

ITEM	IM	AGE SAMPLES	EXAMPLES	NOTES	YOU PROVIDE	V
Lightweight Backpack/ sac				Super lightweight for carry-on items on the flight to Barneo. 25L max.	1	
CLOTHING						
Underwear	Money and	CEBRÉAKER	Icebreaker Mont	Polypropylene or merino No cotton	3 minimum	
Thermal top and pants (base layer)				Worn next to the skin, polypropylene or merino, two different weights for different temperatures but both can be layered if very cold. Thumb loops on sleeves help to keep hands warmer. No cotton	2 of each	
Fleece jacket or pullover				Worn over thermal top, full zip (gives better ventilating options), Polartec 200 (or 300 if you feel the cold), add extensions to all zippers so you can operate zips with mittens on. Add long extensions to all zipper sliders. No cotton	1	
Fleece pants				Worn over thermal base layer. Polartec 100	2	
Shell jacket			Bergans <i>Arctic Expedition</i>	Worn over thermals and fleece, large hood with reinforced rim, large pit zips for ventilation, large-tooth zips, add long extensions to all zipper sliders. Do not use a mesh- or fleece-lined jacket, it must be a shell only. No waterproof zips.	1	
Shell pants	M		Bergans Arctic Expedition Salopette	With full-length side zips and braces, large- tooth zips (no waterproof zips). Add long extensions to all zipper sliders.	1	
Ski shorts/ skirt			Wedze Short Arctica Short Mountain Hardwea Skirt	Very difficult to add warmer layers underneath your shell if you get cold legs. Padded ski shorts are an easy way to get warm. Must have full-length side zippers/s for donning with skis on. Add long extensions to all zipper sliders.	1	



YOU MU	ST PROVIDE THE FOLLOWING				
ITEM	IMAGE SAMPLES	EXAMPLES	NOTES	YOU PROVIDE	✓
Down puffer jacket - lightweight		Mont Zero Rab Microlight MHW Ghost Whisperer Uniqlo Ultralight	Down, windproof, oversized to wear easily over shell jacket when it gets windy/cold. Add long extensions to all zipper sliders.	1	
Down or synthetic puffer pants - lightweight		Mountain Hardwear Compressor Pant Rab Photon Pant	Down or synthetic fill, full-length side zips	1	
Warm jacket		Mont <i>Icicle</i> Rab <i>Batura</i>	Minimum 300g of 800-fill down. Attached hood. Worn over everything when taking a break. Add long extensions to all zipper sliders. Do not use a one-piece mountaineering suit	1	
Polar hat		Icetrek Celsius Hat	Windproof, fleece lined, must have full ear coverage	1	
Fleece or wool hat	ar expadition	Icetrek <i>Lo Go</i> <i>Beanie</i>	For warmer conditions, sleeping, in tent, spare	1	
face mask		Icetrek <i>Guru</i> Face Mask	Neoprene, protects face in extreme cold	1	
neck gaiter or 'buff'		Buff Original	Protects neck and face, can be worn multiple ways. Silk, fleece or capilene, NO COTTON	2	
polar mittens		Icetrek <i>Kelvin Mitt</i>	Modular - windproof outer and removable fleece, down or Primaloft inner. Rated for polar or high altitude mountaineering use. Oversized to accommodate liner mitts.	1	
liner mittens		Hestra Pancho liner Outdoor Research Flurry Outdoor Research Shuck Mitts	Wool or fleece, fit under polar mittens.	1	



