

All the five major dunes can be further categorized into simple, compound, and complex types. When they occur in their original states, all dunes are simple. When a smaller dune forms on top of a larger dune of a similar type and orientation to the wind, the entire structure is known as a compound dune. When a smaller dune forms on top of a larger dune of a different type, it is known as a complex dune.

Table 1 describes the major types of dunes classified by geomorphologists, and Table 2 describes some additional types of dunes.

Table 1: Major Types of Sand Dunes	
Type	Description
Barchan, or Crescentic	Barchan dunes, when viewed from above, resemble crescent moons, with convex (curved outward) backs and steep, concave (curved inward) faces. The curved tips or wings of the crescent point downwind and partially enclose a single slip-face. Barchans usually form where there is a limited supply of sand, relatively flat ground, and a fairly constant flow of wind from one direction. A barchan dune may grow as tall as a several-story building. Barchan dunes are the most common, occurring widely in deserts around world. This is the classic dune shape.
Parabolic, or Blowout	A parabolic dune is similar in shape to a barchan, but it is just the opposite. The tips of this dune point into the wind, and its main body migrates with the wind, forming a depression between the tips. Because of this formation, parabolic dunes are also known as blowout dunes. These dunes often occur when vegetation stabilizes sediments and a U-shaped blowout forms between clumps of plants.
Transverse	Long asymmetrical dunes that form at right angles to the wind direction. They form when there is an abundant supply of sand and relatively weak winds. These dunes have a single slip face which is often very steep. A group of transverse dunes resembles sand ripples on a large scale.
Linear, or Longitudinal	A linear, or longitudinal, dune is one that forms where sand is abundant and strong cross winds converge from at least two directions, pushing the sand into long lines or ridges. The crests or summits of linear dunes are often straight or slightly wavy, with slipfaces on either side. Linear dunes can reach more than 655 feet (200 meters) in height and 62 miles (103 kilometers) in length.

Star	Pyramidal or star-shaped dune with three or more sinuous ridges radiating out from a central peak of sand. A star dune forms where there is plentiful sand and strong winds coming from various directions. This dune has 3 or more slipfaces. It does not migrate along the ground, but grows vertically. The largest and highest dunes are star dunes.
Table 2: Other Types of Sand Dunes	
Barchanoid Ridge	A barchanoid ridge consists of several joined barchan dunes and looks like a row of connected crescents. Each of the barchan dunes produces a wave in the barchanoid ridge. Occurs when the sand supply is greater than in the conditions that create a barchan dune.
Seif	Sub-type of longitudinal dune that is shorter and has a more sinuous ridge.
Dome	A dune that is circular or elliptical in shape and has no slip-faces. May be formed by the modification of stationary barchans.
Whaleback	A smooth, elongated dune shaped generally like a whale's back; formed by passage of a succession of longitudinal dunes along the same path. Also known as a sand levee.
Reversing	A dune that is intermediate between a star and a transverse dune. Its ridge is asymmetrical and has two slip-faces, caused by winds that reverse direction. Click here to view an animation.

<http://sand.xboltz.net/types.html>