



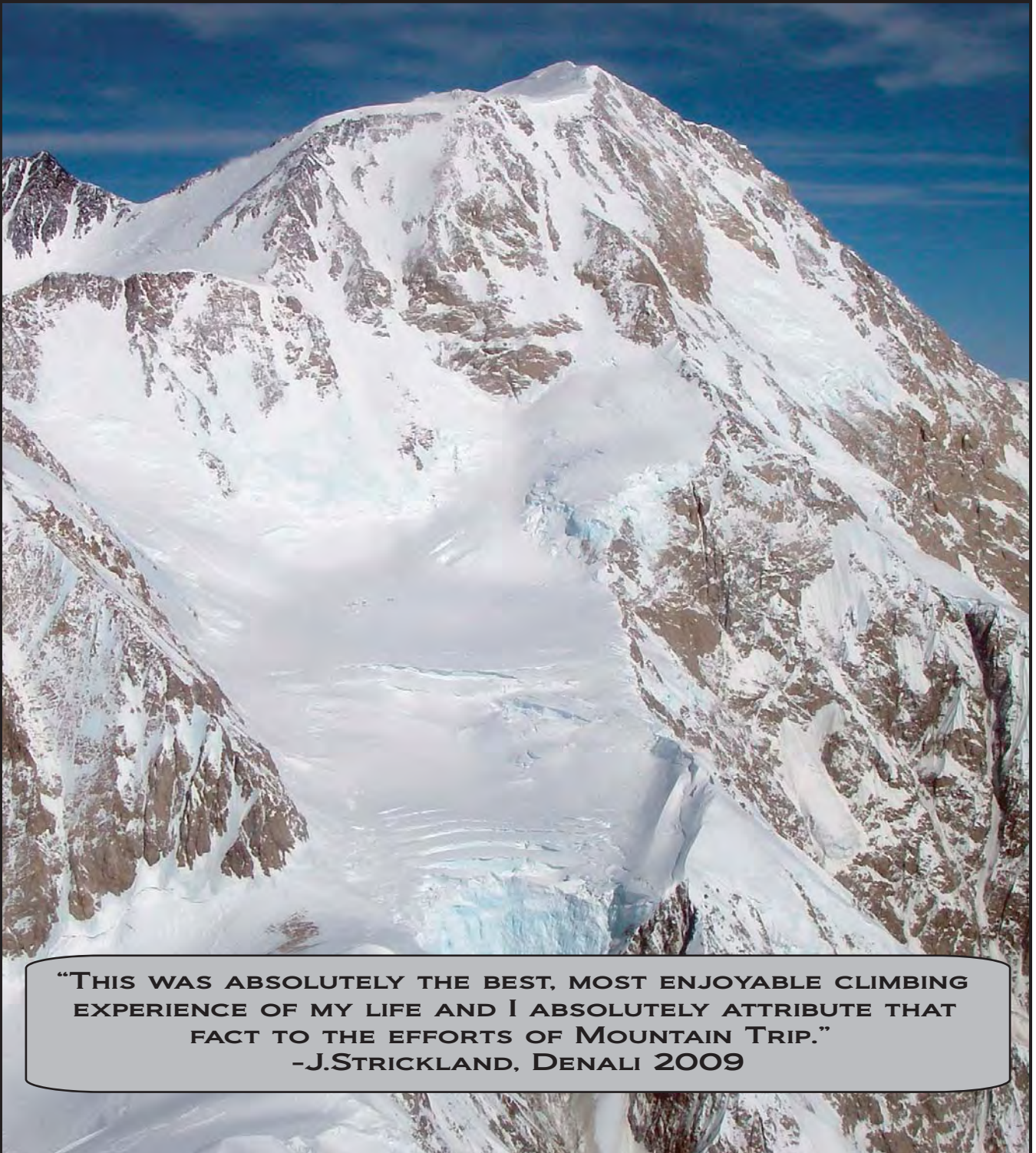
# DENALI

## EXPEDITION PLANNING AND PREPARATION

THE  
SMALL  
COMPANY  
GUIDING  
BIG  
MOUNTAINS  
SINCE  
1973

BECAUSE  
SIZE  
DOES  
MATTER

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**"THIS WAS ABSOLUTELY THE BEST, MOST ENJOYABLE CLIMBING EXPERIENCE OF MY LIFE AND I ABSOLUTELY ATTRIBUTE THAT FACT TO THE EFFORTS OF MOUNTAIN TRIP."**

**-J.STRICKLAND, DENALI 2009**

Thanks for joining Mountain Trip on what many consider the experience of a lifetime! This booklet contains an assortment of information to help you prepare for a safe and successful climb of Denali. Within these pages you'll find an expanded itinerary, gear list and training ideas, as well as some general information and history about Denali and Denali National Park. There are dozens of good books about Denali and a few not-so-good ones, so we have included a suggested reading list. Climbing a high mountain is hard work, requires proper preparation and can be incredibly rewarding. The more physically and mentally prepared you are for the trip, the more you will enjoy your experience.



Denali, as seen from your flight in!

## General Information

**Responsibilities of Team Members:** Team members are ultimately responsible for their own well-being. This includes making all necessary preparations to ensure good health and physical conditioning. Team members are responsible for understanding the conditions that may exist on the climb and choosing a climb that is appropriate for their abilities and interests. Team members are responsible for having knowledge of all pre-departure information and for assembling the appropriate clothing and equipment for their climb. Please contact us with any and all questions. While on the expedition, team members are responsible to maintain basic levels of hygiene and to conduct themselves respectfully with other team members and members of other expeditions. People climb Denali for many reasons and a fun part of joining a team is that you get to share in the diverse experiences of the group. We like to put team members in contact with one another before their climb. If you would not like to be included on team contact lists, please let us know.

**Paperwork:** We must have all of your application paperwork in order to confirm your spot on an expedition. You also need to send the National Park Service registration to the Talkeetna Office. Remember that final payment is due at least 90 days before the start of the trip. Please refer to Cancellation and Refund page in your application packet for details on those policies.

