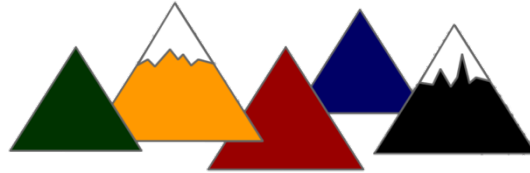


SUMMITS AFRICA



## PRE DEPARTURE INFORMATION PACK

*“Mountains are not stadiums where I satisfy my ambition to achieve,  
they are the cathedrals where I practice my religion.”*

**Anatoli Boukreev**

# MT KILIMANJARO / MT MERU / MT KENYA

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## INTRODUCTION

Now that you have decided to take on your adventure this pre departure information pack will give you a wealth of information about how to prepare for your trip.

## BACKGROUND

### GEOLOGY OF THE 3 PEAKS

To understand any one of the 3 Peaks in East Africa, or even wonderful areas such as the Ruwenzori Mountains or Ol Doinyo Lengai, one must first have a basic understanding of the events that lead to their creation. The key is a geological process known as rifting. In this case the rifting has led to one of the biggest geological features visible from space – The Great Rift Valley.

The rift valley system is part of a constructive plate margin, which on a larger scale, involves two parts of the African plate (the Nubian to the West and Somalian to the East) and the Arabian plate. These two sub plates (the Nubian and Somali plates are sub plates of the larger, indeed massive, African Plate) and the Arabian plate are slowly moving apart. As the plates split, tension is released and a vast array of geological features have sprung up as a result. Up faulted blocks, troughs, faults, horsts, grabens, half-grabens and a wide variety of volcanoes and peaks all exist in the rift valley due to this activity; and it is these peaks that command our attention.

Prior to the splitting of the earth's crust, this area was largely flat – gently undulating ancient landscape. And so, when volcanoes did start to emerge from the weaknesses in the earth's crust, they grew to become veritable sentinels on the earth's surface. Freestanding giants that hold magnificent views for hundreds of kilometres.



The East African Rift. The splitting of the African plate manifests itself in the East African Rift. There are actually two arms to the rift as one heads further south which splits just above present day Kenya.

The Eastern Rift, or Gregorian Rift, is where Mt Kenya (5,199m/17,470ft), Mt Meru (4,566m/ 14,980ft) and Mt Kilimanjaro (5,895m/19,340ft) are found.

The Western Rift, or Albertine Rift, hosts the largest, deepest and oldest of the Rift Valley Lakes, also referred to as the Central African Lakes.

Lake Victoria, Lake Tanganyika and Lake Malawi are often collectively known as the African Great Lakes.

However, Lake Victoria not actually in the Rift Valley – a common misconception. It actually lies in a depression between the two arms of the rift and is the largest lake in Africa.

On the Western arm of the rift valley deep lakes can be found, the deepest is Lake Tanganyika which is the second deepest lake in the world (1,470m/ 4,823ft max).

## FLORA & FAUNA OF EAST AFRICA

All three main peaks: Kilimanjaro, Mt Meru and Mt Kenya are affected by similar weather systems and seasons. It is therefore not surprising that their floral types and distributions bear strong similarities as does the fauna that inhabits their verdant slopes. The flora and fauna mosaic is determined by 3 key factors:

1. **Altitude.** The fact that all 3 peaks are in excess of 4500 meters means that the combination of falling temperature and rainfall amounts as you ascend means that on all mountains there is a diminishing amount of biomass as one ascends. Each mountain has at least the following zones due to the fact they are massive free standing volcanoes:

- Plains
- Cultivation
- Plantation forest
- Montane forest
- Heath / moorland
- Alpine desert

Note: Between the Montane forest and heath zones on both Mt Kenya and Mt Meru there is also a bamboo zone – absent on Kilimanjaro.

2. **Prevailing seasonal wind directions and associated rainfall.** From around late October through March the northern monsoon blows moisture laden wind from the Indian Ocean and thereafter in April through mid-October the southern monsoon blows in a similar manner, once again bringing moisture from the Indian Ocean. Hence, whilst the source of the moisture remains constant, the mountains tend to receive more moisture on their southern sides, and indeed more on the start of the southern monsoon.

In this way the mountains tend to have significantly higher rainfall on those slopes – the amount and type of vegetation reflects this. The West North West sides are therefore drier with less montane forest and vegetation more suited to these conditions. Rainfall patterns also have an impact on the seasonal movement of game such as buffalo and elephant, both of which normally require drinking water once a day.

3. **Man.** Both the British and German colonial powers recognised the potential of the Afro Montane forest zones as potential plantation forestry. The British went on to develop all three mountains into significant forestry reserves of both introduced species such as pine and Eucalyptus and indigenous timber.

Prior to the advent of the colonial powers, Kilimanjaro especially seems to have a particularly intense cropping of wildlife on its southern slopes. Ivory was removed in vast amounts to satisfy the demand from the Swahili traders and latterly the colonial interests on the coast. On Kilimanjaro the removal of the mega fauna (elephant and to a lesser extent buffalo) may have been the key determinant for the lack of a bamboo zone – bamboo tends to flourish in disturbed land and on-going disturbance of the bamboo zone appears to stimulate rather than curtail growth. The absence of animals such as elephant may have therefore led to other tree species dominating instead.

Today, man's presence has seen significant deforestation and degradation of the former forests and widespread cultivation on the lower slopes.

