Mountaineering Gear in Harim-Mountains

Every Harim-Mountains activity comes with a gear list that you- the participants- have to bring with, or purchase
The list is different from activity to activity and from season to season, however, every activity requires from its participants specific clothing, footwear, hut gear, sun and cold weather protection and some other specific articles that can influence greatly your enjoyment or even your ability to take part in the activity.

In this article we will try to answer frequently asked questions about gear requirements, we will start from Footwear and work our way up.

Footwear:
The footwear issue is a critical one in mountaineering and climbing. Our shoes stabilize our feet and ankles, insulate our feet in cold or wet conditions, give us an extra friction while walking on boulders and rock slabs and allow us the use of crampons.

We divide mountain and mountaineering footwear into 2 main categories:
Shoes- light footwear such as approach shoes , and climbing shoes
Boots- heavy footwear especially designed for backpacking and mountaineering.
Boots divide into 4 categories: B0-B3 and approach shoes

Approach shoes

with good approach shoes we can walk comfortably off trails and scramble.
Usually the approach shoes will have a sticky rubber sole that would give us a secure feeling while walking on rocky slabs.
Approach shoes can be ether loafers (low cut shoes) or hiking shoes with a “high” profile.

The soles profile in approach shoes will usually contain an area at the front of the shoe with a special “climbing zone”, a flat patch of sticky rubber for precise placement and better friction while scrambling.
Approach shoes are very light and comfortable hence can be used for the rock part of our **Alpine semester/Technical mountaineering courses** , as comfortable walking shoes while approaching a hut in the **basic mountaineering and our family mountaineering experience** or for the Via feratta activity in our **family mountaineering experience**

Climbing zone in approach shoes

B0

A lightweight boot designed mainly for walking , ether day trips or on trails, while carrying light weight loads.
Usually B0 boots are comfortable, flexible, light weight and depending on the model can be ether water proof or not.

B0 boot

The B0 boot is **not adequate** for mountaineering, ice or snow climbing or cold temperatures., because of the preannounce flexibility of its sole.
B0 boots can be used at the rock part of our **Alpine semester** and our **Technical mountaineering courses,** so as hut approach shoes for our **family mountaineering experience** in the summer**.**

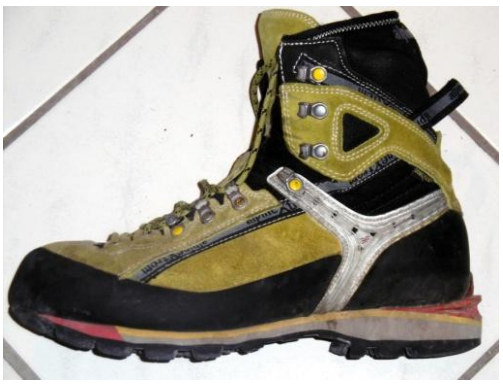
B1

Robust trekking boots for heavy duty backpacking in cold temperatures and variable terrain.
The boots are water proof and have a **semi flexible** sole (applying pressure on the sole one can “bend” the sole slightly)
Sometime the sole profile in B1 boots has a bent which enables a comfortable “rolling “ motion of the feet while walking
B1 boots can be used at the rock part of our **Alpine semester** and our **Technical mountaineering courses,** or as mountaineering boots only in our **family mountaineering experience** in the summer**.** B1 boots **are not adequate** for any kind of technical mountaineering activity such as our **Basic mountaineering course, Alpine semester, Technical mountaineering or any ice climbing activity**

B1 Boot

B2

Those are stiff soled boots (A slight band in the sole is still possible if applying pressure) which are crampons compatible . The difference between B0 and B1 shoes lies in the sole rigidity and profile. These shoes are water proof , robust and usually less comfortable in comparison to B1 boots. On the back side of these boots a rail or “step” will always be integrated to allow a tight clipping of crampons such as the C2 category . B2 boots can be used at our **Basic mountaineering course, Alpine semester and Technical mountaineering** the boots are not recommended for any ice climbing activity



B2 Boot

B3

Boots with a fully rigid sole (the sole can not be banded or can hardly be banded also under pressure) who are fully crampons compatible (can be used with crampons from category C3).
These warm boots can be used at our **Basic mountaineering course, Alpine semester and Technical mountaineering courses.**
B3 boots are an **optimal choice for any ice climbing activity** we offer.

