DENALI WEST BUTTRESS EXPEDITION

20,310 ft / 6,190 m

Alaska Grade II
Experience level: Advanced
13,000 ft elevation gain
41 miles, 22 days
Group limit: 6 expedition members, 3 guides

Denali, America’s tallest mountain, is unsurpassed in technical challenge and scenic beauty. Located 130 miles north of the port city of Anchorage, Alaska, it rises from a sea of glaciers and other peaks that comprise the Alaska Range. A Denali expedition is a dream finally come true for many mountain climbers. AMS expeditions provide qualified climbers a solid chance of achieving their goals with excellent, experienced leadership on the mountain. Our history reaches back to 1983, and we are proud of our long-standing reputation for superior Alaska mountain guiding. On the West Buttress expedition, starting at base camp in Denali National Park and Preserve, we climb 13,000 vertical feet to the top—the greatest elevation gain of any mountain in the world.

COST

Deposit: $3,000
Balance due: 120 days prior to the starting date
Includes: AMS professional mountain guides; National Park Service mountaineering special-use and entrance fees; base camp fee; glacier flights, field food and fuel; group camping and climbing equipment (tents, ropes, snow/ice protection, kitchens); emergency supplies (maps, GPS, radios, satellite phone, Delorme inReach messaging; and repair, trauma, and drug kits); pre-rigged, custom-built lightweight sleds and sled duffles; 24/7 support from AMS headquarters; knowledgeable advice for training, equipment, and travel; pre-trip one way ground transportation from Anchorage to Talkeetna, pre-trip 2 night stay in Talkeetna; and regular social media updates during the expedition. Camping at AMS campground in Talkeetna is available.

You are responsible for: arriving with excellent physical and mental fitness; transportation to and from Talkeetna; lodging (AMS campground is free, tents are not provided); travelers cancellation insurance (highly recommended); personal equipment and clothing; AMS equipment rentals; and guide gratuities.

HISTORY

The early pioneers in Denali’s climbing history were explorers and gold miners who unraveled intricate and formidable approaches to find a northern route to the summit. In 1910, a group of miners struck out from Fairbanks and climbed the slightly lower North Peak (19,470 ft). In 1913, a team led by Archdeacon Hudson Stuck approached the mountain from the north to climb via Karstens Ridge, making the first ascent of the higher South Peak (20,310 ft). Much later, in 1951, a team of eight mountaineers including cartographer, explorer, photographer, and mountaineer Dr. Bradford Washburn flew to the mountain from the south, landing on the Kahiltna Glacier. This team pioneered the West Buttress route, which today is the most popular route to the summit. Washburn and AMS director Colby Coombs teamed up to write the comprehensive and descriptive book, Denali’s West Buttress: A Climber’s Guide.

GRADE/DIFFICULTY
Given a Grade II, the West Buttress shares with the Muldrow route the status of having the lowest grade on Denali. This implies it is the “easiest and safest route” to the summit. Some seasoned technical climbers may even say, “You camp up Denali, not climb it.” Relative to other climbs on Denali, the terrain is less technical. However, be warned: It is never easy on Denali! Unique to Denali’s rating system is an implied severity grade that makes any route a serious undertaking. High altitude, extreme weather, and active glaciation combine to make Denali one of the most difficult and severe mountains in the world to climb. We take Denali very seriously and never underestimate the severity of conditions or the effect high altitude has on people’s health. Reaching the summit of Denali is a worthy achievement that comes only with the highest degree of attention to detail and expedition climbing strategy.

WILDERNESS

Preserving the wilderness character of Denali National Park and Denali’s West Buttress route is a long-standing priority at AMS. We have climbed on all continents and Denali remains one of the world’s cleanest big mountains—and we strive to keep it that way. Our expeditions practice Leave No Trace camping and climbing techniques and follow current and progressive human waste and trash removal management techniques. To enhance the wilderness experience and take advantage of better climbing conditions, we travel in the cooler temperatures of the night and early mornings, which allows us to climb with less people and avoid any possible congestion of narrow areas on the route. We avoid broadcasting of music to be considerate of other climbers and are strategic in our choice of campsite locations. Our expedition guides work closely with NPS mountaineering rangers on the mountain to identify current mountain hazards in addition to documenting and reporting unethical camping or climbing teams. We believe that our national park lands are treasures of North America, and we practice clean visitation practices and wilderness preservation education during all our climbs and programs.

