



# 2018 CARSTENSZ PYRAMID EXPEDITION EQUIPMENT LIST

## Equipment Checklist

You **MUST** bring all items listed on the enclosed clothing and equipment checklist. The only exception is items listed as optional; this is very important. Please contact us with any questions that you have pertaining to equipment or clothing. At the same time, you must keep your equipment weight to a minimum.

### 1.0 Body Wear

- Waterproof shell jacket
- Waterproof shell pants
- Rain poncho (*Optional*)
- Midweight synthetic insulated jacket
- Midweight fleece/softshell jacket
- Lightweight fleece top
- Softshell climbing pants
- Base layer top x 2 and leggings x 2
- Glacier shirt
- Trekking pants
- Underwear
- Casual clothes

### 2.0 Head Wear

- Warm hat
- Sun hat
- Sunglasses
- Bandana/Buff (*Optional*)

### 3.0 Hand Wear

- Liner gloves x 3 pairs
- Leather work gloves
- Mountaineering gloves with removable liners

### 4.0 Foot Wear

- Socks x 3-5 pairs
- Lightweight, waterproof trekking/climbing boots
- Long gumboots (*Knee high recommended*)
- Gaiters

### 5.0 Packs & Bags

- Mountaineering packs x 2 (or pack and duffel)  
(*35-40 litres and 40-50 litres for porter bag*)
- Small lockable duffel bag

### 6.0 Camping Gear

- Synthetic sleeping bag (*-10C/14F*)
- Sleeping bag liner
- Foam sleeping mat
- Inflatable sleeping mat

### 7.0 Accessories

- Headlamp and spare batteries
- Personal first aid kit and medications
- Personal toiletries
- Sun block and lip balm
- Wet wipes
- Water bottles x 2
- Pee bottle
- Foot powder
- Cup, bowl and cutlery
- Additional snack food
- Insect repellent
- Water purification tablets
- Waterproof pack cover
- Stuff sacks and plastic bags
- Heavy duty plastic bags
- Personal entertainment (*Optional*)
- Camera (*Optional*)
- Collapsible trekking poles (*Optional*)
- Waterproof notebook and pencil (*Optional*)

### 8.0 Climbing Equipment

- Climbing helmet
- Climbing harness
- Belay/rappel device
- Locking carabiners x 3
- Non-locking carabiners x 3
- Mechanical ascender x 1
- Leg prusik x 1
- 6m of 12mm tape or 8mm cord

### 9.0 Other

- Passport, copy of passport, travel agent contact details, insurance policy details.

# Clothing and Equipment Information Guide

The following information is a guide to assist you in securing the required clothing and equipment for your expedition, along with recommended brands. You may have equipment you have used which is different to what is on the list, so please read thoroughly and get back to us with any questions.

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## Fabrics/Garment Designs/Garment Selection

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Today there is a bewildering and ever-changing array of modern technical fabrics and garments on the market. Accordingly, suitable mountain attire can be derived from a wide variety of garments utilised in varying combinations. The clothing on our gear list can be creatively substituted according to your preferences but ensure your choices are functional and adequate. For example, a functional and often utilised garment that does not appear on our list is a vest.

A basic principle in selecting clothing and equipment is to minimise weight and bulk while still ensuring adequate warmth and functionality. It can be difficult to find a brand that has all the features you prefer, which means you will have to make prudent compromises. In the description below and for certain items, we suggest brands and specific products that we have found to be suitable; this is by no means definitive. In some cases, there are multiple suitable brands on the market and hence we do not make specific suggestions.

Appropriate fabrics used in thermal underwear include polypropylene, silk and merino wool. The only cotton garment worn during the climb is your glacier shirt. Warmer insulating materials can be made from fleece, softshell or Primaloft®. Varieties of fleece include Windstopper, Wind Pro, Power Shield, Windbloc, Power Dry and Power Stretch. Be aware that fleece garments that incorporate stretch fabric take longer to dry. Softshell garments integrate stretchy nylon fabrics to increase freedom of movement while also providing various degrees of wind and water resistance. They are often lined with a microfleece for increased insulation. Synthetic insulation materials such as Primaloft® are advantageous as they are warm even when damp are water-resistant and quick-drying.