B3 boot with a built-in gaiter

B3 boot

Tip Harim-Mountains

The **longer** the sole of the boot is, the **less rigid** it will be- for example, a B2 boot side 47-48 will be as flexible as a B1 boot size 42.
consequently it is recommended for people with big feet (45+) to “step up” the rigidity standard for their mountaineering boots.

Crampons:
After talking about footwear it is only natural to addressee crampons.
Though we supply crampons in all our offered activities it is important to understand which crampon can suite your boot and the activity you plan to undertake.

Crampon Category **Adjustment**

C1

Flexible crampon without a rigid clipping system but rather a strapping system that tightens to the shoe.
This crampon is suitable for our family mountaineering experience only

C1 crampon fits boots from category B1-B3
In the picture a B1 boot with a C1 crampon

C2

A semi-rigid crampon with a back clipping system that can be used in almost every activity offered by us, namely our family mountaineering, basic alpinism, alpine semester and technical alpinism.
 depending on the model a C2 crampon can be also used for alpine ice climbing and ice climbing courses and activities.

C2 crampons are suitable for B2-B3 boots
In the picture a B2 boot with a C2 crampon

C3

A fully rigid crampon suitable manly for technically challenging, steep climbing
This crampon is ideal for our ice climbing activities

C3 crampons are suitable only for B3 boots
In the picture a C3 crampon on a B3 boot

Rock climbing shoes:
Specially designed shoes for steep rock climbing.
Climbing shoes are a must in our **alpine semester** and **technical alpinism.**

Tip: Harim-Mountains
the most important advice for choosing climbing shoes is their adjustment to the foot!- the shoe should be tight but **not painful**, when we climb while our feet hurt our natural and balanced movements become very limited. In order to find your climbing shoe size, try on increasingly smaller sizes until you reach your "pain level", than try a slightly bigger size, if the pain disappeared- that is your size, if not, try a size bigger.
The feeling you are looking for is a "comfortable tightness"

Two examples for rock shoes- with laces and velcro (above).

Socks:
Your socks are as important as your shoes- the socks insulate our feet and keep its warmth, prevent blisters, provide comfort and deal with moisture.
There are numerous socks for different types of mountain sports, they differ in their thickness, length, materials and structure but they share one thing: **they do not have even one cotton fiber!**
The reason is pretty obvious, cotton fibers are plant fibers hence absorb moisture- water or sweat- and directly jeopardize the sock ability to insulate.
Technical socks will always be made ether from synthetically made fibers, silk or wool- all with insulation abilities also in wetness.

Tip: Harim-Mountains
woolen socks with some percent of synthetic fibers will be usually warm, will handle moisture well, will not smell immediately (les bacteria prone), will prevent blisters and will be comfortable.

Thermal wear- wool and synthetic:
Thermal clothing or our “base layer“ is extremely important for intense physical activity in extreme conditions.
As well as socks, the thermal wear has also no cotton fibers and offers a large verity of cuts, materials, thickness etc.

Usually we sweat more from our upper body in comparison to our lower one , there-for it pays more to invest (both thought and money) in the purchase of thermal shirts or t-shirts which suite us.
Tight shirts made of synthetic fibers tend to grow a bacterial layer after a short period of usage., which causes a bad smell and decrease in its performance.
Some people though like the tight cut since it is fashionable and easy to put on other layers.

Loose synthetic thermal shirts grow also a bacterial layer but it takes longer for it to develop.

