



Famous Freshwater!

You may well not have even heard of it before your visit to the Isle of Wight but, believe it or not, Freshwater and Freshwater Bay have seen many famous faces as either residents or visitors over the years...

Robert Hooke is one of them. The renowned scientist was born in 1635, the son of the curate of All Saints Church which stands on high ground above the River Western Yar.

Indeed, as a young boy, it is likely that Robert experimented with a fully rigged ship on the river. He was certainly fascinated by the geology of the cliffs on the Island, and his observations of the cliffs of the western part of the Island led to the following theory...



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The cliffs at this end of the Island are rich in fossils and dinosaur bones, which are revealed through regular erosion which causes cliff falls. Hooke was pretty accurate in these early thoughts by realising that the rocks containing these fossils must have been formed under the sea. The chalk surrounding Freshwater Bay is a type of sedimentary rock, created by compacted sediments and the shells and skeletons of marine animals.



Take a stroll along the beach (taking care not to get too close to the cliffs)... Mammoth teeth have been regularly found here, dropping down with cliff debris as the cliffs erode...

What might you find?!

The Geography of Freshwater Bay

Bay-building...



Freshwater Bay has been created by the sea exploiting and eroding a weakness in this chalk, and widening and deepening it over millions of years to form the small, semi-circular bay.

Also, during this period, the River Western Yar was much larger than it is today. Once a tributary of the Solent River, it flooded along with all other rivers in along the south coast, when sea levels rose at the end of the last Ice Age.

It actually cut the Island in two at this time, and the only means of transport was by boat before the

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Stack-sculpting...

Look out to sea, and to the eastern side of the bay and you will see 'Stag Rock' (right in the picture) and 'Mermaid Rock' (left in the picture). These are geographical features called stacks, and they are sculpted by the power of the sea.

Headlands are exposed to the full force of erosion by the sea. Erosion attacks and widens cracks in the rock to form small caves.

Smugglers once used the caves in the chalk cliffs to land and stash their bounty. These caves gradually enlarge and cut all the way through to the other side of the headland to form an arch.

Over time, the roof of the arch becomes weaker and weaker and eventually collapses, and all that is left is an isolated pillar of rock – a stack!



Between the two existing stacks, at low tide, you can see the two 'platforms' of an arch (Arch Rock) which collapsed in October 1992. The Stag and Mermaid stacks won't last forever; the sea is unforgiving and one day they too will succumb!

Flood Alert!

This location is highly vulnerable to the prevailing south-west winds. The waves can be extremely powerful and storms regularly throw shingle up onto the promenade. The low-lying river valley behind the bay is at risk of coastal flooding.

The shoreline management plan (SMP) for this area has identified a potential erosion rates could almost double within 100 years, putting 15 properties at risk of damage from erosion and a further 357 properties at risk from damage from flooding. Therefore, the management policy here is to 'Hold the Line' throughout the next 100 years, which means that existing protection structures will be maintained. Also, the plan is to heighten them to take account of sea level rise, which would

otherwise overtop them in time.



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Who am I?

A whole host of famous people have lived in, or visited Freshwater Bay, aside from Robert Hooke discussed earlier. In the middle of the 19th Century, Freshwater was a stylish and popular retreat for a host of artists, photographers and writers. Find 'The Freshwater Circle' information board behind the shelter on the promenade, and see if you can guess who each of the following clues refers to...

'I started it all really. I made Freshwater stylish, even if I do say so myself. I lived here until my dying day in 1892, although the 'star-struck tourists' wandering around did annoy me somewhat and, after a while, I only spent the quiet winters here.'

'I started visiting Freshwater regularly after I met a rather great man. I, like him, was a writer. Unfortunately, I did not become famous until after I was dead! It's a shame that photographer woman was around all the time – I did dislike her so!'

'Well, he may have been the leading light, but I was the one who drove the circle forward. Those Victorians did so love their celebrity pics, and Ellen had such a pretty face-her full-head portrait was a delight!'

10 things to find out about Freshwater...

1. Name three things that you might find in a rock pool at low tide on Freshwater beach?
2. Name a pink flowering plant you may find on the back of the shore?
3. Name the hill that rises above Freshwater Bay?
4. What is at the top of this hill?



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5. Where would you get to if you continued to walk along this hill?
6. Give the name of the nature reserve, the other side of the road and car park?



7. Guess where the steps and door in the cliff to the west of the bay lead to?
8. Name three natural sounds that you can hear when you stand still and quietly?
9. How many fish can you count in the mosaic in the shelter?
10. Who used to live at Dimbola Lodge?