**Airline Arrangements:** Denali climbs may take from 15-22 days. Do not book your return flight too early. We recommend you plan to spend at least **24 days in Alaska** for the West Buttress. You must arrive in Anchorage in time to join the DAY 1 Team Meeting & Equipment check at 10:00am. We strongly recommend you arrive a day early, as this will allow you time for any unexpected travel delays or lost baggage (in 2005 almost 10% of our climbers had baggage delays). For unparalleled travel support, contact **Pirjo DeHart** with *CTT Destinations* at +1-425-831-0367 or via email at: Pirjo.dehart@cttdestinations.com

**Lodging:** We will provide two nights lodging before we drive to Talkeetna at the Earth Bed & Breakfast before the climb as this is the location of our team meeting on DAY 1. If you arrive earlier, you will need to book your own lodging for those nights. Lori and Angel run the Earth B&B, which is located at: 1001 W. 12th Avenue, Anchorage, AK 99501. Their contact phone and email are: 907-279-9907 and info@earthbb.com. This B&B is centrally located and has convenient access to gear shops and downtown. There are many other options for lodging in Anchorage ranging from five star hotels to hostel accommodations. **If you will not be staying at the Earth B&B you still need be there at 10:00am on the day your trip is scheduled to begin.** Please let us know where you will be staying in Anchorage.

**Park Service:** The mountaineering fee of \$200 as well as the Park Entrance Fee of \$10 are payable to the National Park Service when we check in for the climb in Talkeetna. The NPS will accept cash or credit cards, but not checks.

# Expectations



We believe that the most successful expeditions are born of teamwork. Anyone can muddle up a hill, with someone holding his hand, tugging on the rope when the going gets tough. We hope to instill a sense in everyone who climbs with us that through active participation, you walk away with a more positive experience. Strive for quality in everything you do on the mountain, from lacing up your boots in the morning, to taking the extra minute to organize your kit in the tent so your smelly socks don't infringe on your tent mate's airspace. Climbing Denali is a lot of hard work and we really feel that if you aim to do your best at every step of the way, you'll look back at your expedition with a smile and that faraway, Kahiltna glimmer in your eye.

You have embarked upon a journey that will test your will, your patience, stamina, endurance and good humor. Denali is not a comfortable place. You will, at times, find yourself too hot or too cold, too thirsty or too full, moving too quickly or too slowly. There will be plenty of time to hang out and enjoy your surroundings, but at times you will need to focus all your energies at completing the task at hand. The better prepared you are before you fly on to the glacier, the more fully you will enjoy your climb. Feedback over the years tells us that climbers find the dependency on good weather a mental challenge. Climbers have also commented that they should have put in more long days training with their pack on (4-6 hours, plus breaks). It is tough to train for pulling a sled, but some inspired climbers have tied old tires to their packs and pulled them along the beach. Get creative!

There will be opportunities on your expedition to review skills necessary for safely traveling in a glaciated environment and we'll teach you a trick or two; however we do expect you to come to Alaska at least moderately proficient in certain skills. Review the following list of skills and take some time before your trip to get outside and practice them. If you have not used these skills in an alpine setting, consider signing up for an expedition prep course. In addition to teaching skills, such a course can serve as a good reality check for what you might encounter on a longer expedition.

We offer springtime Denali Preparation courses in Colorado and summer courses in Alaska. Give us a call for dates and prices. We can also refer you to someone in your area who we think does a good job.

## Knots:

- "Figure 8 on a bight"
- "Double Fisherman's"
- "Clove Hitch"
- "Water Knot" (For webbing)

## Snow Skills:

- \_\_Basic Ice Axe technique, including self arrest
- \_\_Crampon skills with a focus on French Technique (Alpinists have great French Technique!)
- \_\_Plunge stepping down a snow slope

## The Basics:

- \_\_Make sure you know how to adjust your pack and harness. Practice packing your backpack.
- \_\_Practice putting on your crampons while sitting and standing (with and without overboots)
- \_\_Familiarize yourself with your ascenders and how to attach and disengage them from a rope with one gloved (and mittened) hand.

## Recommended Reading:

- Glacier Mountaineering, by Andy Tyson
- Freedom of the Hills, by The Mountaineers



Practice at home, so you can better enjoy your climb!

# West Buttress Itinerary



Denali is a big, serious mountain with big mountain weather, geography and acclimatization issues. The following itinerary represents a very basic outline of what could happen on a given day during the course of a Denali expedition. Many factors can, and probably will, contribute to cause the following schedule to change. Our guides know the mountain and may elect to stray from this itinerary in order to give you the best possible shot at getting to the summit.

**DAY 1: MEET IN ANCHORAGE.** *Team Meeting at 10 A.M.* for an expedition orientation and equipment check. **This is a very important meeting, which you must attend!** Be sure to arrive in Anchorage early enough to make the meeting; which may require arriving a day early. We have booked rooms for the entire team at the Earth B&B, which is conveniently located near downtown Anchorage. If you are planning on staying elsewhere, you must make arrangements to attend this meeting.

**DAY 2: TRAVEL TO TALKEETNA AND FLY TO THE GLACIER.** Team members will travel by shuttle the several hours to Talkeetna. Everyone will need to register with the National Park Service prior to flying to the glacier. Weather permitting; we will fly into the Kahiltna Glacier at 7,200 feet that afternoon. Once on the glacier, everyone will need to pitch in to get Base Camp established so we can proceed with our on-glacier expedition orientation that will cover the following topics: glacier travel, crevasse rescue, sled rigging, rope management and camp site procedures.

**DAY 3: SINGLE CARRY TO CAMP 1.** We'll load up our packs and sleds and depart base camp, dropping down the infamous Heartbreak Hill and onto the broad Kahiltna glacier. Camp 1 is located at 7,800 feet, near the junction with the NE Fork of the Kahiltna Glacier. Throughout the expedition we will follow the "climb high, sleep low" technique for better acclimatization, however the altitude difference between Base Camp and Camp 1 is minimal enough to permit us to "single-carry" this stretch. On the late May and June expeditions, we may be doing our climbing early in the morning to avoid the excessive heat and soft snow conditions on the Lower Glacier.

This is a challenging, but manageable day and a good shakedown for the days to come.

**DAY 4: HAUL LOADS UP TO KAHILTNA PASS.** We'll head out of Camp 1 and carry loads up Ski Hill. Several options exist for camp sites between 9,000 & 11,000 feet, depending upon weather, snow conditions and team strength. This is a moderately difficult carry of 7-9 miles round-trip, with 2-3,000 feet of elevation gain and a return to Camp 1 for the night.

**DAY 5: MOVE EVERYTHING TO CAMP 2.** Camp is often in the 11,200' basin at the base of Motorcycle Hill. This is an incredibly beautiful camp that basks in alpenglow when the sun travels around the north side of the mountain.

**DAY 6: BACK-CARRY DAY.** This is an "active rest day" during which we drop back down and pick up the cache we left down near Kahiltna Pass. It also helps give us another day to acclimatize before moving higher.



Team climbing above Motorcycle Hill

**DAY 8: HAUL LOADS AROUND WINDY CORNER**

(13,300 FEET). Steep snow climbing up Motorcycle Hill rewards you with spectacular views. The total distance is about 4 miles round trip with a little over 2,000 feet of elevation gain. Fun climbing with crampons and ice axe gets you around Windy Corner where the upper Mountain comes into view-have your camera ready!

