboratory tests with people uses for experiments (Trondheim)

Field test with people uses for experiments (the Snøhetta area)

Laboratory tests with thermal doll (Trondheim)

Tests with wind tunnel with people used for experiments (Oulu, Finland)

The full report is 28 pages, and we will therefore only include small extracts and conclusions. It was possibly the expedition leader Odd Harald Hauge from “Unarmed to the South Pole” who was the first to say: - I will maintain that it is just about impossible to freeze to death in a Jervenbag Thermo.

We were then discussing hiking in the Norwegian mountains. Project leader at SINTEF Unimed, Jonny Hisdal said something similar:



Jonny Hisdal

“ - In practice it is just about impossible to freeze to death in a Jervenbag Thermo. “

Strong words are not used by scientists, but this ought to be plain speaking! Then to the report:

The following experiments were carried out in climate-chambers in Trondheim and show exceptional good results. Page 18 and 19 from the report follows here in their entirety:

Fig 3.3 shows clearly to which extend the various models of Jervenbag protects the upper part of the body against chilling in the cold environment. Without protection from the Jervenbag the chest temperature of the test-persons sank by approx 4°C (39,2 F) during an interval of two hours. Protected by Jervenbag THERMO EXTREME the average chest temperature was approx. 2,5 degrees (36,5 F) **higher** after 3 hours in the climate-chamber, than at start of the test. Protected by the Jervenbag ORIGINAL the test-persons had the same chest temperature after 3 hours in the climate-chamber as at the start of the test.

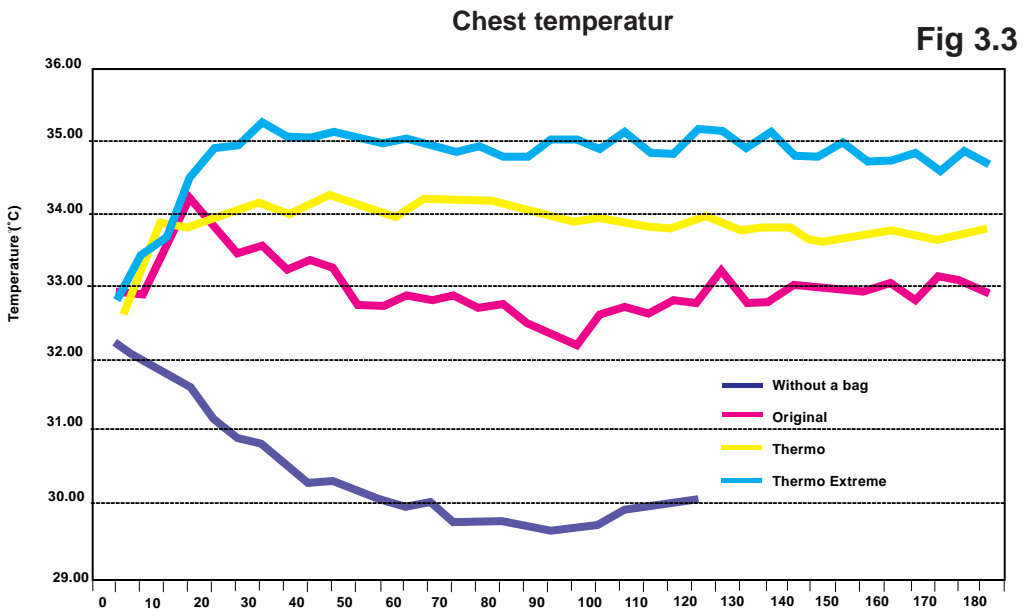


Figure 3.3

The chart shows the average chest temperature of all the test-persons (n=6) without protection from the Jervenbag, and with Jervenbag Original, Jervenbag Thermo and Jervenbag Thermo Extreme respectively. The test-persons wore standard two-layers mountain clothing, the temperature was -10°C (14 F), and the wind approx. 5m/s. The test without protection of Jervenbag had to be stopped after 120 minutes, but with protection of one of the Jervenbag models the test period was set to 180 minutes.