## THE 3 PEAKS COMPARED

The table below compares some of the different facts about the 3 mountains:

	<b>Mt Kilimanjaro</b>	<b>Mt Kenya</b>	<b>Mt Meru</b>
<b>Main Peaks / Points</b>	Uhuru Peak (formally King Wilhelm Spitz Peak) 5895m Mawenzi Peak – 5149m Shira – 4006m	Batian – 5199m Nelian – 5188m Lenana – 4985m Point Thomson – 4955m Point Melhuish – 4880m Point John – 4883m	Socialist Peak – 4565m Little Meru – 3820m
<b>Structure</b>	Triple strato volcano	Central strato volcano	Central strato volcano
<b>Approx Age</b>	1 million years	3.1 million years	365,000 years
<b>First Ascent</b>	1889 – Hans Meyer & Ludwig Purstcheller	1899 – Halford Makinder	1904 - Fritz Jäger
<b>Last Eruption</b>	60,000 years ago, with smaller ash eruptions in Kibo up to 300 years ago	40,000 years ago from Nyambene Hills – flank eruptions	1910 – lava flow from central area
<b>First European sighting</b>	Johann Rebmann - 1848	Johann Krapf – 1849	Unknown
<b>Why hike / climb?</b>	Tallest freestanding mountain in the world, amazing scenery	Technical and non-technical ascents, amazing scenery	Non-technical, beautiful views, shorter hike, great acclimatisation for Kili
<b>Status</b>	Dormant	Extinct	Dormant

## PREPARATION FOR YOUR CLIMB

### WHAT TO PACK

Please refer to our dedicated Packing Guide for an in depth look at what to pack for your trip with tips and guidance from our experienced expedition leaders. In the guide there is a list of essential items, which will be visually inspected at your pre climb briefing.

### HOW TO PACK

You should find when travelling to Africa, for the most part, airlines will grant 2 holdall bags as standard. Keep this in mind especially if you are planning to combine a safari with your mountain trip as it can be useful to separate your kit for each section of your trip into different bags.

In simple terms, the following is required:

#### Daysack

There is an old Spanish proverb that says: “On a long journey, even a straw weighs heavy.” Try to keep your day sack as light as possible. Your porters have been hired to carry most of your gear and carrying extra gear will only make you more tired and stress your body out more – making it harder for your body to deal with the altitude.

Before setting off your day sack should be packed with the following essentials:

- Sun hat
- Sun cream
- Sun glasses
- Waterproofs (in case it rains)
- Warm layer (in case it gets cold)
- Water (2 litres minimum)

- Head torch
- Snacks
- Camera
- Passport

### **Main Bag 1 – Mountain Bag**

This must be a soft bag like a duffel or something similar so that the porters can carry it. A hard case is not able to fit inside the specially made porter bags and its shape is not easy to carry on long trips. Pack your duffel bag with everything else you require on the mountain. You will need to try and keep your total weight of equipment on the mountain to below 15kg (30 lbs), not including your sleeping bag if you are bringing your own. Please advise us if you will be bringing more so that we can plan our end accordingly, although extra weight may be charged for.

### **Main Bag 2 – Safari Bag (optional)**

If you have extra baggage for an onward trip, or things that you find you do not need after the kit check, then it is best practice to bring a second bag. This can either be left at your hotel during the climb or can be given to your driver who will deliver it to our office, where it will be stored securely during your time on the mountain. It is also useful to have an extra bag so that you can separate your dirty clothing from the mountain with your clean items.

### **Other Tips**

To guard against the event of your luggage not arriving with you on the airplane, we strongly suggest that you wear your boots to travel in and bring your backpack with some essential items in, especially if you plan to start your climb the day after you arrive. Generally speaking, luggage arrives no later than 24 hours after you land but having the ability to start your climb without your main luggage is prudent. In the event this does happen, rest assured, we will collect your luggage and arrange for it to be reunited with you as soon as possible on the mountain.

## **MEDICAL ASSESSMENT**

We advise that all clients have a medical check-up before attempting any altitude climb. This is especially relevant if you are above 40 years of age, or if you have had any conditions in the past that limited your ability to trek. The key thing to remember is that altitude trekking is not just a walk in the park – it is a demanding hike of at least 5 days (a length of climb we cannot recommend) and up to 8 or even 9 days depending on your chosen route. Your body will be exposed to far more stress and strain than normal life and therefore being as fully prepared as possible is a good idea.

## **MEDICATION**

Please check with your doctor if you plan to take any prescription medication during your trip and ensure you bring enough to last your entire time away.

## **ALTITUDE SICKNESS PREVENTION**

Please refer to Annex A for detailed information about altitude sickness and available medication.

## **INSURANCE**

We recommend that all guests take out comprehensive travel insurance that specifically covers climbing at an altitude of 6000 metres. This should cover you in case of hospitalisation as well as evacuation from Tanzania if the need arose. We provide evacuation from the mountain on foot and our emergency response crew will evacuate you to the nearest hospital. Any advanced rescue, such as helicopter or flying to another country, is not covered. Also note that in-patient costs need to be covered too. You should be asked for your insurance details in due course and these will be confirmed at the pre climb briefing.