*\*\*\* Please note that we have not planned on a "real" rest day before this point. 30+ years of guiding Denali has taught us that climbers fit enough to safely climb the upper mountain do not need rest days below Camp 3.*



Climbers approaching Windy Corner on a windy day!

**DAY 9: MOVE CAMP TO 14,200 FEET.** This is usually a long, hard day. Camp 3 is located at the well equipped 14,200' camp. Loads are getting lighter and the air is getting thinner. Hopefully everyone will have enough energy left to help get camp in as we need to fortify this camp due to the possibility for fairly severe weather.



Camp 3, as seen from below the fixed lines at about 15,600 ft.

**DAY 10: BACK-CARRY DAY.** This is another "active rest day," during which the team will descend from Camp 3 to the Windy Corner cache and bring everything up to 14,200 feet. We'll spend the afternoon going over climbing techniques that we will use in the upcoming days.

**DAY 11: CLIMB UP THE HEADWALL TO THE RIDGE.** Our goal is to cache supplies on the ridge and return to 14,200 feet. Climbing up the Headwall (fixed lines run from 15,500 to 16,100 feet) with a heavy pack is one of the more strenuous days of the trip, because of the steep terrain, heavy pack and thinning air. The views from the ridge can be as breath taking as the rarified air!

**DAY 12: REST DAY.** It is often prudent to take a rest/acclimatization day prior to moving up to High Camp.

**DAY 13: MOVE TO HIGH CAMP.** Weather and team strength will again determine this decision. While there is a camp site at 16,100', it is very exposed, so we usually push for the 17,200 ' site which is more secure and the better choice for camp. This is a really tough day, as our loads are big and the terrain is steep in sections. Rewards for our work are in the great

climbing along the ridge. Weaving in and out of the rocks and occasionally walking a knife edged stretch, combine with big exposure to create one of the most memorable parts of the route.

**DAY 14: REST DAY.** Moving to 17,200' and getting High Camp established can be a huge day, so we usually take a Rest Day before attempting the summit.

**DAY 15: SUMMIT DAY:** If the weather is favorable, we'll push for the summit. However if the weather is not good we will not go. It is important to be patient! We will only try for the summit when the weather is good, meaning mostly clear and calm. Our guides are the most experienced on the mountain and will make this sometimes difficult decision. The round trip climb will take eight to twelve hours or more.

Usually you will depart camp early (7-9 a.m.), climb up to Denali Pass (18,000') and follow the route past Arch Deacon's Tower and the Football Field to the slopes leading to the Summit Ridge. On this spectacular ridge you can often see down into the Ruth Glacier with views of beautiful peaks such as Mooses Tooth, Mt Huntington and Mt Hunter.



Ascending the Autobahn en route to the top!



The amazing summit ridge, as seen from the top of North America.

**\*\*\*Summit Day is serious.** The weather needs to be good and everyone attempting the summit needs to have demonstrated that *they can safely give it a shot*. This is often the most grueling day of the expedition (some climbers say of their lives!). The guides have the ultimate decision as to when the team will make a summit bid. The guides also have the discretion to decide that a team member has not shown that he or she is capable to safely make a summit bid. Such occurrences are rare; but remember— **your safety is our primary concern.**

**DESCENT:** The descent from High Camp takes from one to two days, depending on the team's strength and motivation to get home. The descent can beat you up more than the ascent, as we often have the heaviest loads of the trip as we go down from High Camp to Camp 2. Weather dictates when we can fly out to Talkeetna for food and showers. Not much beats a steak and salad at the West Rib Tavern after working hard on Denali!

# West Buttress Expedition Equipment List



Climbing big mountains inherently requires specialized equipment. The following list should be followed closely in order for you to succeed on Denali. Optional items are noted as such, but the ***rest of the list should be regarded as required equipment.***

Many of the items on the list need to fit you well in order for you to fully enjoy your experience on the mountain. Please plan ahead with equipment purchased for your trip so you can be certain that your gear fits you well. The Kahiltna Glacier is not the place to discover that your pack is too long for your torso or that your boots give you blisters. Lastly, we do provide some recommended items that reflect the opinions of our guides and are weighted toward companies practicing sane environmental practices, but they may not necessarily fit you. Call or email with any gear questions, as we want you to be as prepared as possible for your expedition.

## FOOTWEAR

\_\_\_ **MOUNTAINEERING DOUBLE BOOTS:** Boots fall into two categories, traditional double boots and boot systems with integrated gaiters. The goal is to have warm, comfortable feet! Try on a variety of boots as they all fit differently and get the one that fits well.

*Recommended System Boots:* **LaSportiva "Olympus Mons EVO"** and the **Lowa "Expedition GTX 8000"**

*Recommended Double Boots:* **Scarpa "Inverno" with High Altitude Liners or INTUITION Liners,** "LaSportiva "Nuptse," "Spantik" or "Baruntse"

\*\*\* **All double boots need Overboots and Gaiters** (Unless you consult with us regarding your system)

\_\_\_ **OVERBOOTS:** We are huge fans of the **40 Below Purple Haze**. OR and Wild Country insulated overboots work OK if they fit with your crampons, but they tend to be a bit baggy. Supergaiters alone are not warm enough for Denali.

\_\_\_ **GAITERS:** These must be full height, such as the **Black Diamond GTX Frontpoint Gaiter** or Outdoor Research "Crocodiles." Full coverage "Supergaiters" work great as well. ***Guides' Tip!*** Do your pants really need gaiters? Some fit snugly enough at the cuff that they do not require gaiters to keep snow out. Give us a call...

\_\_\_ **BOOTIES\*\*:** Synthetic or down filled booties. These are great for camp and tent comfort and allow you extra opportunity to dry out your mountain boots. Look for ones with good traction soles. (*Optional, but HIGHLY recommended*)

## GLACIER TRAVEL

\_\_\_ **SNOWSHOES:** Atlas 9 or 10 Series, MSR Denali or Denali ascent. 22-28 inch sizes are plenty big enough. Don't worry about getting the monster ones that the manufacturer tells you that you need for your weight plus your pack.

\_\_\_ **SKI POLES:** Select a length for walking. Almost any ski pole will do, although *adjustable poles work best and you need a fairly large basket for use on snow*. We really like the **Black Diamond Flick Lock poles**.

## CLOTHING

\*\*\*Your clothing layers will consist of **5** total layers for your torso and **4-5** for your legs.  
This is high altitude **ARCTIC** climbing! Variations will always exist, but these are the goals.  
Please call or email us with any questions.

