

# Storms in Great Britain

As we have been affected again by severe storms causing flooding in some areas there are people who are saying that we have always had flooding and storms. Whilst that is true the numbers have increase substantially over the last 120 years.

We had two major floods in the 1950s with the Lynmouth flood in 1952 and the North sea flood in 1953 but the next major flood was the great flood of 1968.

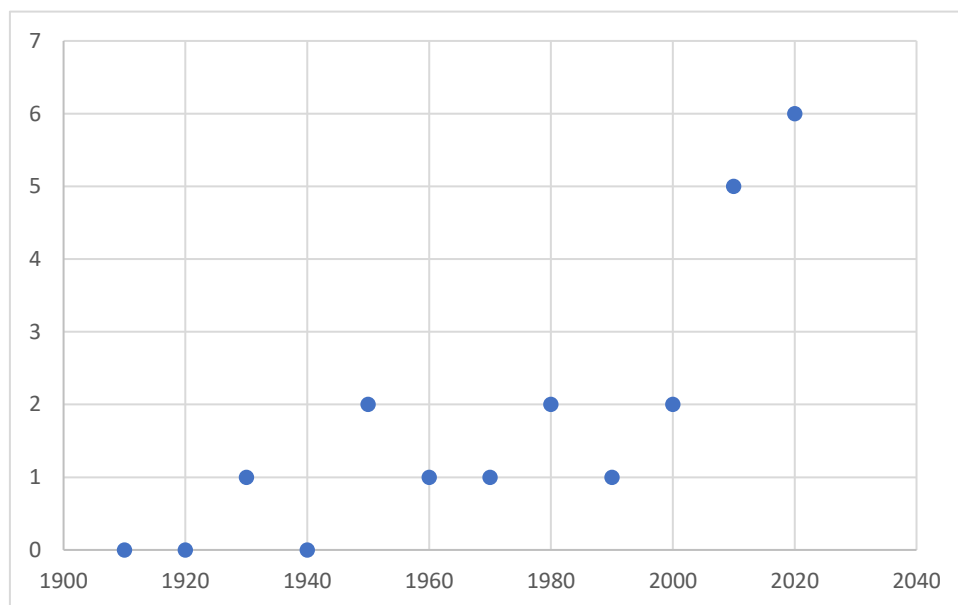
The graph below shows the number of severe storms in every decade since 1900. We have had more this year than in the first 50 years of the twentieth century.

Looking at the first fifty years of the twentieth century we see two major storms.

Over the last fifty years of the century we see seven major storms.

In the first two decades of this century we have seen eleven

**Graph showing the number of severe storms causing flooding in each decade since 1900**



## What has happened over the last ten years

2012- Great Britain and Ireland Floods. A series of low pressure systems steered by the jet stream bring the wettest April in 100 years, and caused flooding across Britain and Ireland. Continuing through May and leading to the wettest beginning to June in 150 years, with flooding and extreme events occurring periodically throughout Britain and parts of Western

Europe. On 9 June, severe flooding began around Aberystwyth, West Wales with people evacuated from two holiday parks.

2013 St Jude's storm. Torrential rain and winds of up to 100 mph hit the south of England and Wales. 600,000 homes were left without power, and 5 people were killed.

2013-14 Winter storms. During the winter of 2013–14 the British Isles were in the path of several winter storms, which culminated in serious coastal damage and widespread persistent flooding. The storms brought the greatest January rainfall in Southern England since at least the year records began in 1910. The season saw persistent flooding on the Somerset Levels with recurrent fluvial flooding in Southern England of the non-tidal Thames, Severn and in Kent, Sussex and Hampshire and in Dorset. Also coastal flooding and wave battering damage took place in exposed parts of Dorset, Devon and Cornwall.

2015. Flooding in Cumbria, Yorkshire, southern Scotland and parts of Ireland.

2019. Flooding in much of England. It was the wettest year on record across parts of the Midlands, Central and Northern England

2020 We have had storm Ciara and storm Dennis with the possibility of more storms to come and we have had widespread flooding.

Whilst I believe this is a consequence of global warming, the climate change deniers will disagree. What I hope is beyond debate is that we are getting severe storms more frequently.

The debate needs to be what can we do in Wales to reduce the impact of these storms and stop houses and businesses being flooded.

I suggest three possible actions to deal with river flooding

We can produce basins near the rivers that can be flooded in the event of heavy rains and storms forming lakes. Stopping the flooding both up and down stream.

Plant trees because we know that trees can help prevent flooding by absorbing much of the excess water before it flows into drains or rivers. The surface roots quickly absorb water as it seeps into the ground and the deep tap roots use up some of the groundwater, allowing the soil to absorb more. As well as simply drinking a lot of water, trees also change the physical structure of the soil. The dropped leaves and twigs add organic matter, which allows the soil to hold more water – and the little microbes that eat them create tiny tunnels in the soil, helping water seep in more effectively. A recent study says strategic tree-planting can reduce the 'peak height' of floods in downstream towns by up to 20%.

Widen the rivers and put bends in them. Reintroducing meanders in a river and widening the river will increase the length of that river which will lead to flows taking longer to reach their destination thereby slowing the flow and reducing flooding risk.

Other actions that can be taken include

A complete ban on any building within a designated flood risk area

Mimic nature by building leaky dams using locally sourced wood

Promoting good soil practice

The storms are coming we can either build higher and higher walls or we can try and control the water when it arrives.