3.1.2 Air temperature and humidity inside the windproof bags

The temperature inside the windproof bags were taken at chest height and at the foot-end during the trial. Summary of the temperatures are shown in table 3.1.2. Accumulated humidity inside the different Jervenbags during the 180 min of the tests, was evaluated by weighing the Jervenbag before and after the trials. All models had a weight increase during the 180 minutes the tests lasted. However, there was no different in weight gain for the various models. This should show that the humidity accumulated in the windproof bags caused by the perspiration of the person inside the Jervenbag, does not vary between the various models. The condensation was found to be a bigger problem by test-persons in Jervenbag ORIGINAL, compared to Jervenbag THERMO and Jervenbag THERMO EXTREME.

| Model | Environmental temperature | Wind | Temperature chest height | Temperature foot-end |
|--------------------------------|---------------------------|----------|--------------------------|----------------------|
| The Jerven bag Original | -10°C (14 F) | 5 -7 m/s | 7°C (44,6 F) | 2°C (35,6 F) |
| The Jerven bag Thermo | -10°C (14 F) | 5 -7 m/s | 14°C (57,2 F) | 5°C (41 F) |
| The Jerven bag Thermo Ekstreme | -10°C (14 F) | 5 -7 m/s | 24°C (75,2 F) | 16°C (60,8 F) |

Table 3.1.2

The table shows average temperature (°C) taken at chest height and at the foot-end of the various windproof bags, after the test-persons had been sitting still for 180 minutes. The environmental temperature was -10°C (14 F) and the wind from 5-10m/s. This equates to a chill-factor of approx. -25°C (- 13 F).

3A.3 Subjective evaluation - Shivering:

The results from the subjective evaluation show that all test-persons started to shiver to increase heat production when in the climate-chamber in standard clothing, without the protection of Jervenbag. On average the test-persons started to shiver after 48 minutes. Protected by the Jervenbag ORIGINAL only one of the six test-persons started to shiver. This person started to shiver after 100 minutes. Protected by Jervenbag THERMO or Jervenbag THERMO EXTREME none of the test-persons started to shiver during the 180 minutes of the test in climate-chamber.

*From the field-tests on Snohetta.
Notice all the wires to the temperature
gauges on the test-person*



Photo: Jonny Hisdal

We have made following extracts from the field-tests:

The weather varied from day to day during the field-tests, from snowy weather to dry spells and from mostly calm to violent storm. During the days of the strongest wind, we experienced the best effect when protected by one of the Jervenbag models. During all test conditions, the test-persons carried out the planned test of 180 minutes. On the days with the strongest wind, all tests with test-persons having no protection of one of the Jervenbag models, had to be abandoned before 60 minutes had passed due to high degree of chilling. The feet of test-persons were most affected, and no further tests were carried out to avoid the toes getting frost damage. A general chilling down of the bodies to the persons not protected by Jervenbag, was observed on the days with the strongest wind.

The days we measured violent storm, the test-persons without protection of a Jervenbag model would have been completely helpless within two hours due to the cold, and none of them would have survived a night in the open. The test-persons protected by one of the Jervenbag models would most probably all have survived the night. The test-persons in Jervenbag ORIGINAL, giving the lowest thermal protection would probably also have been chilled after a while, but due to the very gradual reduction in temperature it would have been quite a few hours before the situation had become life threatening, compared to having no protection.

The two most insulated models, Jervenbag THERMO and Jervenbag THERMO EXTREME, gave such good thermal protection, even with a wind up to violent storm and an air temperature of -2°C (28,4 F), that test-persons probably would have survived several days before the situation had become critical due to the cold.

During the storm two tents were damaged by the wind, and three test-persons choosed to stay overnight in the open protected by the Jervenbag THERMO EXTREME. The test-persons had on two-layer clothing, and were laying on ground-sheet as issued by the Armed Forces. They choosed an area in the lee of a snow-dune, with the entire body inside the windproof-bag and all zippers firmly closed. All three test-persons slept soundly through the night and were thermal-neutral when they woke up in the morning, despite strong wind with drifting snow and an air temperature of approx. $-3,5^{\circ}\text{C}$ ($25,7\text{ F}$) during the night.

The most extreme test was carried out in Finland in co-operation with Dr. Hannu Rintamäki at Oulu Regional Institute of Occupational Health. In the wind tunnels in Oulu the temperature was lowered to -40°C (-40 F), and with the wind factor this corresponds to minus 80 degrees (-112 F). During such conditions naked skin would freeze in 15 seconds. The test-persons therefore had to be inside the Jervenbag before the fans were switched on.