THE CLimb

We climb the West Buttress in expedition style: relaying loads, establishing camps, and climbing slowly enough for proper acclimatization. We travel the first 9 miles of the route on the Kahiltna Glacier up to 11,000 ft. wearing snowshoes, which help us move efficiently in deep snow conditions and on variable terrain with our heavy packs and sleds. We typically place three camps on this section of the route. Above 11,000 ft., the terrain steepens and we switch to crampons. Our next camp is located at 14,200 ft.—we often arrive at 14.2 camp on the eighth day. The camp is located in a large basin relatively sheltered from high winds with amazing views of Mount Hunter and Mount Foraker. After 4 to 5 days acclimatizing, reviewing technical skills, and making a carry to 16,200 ft., we depart for the upper mountain. Between 15,500 and 16,200 ft. we encounter 40–45 degree slopes, so we climb clipped to a fixed rope. We may place a camp at the top of the fixed ropes at 16,200 ft. to break up the climb or if there is need to wait for better weather. The next 1,000 ft. of climbing the narrow ridge and granite boulders to high camp at 17,200 ft. is pure climbing joy and a noteworthy, scenic part of the route. The next day is most often a rest and acclimatization day, but if we are sufficiently rested and the weather suits, we continue on and go for the summit. Summit day usually takes 10 to 14 hours. After summiting, it usually takes 2 days from high camp to return to base camp.

Denali provides an excellent stage to practice good mountaineering. We fully expect all participants on our expeditions to arrive with solid mountaineering skills and work to become even better climbers. Denali’s summit is our shared goal and it is worthy of our time spent pushing every day to increase our performance.

PRIOR EXPERIENCE

Denali is an inspiring objective for people with the experience and attitude to enjoy the rigors of expedition life. As an advanced climb, Denali requires a significant amount of prior climbing, winter camping, and training. Simply dealing with the cold on Denali is a day-to-day challenge. For the best chance of success, applicants should be in excellent physical condition and have experience in roped glacier travel using ice axe and crampons. Prior winter camping and long expedition travel is also essential training. The figure 8 knot series, rope coiling, and belaying in and out of a wanded perimeter should be easily familiar.
The ability to stop a fall with an ice axe on steep snow is paramount to your safety and the safety of your rope team. Above 16,000 ft., you will travel wearing crampons with a 60- to 75-pound pack on slopes up to 30–35 degrees. Some sections of the route require you to bend to clip through running belays. The mountain is too severe to be learning these skills for the first time. Climbing smaller peaks in the Alaska Range, Colorado’s 14’ers, Mount Rainier, the Tetons, Mount Blanc, and winter climbs of Mount Washington are suitable training grounds for Denali. A non-technical, mid-altitude climb is a great way to train for the altitude. Our best-prepared expedition members have taken a mountaineering course and trained for at least one year before joining an expedition.

WHEN TO CLIMB

Perhaps the most common question asked by our climbers is “Which is the best month to climb?” There is no right answer, as every year is different as far as weather and conditions. Still, it is generally agreed that the popular climbing season on Denali begins mid-April and lasts through mid-July, shrinking the acceptable window down to 90 days. The West Buttress climbing season is casually divided by climber numbers: early shoulder season is mid-April to mid-May; high season is mid-May to mid-June; and late shoulder season is mid-June to mid-July. In March and early April, cold temperatures and strong winds at higher elevations make conditions too severe. The month of May shows less precipitation on average than June or July, but May is also colder and requires more aggressive cold-injury prevention. Statistically, there are more people on the mountain in June and therefore more people summit then. In late July, snow conditions on the lower mountain can deteriorate to the point that crevasse hazard becomes extreme. Fewer people are on the mountain in the shoulder seasons, providing a higher wilderness quality climb, which can be another deciding factor for climbers along with weather and snow conditions. Choices for “best time” within the season vary with personal preference.