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ITEM	IMAGE SAMPLES	EXAMPLES	NOTES	YOU PROVIDE	✓
ski gloves		Hestra Falt	For warmer conditions. Preferably modular (removable inner).	1	
liner gloves		North Face PowerStretch	Polypropylene, capilene or merino. For inside the tent. Not to be used as mitten liner as this makes the hands cold by preventing skin to skin contact of fingers.	1	
vapour barrier socks		SealSkinz Trekking Thick	Warm waterproof socks, prevent sweat from entering boot liners	1	
nylon liner socks		Wilderness Wear Wick Dry Wigwam Gobi Liners	Fine knit, worn next to the skin, helps prevent blisters	1	
thick tent socks		Bridgedale <i>Trekker</i> Wigwam <i>Snow</i> Altitude	For in the tent/sleeping bag, wool or synthetic. Can be used as a trekking sock with liner.	1	
Tent boots		Exped <i>Booties</i> Helsport <i>Bivy Shoes</i> Baffin <i>Cushy Booty</i>	For inside the tent and quick trips outside. Down or synthetic fill	1	
воотѕ					
Polar boots		Baffin 3-Pin Guide Pro (man and women) Alfa Polar or Advance Baffin Impact (women)	Flexible sole, removable inner. Be sure to size your boots to fit orthotics if you use them. Order two sizes above usual size when ordering Guide Pro. PLEASE LET US KNOW WHICH MODEL YOU HAVE so we can match them to appropriate bindings. Do not use mountaineering, alpine touring or plastic boots	1	
EYEWEAR					
Sunglasses		Julbo <i>Aero UTMB</i> Smith Optics <i>PivLock</i> Oakley <i>Flak</i>	Frameless, interchangeable lenses (yellow good for low light), attach a nose piece for wind and sun protection.	1	



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ITEM		IMAGE SAMPLES	EXAMPLES	NOTES	YOU PROVIDE	✓
Goggles			Julbo <i>Aerospace</i> Smith Optics <i>Turbo</i> <i>Fan</i>	Goggles fogging and icing can be a frustrating problem for polar travellers. These models work well at extracting moisture within the goggles and preventing icing up on the inside of the lens.	1	
Spare contact	ct lenses or prescr	iption glasses if required			as required	
POWER / CI	HARGING		_			
Power bank			Lithium. For charging	g devices.	1	
Chargers and	d power cables		For devices		√	
OTHER E	QUIPMENT					
Down-filled sleeping bag			2-3 season down sleeping bag plus if you sleep coldly, a Sea to Summit Reactor Thermolite or Fleece, or similar	2-3-season down sleeping bag (between 400 and 800g of goose-down, -0 to -10°C) with or without hood, depending on how warmly you sleep. Women typically require warmer bags. This will be paired with one of our synthetic outer sleeping bags. Most of our outer bags have a zipper on the left side. Box or rectangular foot is more comfortable than mummy. Don't bring a bulky 4-season bag. You may also like to bring a liner.	1	
Thermos flask			GSI Glacier Thermos King	1 litre. We provide one, you bring the other.	1	
Sipper bottle			Nalgene Camelbak HydraPak	500ml Additional water capacity plus useful as a sipper inside the tent/sleeping bag.	1	
Pee bottle			1 litre Nalgene Wide-Mouth	Useful for men, and for women using a FUD (see below)	1	
Pee Funnel			SheWee Freshette	Used by women for urinating while dressed/ standing.	1	
Stuff sacks			Sea To Summit Ultra-Sil Stuff Sacs	For packing clothes etc. L or XL. do not bring buckle-closure dry sacks as they are more difficult to operate and waterproofing is not necessary	4-6	



If you are unsure about anything, check with us before buying.

ITEM	IMAGE SAMPLES	EXAMPLES	NOTES	YOU PROVIDE	,
Pocket knife /	multi-tool	Leatherman, Swiss A	rmy Knife	1	
Personal toilet powder etc.	tries & medications with pack towel, Wet Wipes,	toothbrush, toothpaste, ar	nti-bacterial gel, Band-Aids, blister kit, foot	√	
Chemical hand	d warmers			10	
Sun screen (S	PF40+) and lip protection			✓	
Spare batteries for devices		MUST BE LITHIUM.	MUST BE LITHIUM. Nothing else works in the cold		
Insurance policy				✓	
Camera		With lithium-ion batte	ries	Optional	
Watch with new battery and long strap for wearing over sleeve				Optional	
Accessory cor	d	3m, 3mm, for adding	extensions to your zips if not already done	Optional	
book/Kindle				Optional	
diary and pencil				Optional	
Music device, headphones				Optional	
ear plugs and eye shades				Optional	

When purchasing clothing and equipment please consult with us well in advance so that we can check it's appropriateness for the polar environment. Read our advice below.

Longyearbyen has a number of quality outdoor stores where most items of clothing and equipment can be purchased. They are closed on Sundays and public holidays. We suggest you rely on these stores only as a backup.

