## Too Hot in Spain?

## Environmentalist Seán McDonagh SSC looks at increasing temperatures in the Mediterranean.

In September 2020 the travel restrictions put in place to deal with the Covid-19 pandemic were devastating for the tourist industry across the Mediterranean. The financial impact on the economies of Mediterranean countries was highly significant as more than 100 million people are involved in the tourist industry there. Losing this trade would be considered a financial disaster.

These restrictions have been lifted and tourism has recovered. However. another more deadly threat might be in store for Mediterranean holidays. It is human-induced climate change that, at present, is causing the temperature in the Mediterranean to increase by 1.4°C since pre-industrial times. Thus, the increase in the Mediterranean region is 0.3°C higher than the global average. Over the next few decades, if the global average temperature increases by 1.5°C or 2°C above the pre-industrial level, this will increase the number of 'unbearably hot' days in the region.

Many scientists expect that the number of 'too hot' days will double in Mediterranean countries by 2050. This would mean that the number of 'too hot' days – days above 37°C – would jump from thirty to sixty in



less than thirty years. Such a spike in intolerably 'hot days' would destroy tourism, especially during the peak period of June, July and August each year.

There are other reasons why the planet Earth is getting warmer. Scientists have recently noted that the oceans have become hotter.

For the past three years the world has experienced the unusual cooling effect of La Nina. The arrival of El Nino, a weather system which begins in the Pacific and gradually warms the whole world, is worrying. Because the El Nino system is still only developing, Professor Mike Meredith, of the British Antarctic Survey, told the Guardian,



'This has got scientists scratching their heads. The fact that it is warming as much is a real surprise and very concerning. It could be a short-level extreme high, or it could be the start of something much more serious.'

Experts point out that the oceans are 0.4% warmer than they were at the last El Nino in 2018 and 2019. Though the warming appears to be small, it could be compared to the 'energy equivalent of hundreds of millions of atomic bombs, the size that levelled Hiroshima'.

Warmer oceans take up more space because they lead to sea level rise with melting of the ice-caps in the Arctic and Greenland. Many cities across the globe will have to protect themselves against the rise in sea-level. Furthermore, some ecospecies do not do well in warming water. For example, coral reefs suffer devastating bleaching when the water is warm.

With this new information, some scientists are afraid that the rapid warming could be a sign of the climate crisis progressing at a faster pace than had been predicted. It may mean that the oceans will no longer act as a buffer, absorbing huge amounts of carbon dioxide. This might mean that we could be reaching the limits of the oceans' ability to absorb this excess heat. Many believe that 'this is heading in an unprecedented direction and could be taking us into uncharted territory'.

Many people were upset by the extreme weather events that took place in 2021–2, like the Eunice and Barra storms, with floods in many areas in the last few years and in 2022 the highest temperature recorded in Ireland since 1887. In 2022, extreme weather across Europe made headlines: vast wildfire damage and the worst drought in 500 years. It was the hottest summer ever recorded. Such weather events occurred all over the world and will be part of our culture from now on.

Recently we are beginning to understand what global warming is doing both to the oceans and to the land area of Europe. If the Mediterranean is too hot for tourism in a few decades, maybe some of the tourists will decide to come to Ireland for their vacation! By 2050 the average summer temperatures will increase by five degrees. Will the west coast of Ireland become the next Costa del Sol?