## GETTING YOUR BODY PREPARED

Essentially Kilimanjaro is a multiple day hike. In light of this hiking and walking are ideal forms of preparation for your body. Hiking at altitude is hard work and so the more preparation you do the better – but not to the point of over exerting yourself or stressing your body, especially a few days before the climb. Therefore, your best bet is to introduce exercise into your daily routine (if you don't already). Where possible, try to have extended walks where you can wear in your boots, carry your rucksack and get used to some light weight on your shoulders and increase your aerobic ability. If you can combine more exertive exercise, such as swimming and even other forms of aerobic exercise then great! Remember that you will be walking for a number of days and so the fitter you are the more adapt your body is to this level of exercise.

## TRAINING PROGRAM

Please refer to Annex B for a prospective training program you can follow or at least give you some idea of the level of fitness you will require on the mountain.

## PHOTOGRAPHY

Kilimanjaro is a stunning mountain and photographs are simply a must. Whilst some people bring larger cameras these days most phones have excellent cameras. We find that putting phones on flight mode ensures that the batteries last much better and thereafter a backup battery charger of around 20,000 mAh will be more than enough charge for between 6 to 9 days. When summitting please note that taking phones out when it is still dark or windy will result in a very fast use of the battery and so for best results save the battery for the summit shots and then shoot liberally on the way down.

For those shooting with SLR or mirrorless cameras then as per the info above, the cold can severely impact the battery life. A minimum of around 3 spare batteries is a good plan and then zoom lenses help cover multiple shots and keep the weight down. Around 18 to 200mm lenses are ideal but most shots tend to be in the 28-80mm range. If wanting to do night photography / stars / time lapses then having a lightweight tripod is a must. For milky way shots consider making your travel plans when there is no moon!

## ARRIVAL PROCEDURE

### ARRIVAL AT THE AIRPORT

On arrival in either Tanzania or Kenya you will be met by our representative. They will meet you at the airport with a signboard with your name on it. After collecting your baggage, you will be transferred to your accommodation via private transfer. Depending on your arrival time you will either receive your pre climb briefing upon arrival at your hotel or the morning after.

### PRE CLIMB BRIEFING

The pre climb briefing is an opportunity for us to introduce you to our guides, check that you have everything you need for the climb, answer any outstanding questions and help out with anything we can. We normally do the pre climb briefing at least a day before you set off. That is not always possible if you arrive on a night flight and climb the next day (we recommend you give yourself at least a day to relax and get over your flight, and most likely the stress of leaving work!) in which case we brief you in the morning. The brief will cover the following points:

1. **Introduction to your guide.** Your guide will be in charge for the coming days during your climb and the pre climb briefing is your opportunity to meet them in a relaxed environment and ask any burning questions you have before setting off.
2. **Important Timings.** You will be explained where and when to meet the transport to take you to the National Park and who will meet you.

3. **The Route.** You will be explained the route in detail and what you can expect on each day. For example, how far you will ascend during the day, how many hours of walking etc.
4. **Daily routine in Camp.** This will cover approximate timings for setting off each day, meal times, facilities in camp etc.
5. **Kit Check.** Finally, the guide will conduct a visual inspection of all your kit to ensure you have all the correct equipment essential to complete the trek and that it is in adequate condition. If anything is missing, we will endeavour to source the missing piece of equipment before you leave for your trek.

## STARTING OFF FROM YOUR ACCOMMODATION

We normally like to get to the trailhead relatively early, especially on the busier routes. We will advise the start time in the actual briefing. The key thing is to be prepared to depart the night before to save time in the morning so that when your guide arrives to collect you, you are ready.

Depending on which gate you are driving to, transfers can take 2-4 hours. There is the opportunity to stop for a toilet break on the way and a service station where you can buy things like batteries and snacks en route to the national park.

## ON THE MOUNTAIN

### THE GATE

After transferring to the gate your guide will head off to fill in the necessary paper work whilst the mountain authorities and our team check all the porter bags to make sure they conform to the rules of the national park. All baggage is normally weighed again at this point; thus the exact number of porters will not be determined until this point.

At this point, you will also be introduced to the rest of the mountain team and be offered a drink and a snack while you wait. When all the formalities are complete you set off with your guides. Your porters will catch you up later on, pass you and set up camp by the time you arrive.

### TO THE FIRST CAMP

The first day is a good chance to get to know your guides and they will also be on hand to explain and describe some of the flora and fauna. This first day is an ideal opportunity to start a few good habits:

- Drink lots of fluids
- Eat snacks as often as you can
- Walk slowly

When you arrive at camp, your Camp Manager will give a camp orientation and go over important timings.

### DAILY ROUTINE

As a general guideline:

- Tea/Coffee & hot water: 6.00am
- Breakfast: 6.30am
- Briefing: 7am
- Depart: 7.30am
- Lunch: depends on whether lunch is en route or in camp, but around 12pm to 1pm
- Afternoon tea: 3 – 4 pm
- Dinner 7pm
- Evening briefing: 7.30pm



Most people tend to go to bed fairly shortly after dinner for a well-earned rest.

## DAILY BRIEFING

Every evening your head guide will brief you in your mess tent during dinner. This briefing will include:

- How the day went, how your pace was and how to improve your performance
- What lies ahead for the next day
- What time tea and hot water will be brought to your tent
- What time you need to get up
- Breakfast times
- What to include in tomorrow's day sack
- Departure time from camp
- Where lunch will be (in next camp or en route)
- Approximate arrival time / walking times

## MEDICAL CHECKS

Your guide will take medical readings from you twice daily using a pulse oximeter and asking you specific questions. Please be honest so that we have an accurate account of how you are doing during the trip.