There will be a strict hold luggage weight limit on the flight from Longyearbyen to Barneo Ice Camp of 40kg which includes your sled, food and ski equipment. Do not exceed this limit or you will be liable for excess luggage charges. Do not add anything to the list above without consulting us. Every extra item is additional weight and slower progress and may attract excess luggage charges.

Take advantage of our 20% discount on selected <u>lcetrek Equipment</u>. Ask us for a code.





ITEM	QUANTITY	VING, most of which you return to us after the trip	
Fur ruff	QUANTITY 1		✓
	I	Attached temporarily to your jacket hood using magnets	
Skis bindings, skins, poles		Icetrek Flexi ski bindings with touring skis, climbing skins and adjustable ski poles.	
Sled harness with whistle	_	Used to haul sled	
Sled and hauling traces	1	Plastic amphibious expedition sled with large zipped cover and traces (hauling lines)	
Strain reducer	1	Bungee connector that reduces the strain on your back when hauling.	
Ice tools	1	ice axe, hammer etc	
Tent	1 per pair	4-season, with spare pole set. 4-person tent for 2 people	
Tent anchors	12 per tent	Ice screws and stakes for anchoring the tent to snow	
Tent brush	1 per tent	For cleaning snow from tent floor	
Inflatable mattress	1	Combined to give thermal R-value of 5+	
Foam mattress	•	Consumos to give thermal in value of the	
Camp seat	1	Converts mats into chairs	
Synthetic-fill outer sleeping bag	1	Wide, side zipper, with hood. This will be paired with your down sleeping bag.	
Snow Shovel	1 per tent	Used for shovelling snow onto tent flaps and for collecting snow for cooking.	
Stove kit	1 per tent	You will be trained in stove use before we depart.	
Fire blanket & stove instructions	1 per tent	stove safety	
Food		see Polar Food and Diet	
Snow bag	1 per tent	Used to collect snow blocks for melting on the stove	
Toilet paper and hand wash		We provide as much as you need	
Thermos flask	1	You provide one, we provide the other	
Nalgene bottle with bottle parka	1	An additional 1 litre of water carrying capacity, also used as a hot water bottle	
Bowl, cup, spoon	1 set	Freezer safe!	
Utility spoon	1	Useful for scooping food out of your lunch bag with mittened hands	
Ice brush	1 per tent	For de-icing your clothing and boots	
Throw bags	1	For safety when crossing thin ice	
Raft reels	2 per team	50m lengths of cord used to ferry rafted sleds across open water	
Navigation equipment	Guide		
Communications	Guide		
Polar bear deterrents	Guide	Firearms, flare guns	
Medical kit	Guide		
Repair kit	Guide		