You can read Guy Cotter's thoughts on the ultimate lightweight layering system at [www.adventureconsultants.com/adventure/LightweightGear/](http://www.adventureconsultants.com/adventure/LightweightGear/)

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## 1.0 Body Wear

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### Waterproof Shell Jacket

You will need a lightweight Gore-Tex or similar fabric jacket with a good storm hood and water-resistant zip closures. Chest pockets are useful to store bits and pieces like snack bars and sunscreen during the day. The jacket should provide a good overlap with your pants, but should not be so long that it restricts access to your harness. Underarm pit zips allow for increased ventilation and cooling.

*We recommend The North Face Summit Series L5, Arc'Teryx Alpha FL, Montane Alpine Pro and the Rab Latok Alpine Hardshell Jackets.*

### Waterproof Shell Pants

Waterproof overpants should have sufficient movement to enable you to lift your legs easily, when worn with your pants during inclement weather. They should also have full length zips down each leg to enable you to put them on and take them off, while wearing your boots. A salopette style can be warmer as it has a greater overlap, although they will be heavier.

*We recommend The North Face Point Five NG, Arc'Teryx Alpha SL, Montane Spine or the Rab Latok Alpine Waterproof Shell Pants.*

### Rain Poncho (Optional)

A completely waterproof rain poncho will be useful during the trek and allows you to keep your Gore-Tex in good condition. Some prefer this option, others do not.

*We recommend the Sea to Summit Ultra-Sil Nano 15D or the Frog Toggs Action Ponchos.*

### Midweight Synthetic Insulated Jacket

A midweight synthetic insulated jacket or vest which is useful on cold days or when sitting around at camp. Synthetic insulation is best as it is still warm when wet.

*We recommend The North Face Summit Thermoball Hoodie, Rab Xenon X, Montane Prism and the Arc'Teryx Proton LT Synthetic Insulated Jackets.*



### Midweight Fleece/Softshell Jacket

This can be a midweight fleece (200-300 weight) or insulated softshell with a full front zip for ventilation. Zip up pockets help to avoid losing items that are stored in there.

*We recommend the Marmot ROM, Rab Kinetic Plus or the Vapour-Rise Alpine Softshell Jackets.*

### Lightweight Fleece Top

A lightweight (100 weight) fleece top is a good additional layer to keep your thermoregulation perfect. Wear it as your top layer when warm and then put your midweight jacket over it, when it gets colder. It can be a light fleece pullover which has either a short or full zip.

*We recommend The North Face TKA 100 Glacier ¼ Zip, Marmot Reactor Half Zip, Rab Power Stretch Pull-on, Patagonia R1 Hoody or the Arc'Teryx Koneal Hoody Fleece Tops.*

### Softshell Climbing Pants

Stretchy softshell climbing pants with wind and water-resistant qualities. These can be used independently of your Gore-Tex pants in fine weather, but do not replace the Gore-Tex overpants.

*We recommend the Marmot Scree, Montane Alpine Stretch and the Rab Sawtooth Softshell Pants.*

## Base Layer Top x 2 and Leggings x 2

Tops should have long sleeves and we recommend a high neck with zips to allow some ventilation. Long underwear can be worn as a single layer on hot days and under your Gore-Tex or climbing pants, when additional warmth is required. It is advisable to keep one set of base layers dry for sleeping in and have your other set for climbing/trekking.

*We recommend The North Face Warm, Rab Merino+ or the Montane Primino Base Layer Ranges.*

## Glacier Shirt

This is a light coloured long sleeved cotton shirt to be worn on hot days to prevent sunburn and protect from mosquitoes. The lightweight fabric also dries quickly on wet days.

*We recommend The North Face Adventure Consultants Branded Long Sleeve Cool Horizon Shirt, available from our office.*

## Trekking Pants

Long trekking pants are critical to keep the mosquitoes off your legs.