## ON THE MOUNTAIN - THE SUMMIT BID

For most routes the final summit bid is a little different. Here are the key stages and what to expect:

### SUMMIT BRIEF

Usually held during lunch, your head guide will go over how the summit section will be tackled. Your guides will have assessed your performance over the previous days and if necessary, may want to start some members of your group slightly earlier – this is especially relevant in large groups. The starting time for all routes that ascend via Stella point (Machame, Lemosho, Umbwe) or Gilman's (Marangu or Rongai) will almost always be at night. Hence, you may start as early as 11pm or possibly as late as 1am but your guide will decide this. The target is to try to reach the summit by sunrise as you have a long downhill afterwards as well.

For those on longer 9 day hikes you will ascend at day time. This tends to be mentally less tough than a night time ascent and you arrive at the crater camp in time for a late lunch and time to relax. The crater is a cold place, especially at night and so wrap up well. At night make sure you have a warm hat and thermals are a must!

### BEFORE GOING TO SLEEP

You will be wearing most of your cold weather gear for the summit bid, therefore the main things left to carry in your daysack are water, snacks and a camera for the hike up. As you return from the summit and the temperature increases, you can start to fill your daysack with the layers you take off. For the way back down to base camp you may want to pack a sun hat, sun cream and sunglasses as well.

### WHEN YOU WAKE UP

You will be given a wake-up call. From here you dress, put your boots on and make sure everything you take in your day sack is packed and then go to the mess tent with your day sack where you will meet your guide and have a hot drink and check over last minute items.

### DEPARTING

We always have guides at the front and back of the group keeping pace and checking your performance. Your guides set the pace and there will be at least one member of our team for every client during the summit bid and back to base camp.

## GETTING TO THE RIM OF KIBO

Getting to the rim usually takes around 6 hours. It can sometimes be shorter or even significantly longer. This is one place where different abilities can often show, but not to worry. If the group needs to split up then the time to do so will be determined by the head guide and guides will be assigned to each group. This is the hardest part of your entire trek – for some people the hardest thing they will ever do. It is often mental stamina that counts for a huge amount here, and motivating your colleagues is essential. Your guides will also be motivating you and monitoring you consistently. Follow the methodical steps of your guide to maximize grip and maintain a slow steady momentum.

## FROM THE RIM TO THE SUMMIT

On the ascents via Stella point it is still a further hour or so to the summit (Uhuru peak). Some people are happy to turn back here, after all you are at the top of Kilimanjaro, but most likely you will persevere to the summit.

From Gilman's it is around 2 hours to Uhuru peak, which is possibly why more people fail to reach Uhuru peak on the Marangu and Rongai routes as the final distance to the summit is a little daunting.

## ON THE MOUNTAIN - GOLDEN RULES

These "Golden Rules" will be described again during the pre-climb briefing and we consider them to be the most important rules of your entire climb.

### 1. "POLE POLE"

You will hear this from your guides a lot. It means slowly, slowly in Swahili and this applies to your pace on the mountain. This is especially important for the first 2 days where the altitude does not feel like a limiting factor and you are tempted to set a fast pace – for most people that is the normal reaction but it is the wrong one! Your body will be dealing with trying to acclimatize over the next few days and stressing it out and over exerting your body will have a negative impact on acclimatization. Your guides will set the pace and you may find it almost intolerably slow – bear with them, it's for a good reason.

### 2. DRINK

Drink lots of fluids. Your body goes through a number of changes at altitude from an increased basal metabolic rate to breathing deeper and faster. Hiking up steep hills at normal altitudes generates quite a lot of sweat and at altitude your body can be using up to 3 times the amount of water and so keeping hydrated is essential. Every so often your guides will simply stop you and at these points have a drink. In pack water carriers (Camelbak, platypus and so on, are also great as you can easily keep drinking all day long). A good test to see if you are drinking enough is that your urine should be clear and copious. If it is yellow, then there is a good chance that you are dehydrated and you should take immediate steps to counter this (i.e. drink water). Your guides also carry extra water – so don't worry about running out.

### 3. EAT

This goes hand in hand with rule number 2. Studies have shown that your basal metabolic rate (BMR) increases with altitude – at 4300 meters this can be as much as 28% up on normal and so despite the fact that you may not feel like eating that much, your body needs the fuel. Also, one of the first signs of altitude sickness is loss of appetite. So while eating may be a struggle at points, it is still extremely important. From experience we have found that, if you are able to stay well hydrated and keep a full stomach, the effects of altitude are less likely to affect you.

### 4. COMMUNICATION

For the Guide and the team, their sole mission is to help you reach your goal of summiting the mountain safely. In order to do this, they need to be aware of everything at all times.

## ON THE MOUNTAIN - FOOD

All of our food is freshly prepared on the mountain and specifically planned by altitude and experience. Each meal is designed to give you the right amount of calorie intake to keep you healthy and full energised.

Please note that people with special dietary requirements can normally be accommodated, but please let us know if you have ANY allergies or dislikes.

We recommend that each person brings at least 2 energy bar per day to eat on trail. We do provide at least 1 snack (bar) per person per day and afternoon snacks such as popcorn, nuts, and plenty of hot drinks but we do like people to bring snacks that they know they like.