WEATHER

It is often said that the greatest challenge of Denali is the weather. While most of the world’s highest mountains are near the equator, Denali is close to the Arctic Circle. Its location in the southern Alaskan mainland is 200 miles south of the Arctic Circle at 63° latitude. This is 30° further north than Everest, and the same latitude as northern Hudson Bay and central Scandinavia. The mountain’s summit climate makes Denali one of the most severe of any spots on earth. The weather dictates our every move on the expedition; it is fickle and unpredictable. It will force us to be flexible, patient, and sometimes spontaneous. The weather is the one thing we cannot change. What we do have control over is our attitude, and we will maintain a state of positive readiness throughout our climb.

UNFLYABLE WEATHER

Flying small aircraft over mountainous terrain requires even better weather than needed for climbing that same terrain. Pilots need calm winds and excellent visibility. Be aware that Alaska has unpredictable weather, which can prevent flying into the mountains on schedule. Bush planes can only fly safely if the weather is suitable. Sometimes the weather may be unflyable for a day or two. We are well prepared for delays: Our field rations stay fresh stored in our large commercial fridge and chest freezers. We will base out of AMS’s Talkeetna facilities, which consist of the office, staging area, AMS Mountain Shop, and indoor climbing wall. These facilities allow expedition members to view slideshows and additional educational media and practice fixed line ascension and other climbing techniques. We stay at the ready so that we can be at the airport quickly when the weather clears for flying. We will do our best to ensure that your expedition ends on schedule. However, we recommend allowing 3 days on the return end of your travel plans (or purchasing flexible airline tickets) if weather prohibits us from flying off the glacier on time.

ACCLIMATIZATION

Our expedition-style climbing strategy reflects a concern for giving everyone the best chance to acclimate to a lower oxygen environment. Double carries, rest days, and 4 to 5 nights sleeping at 14,200 ft. before moving higher allow most people time enough for their bodies to adjust. All expeditions carry a pulse oximeter to measure blood oxygen...
saturation levels and heart rate, and prescription medicaments to treat life-threatening conditions in emergencies. Advanced signs or symptoms of pulmonary and/or cerebral edema are life-threatening conditions that require immediate descent. Each year AMS is briefed by our medical director Dr. Peter Hackett (who pioneered high altitude medical research on Denali) on advancements in the research, prevention, and treatment of altitude-related illnesses. Our training supervisor, Lance Taysom, chief life-flight RN and Mountaineering VIP for Denali National Park also keeps us trained and up to date. Together they wrote our medical protocols and standing orders, which allow our guides and instructors to evaluate and treat within the scope of their Wilderness First Responder training. Communication with your guides is paramount to your own and your teammates’ health and well-being on the mountain. For those suffering from acute mountain sickness, we use Diamox (Acetazolamide) in conjunction with rest and hydration. Anyone showing signs of severe acute mountain sickness will not climb to higher elevations until those signs and symptoms go away. Please read the Expedition Cold Injury and Altitude Illness Prevention document for more information.

LEADERSHIP & TEAMWORK

Successful expeditions are properly equipped and have the necessary skills, but most importantly they learn to become a strong team. Good leadership reflects the art of effective team building. From base camp to 14.2 camp your guides teach classes, hold discussions, and initiate you into the world of expedition life. Above 14.2 camp and en route to the summit, your expedition will show signs of strength: tight camps, efficient travel techniques, and strong teamwork. We expect you to stay organized, participate all the way, and have fun while supporting the goals of the expedition. Of primary importance is taking responsibility for monitoring yourself: You know best how you feel, how you sleep, how you recover each day. As a team, we can help if someone is having a bad day, but ultimately every member must be a regular contributor, and a safety-minded and efficient climber who helps with camp chores, to be successful. Not participating, climbing unsafely, or failing to meet the day-to-day demands will lead to your departure from the expedition. We expect you to maintain good expedition behavior: taking initiative and being supportive, solution-oriented, hardworking, and patient. In return, you will be rewarded with the climb of a lifetime.