*We recommend The North Face Range of Trekking Pants.*

## Underwear

Sufficient changes of underwear for the trip. You can now get some items in fast drying thermal fabrics that can be much nicer in cold and wet conditions, when cotton can leave you cold and damp and at risk of chafing.

*We recommend the Smartwool, Montane Primino or the Rab Merino+ Ranges of Underwear.*

## Casual Clothes

You will need casual clothing suitable for wearing before and after your journey into the mountain. Please wear long sleeved pants and shirts to respect local sensibilities, and to help keep the mosquitoes at bay!

		
Rab Merino+ 160 Long Sleeve Zip Tee	The North Face Breeze Brimmer Sun Hat	Julbo Monte Bianco Sunglasses

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## 2.0 Head Wear

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### Warm Hat

This hat can be wool, merino, windstopper or fleece hat. It should extend over the ears and be snug enough not to fly off in a strong wind.

*We recommend The North Face Bones and the Rab Logo Beanies.*

### Sun Hat

A wide brimmed, soft hat or baseball cap with bandana to protect you from the sun. The sun is extremely strong at altitude, especially as there is less pollution in the air.

*We recommend The North Face Horizon Breeze Brimmer Sun Hat, available from our office.*

### Sunglasses

Preferably a wraparound style which provides good protection from reflected light. The lens should be dark enough to withstand the intense sun and MUST filter 100% of UVA, B and C radiation. The UV index increases 10% with every 1,000m gain in altitude, so it is of utmost importance you protect your eyes. We recommend a photochromic or category 3 polarized lenses with an anti-fog coating. If you wear prescription glasses, we recommend you get prescription sunglasses. If you wear contact lenses, it is advisable to bring a pair of prescription sunglasses as a back-up. Leashes and nose guards can be used.

*We recommend Bollé, Oakley, Julbo, Adidas and Smith Sunglasses.*

## Buff or Bandana (Optional)

A lightweight cotton Buff or bandana is ideal for sun protection or added warmth.

*We recommend the Adventure Consultants Branded Buff, available from our office.*

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## 3.0 Hand Wear

Like body wear, you'll need a few combinations of gloves for a wide variety of temperatures. Layering works well, so check the various combinations work together.

### Liner Gloves x 3 Pairs

These form a base layer and are worn whenever climbing. Lightweight comfortable finger/liner gloves are worn on hot days to protect against sunburn and under heavier gloves on cold days.

*We recommend Budget Polypropylene, Black Diamond Lightweight and the Rab Stretch Knit Liner Gloves.*

### Leather Work Gloves




These will be the single most useful pair of gloves that you will have on this expedition and they are great for climbing the fixed ropes on warmer days. These must be able to cope with the very sharp rock found on Carstensz and be able to fit over your liner gloves, while still being snug fitting enough to allow dextrous rope work. Many guides simply use leather gardening gloves with a good coating of waterproofing agent.

*We recommend Marmot Basic Work, Black Diamond Crag, Rab Alpine and the Outdoor Research Airbrake Gloves.*

### Mountaineering Gloves

A warm pair with a wind and waterproof shell is essential. We generally use Gore-Tex (or a similar waterproof fabric) gloves with removable fleece liners, so the liners can be removed to make drying easier. A good model will also have abrasion resistant palms and shaped fingers. Bring several sets of liners so you retain dry hands on summit day.

*We recommend the Rab Alliance and the Outdoor Research Alti Mountaineering Gloves.*

		
Mountain Wear Polypropylene Liner Gloves	Rab Alpine Leather Gloves	La Sportiva Trango Tower GTX Boots

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## 4.0 Foot Wear

### Socks x 3-5 Pairs

Various combinations suit different people. You need at least 3 complete sets of your personal preference; one for each climbing day and a spare change. Some people prefer to wear just one pair of socks in their boots, while others wear two; a thicker pair over a thinner one. You will need one set that will remain clean, dry and unworn for your summit bid.

*We recommend the Smartwool, Bridgedale, and Thorlo Socks.*

### Trekking/Climbing Boots

You want a lightweight and waterproof pair of comfortable trek/climbing boots with good ankle support and a reasonable sole for traction such as Vibram. A lightweight  $\frac{3}{4}$  shank boot is the best option and some people prefer a trekking shoe because they are lighter, but a boot offers much better ankle support.