### Torso Layers

\_\_\_ **EXPEDITION PARKA (WITH HOOD):** Marmot, Mountain Hardwear and Patagonia all make good, down filled parkas, but our ***Guides' Pick*** is the **Feathered Friends Volant Jacket with Hood** as it is incredibly warm for its light weight. There are some synthetic options such as the Patagonia D.A.S. Parka and the Wild Things Belay Jacket, however; down is recommended as it is lighter and less bulky. ***Guides' Tip!*** *You probably don't need the burliest parka in a company's line, despite what the your store salesman tries to tell you. Trust us– we know Denali!!*

\_\_\_ **SHELL JACKET:** This should be a lightweight, yet functional piece that fits over your fleece layers. It does not need to be the most burly jacket on the market. ***Guides' Pick:*** The Patagonia Ascensionist Jacket.

\_\_\_ **FLEECE OR PRIMALOFT (PUFFY) JACKET:** Size fleece to fit under your shell jacket and size Primaloft to fit over your shell, as their nylon fabric is already windproof. *We are fans of puffy jackets, as they are warmer for the weight and compress down much smaller than fleece.* **Guides' Pick:** Patagonia Micro-Puff Hooded Jacket.

\_\_\_ **VEST\*\*:** Puffy or down vest adds warmth to a light Expedition Parka. (*OPTIONAL except for early season trips*)

\_\_\_ **"EXPEDITION WEIGHT" FLEECE:** This should be made from 100 weight or Powerstretch fleece. A zip t-neck is good for ventilating. **Guides' Pick:** Patagonia R1 Flash Top or (*Better!*) R1 Hoody.

\_\_\_ **BASE LAYER:** Synthetic or wool Top such as Light or Mid-Weight Capilene or Wool 2 or 3 from Patagonia. A top with a "Zip-T" neck is nice for ventilating and you might consider a light color for warm days on the lower glacier.

\_\_\_ **T-SHIRT\*\*:** Synthetic t-shirt for the lower glacier on late season climbs. Synthetics dry faster! (*Optional*)

## Legs and Feet

Consider how your layers will work as a system. Think about how easy or difficult it might be to change layers when the temperatures drop...or rise. How will you negotiate things when "nature calls?"

\_\_\_ **SHELL PANTS:** These should be large enough to go over your base layers and **must have side zippers.** Again, these do not need to be the burliest Gore-Tex pieces you can find!

\_\_\_ **DOWN or PUFFY PANTS:** This layer must have side zippers, so they can be layered over your shell pants for easy and quick layer changes. **Guides' Pick:** Patagonia Micro-puff pants

\_\_\_ **STRETCH WOVEN PANTS:** Used to be considered optional, "Soft Shell" layer is now considered standard due to the broad comfort range they provide. Pants made of Schoeller Dynamic or similar fabrics can be worn all the way to High Camp in lieu of less breathable shell pants. **Guides' Pick:** Patagonia Simple Guide Pants.

\_\_\_ **"EXPEDITION WEIGHT" LAYER:** **Guides' Pick:** Patagonia R1 or Wool 3 pants

\_\_\_ **BASE LAYER:** Synthetic or wool Bottoms such as Light or Mid-Weight Capilene or Wool 2 from Patagonia.

\_\_\_ **REGULAR UNDERWEAR:** One to three changes should do the trick, although ladies might want a few more. Look for synthetics such as Patagonia Capilene. Ladies might also want a couple synthetic sports bras.

\_\_\_ **SOCKS:** 2 - 4 sets of wool or synthetic medium/heavy weight socks. Make certain your sock s fit with your boots! The new system boots don't need as thick a sock as the boots of old... Early season climbers might add an extra pair.

## Hands and Head

**PLEASE DO NOT SKIMP ON THE QUALITY OF YOUR GLOVES AND MITTENS!!**

\_\_\_ **GLOVES:** Light or medium weight fleece, Windstopper or Schoeller fabric (one or two pairs.) We really like the Shoeller versions. **Guides' Pick:** Outdoor Research "Vert" Gloves

\_\_\_ **INSULATED GLOVES:** Warm, insulated gloves with a gauntlet are the workhorse on Denali. **Guides' Pick:** Black Diamond "Guide Gloves" are bomber and have removable liners for ease of drying.

\_\_\_ **SUMMIT MITTENS:** Thick, warm, non-constricting mittens made of pile, Primaloft or down. **Guides' Pick:** Outdoor Research Alti Mitts. They aren't cheap, but are extremely warm (Divide the cost by 10 fingers!).

\_\_\_ **WARM HAT:** One warm hat or two hats of different weights. Wool or pile is fine. **Your hat must provide ear protection.**

\_\_\_ **\*\*BUFF:** This is the brand name of a lightweight neckgaiter that can also serve as a hat or headband. (*Optional*)- *but the choice of virtually ALL of our guides!*

\_\_\_ **FACE MASK:** Neoprene or Windstopper. **Guides' Pick:** Neoprene ski masks with a light fleece lining

\_\_\_ **SUN HAT:** Baseball type or (better) wide brimmed sun hat for the intense sunshine of the lower mountain. You can combine a baseball hat with a bandana for good sun protection-again, think synthetic.

\_\_\_ **HAND WARMERS:** Bring 5+ sets of the disposable versions. Toe warmers work well too and can keep camera batteries warm on summit day. Early season climbers should bring a couple extra pairs.

\_\_\_ **GLACIER or SUN GLASSES:** They must provide side protection and filter 100% UVA and UVB rays.

\_\_\_ **NOSE GUARD:** You can purchase one (Beko makes nice ones) or make one out of duct tape, but this will save your nose on sunny days.

\_\_\_ **SKI GOGGLES:** For use during storms or really cold spells. UV-protected Amber or Rose lenses work great.

## PACKS

\_\_\_ **EXPEDITION PACK:** 5500+ cu in. or 85+ liters, with emphasis on the "+". You'll need a large pack in order to carry your gear, plus group food & equipment. The Mountain Hardwear BMG is a nice pack, as is our **Guides' Pick:** Osprey Aether 85 Get to know your pack. Train with it.

\_\_\_ **LARGE ZIPPERED DUFFEL:** (36-48") for use as a sled bag. Lightweight and inexpensive bags work great although the Patagonia Stellar Black Hole Bag is just about the perfect sled bag as it is waterproof and light.

## SLEEPING GEAR

\_\_\_ **EXPEDITION SLEEPING BAG:** Rated to 20-30 below. Marmot Col or Cwm, Mt Hardwear Wraith or The North Face Darkstar are all great bags. Which to choose, down or synthetic? Down is lighter and less bulky, but cost a lot more. Synthetic bags are getting much better. What ever you choose, be sure it is a quality product!

