



## Safety and Success on Kilimanjaro

By

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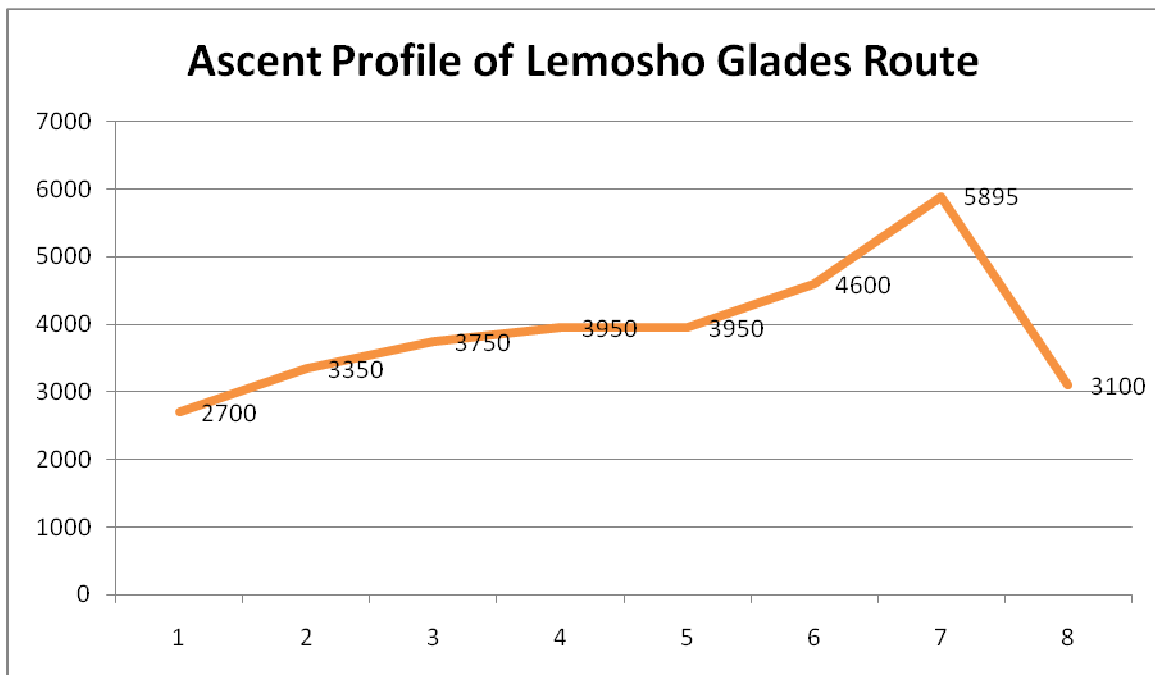
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## Ascent Profile

- [1] Mti Mikubwa 2700m
- [2] Shira Camp I 3350m
- [3] Shira Camp II 3750m
- [4] Barranco Camp 3950m
- [5] Karanga Camp 3950m
- [6] Barafu Camp 4600m
- [6] Barafu Camp 4600m
- [7] Uhuru Peak 5895m
- [8] Barafu Camp 3100m



[Nights along the x axis and altitude along the y axis (m)]

Mountain: Kilimanjaro

Route: Lemosho Glades

Altitude: 5895m (19650ft)

Location: Tanzania (3° 4' 33" S 37° 21' 12" E)

Access: The mountain is most easily accessed from the town of Arusha (3° 22' 20.5" S 36° 41' 40.1" E). Arusha is a 1-2 hour journey by metal road from Kilimanjaro International Airport (KIA). The journey to the Londrossi Gate takes a further 3-4 hours along a mixture of metal and earth roads.