### BREAKFAST

- A selection of fresh fruits
- Cereal
- Porridge
- Sausage, baked beans, toast and hard boiled eggs
- Tea / coffee / hot chocolate

### LUNCH

Lunch is sometimes taken on route in the form of a picnic lunch. A typical picnic lunch would include:

- Freshly made hot soup
- Make your own sandwiches with cheese, ham, vegetables or some similar
- Chocolate bar
- Fruit juice
- Tea / coffee / hot chocolate

On the other days, lunch is taken in camp and would typically include:

- Freshly made hot Soup
- Crunchy Thai Quinoa Salad with chicken and satay sauce
- Fruit salad
- Fruit juice
- Tea / coffee / hot chocolate

### DINNER

- Tomato balsamic bruschetta
- Freshly made hot soup
- Spaghetti bolognaise
- Banana fritter
- Tea / coffee / hot chocolate

## ON THE MOUNTAIN - WATER

On these mountains the water is actually very clean – for the most part. We provide bottled water at the trail head until we enter the national park. From this point we use water from streams and, whilst it is most likely perfectly suitable for consumption, we take two precautions:

Firstly, we filter the water with Expedition Katadyn Carbon Filter Pump. This already makes the water perfectly acceptable to drink but to absolutely guarantee it is clean we go a step further and add puritabs. These are chlorine based tablets, when combined with boiling, making the water entirely safe to drink.

You may like to bring water flavouring to mask the taste of the puritabs.

Each day you should have 3 litres of water on you when you start. For the entire day you should be drinking between 4 and 6 litres of water. Each person is different, but a simple rule is that your urine should be clear and copious; if it isn't, keep drinking.

## HYGIENE

Hygiene is very important on the mountain. Fresh underwear, fresh socks and washing are all important. Hot water is provided in the morning by your tents and when you get in to camp. Water is also available after you have been to the toilet with soap. All crew members are also under strict instructions to maintain a very high level of hygiene at all times.

## EMERGENCY PROCEDURES

### ROLE OF THE GUIDE

One of the main roles of your guides is to make sure that you are safe, and in the eventuality that you do have to go down, the whole team is on hand to make sure that this is done quickly and efficiently. Importantly they will be able to discern whether it is necessary for you to go down or if resting at the same altitude is safe.

Note that for serious forms of mountain sickness – specifically HACE (High Altitude Cerebral Edema) and HAPE (High Altitude Pulmonary Edema) the only cure is removal from altitude. Our guides' decision on removal from altitude is final (note that it can be the case that in non-serious cases you may meet the group at a lower camp).

### COMMUNICATIONS

Our guides have both radios and mobile telephones and have communication lines with both KINAPA (Kilimanjaro National Park authorities) and 3 base team managers. A manager is specifically kept on standby during each climb.

### EVACUATION ROUTES

Depending on where you are on the mountain, a different exit point may be used. KINAPA vehicles are allowed onto the Shira plateau and can also access some way up the Mweka route and the Marangu route. To get an evacuee there, our team work together to either make a stretcher, use a KINAPA stretcher (if available) or even carry the person if necessary. At least one person assigned is an assistant guide.

A key aspect of our climbs is to try, wherever possible, to make sure that a guest can walk out safely by themselves. Our guides will decide if you need to turn around and their decision is final. **Please respect this.**

### AFTER COMING OFF THE MOUNTAIN - OPTIONS

If someone does decide to go down, then depending on the exit point, KINAPA vehicles may drive up as far as the track allows to meet you and then we will have a vehicle at the gate to take over. From here there are the following main scenarios:

1. The guest does not or did not have signs of altitude sickness and is physically ok. They are transferred back to their hotel to rest. Over the next few days we will keep in regular contact and a manager visit them to make sure everything is ok.
2. They have had mountain sickness but appear fine. The guest is taken to a good hospital nearest to their accommodation in either Arusha or Moshi for a check-up before being transferred to a hotel to rest. We monitor their performance by keeping in regular contact and a manager visits them daily to make sure everything is going well until the rest of the group returns from the mountain.
3. The guest had a severe case of mountain sickness or other forms of sickness / condition and may still be feeling discomfort. In this case they go straight to KCMC in Moshi and are treated. If it is a very serious case, we would arrange for flying doctors to initiate an evacuation to Nairobi. Hence, having your emergency contact and

insurance details are of paramount importance. We monitor their condition and keep in regular contact and a manager visits them to make sure everything is ok. This also applies to Nairobi as well – we have an office based in Nairobi and one of our managers would visit.

4. For the extra transfers and any medical costs and accommodation we would charge the client at cost price and if payment is a problem at that immediate time then we can make sure everything is covered and can be paid back at some later point.

## OTHER AILMENTS

### DEHYDRATION

Dehydration is caused by a lack of fluid in your body. As already indicated, your body uses a lot of water at altitude and so drinking as much fluids as possible should be a major goal. Consider these times and potential sources of fluid:

- **Breakfast:** porridge, hot drinks, water (approx 1 litre)
- **Hiking:** water bottle (approx 3 litres)
- **Lunch:** fruit juices, hot drinks, water (approx 1/2 litre)
- **Afternoon tea:** hot drinks, water (approx 1/2 litre)
- **Dinner:** soups, hot drinks, water (approx 1 litre)
- **In bed:** water (approx 1 litre)

This guide simply shows places where you may be able to get fluids – drinking 7 litres a day is probably a tad excessive!

