

WAVE TYPES

WHAT IS A WAVE AND WHAT CAUSES THEM

WHAT IS A WAVE AND WHAT CAUSES SURF?

A wave is a body of water (swell) moving along the surface of the ocean. Wind and storms at sea form pressure differences on the ocean surface. As these undulations travel thousands of miles they gather together to form swells. As the swell approaches land and the sea bottom gets shallower, the waves become higher and narrower and the distance between each wave becomes shorter. The wave becomes higher until it collapses and topples over. This is called a surf.

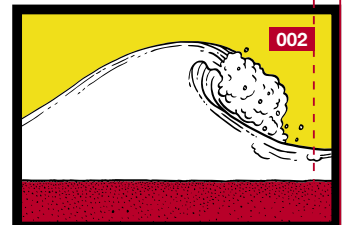
001 PLUNGING WAVE OR DUMPER

A dumping wave breaks suddenly with tremendous power making them dangerous for swimmers and surfers. Dumping waves that break on the beach are called a shorebreak. Serious injuries can result from such waves violently throwing swimmers on the sand.



002 SPILLING WAVES

This type of wave occurs when the crest (or top) of the wave tumbles down the face (or front) of the wave. These waves are good for swimmers and board riders. Tubes or barrels are often formed at low tide.



003 SURGING WAVES

A surging wave may never break as it approaches the beach. This is because it is very deep beneath the wave. These waves often occur around rocks.



004 BEACH ONE

This beach has an even sand bottom that is not very steep. Generally the waves will spill as they get closer to the beach. Conditions at low tide may be quite different to those at high tide.



005 BEACH TWO

At this beach there will be more spilling waves at high tide. When the tide goes out, and there is less water covering the sand bar, the waves will start dumping on the sand bar due to the steepness of the sand bottom.



006 BEACH THREE

At this beach the waves will be spilling at low tide. When the tide comes in and the waves hit the steep rise they will start dumping. This is commonly called a shorebreak.