Thermal shirts- merino wool (left) and synthetic.

Merino wool shirts are usually more expensive then synthetic ones, the wool insulate longer and smell less (if ventilated). In spite of its qualities wool develops bacteria and smell eventually.

Wool thermal wear comes also in different cuts and is very sensitive to sharp objects that can be puncture it easily.

Tip: Harim-Mountains

There are in the market “mixed” fabric thermal wear items that combine between wool and synthetic fibers which prolongs the fabrics life and its effective insulation period. .

The texture difference between a synthetic fiber (right) and merino wool

Thermal underwear:
Insulating our legs is extremely important in extreme weather conditions , therefore it is important to use short and long thermal underwear from wool or synthetic fibers. Thermal underwear come in different thickness and styles- try them on and see what suites you comfortably.

Long (left) and "¾" thermal underwear

Climbing pants:
We can divide climbing pants into 3 categories

1. **Light climbing pants:** synthetic pants suitable for trekking or rock climbing allowing a free movement of the legs. Climbing pants are not water proof nor resistant and in contact with snow or rain transfers the moisture immediately to the body. It's important to make sure that you buy a wide enough pant to put it over a long thermal underwear. Usually light climbing pants are made of light, breathable and quick drying nylon.

Light climbing pants are suitable for the rock chapter in our **alpine semester** and **technical alpinism**. In a combination with a robust waterproof pant can be used for **snow and ice** activities.

2. **Wind block pants:** Classical mountaineering pants made in combination with a wind blocking- breathable membrane.
There are numerous companies and brand names that produce wind blocking-breathing fabrics.
It is usually a slightly heavier pant which suites mountaineering and ski touring. The pant is usually water resistant but not water proof. It does not transfer the moisture to the body immediately but after some time of exposure to water and snow the humidity would transfer to the body. In spite of its thickness the pant tends to dry quickly. Wind block pants or "soft-shell" pants can be used in our snow and ice activities, they stretch well and therefore comfortable to climb with in cold temperatures or ski tour if it is not snowing heavily.

Water proof pant: The most challenging task in a waterproof clothing production is the “breathability” of the fabric.
A bed breathability clothing would give you the feeling you “cook yourself” inside it while walking, skiing or climbing.
There are many companies that produce waterproof clothing- the clothing comes in different brand-names, fabric patented names, colors, price range and weight.
The clothing quality (which is a combination between weight, water proof level and breathability) will be usually a big part of its cost.
Tip: since we are constantly dealing in too hot-too cold situations in mountaineering , climbing, skiing and ski touring , I find it important that the waterproof pants will have a zipper through most of its length which allows a quick dressing and undressing.

Fleece: our fleece clothing is our “second layer” clothing in a form of a jacket or a thick shirt produced from plastic fibers (usually from recycled soft drink bottles).
In the last years some companies started producing similar second layer clothing from merino wool as well.
Choosing a second layer we have 2 main options from which to choose:

Normal fleece: a fleece jacket with or without a zipper, tight or loose, thick or thin.

Wind block fleece- a slightly more expensive, heavier jacket with a wind blocking - breathing membrane implanted in the fabric.

Tip:

We find that creating an “onion model” of many thin layers- putting on or taking off a layer depending if we feel too cold or too hot, while doing an activity or resting is highly effective. Therefore our recommendation will be to use a very thin- breathable second layer and on top of it ether a wind-blocking layer or a water proof jacket.

Fleece vest: a highly effective garment for mountain sports- the fleece vest keeps our core warm and wind protected, allows us to move freely and creates a ventilated yet warm feeling.

A wind block (right) and non-wind block fleece vests.

Water proof jacket: an obligatory garment for every mountain activity- summer and winter. Gore-Tex company was one of the first companies to bring into the market a water-proof & breathing membrane. Thereafter numerous other companies developed a similar product and today almost every out-door clothing company works with its own brand of water proof- breathing membrane.