### BLISTERS

Badly worn in hiking boots or new boots are the main culprits for a blister. Blisters can vary in their seriousness and this will affect your ability to walk. To avoid this please train in your boots and get them worn in. Wearing in a pair of leather boots can take time – sometimes at least a month and so be wary of this in your preparation.

A hot spot may be where you are experiencing friction and rubbing and is likely to develop into a blister. Having blister patches and good socks and well worn-in boots are ideal to avoid this.

**Golden rule:** if you feel a hot spot developing, stop and sort it out immediately.

### CRAMP

Cramp is normally the result of muscle fatigue, overexertion and or dehydration. Hence, keeping hydrated and not overexerting yourself if essential. Light stretching normally helps the cramps go away in a matter of minutes.

### SUN BURN / WIND BURN

The amount of harmful UV rises as you ascend. Having high factor sun block is essential (see packing list). This should be applied at the start of each day. A small tub of Vaseline is also very handy for chapped lips and moisturizing hands as well.

### SPRAINS

Sprains are not that common as long as people take our advice and do not rush. Areas where you are particularly at risk are in the forest section, some rocky sections such as the Barranco wall on Kilimanjaro or mid-way up to the summit as well as on your descent. Hence, a slow pace and care are ideal. For those with weak joints due to previous sprains, breaks or ligament tears, be prepared! Having and wearing if necessary a support for the injured muscle / joint is far better than overstressing the injury and not being able to go all the way to the summit!

## TIPPING GUIDELINES

### OUTLINE

There are sometimes different expectations when it comes to tipping from different nationalities and we have found expectations are quite often in line with cultural norms back in respective home countries. In East Africa tips are customary in most service industries and the mountain is no different. Nonetheless it is not obligatory and we pay very well compared to many other operators and, in comparison, to average Tanzanian wages. On smaller groups (2 or 3 people) our crews also appreciate that the tipping burden can be quite high as our crew numbers are high due to our specification. A common phrase in Kiswahili is 'Zawadi ni zawadi' – a gift is a gift.

### WHEN TO TIP

You will often find that the subject of tipping comes up at the final camp, which is probably a good place to arrange the final tips as most of the porters leave at that stage and go home, so it is preferable to be able to reward them on the final morning.

### HOW TO TIP

We try to keep tipping as transparent for the crew as possible. All tips should be written down on the form provided to add transparency. The amount of tip generally differs depending on the position of the crew member.

Your Guide will assist you with this at the time but the procedure should be as follows:

- On the last evening each guest should pledge the amount they would like to tip the Head Guide and he should be tipped **SEPARATELY**. This way the Head Guide is out of the tipping procedure and can assist the group with tipping the rest of the crew.
- Each guest then fills out their pledge on the tipping form under guidance from the Head Guide.
- Once the form is filled out the Head Guide will invite a member of the group to present the tips to the crew on the last morning. We require all guides to announce the group tip (where possible) on the final morning of descent with our guests present and to communicate in both Swahili and English.

Having change (US dollars are the best) is a good idea. Please plan for this before the climb or we have to organize tipping later on back at base and this becomes more complicated. Transferring money from your home country after the climb is unhelpful as it will have to go through formal bank accounts and taxes are expected from these payments to the government – around 24% at the time of writing.

### GUIDELINE AMOUNTS

These figures are designed to be a guideline based on what have become normal tipping amounts over time. Please remember that you should not feel obliged to pay exact amounts and if you feel like giving more or less then please do – it's a tip after all!

We always try to ensure that a good baseline is met with the porters such that they receive at least \$20-\$30 per porter if possible. Skilled staff – chefs, assistant guides, camp managers and guides will get graduated amounts from this base amount.

Please also consider that unused snacks, equipment and clothing will also be gratefully accepted by the staff.

## TIPPING BREAKDOWN

### CREW NUMBERS

Numbers may vary. Use below numbers as a guideline.

Climbers	Guides	Assistant Guides	Camp Crew	Cooks	Porters	Total
1	1	1	1	1	10	14
2	1	1	1	1	14	18
3	1	1	1	1	18	22
4	1	1	1	1	22	26
5	1	2	1	1	25	30
6	1	2	1	2	30	36

### DAILY TIP AMOUNTS – GUIDELINE

POSITION	FROM (US \$)	TO (US \$)
Head Guide	\$20	\$30
Assistant Guide	\$10	\$20
Cook	\$10	\$20
Camp Crew	\$10	\$20
Porter	\$3	\$5

### 7 DAY EXAMPLE

Position	1 Climber	2 Climbers	3 Climbers	4 Climbers
Head Guide	\$140 - \$210	\$140 - \$210	\$140 - \$210	\$140 - \$210
Assistant Guide	NA	\$70 - \$140	\$70 - \$140	\$70 - \$140
Cook	\$70 - \$140	\$70 - \$140	\$70 - \$140	\$70 - \$140
Camp Crew	\$70 - \$140	\$70 - \$140	\$70 - \$140	\$70 - \$140
Porter	\$189 - \$315	\$336 - \$560	\$378 - \$630	\$504 - \$840
Total for Group	\$469-\$805	\$686 - \$1190	\$728 - \$1260	\$854 - \$1470
<b>Total Per Person</b>	<b>\$469 - \$805</b>	<b>\$343 - \$595</b>	<b>\$243 - \$420</b>	<b>\$214 - \$368</b>