Overview: Strange as it may sound, Kilimanjaro is perhaps one of the most dangerous mountains in the world. Despite reliable weather and straightforward access, illness and injury are commonplace. Of the 40,000 visitors Kili attracts each year, between 50 and 75% turn back before reaching the summit. In a recent study of 112 Finnish trekkers on the Marangu route, only 53 (59%) made it to either Gilman's Point or Uhuru Peak. What's the reason for this? In one word - altitude. Altitude presents humans with a host of problems. On Kili the combination of cold, dehydration and acute mountain sickness seems to be responsible for turning most people back. Preventing these is the key to climbing the mountain.

Whilst the Marangu, Rongai and Machame approaches see the majority of the traffic, the Lemosho Glades Route is proving to be an increasingly popular alternative. The reasons for this are simple – the route not only offers a beautiful trek through a range of stunning habitats, but it also enjoys an ascent profile that allows aspiring summiteers plenty of time to acclimatise. All in all, the Lemosho Glades Route offers one of the best ways to climb the mountain safely!

*"To my surprise during the whole of the trek I did not have any headaches." TM 2007.*

*"I now realize that high altitude climbing is primarily about good acclimatisation, and then go for the top when your body is ready." EG 2007.*



Route Description: The route begins close to the Londrossi Gate on the northern slopes of the mountain. Most trekking companies aim to start the route by the middle of the day. The first stage to Mti Mikubwa “Big Tree Camp” (2650m) is short and relaxing (2-4 hours). Despite walking in the warmest part of the day, ample tree cover and a gentle incline makes this an ideal way to start. However in wet conditions progress will be much slower since the rough earth track can turn to mud after a few days of steady rain. During the second day the forest falls away and temperatures start to rise. Make sure you have a sun hat, drinking water and sun block in your day sack – you’ll need it! Expect to walk for 5-7 hours. Watch out for blisters – not only on the feet but also on the fingers too. A new pair of trekking poles can cause small, painful surprises! At Shira Camp I you’ll have your first views of the mountain

and the long day will have felt worth it. At 3350m, the altitude will be a problem for some – resting heart rates will be higher (70-90 beats per minute) and the pulse oximeter will show a significant fall in arterial oxygen saturation (85-95%). After a few hours, the first signs of AMS will appear in some. These will be commonest in the younger, fitter members of the group who'd raced ahead of everyone else! Victims will be quiet and withdrawn – complaining of a throbbing headache when prompted. The first night's sleep at this altitude will often be a disappointment. Although second rate mattresses and cold sleeping bags will be blamed by some, the underlying reason for most is the altitude. The combination of periodic breathing and the increased need to urinate often leads to a broken night's sleep. The following morning, the first physical signs of altitude may be visible. It is common to see faces swollen and shiny with edema. Although this is sometimes linked to AMS, it rarely causes problems and vanishes in most by mid morning. Fortunately, the journey to Shira II (3850m) is a short one (2-4 hours). However it's easy to take the wrong path and head off to the north or east. Make sure that you stay close to your guides and porters! At 3950m the next day's journey to the Barranco camp looks like a flat walk. Sadly, a closer inspection of the map reveals a number of ridges blocking the way. Fortunately, these have their advantages! At 4500m the Lava Tower offers a good opportunity for some more acclimatisation. A few hours spent here before descending to Barranco Camp will be of enormous help later. Barranco Camp can also be reached from the southern Umbwe route. This is an excellent escape route for those with AMS, HAPE or HACE since altitude can be lost quickly and safely. The first part of the next day is spent negotiating the Barranco Wall. Although steep in places, it's safe and fun! However it's not the place to take someone who's struggling with AMS – either rest at Barranco Camp for a day or head down. On the Barranco Wall you'll encounter groups on a shorter itinerary. Listen to them panting! Are they talking to each other? Are they enjoying the view? Probably not! They haven't given their body's a chance to acclimatise, but are still pushing on! At this point you're allowed a smile to yourself. Karanga Camp splits up a very long day and it's worth spending the night here. Next day, an early start should see you at Barafa Camp by lunchtime. Food, water and sleep are now required. Summit day starts at midnight!

Summit day is long but worth it. Most groups start around midnight and aim to reach Uhuru Peak by dawn. A slow and steady approach will get most to the top in 6-8 hours (See Conditions). Thankfully, the descent is much quicker and you should be back in camp by lunchtime.