On the right a Glittetind jacket, on the left a gore-tex jacket. Today every company has its own brand of similar products with different names

Tip:

When we purchase a water proof jacket we must make sure that we have a breathing fabric other wise it will feel like walking and climbing inside a plastic bag.

For mountaineering and climbing we recommend a lightweight- easy to pack jacket. For snow boarding and skiing one can use a thin jacket with an “onion layering” of other warm cloth or a padded jacket.

Coats:
There are hundreds of different coats/warm jackets models for mountain sports. Usually warm jackets are more important in the winter, in transaction seasons or in a prolonged stay outside of a mountain hut. Warm jackets are an absolute must in **ice climbing** (for the belayer) and in **expeditions**. Most of our summer activities do not require a down or other warm jacket.
The warm jacket needs to be light, insulating and comfortable to pack and carry.
There are two main types of jackets:

A synthetic jacket:
the generic name is sometime a “Primaloft” jacket, those are slightly heavier, cheaper jackets with a main advantage of good function in wet conditions.

A down jacket:
Stuffed with goose down these jackets are very warm, light and slightly expensive.
When wet the down jacket looses its value completely hence down jackets are suitable for cold, dry conditions such as our ice climbing courses and ski touring activities.

Accessories:
Besides the obvious clothing items, we can not function well in the mountains without gloves, sun and cold protection to our head, ears and eyes etc.
our last few items in this gear review belong to the critical clothing accessories we use in our **Harim-Mountains** activities.

Gloves:

Gloves are one of the most important clothing items in our gear list- the gloves we use for mountaineering, ice climbing and ski touring must be with fingers separation. Skiing and free riding gloves are also better with fingers separation but can be compromised for mittens especially in a low temperature-windy weather.

Usually we would like to have one pair of thin, ventilated and non- waterproof gloves and one pair of water proof thick gloves. Our thick gloves can be from leather, gore-tex or any kind of warm and water proof material.

Thin fleece gloves

Water proof leather gloves

Water proof synthetic gloves

Gaiters:

Gaiters are a cover sheltering the upper opening of a mountaineering boot. The gaiters are waterproof and prevent water or snow from seeping into the shoe.

Tip: Harim-Mountains

using crampons the gaiters decrease the chance of "hooking" our pants with the sharp crampon points while walking- hence we recommend the purchase of crampons for our ice and snow activities.

Walking poles:

Even though walking poles are not an obligatory item in our activities, we recommend them highly. While ascending or descending from a hut, an approach or return from a climb, the pole saves shocks and load from our back and lower body.

We have 3 main categories of walking poles that can be used in our activities:

1. **Telescopic pole:** 3 parts pole that can be folded to a third of its size. It is the most common and cheap walking pole in the market. Its locking mechanism of these poles is very sensitive to dirt or freezing. And it is worth it to invest some more money and but a comfortable reliable pole that would function for a longer time.
2. **Antenna pole:** more expensive and much lighter antenna poles start to become increasingly popular. Instead of sliding the parts of the pole in and out of each other- like in the telescopic pole- the antenna pole parts are folded one next to the other. These poles are slightly less robust as the telescopic ones and can function well in any weather or dirt conditions.
3. **A lock jaw pole:** a combination between an antenna pole and a telescopic one- the difference leis in the locking mechanism which is more reliable and less sensitive to freezing and dirt. Those are the most robust and heavy reliable poles.

A lock jaw (above) and antenna pole

Sun protection:

Sun glasses: relevant sun glasses for ice and snow are with filter 3- very dark glasses which are especially designed agains high rediation.

Sun hat: an important item for our summer activities the sun hats we recommend are wide brimmed and easy to pack.

Sun screen: the sun radiation in the mountains is extremely high. Therefore we recommend a sunscreen and lip balm with no less than 40 SPF. For sensitive skin types we recommend a 50 + sun protection.