*We recommend the Scarpa Charmoz Pro GTX, Salewa Crow GTX and the La Sportiva Trango Range of Boots.*

## Long Gumboots

These can be found in Indonesia only up to size 42 so we suggest you bring your own. Due to the excess of mud on the trek, you may find these the best option and these boots should not be insulated.

*We recommend the Irish Setter Rutmaster 2.0 17" Non-Insulated Rubber Boots*

## Gaiters

Full calf-length gaiters help to keep small stones out and protect your overpants. These need a good tie-down system under the instep to stop them creeping up at the heel. A Velcro closure at the front is best for putting them on and removing them easily.

*We recommend the Sea to Summit Alpine and the Rab Latok Gaiters.*

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## 5.0 Pack & Bags

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### Small Lockable Duffel Bag




Bring along a small duffel bag to leave at the hotel with any surplus gear and travel clothes. Bring a combination lock so that it is securely locked during your absence.

*We recommend The North Face Base Camp Duffels (XS and S).*

### Mountaineering Packs x 2 (Or 1 Pack and 1 Duffel)

Bring 2 packs, or 1 pack and 1 duffel bag. Your porter will carry 15kg of gear and you must carry the rest (unless you arrange an additional porter with us well in advance). The local porters do not have their own packs so you need to supply a second pack of around 40-50 litres (or a duffel), which will be used by them to carry your gear along with some of the group gear. It can be an old pack, no need for a new one and this will be given back after the trek. Your personal pack should be approximately 35-40 litres in capacity, which is compressible to use as a summit daypack to carry a jacket, camera and snack food. Avoid trekking style packs with bulky side pockets.

*We recommend the Black Diamond Speed 40, Deuter Guide 35+ or Osprey Mutant 38 Packs and/or The North Face Base Camp Duffels.*

		
Irish Setter Rutmaster 2.0 17" Non-Insulated Rubber Boots	Osprey Mutant 38 Mountaineering Pack	Rab Ignition 4 Synthetic Sleeping Bag

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## 6.0 Camping Gear

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### Synthetic Sleeping Bag (-10C/14F)

The bag should be roomy enough to allow you to dry damp clothing in your bag without it being too cramped. Also, do ensure that your feet do not press hard against the foot of the bag. Although down fill is less bulky than synthetic fill, it quickly loses its warmth-retaining properties when damp, hence a synthetic model is preferable on this expedition. A silk sleeping bag liner helps keep your bag clean.

*We recommend the Mountain Hardwear Lamina, Marmot Trestles, Mountain Equipment Aurora or the Rab Ignition Ranges of Synthetic Sleeping Bags.*

### Sleeping Bag Liner

This is useful both to keep your sleeping bag clean as well as in the more remote hotels to use as a very lightweight sleeping bag.

*We recommend Sea to Summit Silk Sleeping Bag Liners.*



## Foam Sleeping Mat




Take along a closed-cell foam, full-length sleeping mat which is used to increase the warmth of your air mattress and to increase comfort. It is also used to protect your Thermarest from damage and can be used to line your duffel bag to protect its contents.

*We recommend the Therm-a-Rest RidgeRest SOLite Foam Sleeping Mats.*

## Inflatable Sleeping Mat

We suggest a lightweight ¾ length model for use in conjunction with a foam mat. Bring a repair kit also in the case of punctures or valve failure.

*We recommend the Therm-a-Rest NeoAir XLite, NeoAir Xtherm and the ProLite Plus Air Mattresses.*

		
Therm-a-Rest NeoAir XTherm and NeoAir XTherm MAX Inflatable Sleeping Mats	Black Diamond Storm Headlamp	Nalgene 1 Litre Wide Mouth Water Bottles

## 7.0 Accessories

### Headlamp and Spare Batteries

Headlamps are needed for early starts, long days or night visits to the toilet. Headlamps are more versatile than hand torches as they allow you to keep your hands free. Remember to bring spare batteries.