Unfortunately the day is not quite over! There's still 3-4 hours to go to Mweka Camp. Just keep going – you'll make it!

*“Undoubtedly, the hardest part of the trek was summit night. Not to be under estimated. I was surprised how cold it was since I was not able to move fast enough to keep warm – definitely take the sub-zero gear!”MM 2007*



Duration: Between 6 and 8 days to reach the summit

Local Languages: Kiswahili (Swahili) and English

Currency: Tanzanian Shilling (TZS)

100 Cents = 1 Shilling

[http://coinmill.com/TZS\\_calculatorTSh.html](http://coinmill.com/TZS_calculatorTSh.html)

Visa Requirements: [http://www.tanzania-online.gov.uk/web/index.php?option=com\\_content&view=article&id=51&Itemid=65](http://www.tanzania-online.gov.uk/web/index.php?option=com_content&view=article&id=51&Itemid=65)

Vaccinations: A Yellow Fever vaccination certificate is only required by those who enter Tanzania from areas where Yellow Fever is endemic (see <http://www.tanzania.go.tz/immigration.html> for details). However Yellow Fever is a common problem in Africa and vaccination is strongly recommended.

Rabies is a common problem in Africa. Many animals are infected. A vaccination buys you enough time to reach medical help and may reduce the severity of the infection. Without it, rabies can be fatal within hours of being infected. If you're visiting remote areas, a rabies vaccination is strongly recommended.

Nearest Hospital: Kilimanjaro Christian Medical Centre in Moshi (3°21' 33" S 37°19' 60" E)

Evacuation:



The local Tanzanian guides are knowledgeable, attentive and strong. If you're able to walk they can get you off the mountain safely. Many have been trained in the diagnosis and treatment of life threatening conditions such as HAPE and HACE. Importantly, they all know the importance of the mantra "Descend, Descend, Descend" in these situations! Most trekking companies carry a cylinder of supplemental oxygen or a portable hyperbaric chamber for those suffering from HAPE or HACE. Fortunately, Kili's steep ascent profile and good paths make it possible to descend quickly. HAPE and HACE victims often improve quickly. Sometimes just a few hundred metres of descent is enough to reverse the effects of altitude. Many, diagnosed with life threatening conditions reach the park gates eager to climb again!

If you're organising a rescue make sure that the victim is accompanied by at least two people – one to guide and carry equipment and a second who can go for help in case there are difficulties. Encourage them to use trekking poles, especially if they're slow and unsteady – they can make life a lot easier.

Unfortunately a helicopter rescue is not an option on Kili! For those who can't walk, the only alternative is the portable stretcher. In experienced hands these devices are lifesavers and can ferry the sick and injured to the park gates very quickly. Before leaving it's vital that the victim is warm and dry. Wet weather is common lower down the mountain and waterproofs are essential. Add an insulating mattress too - the ride can be a bumpy one! Water, food and a day's medication are also essential. Finally, make sure that radio contact has been made with the park officials. This will ensure that there will be an ambulance ready and waiting.

Remember – our guides and porters get sick too! Most who work on the mountain are from lowland villages and towns. Unlike those born at altitude these men and women lack genetic “advantages” and are just as prone to HAPE and HACE as anyone else. As employers and human beings, trekkers have a responsibility to treat their guides and porters as they would want to be treated themselves.



Climbing Seasons: December to March and July to October

Communication: Radios are operated by park staff at each camp. Mobile phone reception is very patchy and cannot be relied upon



Conditions: Conditions on Kili can change dramatically. All eventualities need to be covered. Within minutes of the sun setting T-shirt and shorts will



need to be swapped for a down jacket and trousers! Nights are cold. Sleeping bags should be rated to  $-20^{\circ}\text{C}$ . However without a good insulating mattress even the best sleeping bags won't offer much protection. A full length inflatable mattress should be one of the first items you pack!