The results from the test:

Inside the Jervenbag Original: -20°C (-4 F), a difference of 60°C (diff. of 108 F) outside/inside.

Inside the Jervenbag Thermo Extreme: $+8^{\circ}\text{C}$!! ($46,4\text{ F}$), a diff. of 88°C (diff. of $158,4\text{ F}$) outside/inside.

The effect of the Jervenbag models was a great surprise. Nobody had expected such sensational results. It is not very probable that any of us "normal" people will experience these kind of temperatures, but it is nice to know what the product is good for.

Finally, some good advice: Always have a groundsheet inside the Jervenbag. It is important to insulate to the ground/snow to avoid heat-loss that way. You also avoid the risk of the groundsheet blowing away. Also keep your rucksack on, preferably empty, to avoid the Jerven Bag coming in direct contact with the back. Rub cold feet to keep the blood circulating, and then you can contemplate why you didn't take your holiday in warmer climate instead!



Jonny Hisdal is dog out after a night in the open with gale-force. He had slept like a kitten all night!



The Climate-chamber in Trondheim.

Foto: Jonny Hisdal

The table below shows the importance of protection against the chilling effect of the wind. Minus -5°C (23°F) and moderate breeze (force 4) constitutes as much as minus -18°C ($-0,4^{\circ}\text{F}$)! As long as you are moving it is usually OK, but sooner or later you need a rest.... Inside Jervenbag you get shelter and warmth.

| Wind force in Beaufort | Wind velocity | | The thermometer shows $^{\circ}\text{C}/\text{F}$ | | | | | | | | | |
|---------------------------------|---------------|-----------|---|-------|--------|--------|--------|--------|--------|--------|---------|---------|
| | | | 15/59 | 10/50 | 5/41 | 0/32 | -5/23 | -10/14 | -15/5 | -20/-4 | -25/-13 | -30/-22 |
| | m/s | km/hr | Effektiv kulde (chill-factor) | | | | | | | | | |
| Calm 0 | 0 | 0 | 15/59 | 10/50 | 5/41 | 0/32 | -5/23 | -10/14 | -15/5 | -20/-4 | -25/-13 | -30/-22 |
| Light Wind 2 | 1,6-3,3 | 5,8-11,9 | 14/57 | 9/48 | 3/37 | -2/28 | -7/19 | -12/10 | -18/0 | -23/9 | -28/18 | -33/27 |
| Light breeze 3 | 3,4-5,4 | 2,2-19,4 | 10/50 | 4/39 | -2/28 | -8/18 | -14/7 | -20/4 | -26/15 | -32/26 | -38/36 | -44/47 |
| Moderate breeze 4 | 5,5-7,9 | 19,8-28,4 | 8/46 | 2/36 | -4/25 | -11/12 | -18/0 | -25/13 | -32/26 | -38/36 | -45/49 | -52/62 |
| Fresh breeze 5 | 8,0-10,7 | 28,8-38,5 | 7/45 | 0/32 | -7/19 | -14/7 | -21/6 | -29/20 | -36/33 | -43/45 | -52/62 | -57/71 |
| Strong breeze 6 | 10,8-13,8 | 39,4-49,7 | 5/41 | -2/28 | -9/16 | -17/1 | -24/11 | -32/26 | -39/38 | -47/53 | -54/65 | -61/78 |
| Near gale 7 | 13,9-17,1 | 50,0-61,6 | 5/41 | -3/37 | -11/12 | -18/0 | -26/15 | -34/29 | -42/44 | -49/56 | -57/71 | -65/85 |
| Gale 8 | 17,2-20,7 | 61,9-74,5 | 4/39 | -4/25 | -11/12 | -19/2 | -27/17 | -35/31 | -43/45 | -51/60 | -59/74 | -66/87 |
| Strong gale 9 | 20,8-24,4 | 74,9-87,8 | 4/39 | -4/25 | -12/10 | -20/4 | -28/18 | -36/33 | -44/47 | -52/62 | -60/76 | -66/87 |

Do not leave the Jervenbag at home!