### 8 DAY EXAMPLE

Position	1 Climber	2 Climbers	3 Climbers	4 Climbers
Head Guide	\$160 - 240	\$160 - 240	\$160 - 240	\$160 - 240
Assistant Guides	NA	\$80 - \$160	\$80 - \$160	\$80 - \$160
Cooks	\$80 - \$160	\$80 - \$160	\$80 - \$160	\$80 - \$160
Camp Crew	\$80 - \$160	\$80 - \$160	\$80 - \$160	\$80 - \$160
Porters	\$216 - \$360	\$384 - \$640	\$432 - \$720	\$576 - \$960
Total for Group	\$536 - \$920	\$784 - \$1360	\$832 - \$1440	\$976 - \$1680
<b>Total Per Person</b>	<b>\$536 - \$920</b>	<b>\$392 - \$680</b>	<b>\$278 - \$480</b>	<b>\$244 - \$420</b>

### GUIDELINES

You will find that as a very rough guideline tipping works out to 10% of your trip value. In layman's terms:

- 6 to 7-day Luxury / VIP climbs: \$350 per person, but with small groups consider budgeting \$400 per person as there are no economies of scale and so a very high proportion of crew to clients.
- 8 – 9-day Luxury/ VIP climbs: \$400 per person, but with small groups consider budgeting \$500per person as there are no economies of scale and so a very high proportion of crew to clients.

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## AFTER YOUR TREK

Once you have been delivered safely back to your hotel (and after a thoroughly well-deserved hot shower!) there will be time to relax and have a celebratory dinner. Either that evening or the following morning, one of our managers will visit for a chat to make sure you have been well looked after and guide you through the timings for your onward journey. We also take this opportunity to receive any feedback that you have for us. Straightforward, critical feedback is ideal – we are always aiming to improve our service and standard on the mountain.

If you thought you had a great experience then let your agent and friends know. If there was anything wrong at all, let us know so that we can have the chance to make it right!



## ANNEX A TO PRE DEPARTURE INFORMATION PACK

### ALTITUDE AND ALTITUDE SICKNESS

#### INTRODUCTION

This information has been collected from a number of sources, which include medical journals and outdoor training guides. It is not meant to be a definitive source of information, but is designed to give our guests a basic understanding of the environment and reactions that the body may face at altitude as well as the inherent risks.

Our mountain guides are trained to ensure that you are monitored at all stages and are able to recognize various forms of mountain sickness and their severity and to take appropriate steps. Their ability to make these decisions is also based on years of experience on the mountain and so their decisions must be adhered to at all times.

#### DEFINITIONS OF ALTITUDE

Different altitudes can be classified as:

- a. High: 8,000 – 12,000 feet (2438 – 3658 meters)
- b. Very High: 12,000 – 18,000 feet (3658 – 5487 meters)
- c. Extremely High: 18,000 + feet (5487 meters +)

Therefore, on a typical Kilimanjaro hike you will pass from High altitude on your first day all the way to extremely high at the summit. Kilimanjaro is an extremely high mountain - the same classification as Mount Everest!

#### ENVIRONMENTAL CHANGES AT ALTITUDE

As you ascend Kilimanjaro (more specifically as you ascend through the atmosphere) the barometric pressure decreases. The temperature also drops – for every 1000 feet around 5°F (10°C per 1000 meters).

The effects of these changes are a decrease in the density of air. Essentially there is less air to breathe, hence the term 'thin air'. The percentage of oxygen remains constant at around 21%, but there are simply less oxygen molecules for a given volume of air that you breathe.

#### ACCLIMATISATION

As you ascend your body needs to deal with the reduced amount of oxygen available in every breath. These changes that your body makes are the process of acclimatization. The main changes that occur in the body are:

- a. The depth of breathing increases
- b. Pressure in the pulmonary arteries increase forcing blood to flow into parts of the lungs not necessarily used at lower latitudes
- c. The body produces more red blood cells (the protein Haemoglobin being the oxygen carrier, which resides in the red blood cell).
- d. Additional production of a certain enzyme that facilitates the release of oxygen from Haemoglobin to the body's tissues.
- e. You urinate more (altitude diuresis where the kidneys release more water from the body).

Failure to acclimatize properly therefore leads to certain symptoms – signs that your body is not adapting, or has not yet adapted, to the change in altitude.

## RATE OF ACCLIMATISATION

9. The rate of acclimatisation is affected by a few main factors:
- How quickly you ascend. An ideal target rate is 1000 feet a day (305 meters per day) and every 3000 feet spend an extra day at the same altitude.
  - The amount of time spent at a particular altitude. Extra days spent at the same altitude help.
  - The maxim 'walk high, sleep low' also applies.
  - The condition of your body. Being prepared and taking it easy ensure that your body is given the best chance of dealing with the changes in environment.
  - How well hydrated you are and diet. High carbohydrate diet combined with lots of fluids are essential.