*"I would leave clean clothes behind in order to take a thicker sleeping mat." MM 2007*

Summit day can be cold. Since your progress will be slowed by the altitude for most of the day, the amount of heat you produce will be limited. Therefore set off wearing your warmest layers and remove them if you get too hot. Boots must be warm. Gaiters will prevent ice and snow from slipping into your boots and melting.

A couple of pairs of dry socks are vital. If you usually suffer with cold hands take a pair of chemical hand warmers to get you through the coldest part of the night. Water bottles will freeze so drink plenty before setting off and store a small bottle (1 litre or less) inside your jacket for the journey.

Below the clouds rain showers are common. Always pack a set of lightweight waterproofs in your day sack!



Temperature: 20-30°C (day) 0- -20°C (night)

*"What was the biggest surprise? How cold it was at night from day one!" TG 2007.*



**Technical Difficulty:** Mainly walking, with short sections of easy scrambling on the Barranco Wall. Climbing harness, helmet and ropes are not required.

**Dangers:** Electrocutation – Electrical connections and wiring in hotels should be treated with the utmost caution. Sockets are often poorly attached and the wiring in plugs can be loose. Switch off all sockets before inserting or removing plugs.

HIV/AIDS - In 2006, the UNAIDS/WHO working group estimated that approximately 1,300,000 adults aged 15 years or over were living with HIV/AIDS in Tanzania. This represents 6.5 % of the adult population and is considerably higher than the incidence of HIV/AIDS in the UK and other parts of Western Europe (0.2%). The incidence of HIV/AIDS and other sexually transmitted diseases are likely to be considerably higher amongst sex workers based in and around Arusha and Moshi. Use barrier contraception, or better still, refrain from sexual contact altogether.

*“If not with your regular partner, the only form of safe sex in sub Sahara Africa is on your own, under a mosquito net, wearing a condom and some would add also wearing rubber gloves” DH 2008.*

Road Traffic Accidents (RTA’s) – RTA’s are the commonest cause of death or serious injury in visitors to Tanzania. Avoid overcrowded buses and taxis wherever possible and be aware that vehicles and drivers may not match up to normal western standards!

Sanitation – At present, the toilet facilities on Kili are a real concern and may, in the future, pose a significant risk to health. Poor management of human waste, large numbers of visitors and the limited availability of water mean that there is a real risk of acquiring a viral or bacterial infection on the mountain. Despite this, the local kitchen teams are often magnificent and maintain an extraordinary level of cleanliness in difficult circumstances. In return we owe it to them to

maintain a high standard of personal hygiene ourselves. Regular hand washing with anti-bacterial soap is vital!

Malaria is common in Tanzania and a course of preventative treatment should be taken. See the later article - "Malaria and Mountaineers" for details. Also try these sites for up-to-the-minute details on medication and practical measures...

[www.fitfortravel.scot.nhs.uk](http://www.fitfortravel.scot.nhs.uk)

and

[www.nathnac.org/travel/misc/travellers\\_mos.htm](http://www.nathnac.org/travel/misc/travellers_mos.htm)

Other diseases such as cholera and rift valley fever also occur sporadically in areas where access to sanitation is limited. At present vaccinations are not recommended. However, use only boiled or bottled water and avoid ice in cold drinks.

*"Credit must go to the cook, assistant cooks and the water carriers who somehow fed thirteen westerners on the trail for nine days without anyone becoming unwell – quite an achievement!" JW 2007*

Schistosomiasis (Bilharzia) – This disease is found throughout East Africa and is acquired following wading or swimming in lakes, ponds or rivers that contain the schistosoma parasite. Symptoms include: abdominal pain, diarrhoea, fever and fatigue. Schistosomiasis is treated with a single 600mg dose of Praziquantel.

Bites – Whilst diseases like malaria and rabies catch all the headlines, there is an endless list of diseases that can be caught from the bites of animals and insects. Avoid contact at all costs! In many cases these conditions have long incubation periods and may take up to a year to present.