Fjellduken

- An Arctic Lifesaver

New Equipment:

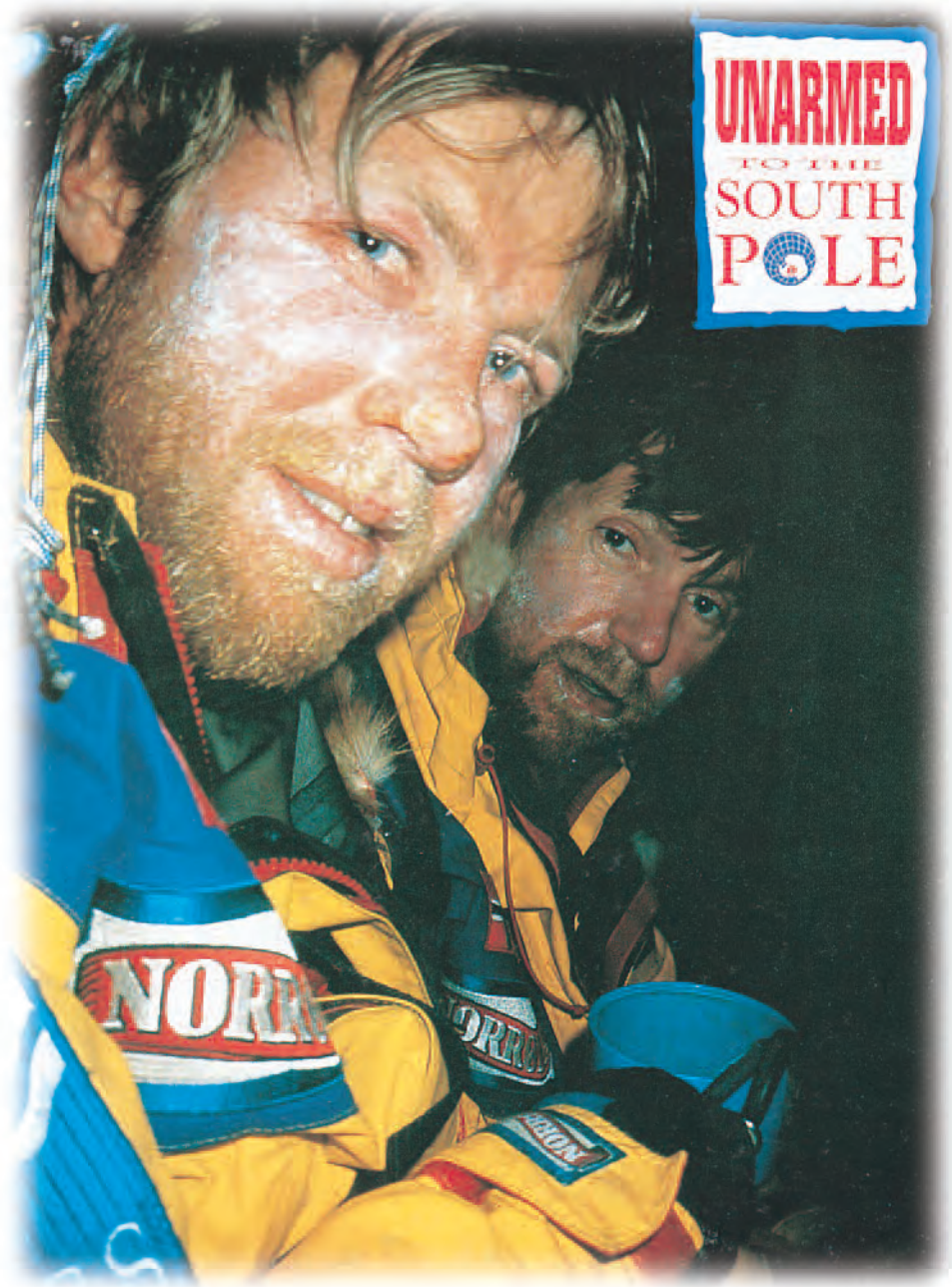
by: Bob Morrison, Combat & Survival UK - published december 2005.

