

Deposition

Till – unsorted material transported by a glacier.

Outwash – meltwater emerging from the snout of a glacier deposits fine material as it loses energy. Finer sediment will be carried furthest.

Conflicts Between Different Land Owners

Tourism – infrastructure for tourists (e.g. large car parks) can spoil the local landmarks. Tourists may have a lack of respect for countryside practice (e.g. they may stray off the path causing increased erosion, they may harm wildlife by littering and their ignorance can result in damaged stone walls).

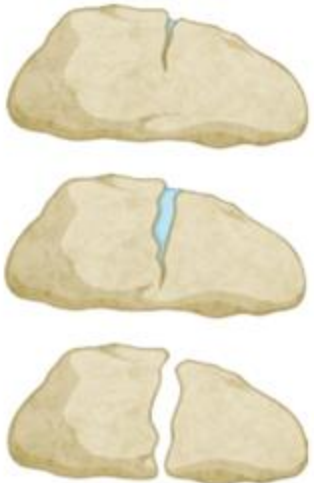
Farming – grazing sheep can cause a loss of natural vegetation which could lead to soil erosion. Some farmers do not like tourists walking on their land.

Forestry – non-native species can alter ecosystems causing increased soil erosion and distort predator populations. Non-native trees also tend to grow quicker than native species preventing native woodlands from becoming established. Monocultures also reduce biodiversity.

Quarrying – the destruction of habitats and creation of ugly scars on the landscapes could result in a decrease in tourism. This would impact the local economy. Locals also complain that quarry traffic and machinery is noisy and disruptive.

Freeze-Thaw Weathering

Glacial meltwater expands when it freezes and turns to ice. Continual expansion and contraction can put pressure on rocks and break them apart; creating angular rock fragments.



Erosion

Abrasion – as a glacier moves downhill, rocks, pebbles and sand become embedded in the base and sides of the glacier. The material is scrapped along the land, wearing it away like sandpaper. This creates a smooth and polished landscape. Striations (deep scratches) are formed by larger angular material in the base of the glacier.

Plucking – glacial meltwater freezes and sticks to rock. As the glacier moves downhill this ice will 'pluck' rock fragments that have been weakened by freeze-thaw action away from the land. Plucking creates a jagged landscape.

Lake District Conflicts

Erosional Landforms

Corrie

Valley glaciers often start in corries; snow collects in small hollows and becomes compacted over time, turning into ice. Rotational slip, plucking, abrasion and freeze-thaw weathering cause the hollow to enlarge into an armchair-shaped hollow in the mountainside with a lip at the bottom.

Arête

A steep-sided, knife-like ridge is created when two corries form back-to-back.

Pyramidal Peak

A pointed mountain peak formed when three or more corries form, eroding back to a meet at a central point.

Truncated Spurs

Interlocking spurs of the original river valley are sliced away as the glacier moves downhill, creating cliff-like edges.

Glacial Trough

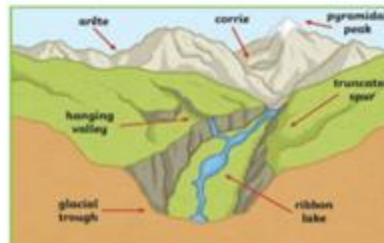
The original V-shaped river valley is widened and deepened as the glacier moves downhill through plucking and abrasion. The valley is now U-shaped.

Ribbon Lake

Glacial processes erode areas of soft rock in the valley floor creating hollows which become lakes once the glacier has retreated.

Hanging Valley

Smaller tributary valleys are sliced away as a larger glacier moves downhill. This results in small valleys which are at a much higher level than the main valley. Today, waterfalls are often found here.



An Example of a Glaciated Upland Area in the UK Used for Tourism – The Lake District

Attractions for Tourists

- 18 million tourists visit the Lake District each year.
- Visitors spent £1.3 billion in the Lake District in 2016.
- Outdoor activities, e.g. Brockhole Activity Centre at Windermere – high ropes, archery, boat hire).
- Cultural attractions, e.g. Stott Park Bobbin Mill on Lake Windermere – tours and exhibitions bring the mill to life.
- Scenery – unique, varied and dramatic scenery attracts visitors from all over the world.

Social and Economic Impacts of Tourism

- 92% of the Lakes District's visitors (16 million a year) drive, this causes traffic jams and parking problems around honeypot sites.
- The large amount of second home ownership has pushed up house prices – a three-bedroom house can cost £700,000! 80% of the houses in the village of Chapel Stile are second homes/holiday lets. This means that local people cannot afford to buy a home and doctors surgeries/schools have closed.
- Many businesses cater for tourists rather than locals – 40% of businesses in Ambleside are cafes and restaurants.
- Over-dependence on tourism for jobs and a lack of diversity in employment result in low wages.

Environmental Impacts of Tourism

- Boat users on Lake Windermere create noise, pollution and litter problems.
- Walkers venturing off paths has resulted in soil erosion (e.g. along Striding Edge at Helvellyn).