

# Glacial Depositional Landforms

## Glacial Depositional Landforms

Glaciers have played an important role in the moulding of landscapes in the mid and high latitudes of alpine environments. The major depositional landforms made by glaciers are:

- Esker
- Outwash plains
- Drumlins

Read in detail about these below:

### Eskers

- The esker is one of the most striking landforms of fluvioglacial deposition.
- They are usually formed of washed sand and gravel.
- Eskers vary in shape and size.
- When glaciers melt, the water flows on the surface of the ice or leaks down along the margins.
- These waters amass underneath the glacier and flow like streams in a channel beneath the ice. Such streams flow over the ground with ice forming its banks.
- Very coarse materials like stones and blocks along with some minor segments of rock debris transported into this stream settle down in the valley of ice underneath the glacier and after the ice melts can be found as a winding ridge called Esker.

### Outwash Plains

- It is also known as called a sandur.
- It is a plain formed of glacial sediments deposited by meltwater outwash at the limit of a glacier.

### Drumlins

- These are smooth oval-shaped ridge-like topographies composed primarily of glacial till with masses of gravel and sand.
- It forms due to the dumping of rock debris underneath heavily loaded ice through fissures in the glacier.
- The long axes of drumlins are parallel to the direction of ice movement.
- Drumlins give an indication of the direction of glacier movement.
- The Stoss end is the steeper of the two ends and used to face into the ice flow.

## Moraines:

- Moraines are long ridges of deposits of glacial till.
- When these deposits are at the end of a glacier, they are called as Terminal moraines and when they are deposited on both sides, they are called as Lateral moraines.
- When lateral moraines of two glaciers join together, they form Medial moraines.
- When the lateral moraines of both sides of a glacier join together, it forms a horse-shoe shape.
- Ground moraines are deposits left behind in areas once covered by glaciers.

## Quick Facts about Glacial Depositional Landforms

### What are the main glacial landforms created by deposition?

Three major glacial depositional landforms are eskers, outwash plains and drumlins.

### What is the glacial action?

The actions by the movement of glaciers including erosion, deposition, transportation are termed as glacial action.