When C&S was in Norway in early 2004, covering Royal Marines on winter training, Norwegian staff at NATO's Arctic training Centre (North) told us how their national troops were being re-equipped with the state-of-the-art clothing and sleeping bags, after having been poor relations to the British for many years. One of the items mentioned was a thermal waterproof bivvy bag known as a Fjellduken or hill tarpaulin, which was about to see widespread issue to frontline troops. This year while covering the multinational Exercise BATTLE GRIFFIN in central Norway, we spotted this interesting article of kit being carried by troops and now, courtesy of uniform collector Andy at EastWest Trading, we have had a chance to examine a genuine Fjellduken close up.

Manufactured by Jerven AS of Odda, the Fjellduken is a rectangular padded waterproof tarpaulin with zips along all edges to allow it to be turned into an outer sleeping bag or an emergency bivvy bag for use in extreme cold climates. Originally developed more than twenty years ago for Norwegian hunters and trappers, it has an imitative camouflage pattern on the outer face, and the inner face is aluminium lined. Reinforced eyelets at the corners allow it to be turned into a roughly 2200x2000 mm shelter bivvy, using paracord to attach it to trees or bushes. When all the zips are used the Fjellduken becomes a 2200x1000mm closed envelope for extreme survival. Alternatively, the hunter or soldier can sit snugly in a protective duvet, with only the face showing through the zip opening at the upper corner, and feet sticking out of the bottom zip. Two small slanted zips at the top of the sack allow the arms to protrude to hold a rifle.

Although padded with insulation, the key to the superb performance of the Fjellduken is the aluminium liner, which reflects body heat back in the same manner as a thermos flask. The Fjellduken does not have a breathable membrane which is possibly its one drawback if being used continuously on exercise but, as it is meant primary for static use, there should not be too much build-up condensation in the short term. It must also be borne in mind that when used as a protective outer bag rather than a bivvy tarpaulin, this is primary an extreme low temperature survival bag, and not a sleeping bag. Norwegian troops working in Arctic temperatures as low as -40C would also use their conventional 5-season plus issue sleeping bag inside the Fjellduken to derive maximum protection from the cold.

As to be expected, the Fjellduken is quite a bulky item, but it comes with a capacious stuff sack with three nylon straps to allow it to be compressed for attachment to the side of the Norwegian issue bergen. The stuff sack is also aluminium lined, and can be used to store your boots at the bottom of the sack, preventing them freezing if left outside overnight. Despite its bulk however, this potential lifesaver is incredibly light. A very practical bit of kit indeed, and one which some sources claim is already in use with British Special Forces too.



Cato Zahl Pedersen and Odd Harald Hauge inside *The Jervenbag* on their way to the South Pole in 1991. Photo: Lars Ebbesen.

You have to be both physically and mentally strong and have a lot of willpower and sense of adventure than most, if you're going to pull 120 kg sled to the South Pole. Such a journey is not without dangers. Frostbite, the risk of falling into glacier cracks...anything can happen. There's on thing, though, that is strictly forbidden, and that's poor equipment. Norway has a rich tradition of polar exploration and a wealth of expert knowledge on which to draw when it comes to surviving under the arctic conditions. All equipment is thoroughly tried and tested before use.

The Jerven bag "Thermo King Size" Survival Poncho has been tested in advance on valbard. But how would it perform through two months of daily use...?

Cato Zahl Pedersen, Norway's Paralympic gold medalist who lost both arms in a childhood accident, sweats when he exerts himself. Not just a little, or even a lot, but one heck of a lot. The perspiration literally streams off him. The combination of soaking wet clothes, a biting wind, and minus 30 C. (-22 F), is bad news when you have to break for lunch. Mr. Pedersen most definitely needs to take shelter – inside a Jerven Bag.

Jerven maintains that condensation inside these thermo-bags is not a problem. True enough, even when a veritable Niagara Falls like Cato Zahl Pedersen on the inside, the Jerven Bag stayed just as dry and ice-free every step of the way. And- so warm that a little air had to be let in occasionally. Home again safe and sound from the South Pole, expedition leader Odd Harald Hauge faxed the following message to Audun Melkeråen of Jerven/Norway (The inventor):

The South Pole and the Jervenbag:

*Hi!
Here follows an interim report on the Jerven Bag. You'll receiving a more detailed account later, and I hope we'll have the opportunity to meet in the near future. In general, I must say we're incredibly glad that we came over the mountains to Odda to talk to you and buy three of your Jerven Bags. The two other lads have been a bit sceptical at first but that didn't last long. Now to the point:*

We zipped two ponchos together to make a bag, just as you showed us. There was plenty of room for three inside. We stashed the bag in the back of our sleds, and took it out every lunchtime. We opened it up in the middle, stepped inside and sat down on the sled – in no time at all we had this down to a quick and efficient routine.