## TYPES OF ALTITUDE SICKNESS

If your body is not able to deal with the change in altitude then there are 3 main types of illness that may be apparent:

- Acute Mountain Sickness.** A number of symptoms that indicate you are not acclimatized to your current altitude. These include a headache combined with loss of appetite, fatigue (even at rest), dizziness, mild swelling in extremities, and disturbed sleep. The important thing to note is that a large proportion of people climbing Kilimanjaro do get mild mountain sickness and with rest and time your tolerance for altitude increases and so most people will be able to continue. Fluid leakage on the brain is the predominant cause of a headache and severe forms of this can lead to HACE.
- High Altitude Cerebral Edema (HACE).** Excess fluid leakage causes mental impairment and this can be fatal. The hallmarks of HACE are a severe headache and impairment of the ability to think. Ataxia, or the loss of coordination is an easy sign to recognize. Descent is the only cure. **HACE is considered the 'end stage' of Acute Mountain Sickness**
- High Altitude Pulmonary Edema (HAPE).** Fluid on the lungs. Signs can include breathlessness even at rest, cough (possibly frothy or pink sputum), rattling breaths, lack of blood to the extremities and drowsiness. HAPE can be confused with pneumonia, but rapid descent soon differentiates the two.
- Periodic breathing or 'Cheyne – Stokes' respirations are not an illness. Periodic breathing often happens at night whereby the climber may experience wildly fluctuating breathing cycles in their sleep. It can be quite disturbing to listen to or to suddenly wake up to, but it is not considered abnormal at high altitudes. Acetazolamide (Diamox) can be helpful in relieving periodic breathing.

## DIAMOX / ACETAZOLAMIDE

Diamox (the brand name) is a sulpha based drug that is a carbonic anhydrase inhibitor. Essentially the effect it has is to act as a respiratory stimulant, which impacts your breathing particularly at night and can eliminate periodic breathing. Clinical trials have not been performed conclusively, but it is widely known to increase the rate of acclimatization. It is certainly not a wonder drug that will work for everyone in the same ways – in fact the research and data for how well it works for different people is very limited indeed.

## KEY POINTS

- a. It is a sulpha-based drug and so some people are allergic to it – your doctor must prescribe it for you to take it.
- b. It is a diuretic
- c. Some side effects include tingling in the fingers and toes, altered taste (especially of soda drinks which taste flat) and possibly ringing in the ears.
- d. It is used in the following ways:
  - i. At the start of the climb and during climb to prevent mountain sickness
  - ii. On the onset of any signs of mountain sickness
  - iii. As a treatment for mountain sickness

**The only real cure for altitude sickness is removal from altitude.**

Please note that our guides are asked not to give out their own supplies of Diamox to people that have not been prescribed Diamox to avoid allergic reactions.

## DOSES

Consult your doctor for advice. From experience we have found that a good dose is 125mg twice a day, at breakfast and then after dinner. This minimizes side effects and helps keep a steady breathing pattern when you are asleep. Some information from medical journals indicates that the effectiveness of Diamox may be very limited unless the maximum daily dose of 750mg is taken. We wait for proven clinical results!

**ANNEX B TO  
PRE DEPARTURE INFORMATION PACK**

**A POTENTIAL 3 MONTH TRAINING PROGRAM**

**CLIMB DATE MINUS 3 MONTHS**

- Gym / fitness class / any selection of fitness session x 2 times a week: choose workouts that make you work hard and increase fitness rather than build muscle
- Walking: walk whenever possible – short 10 minute walks are fine, go to the shops, see friends, short trips you might normally take a bus or taxi for.
- Diet: cut out soft drinks with sugar or sweeteners and junk food. Remember this is a once in a lifetime event – use it as a great excuse to get healthy!!

**CLIMB DATE MINUS 2 MONTHS**

- Gym session x 3 times a week: again choose workouts that make you work hard and increase fitness rather than build muscle. No need to go crazy, but doing 3 workouts a week breeds discipline and mental stamina as well as improving physical conditioning. You can even substitute 1 gym session for an alternative activity such as Yoga (even better yoga session every morning!) or swimming
- Walking: keep walking! – short 10 minute walks are good, but increase your distance to at least 1 hour once a week. That's only 4 x 1 hour walks for the whole month!
- Diet: keep healthy but remember to feed the fire! When you exercise you will burn lots of calories and so replace lost fuel and keep very well hydrated – water is life, drink, drink. Lots of water helps flush out toxins and maintains a healthy perfusion of the body's cells.

**CLIMB DATE MINUS 1 MONTH**

- Gym session x 3 times a week: no need to go crazy on the gym sessions, simply keep up a good routine. Do not over exercise! Going over 3 times a week increases the risk of injury and muscle damage which will prevent you from even starting, which is not what we want.
- Walking: be realistic and set 4 hikes for this month of around 2 – 3 hours each. Keep walking whenever possible. Again, overexertion and strains should be avoided at all costs, but some hill work and distance will definitely help wear in those boots and prepare you mentally.
- Diet: a good well balanced diet is the way to be. Any loss of body weight or toning should really have been done in the last couple of months and now keeping healthy and maintaining the status quo is our goal. Lots of water and enough calorie intake to complement your exercise routine.

**CLIMB DATE MINUS 1 WEEK**

- **RELAX.** No need for last minute blasts or burn outs. Take a good walk at the beginning of the week and then simply relax. If you haven't prepared up to this point, then training one week from your arrival is not going to help (people that take that approach should expect to find the hike hard work and possibly be ready to fail). Being **MENTALLY RELAXED** is as important as physical conditioning. Even if you haven't managed to put in lots of training time the same applies.

Note: wearing in your boots will avoid discomfort on the mountain – serious blisters can seriously affect your ability to walk and for this reason we also recommend carrying / wearing them on the plane.