	USEFUL INFORMATION
cameras	Small digital still cameras can be kept warm in a pocket but keep it in a sealed bag or case. This prevents perspiration ice forming on it when it's in your pocket. A camera brought from the cold into a warmer tent will fog up instantly. Always keep it covered until it reaches the ambient temperature before using it. Remember, the smaller the buttons, the more difficult to operate. Best performing compact camera in extreme cold is the Panasonic Lumix DMC-FT6.
cold	The Arctic Ocean can be extremely cold in April, down to -45c. This is manageable (and exciting!) with the right clothing and equipment, but don't underestimate it, even if you are reasonably cold-tolerant. Be sure that all of your gear - clothing and equipment - is in full working condition. Any liquids - water, gels etc - will freeze unless insulated.
dexterity	You will be wearing mittens while outside. Your dexterity will be drastically reduced however you still need to be functional - adjusting zippers, operating buckles and toggles, pulling straps, eating etc. While at home, practice using your mittens while adjusting your shell clothing. If you can't make adjustments with your mittens on at home, you will not be able to make them on the ice, so make changes where possible. Add extensions to all of your zippers (see below).
dressing	Because you'll be active during the day, it will be unlikely that you will wear anything more than a fleece jacket and a thermal top under a windproof shell while skiing. If you get cool while skiing your light puffy jacket will go over everything, including your windproof, so make sure it is roomy enough. Your big down jacket will only be used during breaks and camp setup/decamping. Avoid tight fitting clothing. Even your base layer should be quite loose. Thumbloops on sleeves add warmth to hands. Inside the tent you will be warm enough to get by without gloves and your warm jacket. The tent is warm and comfortable with the stove running.
eating	The food we provide is high in energy, easy to prepare and relatively low in weight and bulk. If you do not eat or drink adequately you will feel the cold much more, hunger and dehydration are two of the main contributors to hypothermia. Check the <u>Polar Diet</u> on our website.
electronics/ batteries	Extreme cold will have a negative effect on electronics and batteries. Lithium batteries work best. Alkaline, NiCad and rechargeable do not hold their charge in extreme cold.
fabrics	Cotton. Avoid cotton garments as they do not retain heat when wet Polar fleece. Excellent under all conditions Gore-Tex. OK to use but not ideal in extreme cold as it does not breathe fast enough Merino wool. Excellent for base layers Synthetics. Excellent strength and tear resistance, not as warm as wool Windstopper/Windbloc. Excellent in hats but not useful under shell clothing Wool. Wool is an excellent insulator. Thick wool items are slower to dry
hygiene	Consider bringing some personal hygiene items. There won't be any running water and warm water is at a premium. A quick-dry wash cloth can be used for washing yourself but bear in mind that if not dried adequately it will freeze. An alternative is using wet wipes kept in a container next to your body. Talc powder can help too. Disinfectant hand-wash is available for each tent. Use it after toileting and before cooking/eating. For toileting, if it's yellow, we're pretty mellow; if it's brown, bury it down (and away from the tent). We will allocate areas for toileting. Use a pee bottle inside your sleeping bag, ladies can use a FUD with a bottle.
metal	Steel items must be insulated where possible. Even with gloves and mittens on, fingers can become frost damaged when handling cold-soaked steel. Wrap tape around your thermos flask and any other steel items you may have.
orthotics	Be sure to purchase boots big enough to include orthotics if you use them. We recommend you use your orthotics with winter footwear.
power	Only lithium batteries work well in the cold, do not bring alkaline, nicad or rechargeable batteries. The sun is too low on the horizon for solar panels to work effectively.
skiing and resting	We usually ski for 60 minutes then have a short break, and a longer break after each 2 hours. Breaks are usually between 5 and 20 minutes, depending on the cold. Your insulated jacket can go over everything, including your backpack. Keep your skis on during shorter breaks, take them off for lunch. Drink and eat during every break or you will feel the effects of hunger and dehydration. We may travel between 6 and 8 hours every day not including rests.



sled packing	You will be allocated a plastic sled. Pack the largest and heaviest equipment, including food, at the bottom, spreading the weight evenly over the base of the sled. This helps balance the sled and minimizes annoying capsizes. The sleds come with a snow cover and compression straps for securing the load. Items required during the day can be slipped under the cover or carried in your backpack. Large but lightweight items such as sleeping pads can be carried in your backpack to maximize room in your sled if required.
sleeping	Your sleeping bag will keep you warm in the coldest temperatures, so long as you use it properly. Slide into the bag liner, close the zipper, adjust the neck baffle so that it sits above your shoulders, place your head in the hood and tighten the drawcord. This will prevent cold seeping into your bag and warmth from escaping. We provide insulting mattresses with a combined R-Value rating of 5 or more under your sleeping bag. We guarantee you the option of 8 hours sleep every night.
teamwork	Look out for your team mates. Check their faces for frost exposure or injury every time you talk to them. There are lots of little jobs to do - camp setup, filling cooking-snow bags, cooking, cleaning - so pitch in.
windproofing	Windproof shell jacket, pants and mitts are mandatory. A fur ruff on the hood of your shell jacket will block wind and create a warm micro-climate around your face. Shell jacket and pants must not be lined with mesh, fleece or any other fabric.
waterproofing	Waterproofing is not important, it's too cold to rain. Seam sealing actually retards garment breathing but it is difficult to source clothing that is not tape-sealed.
zips	Add extensions to all your zips, about 7-8cm is ideal (see below). Be sure you have a big knot or toggle at the end of each extension to grab with mitts on. Extensions should ideally be a different colour from the garment fabric for easy identification. Make sure all zips are working well, a broken or malfunctioning zip can have disastrous consequences. Avoid waterproof zips as they are difficult to operate in extreme cold. The larger the teeth on your zippers, the better they will perform.