REFERENCES

Alaska Mountaineering School is a small and professionally run operation committed to high standards at all levels. The Alaska Range within Denali National Park and Preserve is where we do the majority of our climbing and we consider it our backyard. Our history of guiding in the Alaska Range and on Denali reaches back to 1983, and everything we do today is built from hands-on experience. We urge you to carefully research climbing with us. Search for Alaska Mountaineering School and our directors, Caitlin Palmer and Colby Coombs, on the Internet. Talk to climbing rangers at the Talkeetna Ranger Station (907-733-2231). Call your local climbing store or climbing wall and ask if they have heard of us. AMS is small, but our word-of-mouth reputation extends far. Our guides and instructors represent a tight group of educators and mountain guides with varied professional affiliations. A note on certification: Other than our own Mountain Guides Course, there is no available certification in the United States or Europe that takes into account the expedition skills necessary to guide in the varied terrain and scope of the Alaska Range. AMS has developed a training program for our guides, including a time-tested apprenticeship program, technical training, and an evaluation system, which results in mountain guides with a depth of Alaska Range knowledge found only at AMS.

GUIDES

AMS guides are professional climbers with extensive climbing resumes who love the mountains and have a gift for guiding, teaching—and leadership. Lead guides have a wealth of experience from multiple years of working on Denali as well as on the surrounding technical peaks. All AMS staff is trained in mountain rescue, avalanche safety, extreme mountain weather, Leave No Trace, and wilderness medicine and ethics. They know how to set the pace for a successful expedition. Their knowledge of the area’s natural history and climbing history and stories from their own climbing experiences add immensely to the climb.
Their strength, stamina, and leadership are paramount for a Denali climb.

**TRAINING**

Denali applicants must adopt a goal of being in excellent physical and mental condition at the start of the expedition. Please don’t show up sick, injured, or unprepared. On any mountaineering expedition, there are factors completely out of anyone’s control, namely weather and acclimatization rates. By joining a professionally run expedition you leave expedition logistics, food, equipment, and leadership to us; but you are responsible for and have control over your mental preparedness, physical fitness, and climbing ability. The better condition you are in when you arrive, the more you will enjoy the climb, the safer it will be for you, and the better your chance of summiting. The more climbing experience that you have, the better prepared you will be to climb Denali. The amount of time needed for training depends on a person’s level of fitness at the start. Climbers make it a priority to be in good shape. Those who can, get out and climb. Others cross-train: hit the climbing walls, lift weights, run, bike, swim, master the stair master, or practice martial arts. Athletes may need only to adjust their training habits to include Denali-specific routines; others may have to spend a year or more in advanced, serious training.

It’s important to develop physical and mental stamina over simple brute strength. Upper-body and core strength is necessary for lifting your pack, shoveling snow, and building camp; aerobic stamina is key for long hard days breaking trail and moving camp. Vary your routine to prevent injuries. Think about how much stronger you will be in a blizzard carrying your 65-pound pack while hauling a 40-pound sled! Exposing yourself beforehand to similar activities will condition your body and mind. Make sure to train on irregular terrain in poor conditions. Scramble up peaks, climb snow and ice, embark on a rigorous multi-day winter backpacking trip, ski uphill as well as downhill, go snowshoeing. Pushing yourself in uncomfortable environments outdoors while staying focused and alert is great mental training; you cannot successfully prepare for an expedition by training solely indoors. The more familiar the environmental stress of Denali is for you, the better you will be able to pace yourself on the expedition and be a supporting team member. Our *Fitness & Training* and *Training Resources* sheets contain good guidelines for expedition training.

