

Severn Bore Factsheet

- The Severn Bore is an example of a tidal surge.
- It is caused by a combination of a rising tide and the physical shape of the Severn Estuary.
- As the tide rises it forces water into a channel that continually reduces in width and depth.
- This effectively squeezes the water level upwards and forwards and creates a wave that travels up the estuary.
- The wave breaks because the top part moves faster than the bottom (which is slowed down by the uneven river bed).
- A bore travels at between 10-13 miles per hour.
- The height of the bore can be affected by many factors - such as the direction of the wind and the amount of freshwater in the river.
- The largest bores are around 2m high.
- Big bores occur in the Spring and Autumn around the vernal equinoxes, when the tides are at their maximum size.
- There are between 250 and 260 bores a year.
- They only occur when the tide exceeds a certain height.
- Most bores finish at Maisemore weir, but the very highest can overrun this and continue up towards Sandhurst, although the actual wave dies and all that is seen is a rise in the water level.
- The first surfer to ride the Severn Bore was Colonel 'Mad Jack' Churchill who rode the bore on 21st July 1955.
- There are several other rivers that have bores in the UK:
 - River Parrett, Somerset.
 - River Ouse, Yorkshire.
 - River Trent, Lincolnshire.
 - Great Ouse, Norfolk.
 - Solway Firth, Cumbria.