**Guides' Pick:** Valandre Freja, a -22F bag that only weighs 3 lbs, 6 oz!

\_\_\_ **COMPRESSION STUFF SACK(S):** Look for light ones such as the Granite Gear Air Compressor or the Outdoor Research Helium Compression Sack. Essential for sleeping bags and we recommend one for your summit clothes, such as your parka, mitts and warmest pants.

\_\_\_ **2 SLEEPING PADS:** You need two pads, one closed cell pad such as a Ridge Rest or a Karrimat and a self inflating pad. **DO NOT** bring an extra wide pad or your tent mates might make you sleep outside! **Guides' Pick:** Exped Down Mat 7 paired with a full length Deluxe Ridge Rest. The new Exped Downmats are very cozy, but require some additional effort and precautions to use. Check with us before purchasing one.

## TECHNICAL CLIMBING EQUIPMENT

\_\_\_ **ICE AXE:** (with leash.) 60-80 cm length works well for the West Buttress and go 10-20 cm shorter for technical climbs. **Guides' Pick:** the Black Diamond Raven Pro is very light yet has a durable steel pick and adze.

\_\_\_ **CRAMPONS:** 10 or 12 point crampons that FIT YOUR BOOTS! Step in or "New-matic" work equally well, just make sure step-in versions fit with your overboots. Aluminum crampons are not acceptable.

\_\_\_ **HARNES:** Your harness **must have** adjustable leg loops. The Black Diamond Blizzard and Alpine Bod harnesses are both lightweight and functional.

\_\_\_ **ASCENDERS:** You can pair one full-sized ascender such as the Petzl Ascension with a Petzl Tibloc, a Wild Country Ropeman or a prussic loop for your feet or bring two full sized ascenders. If you are not comfortable ascending a rope with a prussic or Tibloc, bring two full-sized ascenders. If you opt for only one full sized ascender, and are going to purchase one, try to make it a left-handed one for ease of use on the fixed lines (not that crucial, but convenient). Be sure to bring 6 mm cord or a Daisy Chain to attach your ascender to your harness. We can help you rig this in Alaska.

\_\_\_ **CARABINERS:** Bring two locking carabiners and eight regular carabiners. Mark them with colored tape for identification. Please, no bent-gate 'biners! These look very sexy in the gear shop, but save them for when you put on your neon lycra to go sport climbing. **Guides' Pick:** Black Diamond Neutrinos are very lightweight.

\_\_\_ **CLIMBING HELMET:** Due to warmer than historic temperatures, there is now potential for rockfall along a short stretch of the route. We feel it is prudent for everyone to wear helmets as we negotiate this section. Look for the lightest helmet you can find that is compatible with your warmest hat. **Guides' Pick:** Black Diamond "Tracer "

\_\_\_ **PERLON CORD:** 2 - 30 foot lengths of 5-6 mm cord in different colors for sled and pack tie offs. You can also add a couple of 2 foot bungee cords for rigging sleds.

## ESSENTIAL PERSONAL ITEMS

\_\_\_ STUFF BAGS (for your own items, plus one large stuff sac for a cache bag) \_\_\_ CAMELBACK hydration system (*optional and DOES NOT replace a water bottle and works better on June trips*) \_\_\_ (2) ONE QT. **WIDE MOUTH WATER BOTTLES** \_\_\_ INSULATED COVER (1or 2 for your water bottles). \_\_\_ LARGE PLASTIC CUP for eating (2-4 cup measuring bowl or Rubbermaid storage bowl) \_\_\_ INSULATED CUP for hot drinks \_\_\_ LARGE PLASTIC (LEXAN) SPOON \_\_\_ LIP CREAM (WITH SPF) \_\_\_ SUN CREAM (3-4 OUNCES) \_\_\_ BANDANA \_\_\_ TOILET PAPER (1-2 rolls) \_\_\_ TOILET KIT (Tooth brush & paste, floss, individually packaged Handi-wipes or baby-wipes,... keep it small) \_\_\_ SWISS ARMY KNIFE (*optional*) \_\_\_ P-BOTTLE (wide mouth collapsible Nalgene work great- get the 96 ounce version- trust us! Ladies bring an adapter and please practice before you come) \_\_\_ A SENSE OF HUMOR \_\_\_ SMALL PERSONAL MEDICAL KIT (Blister kit, aspirin, antacids, lozenges, Ibuprofen, high altitude drugs)

*There are certain prescription drugs that are appropriate for high altitude climbing. Should you opt to bring these, please discuss them with your personal physician. Please contact us for a list of suggested high altitude drugs*

## OPTIONAL ITEMS

\_\_\_ CAMERA, lots of film or extra memory card and extra battery \_\_\_ BOOK(S) for storm day reading \_\_\_ DIARY & PENCIL \_\_\_ ALTIMETER WATCH \_\_\_ LIGHTER \_\_\_ HAND and FACE LOTION \_\_\_ FOOT POWDER \_\_\_ MAPS \_\_\_ NECK GAITER \_\_\_ SPARE SUN GLASSES \_\_\_ PERSONAL MUSIC PLAYER (iPod, ETC *Please note that hard drives do not work above camp 2 or 3!*) \_\_\_ SAT PHONE (Iridium and Globalstar work in Alaska) \_\_\_ FAVORITE TREATS (we'll provide plenty of food, but having your favorite energy bar or drink mix on summit day can be really comforting- don't bring much)

## RENTAL ITEMS

\_\_\_ SNOWSHOES (\$50) \_\_\_ SKI POLES (\$20) \_\_\_ CRAMPONS (\$30) \_\_\_ ICE AXE (\$25)  
\_\_\_ ASCENDERS (\$20 ea.) \_\_\_ EXPEDITION PACK (\$75) \_\_\_ SUMMIT PARKA (\$60)

**ALL EQUIPMENT ON THIS LIST IS AVAILABLE AT AMH IN ANCHORAGE 907 272-1811**

And you get a **10% discount**. Check out their Web site: [alaskamountaineering.com](http://alaskamountaineering.com)

**FEATHERED FRIENDS WILL ALSO GIVE YOU A 10% DISCOUNT IF YOU  
TELL THEM THAT YOU ARE JOINING US ON AN EXPEDITION  
[www.featheredfriends.com](http://www.featheredfriends.com)**

Please call or email with any and all equipment questions.