*We recommend the Petzl Actik or Myo, and the Black Diamond Spot or Storm Headlamps.*

### Personal First Aid Kit and Medications

You should carry always basic first aid kit, including blister tape, second skin, gauze pads, crepe bandage and painkillers (Paracetamol and Tylenol are great for altitude headaches). Include any personal medication required plus extras and be sure to inform the office and your guide, if you are on prescription medicine. Store your first aid kit in a waterproof container.

### Personal Toiletries

You won't need to take much with you for the short duration of the climb, but do include a toothbrush, toothpaste and some baby wipes. Make sure everything liquid is in containers that don't leak or break! A personal roll of toilet paper and hand sanitizer can be very useful.

### Sun Block and Lip Balm

This should be SPF 30 or higher and a waterproof sports version will last longer as you perspire. Small tubes for the face and sticks for lips that can be carried in a pocket for fast application are best.

### Wet Wipes

Baby Wipes or similar pre-moistened cloth wipes for personal hygiene. These antibacterial wipes are excellent for cleaning hands and other hygiene issues during the trek and when in Base Camp.

### Water Bottles x 2

Two plastic bottles with heat-resistant qualities and a wide top of at least 1-litre capacity are ideal. A "Camelbak" type water carrying system is useful in theory but may freeze on cold mornings, even with an insulation sleeve on the tube and they are prone to damage.

*We recommend Adventure Consultants Branded Nalgene 1 Litre Wide Mouth Bottles, available from our office.*

## Pee Bottle

This is just a water bottle with a different job. We recommend that you mark this bottle in some way (e.g. with strips of duct tape) so you do not confuse them in the dark. Pee funnels are available for women to allow you to pee without exposing any bare skin to the elements, but require some practice to use successfully.

*We recommend the Nalgene HDPE Wide Mouth 1.5 litre Bottle and the Sports and Travel Freshette for Women.*

## Foot Powder

A talcum powder type for dusting your wet feet after a long day of trekking in the rain and which will help keep blisters and other damp foot problems away.

## Cup, Bowl and Cutlery

Plastic Mug: An insulated mug with attached snap on lid is a great idea.

Bowl: A deep 2-3 cup capacity bowl.

Cutlery: Lexan or other good quality lightweight plastic.

*We recommend Sea to Summit and GSI Tableware and Cutlery.*

## Additional Snack Food

Bring some additional items for snacking on and some of your favourite energy gels and electrolyte drink sachets for summit day. A couple of your favourite bars for each of the trekking days will help supplement the meals. Bring your favourite tea/coffee/hot chocolate to ensure you have your preferred sustenance. If you have any specific dietary needs then please discuss this with us, as it may mean you will have to bring a significant amount to substitute the food that we provide.

## Insect Repellent

Use insect repellent as a mosquito deterrent for use in Western Papua. As we will be travelling in an area with mosquitoes, it is important to minimise insect bites to avoid malaria. Use repellent containing DEET or Picaridin on exposed skin. DEET concentrations of 30% to 50% are effective for several hours.

		
Sea to Summit Delta Camp Set	Osprey Ultralight Raincover	Sea to Summit Stuff Sacks

## Water Purification Tablets

Iodine or Chlorine tablets (some combinations come with a "neutraliser" to block the taste of the tablets) or a personal water purifier. It is useful to have your own system for water to use when walking during the day.

## Waterproof Pack Cover

You can bring a purpose made waterproof pack cover (optional) or you can use a pack liner.

*We recommend Osprey Raincovers.*

## Stuff Sacks and Plastic Bags

Lightweight coloured nylon stuff sacks are good for sorting and storing gear. Stuff sacs should be lined with plastic bags to keep gear dry.

*We recommend Sea to Summit Ultrasil Dry Sacks, Compression Sacks and Pack Liners.*

## Heavy Duty Plastic Bags

These are great for a range of different uses, but mainly to keep your gear dry.



