

Week 5 Task 2- Notes to support your diary entry

People, landscape and animals

Everest is situated in the Sagarmatha National Park. The people of the Everest region are mainly the Sherpa who live in the north of the Park. Mount Everest itself is barren, with rocks, snow, ice and very little vegetation. However in the foothills of the mountain there is farming of potatoes, barley, buckwheat, lentils and rice. Sherpa people also use local forests for timber for building, firewood and for animals. Wood is also used for heating homes. While tourism has created many jobs such as tour operators, trekking field managers, high altitude climbers, porters and cooks, it has also led to pollution and deforestation.

Yaks are also used extensively in the region to transport goods. They are tough, hairy animals well suited to living at altitude. They are also used to pull the wooden ploughs to till the fields. Yak milk is important; from it yak butter is used to burn as fuel in lamps, and is even put in cups of tea! Yak dung is also used to plaster walls of houses and is dried and used as fuel for fires. Paul Deegan, an experienced Everest mountaineer, once advised that if you pass a yak on a mountain path, make sure they walk on the side of the drop; they are heavy animals and can easily push you off. While climbing equipment and other essentials are transported up the mountain to Base Camp by yaks, it is often rubbish, including human waste that is transported down. (The human waste is later spread on the barley fields).

A minute black jumping spider has reputedly been found at 6700 metres (22,000feet), making it the highest non-microscopic animal on earth. It feeds on frozen insects blown in by the wind. Some birds, such as chough (pronounced chuff) have been spotted as high as 7900 metres.

There is a myth that the Abominable Snowman lives in the Himalayas. A photograph of a large footprint was taken by Eric Shipton in 1951. No one is sure whether these are genuine footprints or part of a practical joke. However, bears in the Himalayas can occasionally stand on two legs. They also walk in their own footprints- so four footprints might appear as two.

Temperature and Weather

Temperatures near the top of Everest drop as low as minus 60°C. In July, the warmest month, the average temperature is minus 18°C. It never gets above freezing on the mountain. The weather can be very unpredictable and very harsh. Raging storms and howling winds can move in without warning. When the weather turns bad, climbers on Everest can die in falls, die of altitude sickness and the cold, can lose fingers and toes to frostbite and can be buried in avalanches. More than 3000 people have climbed Everest since Edmund Hillary and Tenzing Norgay, however over 200 people are known to have died on the mountain. A recent tragedy was in April 2014 when 16 people lost their lives in an avalanche. Many bodies remain on the mountain because conditions are often too extreme for fellow climbers to safely remove them.

Frostbite

Frostbite happens at extremely cold temperatures when blood stops reaching the body's extremities, usually the fingers and toes, but other body parts, such as the nose, can also be affected. There are three stages of frostbite. Frostnip is the mildest stage when the skin gets very cold, turns red and feels numb. This does not leave permanent damage. The second stage is when the skin goes white and loses all feeling and small blisters may begin to develop. Finally the skin can turn purple and black and swell. In extreme cases body parts can be frozen solidly to the bone. The damage is then permanent and results in the loss of the effected body part.

Air

The air is very thin on the mountain. Many climbers suffer from altitude sickness, a lack of oxygen that robs the brain of its ability to think and can make people weak and nauseous. Altitude sickness can also cause hallucinations, pulmonary oedema (water on the lungs) and cerebral oedema (water on the brain). To cure altitude sickness mountaineers need to walk, or be taken down, the mountain to a lower altitude.

The death zone is a term applied to altitudes of over 8000 metres (26000 feet). Even at Base Camp (5200-5400 metres) the low level of oxygen available has a direct effect on the amount of oxygen in the blood. At sea level oxygen levels are usually 99%, but at Base Camp this falls to 85%. Blood samples taken of climbers at the summit indicated very low levels of oxygen present in their blood. A side effect of this is an increased breathing rate, from 20-30 breaths per minute to 80-90 breaths, leading to exhaustion just trying to breathe and do the simplest tasks.

People have climbed Everest without additional oxygen, the first in 1978 people were mountaineers Reinhold Messner and Peter Habeler.

Snow Blindness

The light is extremely bright at high altitude, especially when reflected off snow. Snow blindness is a reaction to this bright light and specifically to ultraviolet rays. Eyes can become red, swollen and feel gritty before people experience a temporary loss of vision. With treatment (eye drops and eye-patches) the symptoms last a day or two and then full sight is restored.