**MAKE SURE YOU TRY EVERYTHING OUT BEFORE YOU BRING IT ON DENALI!!**

## Denali Gear Checklist

- |                              |                            |                          |
|------------------------------|----------------------------|--------------------------|
| ___ Boots                    | ___ Light gloves           | ___ Stuff sacks          |
| ___ Overboots*               | ___ Thick, warm gloves     | ___ Hydration system***  |
| ___ Gaiters*                 | ___ Summit mittens         | ___ Water Bottles (2)    |
| ___ Booties***               | ___ Warm hat               | ___ Insulating cover(s)  |
|                              | ___ Buff***                | ___ Cup, bowl and spoon  |
| ___ Snowshoes                | ___ Facemask               | ___ Lip cream            |
| ___ Ski poles                | ___ Sun hat                | ___ Sun cream            |
|                              | ___ Hand warmers (5+)      | ___ Bandana              |
| ___ Expedition Parka         | ___ Sunglasses             | ___ Toilet paper         |
| ___ Shell Jacket             | ___ Nose guard             | ___ Toiletry kit         |
| ___ Puffy Jacket             | ___ Goggles                |                          |
| ___ Expedition wt fleece top |                            | ___ Swiss Army knife     |
| ___ Base layer top           | ___ Backpack               | ___ P-bottle             |
| ___ Vest ***                 | ___ Duffel bag             | ___ Sense of humor!      |
| ___ T-shirt***               |                            | ___ Personal medical kit |
|                              | ___ Sleeping bag           | ___ Camera               |
| ___ Puffy Pants              | ___ Compression stuff sack | ___ Books                |
| ___ Shell pants              | ___ Foam pad               | ___ Diary & pencil       |
| ___ Exped. wt fleece pants   | ___ Inflating pad          | ___ Music player         |
| ___ Softshell pants          |                            | ___ Lighter              |
| ___ Base layer pants         | ___ Ice axe                | ___ Foot powder          |
| ___ Underwear                | ___ Crampons               | ___ Maps                 |
| ___ Socks                    | ___ Harness                | ___ Neck gaiter          |
|                              | ___ Ascenders (prussik)    | ___ Spare sunglasses     |
|                              | ___ Locking carabiners     | ___ Satellite phone      |
|                              | ___ Regular carabiners     | ___ Favorite treats      |
|                              | ___ Climbing helmet        |                          |
|                              | ___ Perlon cord            |                          |



## TRAINING FOR AN EXPEDITION

Climbing a high mountain is a serious undertaking, demanding a lot from your body. This demanding experience can only be fully enjoyed if you have prepared for it. Physical fitness is one of the subjective factors of mountaineering over which we can exert a great deal of control. It is especially important for the occasional mountaineer to realize that being fit can make dealing with objective hazards less dangerous. Your physical capacity for mountaineering is determined primarily by your level of aerobic power and physical strength. You must begin training well in advance of your expedition. Plan your training a minimum three months and preferably six months before your trip. **Make up a realistic training schedule for yourself, and stick to it!**

Mountaineering is a physically demanding sport and going on an expedition should be the last place to go get into shape. Seasoned mountaineers understand this and try to maintain a continual state of fitness. An unfit climber on an expedition can be a potentially dangerous liability to himself and to the safety and success of the rest of the team members. The fitness level of individual members of an expedition can make or break a climb. **Your fitness level can also dictate just how much you will enjoy the experience.**

Aerobic conditioning for mountaineering should involve long term, sub-maximum heart rate (65-85% of max HR) endurance type activities that stress and develop the cardiovascular system. Endurance activities that fall into this category include cycling, running, Nordic skiing, brisk walking, swimming, hiking and mountaineering. To be effective, these endurance activities must be done at a constant heart rate (above 65% of max HR) for at least 30-60+ minutes, three to five days a week. At least one day should include a multi hour effort. Your maximum heart rate (HR) is roughly 220 less your age. Your mountaineering endurance program must eventually reflect the long, continuous hours spent climbing a high mountain. Running a few miles a few miles a week will be of little benefit.

In preparing to climb a high mountain like Denali; you should be able to run 6 to 8 miles in under 1 hour or cycle 60 miles in well under 4 hours. This provides a fitness safety margin you will need to have for mountaineering. The level of cardiovascular fitness to handle a 60 minute run requires a minimum of 10 to 12 weeks of training, provided you are not overweight, don't smoke and have been reasonably fit within the last year. If you are over 30 years old and have been living a sedentary life for more than a year, you should have a complete physical before beginning your training program and you should begin your training program 5-6 months in advance of your expedition.

Climbing a high mountain is serious and one must be serious about being prepared. Begin your training program with low key exercise and then gradually build up both distance and intensity. Do not over-train at the start, but give your body and mind time to adjust to the training stress. LSD (long, slow distance) is one of the safest ways to train and it will produce the fastest results. After you have trained yourself so you can climb, hike, cycle, ski or whatever for several hours with minimum of fatigue, you will have the self confidence and body awareness for mountaineering.

Besides aerobic conditioning, strength training is important to prepare your body for climbing steep terrain, carrying a heavy pack and dragging a sled. Strength training can entail working out with weights, or climbing up things (hills, mountains, stairs, stair-climbers...) with a pack. Do not run with a pack as this puts too much impact on your joints.

**Getting used to carrying a heavy pack is essential for success Denali.** Begin with a light pack and build up to 40 -50 % of your body weight. Expedition loads may be between 50-80lb. and you must be prepared for this. Too often we have seen team members who could run for hours, but could not carry a 40 pound pack. Spend at least one day a week carrying a pack. This will allow you to get used to your pack and fit it to your body. A comfortable fitting pack is essential. Before the expedition, pack it with all of your personal gear. Does it all fit? You will need strong legs and a strong back to carry a heavy pack so take your preparations seriously! **This could be the most important part of your preparation!**

Come up with a realistic training program that you can actually do. Write up a schedule for a few weeks at a time and change it as your body begins to respond to the exercise. Once you have gotten a good fitness base and you can work out without too much stress, you should increase to 4-6 days a week. Do not try to work out 7 days a week, as your body needs at least one day of rest. **The harder you train before a climb, the more you will be able to enjoy the experience and the greater will be your chances for success!**

So begin your training now: take it seriously and enjoy yourself on the mountain! So get that pack out and go for a hike!

The following is an example of a training week. Exercise time should increase as you get stronger.

SUNDAY: Long endurance activity 1-4 hours with light pack (increase pack weight as your strength improves)

MONDAY: Rest Day

TUESDAY: Endurance activity of your choice 30-60 minutes. Cycle, ski, run, stair climber...

WEDNESDAY: Rest with some stretching or strength training for 30-60 minutes.