## Personal Entertainment (Optional)

Feel free to bring a good book, playing cards, diary and iPod, etc. A smartphone (used in flight mode to extend battery life) can combine the functions of separate devices (camera, video, music and e-books etc.) into one, so this can be a good option when combined with a small USB recharger such as the Goal Zero Flip 10 or 20.

## Camera (Optional)

Take your choice of SLR or a fully automatic camera. Be aware that batteries can be a problem with cold temperatures so it is a good idea to bring spare sets of batteries. SLR cameras are quite bulky, so are not well suited for Carstensz and the weight restrictions of helicopter access. We recommend one which will attach to your chest harness on your pack. Experience has taught us that ease of access equals lots of great photos.

## Collapsible Trekking Poles (Optional)

Collapsible trekking poles can be very useful on the trek out, especially if you get sore knees on the downhill sections. Ensure you have the trekking baskets on the poles and not the wider snow baskets that will get stuck under rocks and roots.

*We recommend Leki and Black Diamond Trekking Poles.*

## Waterproof Notebook and Pencil (Optional)

If you wish to write diary entries, it would be a good idea to have a waterproof notebook.

		
Petzl Meteor Climbing Helmet	Black Diamond Aspect Climbing Harness	Petzl Ascension Ascender

## 8.0 Climbing Equipment

### Climbing Helmet

Climbing helmets aim to deflect falling rock/ice and protect the head in the event of a fall. Be aware that plastic becomes brittle as it ages so if you are borrowing a plastic helmet, it should not be more than 4 years old. Composite (fibreglass/carbon fibre) helmets are also available but can be quite heavy and expensive. Check that the helmet adjusts enough to allow you to wear a warm hat underneath and a hood over the top.

*We recommended the Petzl Meteor or Sirocco, or the Black Diamond Vector and Vapor Climbing Helmets.*

### Climbing Harness

Bring a lightweight alpine climbing harness. This must have gear loop(s) and adjustable leg loops and waist to fit over the varying clothing combinations that are worn during the expedition.

*We recommend the Petzl Adjama, Luna and Aquila, or the Black Diamond Aspect and Lotus Climbing Harnesses.*

### Belay/Rappel Device

A figure 8 device for rappelling is preferable to an ATC as they more readily accommodate the ropes of different thicknesses as found on Carstensz.

*We recommend the Petzl Huit or the Black Diamond Super 8 Belay/Rappel Devices.*

### Locking Carabiners x 3

Bring 3 lightweight screwgate pear-shaped carabiners. Do not get the ball lock type, just a simple screw lock. Whatever you use make sure you bring the type you are most familiar with and have used in cold conditions.

*We recommend Petzl and Black Diamond Locking Carabiners.*

### **Non-locking Carabiners x 3**

Bring 3 lightweight non-locking carabiners.

*We recommend Petzl and Black Diamond Non-Locking Carabiners.*

### **Mechanical Ascender x 1**

Bring one mechanical ascender for climbing fixed ropes.

*We recommend the Petzl Ascension, Grivel A&D or the Black Diamond Index Ascenders.*

### **Leg Prusik x 1**

This is a loop for the feet used when climbing or jumaring rock steps. This can be made from 3 metres of 6mm cord or 20mm tubular webbing.

*Adventure Consultants has prusik cord and tape available for purchase. Pre-made foot loops like the Petzl Foot Tape are also available.*

### **6m of 12mm Tape or 8mm Cord**

You will require a leash to attach your mechanical ascenders to your harness. Our preference is to improvise leashes from cord or webbing. Leashes should be no longer than the distance from your tie in point to your hand on an outstretched arm, so that when you are resting on the rope you can still reach the ascender. Bring the above-mentioned cord or tape and your guide will assist in making up the leash system.

*Adventure Consultants has prusik cord and tape available for purchase.*

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**NOTE ON YOUR EQUIPMENT: Please read through these notes thoroughly and double check your equipment list while you are packing, as you cannot purchase gear in Bali/Papua, should you forget anything. If you are unsure of anything, please contact our Equipment Coordinator who will be happy to advise.**

**Adventure Consultants provide a facility for the purchase of recommended clothing and climbing equipment through our office. Please enquire for the catalogue and prices.**

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