There were no problems with the Bag in bad weather, regardless of wind force, which should interest you greatly with a view to its potential as an emergency bivouac. It became warm inside almost immediately, enabling us to remove our hats and mittens loosen our jackets etc. After a few minutes, all the ice inside had melted. It is difficult to estimate the inside temperature, but it was probably around plus 5-10 C (41-50F) dependent of course on the outside conditions. In the sun, it became almost uncomfortably warm. I should add that we experienced an average temperature of minus 24 C (-11,2F) over the entire trip, or minus 32 C (-25,6 F) if we take into account the "windchill" factor. Lunch is always a problem on polar expeditions, because you start freeze after 15-20 minutes. With The Jerven Bag, we were able to take long breaks at 45-55 minutes and were well rested before proceeding. So our Jerven Bags were in use every single day throughout the trip, no matter what the weather was like.

Apart from a minor problem with one of the zip fasteners towards the end, the Jerven Bags functioned perfectly as regards quality. No rips and tears of any kind, and they still looked like new after 70 days under extreme conditions. We were prepared for ice to form the inside them from our body humidity, but incredibly enough there was never any trace of ice. Finally: The Jerven Bags attracted a lot of attention in the Antarctic base camps and there can be no doubt that a truly innovative product such as this must be a responding success.

*Talk to you soon!
Odd Harald*



Norwegian hunters and outdoor enthusiasts have used The Jervenbag for 30 years. It gets so hot (!) that you hardly need clothing at all :-)...

Dr. phil. Jonny Hisdal, who was in charge of for the scientific Sintef-test of the Jervenbag in 1997, found the test-results most convincing:

“-It is practically almost impossible to freeze to death if you use a Jervenbag or a similar product”, the scientist says. The Jervenbag removes the wind effect, and you get a layer of higher temperature around you in addition, compared to sitting without a Jervenbag. The heat loss to the surroundings will then be reduced and the body temperature will drop much slower, in case you need to spend an involuntary night outdoors. “

“This could simply make the difference between you freezing to death or being found alive”...



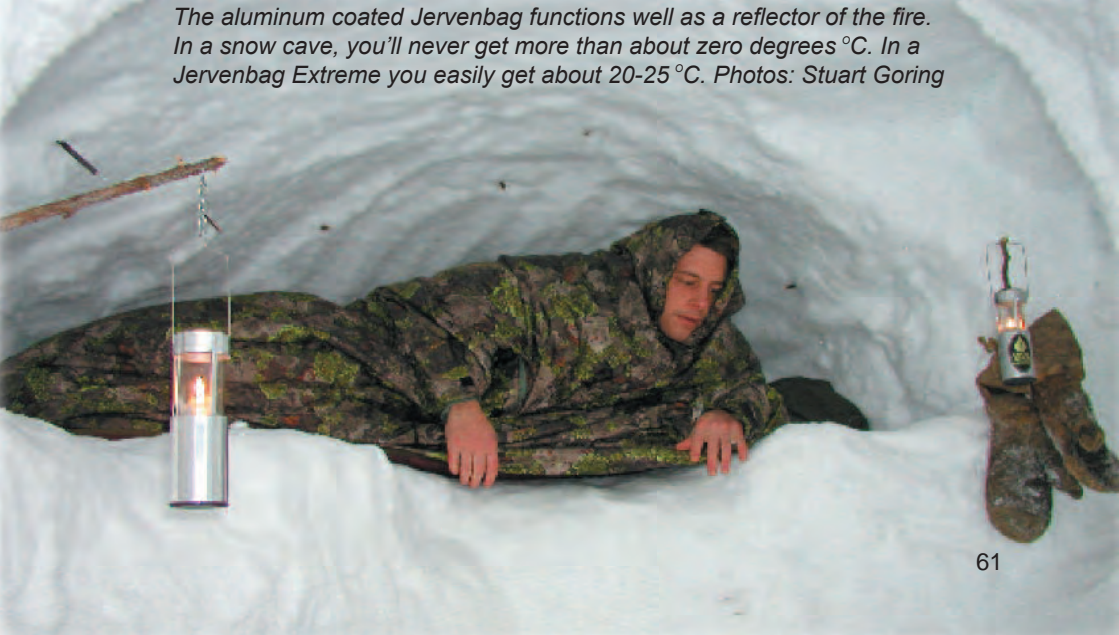
Dr. philos Jonny Hisdal.