THURSDAY: Activity for 40-60+ minutes Strength and stretching

FRIDAY: Activity for 30+ minutes or Rest day

SATURDAY: Activity for 40-90+ minutes, Strength and stretching



## DENALI GEOGRAPHY

Rising to an elevation of 20,320 feet, Denali is the highest mountain in North America. It is located at a latitude of 63 degrees north, just over 3 degrees south of the Arctic Circle. It is the tallest mountain in the world above 43 degrees latitude. With 18,000 feet of rise above the tundra it is surpassed by few mountains in the world in terms of relief. Denali is part of the broad continuous mountain belt known as the Alaska Range. On the west, the range flows to the Bering Sea and on the south and southwest into the Gulf of Alaska.

Surrounding Denali are many magnificent peaks, including Mt. Foraker (known by the Athabascans as Denali's Wife) at 17,004 feet, Mt. Hunter at 14,570 feet, Mt. Huntington at 12,240 feet, Mt. Crosson at 12,800 feet, Mt. Silverthron at 13,329 feet and Kahiltna Dome at 12,525 feet. Denali consists of two summits. The highest is the south summit at 20,320 feet, while the north summit is 19,470 feet high. All the peaks in the Alaska Range are surrounded by glaciers, separated by razor edge ridges, massive granite rock walls and spectacular summits.

Denali's height and latitude make it one of the coldest mountains on earth. In May or June summit temperatures may drop to 40 degrees below zero Fahrenheit. The mountain is so massive it creates its own weather. Wind speeds on the upper mountain can reach speeds in excess of 150 mph and large lenticular clouds over the summit may be seen from hundreds of miles away.

Denali may be approached either by foot or airplane. Climbers usually fly from Talkeetna to the 7,200 foot Basecamp on the Kahiltna Glacier. From here it is 16 miles and 13,000 feet of elevation gain to the summit. On the north side it is 40 miles and 18,000 feet of elevation gain from Wonder Lake to the summit. Wonder Lake can be reached via a NPS shuttle bus on the park road. The road usually opens in late May.

The state of Alaska totals 586,000 square miles or one fifth the size of the rest of the USA. The word Alaska comes from the Aleut word Alyeska, which means Great land. The name is well deserved. It is a land of midnight sun, Northern Lights and miles and miles of glaciers, rivers and tundra. Much of Alaska sits on permafrost, which is ground that is perennially frozen.

Recommended Reading:

[A Map of Mount McKinley, Alaska](#) by Brad Washburn 1947-53

[Mount McKinley: Icy Crown of North America](#) by Fred Beckey 1993

[A Tourist guide to Mount McKinley](#) by Brad Washburn 1974

## A Brief History of Climbing on Denali

The first known attempt on Denali was in 1903 by Judge James Wickersham and his 4 climbing partners. They reached an elevation of 8,100 feet on a spur on what is now known as the Wickersham Wall.

Also in 1903 Dr. Frederick Cook and 5 climbing partners made the first circumnavigation of the Denali and Foraker massifs, reaching an elevation of 10,900 feet on the Northwest Buttress. This remarkable feat was not repeated until 1995 when Daryl Miller and Mark Stasik completed the first winter circumnavigation.

In 1906, Cook and Ed Barrille claimed to have summited Denali via the Ruth Glacier (named after Cook's wife), but research by Bradford Washburn illustrates that they probably only reached 5,500 foot satellite peak.

The first ascent of the North Peak (19,470 feet) was on April 3, 1910 by Peter Anderson and William Taylor. These Sourdoughs climbed the peak via the Pioneer Ridge, carrying a 20 foot spruce pole to the summit.

In 1912, Belmore Browne, Herschel Parker, and Merl LaVoy came within 100 vertical feet of reaching the summit of Denali, but were driven back by high winds. This was Browne's third attempt to reach the summit. He later wrote a fascinating account about his attempts in a book originally published in 1913 titled The Conquest of Mount McKinley.

Finally on June 7, 1913 Hudson Stuck, Harry Karstens, William Harper and Robert Tatum reached the summit of the south and highest peak via the Karstens ridge. An account of this expedition was recorded in The Ascent of Denali by Hudson Stuck.

The first ascent by a woman was in 1947 by Barbara Washburn. The first ascent of the West Buttress was on July 10, 1951 by Bradford Washburn and his party.

### Recommended reading on Denali:

The Conquest of Mount McKinley, by Belmore Brown, 1956 (original publication 1913).

To The Top of Denali, by Bill Sherwinot, 1990

The Ascent of Denali, by Hudson Stuck, 1977 (original publication 1914).

Mount McKinley: The Conquest of Denali, by Bradford Washburn & D. Roberts. 1991

In the Shadow of Denali, by Jonathan Waterman, 1994

Surviving Denali, by Jonathan Waterman, 1991

## Denali Tidbits and Natural History:

Athabascan natives living in the interior of Alaska call the mountain "Denali." This is generally translated as "The High One," but has also been said to mean "Home of the Sun." Other native names are Doleyka (from tribes in the Susitna Valley) and Traleyka (from Indians living near the shores of the Cook Inlet). Today, many Alaskans refer to the mountain as Denali and there has been an effort for a number of years to change the official name from Mount McKinley to Denali, but this has always been derailed by a Senator from Ohio. In deference to the Alaskan natives, the name "Denali" is used by Mountain Trip.

In 1896 William Dickey, a prospector, performed rough surveys of Denali and determined its height to be 20,000 feet. Then in 1897 Dickey wrote in the New York Sun that he had "named our great peak Mount McKinley after William McKinley of Ohio." McKinley was running for United States President at the time and would later be elected.

## Geology and Glaciology

Denali, at 20,320 feet, is the highest mountain in North America. It has a vertical relief of 18,000 feet, making it visible from more than 200 miles away.

The core of the Alaska Range is granitic. The granite of Denali, Foraker, and Hunter intruded during the Mesozoic time through older, tightly folded sedimentary and metamorphic rocks. The granite is about 60 million years old, having cooled from a molten state, exposed through uplift and erosion. It is in sharp contrast with older rock as seen near Denali's summit where the granite met an overlying layer of black slate. Denali itself is located at a bend in the Denali fault system, where one crust block is shoved against another. It is believed this may be the reason the mountain is so high.

The Alaska range contains 5,300 square miles of glacial ice. In the Denali area some 20 glaciers exist with lengths over 5 miles. The longest is the Kahiltna, which is 45 miles long. The Muldrow glacier on the north side is second longest at 39 miles. The Ruth Gorge, when measured by sonar to the glacier bed and to the summit of adjacent Mount Dickey is 9000 feet, and is considered to be the world's deepest. Most of the glaciers in the Alaska range are receding or stagnant, but there have been surges in recent years.