**EQUIPMENT**

Please carefully read the *Expedition Mountaineering Equipment List* before embarking on your expedition. Denali is not the mountain to “just get by” using mediocre equipment. Your gear will be put to the ultimate test. A carefully planned layering system is comfortable, efficient, lightweight, and holds up. “Quality” does not necessarily mean expensive, and a trip to the Army surplus store or secondhand backcountry outfitter often turns up many of the basics. The equipment list gives recommendations for particular items. You can also get your equipment questions answered by a knowledgeable staff member at AMS or a senior sales person in a local climbing store; they are often most informed about the pros and cons of a particular brand or style. The Equipment section of the book *Denali’s West Buttress: A Climber’s Guide* by Colby Coombs also provides tips and suggestions. Your guides will ensure you are properly outfitted, checking equipment with you on your first day at AMS. They will issue any rental gear you need and you will have the opportunity to purchase equipment at the AMS Mountain Shop, which is able to provide all of your equipment needs and offers you a 10% discount. *Note:* If you arrive in Talkeetna early, please wait to check gear with us on the first day of the expedition, not earlier, as we are busy preparing for the expedition a full three days before.

**FOOD**

AMS provides hearty, nutritious, and balanced meals on its expeditions. An Excel spreadsheet of shows how our rations program and faithful recipes balance calories, carbohydrates, fats, proteins, and weight to create tasty and creative meals that build strength and maintain health. Demands on your body will be high, and despite a 4,000–5,000 calorie per day diet some people still lose weight over the course of the expedition. We avoid freeze-dried meal-in-a-bags, as they are typically inadequate portions and lack palatability. Our rations come from specialty companies, organic wholesalers from Washington, and supermarkets in Anchorage. All of our meals can easily
accommodate vegetarians and other dietary needs; please contact us if you need more specifics. AMS provides all of the food for this expedition, but to ensure satisfaction we encourage you to bring 5 pounds (2.25 kilos) of your favorite snacks and cold drink additives to supplement what we provide for you. Make sure to contact us if you have any dietary restrictions or allergies. See our Expedition Food sheet for more details.

TALKEETNA FACILITIES

AMS is the oldest and only outdoor school and guiding company based in Talkeetna and we live here, year-round. Our headquarters—consisting of our office, equipment rooms, food rooms, staging areas, climbing wall, and staff housing—are located adjacent to the local historic airstrip. We have an excellent location and facilities to outfit expeditions and serve our expedition members. A large staging area allows us to check gear and practice fixed line ascension. Our secondary Talkeetna facility, near the Talkeetna State Airport on F Street, is home to our retail store, the AMS Mountain Shop, staff housing, and transitional theater/classroom space. In the event of unflyable weather, our facilities are a comfortable place to teach classes, show slideshows and videos, and be productive during the “Talkeetna hang.”

TRAVEL & LOGISTICS

After flying into Anchorage, Alaska, catch a van shuttle or train to Talkeetna. For more details, including transportation options, please read the Expedition Travel and Logistics document. Plan to arrive in Talkeetna by 11:00am on the first day of your expedition. This gives you time to get settled and be ready at 1:00pm on the starting day. If you arrive earlier you can relax and walk around town, check out the river, the ranger station, and the climber’s exhibit in Talkeetna’s museum. Expect to leave Talkeetna in the morning following the last day of your expedition. The Expedition Travel and Logistics sheet contains more details about transportation and lodging options.

ARRIVAL

Please arrive at AMS at 1:00pm the first day of your expedition. Your guides will provide an expedition and safety orientation. Next, you will pack your mountain lunches and perform a thorough gear check with time to rent or purchase equipment. You’ll be free at 6:00pm to enjoy the evening in Talkeetna.

On your second expedition day, the team meets at 8:00am at our Talkeetna headquarters. This is a busy day that ends at base camp on the Kahiltna glacier, so please be on time and take care of all personal business beforehand. Your team will walk from AMS four blocks to the National Park Service (NPS) Walter Harper Talkeetna Ranger Station for the required check-in and mountaineering briefing. You may wish to start your day with a hearty early breakfast at one of the local restaurants. We’ll have hot drinks and freshly baked goods available all morning. After our NPS Mountaineering briefing we return to AMS headquarters to review technical skills for the climb, including roped glacier travel, sled rigging, and fixed-line ascension; ensure packs are rigged for glacier travel; and double-check that you have all the necessary hardware for your glacier setup. At midday, a tasty lunch is provided for your team at AMS. After lunch, you’ll dress for the mountains, finish packing, and fly onto the glacier in a ski-equipped fixed-wing Cessna 185 or DeHaviland Beaver or Otter. This 40-minute flight into Denali National Park and Preserve is the fastest way to access the glaciated peaks of the Alaska Range and is a spectacular and memorable highlight of the trip. Once you arrive at the Kahiltna Glacier Base Camp, the rest of the afternoon consists of selecting a campsite, setting up personal and group kitchen tents, receiving guides’ advice on how to sleep warm, and settling down to a good, hot dinner.