A few lines published on the website: www.raymears.com:

"What exactly is a Jerven Bag?" you may be asking yourself right now. Well, there is no single answer, as the Jerven Bag has a number of important uses. Primarily designed as a waterproof and windproof poncho for hunters, the Jerven Bag is equally suited as a protective windsack when sitting outdoors, a rain cover for you and your rucksack when hiking, an emergency tarp-style shelter, or a sleeping bag cover. Its versatility and thoughtful design are just two of the reasons why Ray Mears has become a fan of the Jerven Bag"



The aluminum coated Jervenbag functions well as a reflector of the fire. In a snow cave, you'll never get more than about zero degrees °C. In a Jervenbag Extreme you easily get about 20-25 °C. Photos: Stuart Goring





*The Jervenbag has been norwegian soldiers favorite throughout three decades.
Photo: Stuart Goring*

*Article-text from the Norwegian military magazine **Befalsbladet 12-04:***

A Jervenbag instead of a sleeping bag?

A Jervenbag instead of a sleeping bag? Is it unthinkable that the sleeping bag is not a necessary part of the field equipment? The Jervenbag is being evaluated as an alternative to the sleeping bag for certain units in the Military. The Jervenbag is a large, rectangular piece of textile, which may be pulled over a person, with a backpack, for bad weather protection. By means of three zippers the bag may be transformed into a wide sleeping bag. Or into a windsack. The Jervenbag may also be stretched between bushes or trees and function as a shelter against rainy weather or nasty wind. The Jervenbag is being supplied in 7 different models.

Throughout the years The Norwegian Military has been buying a great number of Jervenbags, in different models. This year alone (2004) the Military will buy about 4 000 Jervenbags without lining, and about 2 000 bags with lining. In addition, several units have shown their interest in the model, which is the result of the cooperative development work.

Officers with the Specialist Platoon in Sør-Varanger in Northern Norway have used the Jervenbag Extreme, when spending the night outdoor, in minus 36°C. (about -40°F.). The purpose was to spend the night outdoor, without the use of a sleeping bag, but rather by means of the equipment available in the battlefield pack, only. With a ground sheet on the ground and with all available clothing in the battlefield pack on, the persons executing the test slept through the entire night, in spite of the extreme cold. The field-testing in Sør-Varanger is being confirmed by tests in a wind tunnel in Oulo in Northern Finland.

The Air Force is working to upgrade the so-called "seat pack", which is placed under the seat in our F-16 fighter planes. The seat pack follows the pilot when he, in an emergency situation has to catapult from the plane. The pack contains emergency equipment, enabling the pilot to manage on the ground following the parachute landing. Among other things, this seat pack today contains a vacuum packed down sleeping bag, and it is this sleeping bag, which is being considered replaced by a model of The Jervenbag.



The Jervebag is implemented in the norwegian F-16

This project is still in the development stages and the results will decide as to whether the Jervenbag, which has been used in the seat pack of Norwegian F-16s, will replace the sleeping bag or not. During the operations in Afghanistan one decided to take out both the sleeping bag and the small one-man rescue life raft, which is placed under the seat, and replacing these items with the Jervenbag.



Facsimile of Betafsladet no.12-2004

The Danish air force has equipped their Hercules C-130 planes, flying transportation missions to Greenland, with the Jervenbag. They have also placed Jervenbags in their Fennick (A-555) helicopters.

Several French specialist forces have, in addition, purchased a number of Jerven Bags, so in many ways the small company in Odda, Norway have gotten a lot of interest from the Military, following the first variant of The Jervenbag, way back in the 1980-ties.



JERVEN



Postbox 149, N-5751 ODDA - NORWAY

Tlf: +47 5364 8050 - post@jerven.no - www.jerven.com