## Wildlife

Denali National Park and Preserve is one of Alaska's finest sites for wildlife viewing. There are 37 different species of mammals in the 6 million acre park, including caribou, grizzly bears, black bears, Dall sheep, moose, wolves, marmots, beavers, wolverines, porcupines, lynx (now rare), and red foxes. Some of the smaller species include snowshoe hare, weasels, mink, shrews, voles, pika, and arctic ground, red, and northern flying squirrels. There are 159 species of birds that can be spotted in the park, including the golden Eagle, ptarmigan, arctic terns (that winter as far south as Antarctica), owls, magpies, and common ravens. The only animal one is likely to see on the glacier while climbing the mountain is the common raven. It is not unusual to see this bird as high as 17,000 feet, looking for climbers' food that has not been properly stored. Occasionally a songbird that has been blown up glacier will be seen on the lower Kahiltna, but they do not survive long.

Climbers traversing Denali, may see caribou, grizzly bear, and arctic ground squirrel while walking out to Wonder Lake

Recommended reading:

Alaska Wildlife Viewing Guide, by Michelle Sydeman and Annabel Lund, 1996.

Birds of Mount McKinley, Alaska, by Adolph Murie, 1963.

The Grizzlies of Mount McKinley, by Adolph Murie, 1981.

Mammals of Mount McKinley National Park, by Adolph Murie, 1962.

The Wolves of Mount McKinley, by Adolph Murie, 1944.

## Flora

Denali is dominated by glaciers, but is surrounded by a wide expanse of open tundra and taiga. The word tundra refers to treeless areas and means "barren land." The tundra supports the growth of willow, dwarf birch, and alders. There are over twenty varieties of willow in the park, ranging in height from 2 inches to 20 feet. The low ground cover in the park includes lichens, mosses, cotton grass, tussocks, and herbaceous plants. Flowers generally bloom in May and June, but blossoms can be seen later at higher elevations. One might encounter moss campion, mountain avens, forget-me-nots (the Alaska state flower), lousewort and fireweed. There are more than 650 species of flowering plants in the park.

The berry producing plants are plentiful and an important source of food for both birds and mammals. Blueberry, crowberry, cranberry, and bearberry are widely distributed. The berries are usually ripe in late July and August.

Taiga refers to the woodland of the north. In Denali one can find white and black spruce, birch, quaking aspen, willow, larch and balsam poplar (cottonwood). While spruce is the most common conifer seen. The black spruce is tolerant of wet conditions and is seen mostly in boggy areas. Tree line in the park is at 2,700 feet.

Recommended reading:

Denali, National Park Service brochure, 1996.

Discovering Wild Plants: Alaska, Western Canada, the Northwest, by Janice Schofield, 1989

Mount McKinley: Icy Crown of North America, by Fred Beckey, 1993

Guide to Alaska Trees by US Dept. of Agriculture

Field guide to Alaska Wildflowers by Vera Pratt 1989

Alaska & Yukon Wildflower Guide by Helen White 1988

## Native American History

Cro-Magnon man probably first crossed the Bering Land Bridge around 25,000 years ago. These stone age hunters followed herds of mammoth and reindeer across the tundra, killing their prey with spears. The early humans that migrated to the coastal areas became ancestors of Eskimo and Aleuts. The first sites of human habitation in the Alaska range is dated between 9,500 and 6,000 years ago.

Denali has long been known and revered by Alaska's Native people. The mountain is visible from over 200 miles away due to its height and relief so was seen by many Athabascan tribes, including those of Cook Inlet and the Susitna Valley. It is the Tena Indians who named the mountain "Denali."

The Northern Athabascans that inhabited land in the present park were nomadic and hunted caribou, moose and sheep in the hills in the northern parts of the park.

For those interested in the history of Alaskan natives, it is recommended that they visit the Alaska Native Heritage Center in Anchorage, Alaska.

Recommended reading:

Alaska Natives, by H Anderson and WC Sills, 1975

## THE NATIONAL PARK SERVICE AND ITS MISSION:

America's National Park Service was created by Congress to "...conserve the scenery and the natural and historic objects and the wild life therein, and to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations." Additionally, Congress has declared that the National Park System should be, "...preserved and managed for the benefit and inspiration of all the people of the United States." The National Park Service has as its overall mission the preservation and public enjoyment of significant aspects of the nation's natural and cultural heritage.

## DENALI NATIONAL PARK AND PRESERVE:

The original area of Denali National Park was dedicated as Mt McKinley National Park on February 26, 1917, when President Woodrow Wilson signed the McKinley National Park Establishment Act. "...for the preservation of animals, birds, and fish and for the preservation of the natural curiosities and scenic beauties thereof. That the said park shall be and is hereby established as a game refuge."

The park was later expanded until reaching its present size following the passage of Alaska National Interest Lands Conservation Act (ANILCA) in 1980. The resulting Denali National Park and Preserve was established to protect and interpret the Alaska Range massif, to protect habitat for fish and wildlife, including grizzly bear, moose, caribou, Dall sheep and wolves and to provide opportunity for wilderness recreational use.

## Our Soap Box:

Mountain Trip is committed to Low Impact Practices in all aspects of our operations. We travel among some of the most beautiful mountain environments in the world and believe it is our responsibility to protect these places in whatever way we can. We practice the Leave No Trace policy in the wilderness to minimize our impact in the pristine mountains where we lead our trips.

As mountain guides, we are lucky to be able to travel to remote locations around the globe and visit different peoples and places. While acknowledging that our mere presence in some regions is an impact, we will always do our best to learn about and respect local cultures in all our travels.

Moving forward into the new millennium, we need to be conscious of the fact that the choices we make affect the footprint that we leave on this planet. We try to do our part to make this world a better place by purchasing healthy expedition food with minimal packaging and packing out our trash on expeditions. We support vendors who practice lower impact policies. Our Mountain Trip T-shirts are made from bamboo and organic cotton and we utilize a solar powered web service to power our website. Starting in 2008, we began purchasing carbon offsets to reduce the impact of our Alaska operations.

As a company, we have tried to invest in our guides and we think that you will notice what a difference this makes on our trips. Mountain Trip has always felt more like a family than a corporation and this is a big reason that so many of our guides return year after year. A result is that all of our lead guides are among the most experienced and respected on Denali. We encourage you to call our office with any questions or comments. When you call, you will reach someone who has climbed Denali many times and can give you advice based on personal experience not based on an informational "cheat sheet".

We love what we do and are excited to share the high mountains with you. Thanks for your trust and we'll see you in Alaska!

Mountain Trip donates at least 2% of profits to Earth Friendly organizations.

## Gratuities:

Mountain Guiding is one of the most demanding professions imaginable. Your guides will work incredible hard for weeks on end to help keep you comfortable and hopefully help you reach the summit. If you are satisfied with the quality of their service, we encourage you to express your satisfaction to your guides.