RETURN TO TALKEETNA

We strongly suggest you plan to spend the night in Talkeetna once you have returned from your expedition. Transportation schedules may require that you catch your shuttle to Anchorage the following day. AMS staff will provide a current list of options for transportation and lodging upon your return; it is often most convenient to arrange this transport upon your return to Talkeetna (see the Expedition Travel and Logistics sheet). Many climbers feel that extra time spent in Talkeetna after their expedition helps them transition from the quiet of the mountains back to their busy lives by attending to practical things,
like sorting gear, dealing with travel details, and taking a shower. A night of sleep before traveling is recommended. Some climbers plan extra time at the end of their expeditions for sightseeing while they are in Alaska. In addition to attracting climbers from all over the world, Talkeetna boasts world-class salmon fishing and other activities.

**WEST BUTTRESS ITINERARY**

Weather and snow conditions will ultimately determine our progress on the mountain. This itinerary is a rough timeline and outlines a possible schedule. Our style on the mountain is flexible and will fluctuate on a 24-hour clock depending on conditions. With lucky weather, most expeditions return a day or two early. However, delays at the start with unflyable weather and storms at high camp may result in our running out of time. It is possible for us to extend the length of the expedition for those who have a flexible schedule and desire to tough it out for a few extra days at high camp. There is a cost associated with this to compensate the guides.

**Day 1**
1:00pm, meet at AMS: Orientation and gear check, with time to rent or purchase gear from the AMS store and to select and pack mountain lunches. You are free at 6:00pm to enjoy the evening in Talkeetna.

**Day 2**
8:00am, meet at AMS: team NPS registration and orientation, Denali skills review, lunch at AMS; final packing, weighing, and loading gear for a 3:00pm flight to 7,200-ft, base camp; distance: 60 miles, elevation gain: 6,850 ft.

**Day 3**
Base camp to 7,800 ft: glacier travel and crevasse rescue drill, pack and single to 7,800 ft, Camp 1; distance: 5.5 miles, elevation gain: 600 ft.

**Day 4**
Carry to 9,700 ft, Kahiltna Pass; distance: 5 miles (RT), elevation gain: 1,900 ft.

**Day 5**
Move to 11,000 ft, Camp 2; distance: 4 miles, elevation gain: 3,200 ft.

**Day 6**
Back carry to 9,700 ft; distance: 2 miles (RT). Acclimatization/weather contingency day at 11,000 ft, Camp 2.

**Day 7**
Carry to 13,500 ft, around Windy Corner; distance: 3.5 miles (RT), elevation gain: 2,500 ft.

**Day 8**
Move to 14,200 ft, Camp 3; distance: 2.75 miles, elevation gain 3,200 ft.

**Day 9**
Back carry 13,500 ft cache; distance: 2 miles (RT), elevation gain: 700 ft.

**Day 10**
Carry to 16,200 ft; distance: 2 miles (RT), elevation gain: 2,000 ft.

**Day 11**
Acclimatization/weather contingency day at 14,200 ft, Camp 3.

**Day 12**
Move to 17,200 ft, Camp 4; distance: 1.75 miles, elevation gain: 3,000 ft.

**Day 13**
Rest day/acclimatization/weather contingency day at 17,200 ft, Camp 4.

**Days 14, 15, 16, 17, 18, 19**
Summit day/weather contingency days, 20,310 ft; distance: 5 miles (RT), elevation gain: 3,120 ft.

**Day 20**
Return to 14,200 ft; distance: 1.5 miles, elevation loss: 3,000 ft.

**Day 21**
Return to base camp, 7,200 ft; distance: 12.25 miles, elevation loss: 7,000 ft.

**Day 22**
Fly back to Talkeetna.