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## Into the depths: Climate Change Part 1

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# Into the depths: Climate Change Part 1

By Felicia Bedford

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Staff Article

*Note to the Reader- my name is Felicia and I am a Biology major who is very curious about different cultures, and also the fate of our Earth. I will be writing a series of articles on climate change as it pertains to different geographical locations. This one is the first of several. Please stay tuned for the rest of the series.*

I could feel the droplets of rain hitting my face, yet, through the clouds, there was a hint of sun in the sky. On this journey, I have seen the most magical creatures and places. Europe- a place of great tourism, great wonders of the world, and nature with such beauty that it could take the breath right out of your lungs. I ventured here in search of answers about the climate crisis. I hope to find them through the people and the research that has been conducted in the countries of the United Kingdom. I currently find myself in the Scottish Highlands. The mountains are jagged, framing the dark gray sky, and pieces of them laying all over the ground at my feet, wiped away by the great force of water that comes down daily. The rivers and lochs are often flooded with the intensity of it. Over the last few days, I heard the stories of this land from the locals- how it has changed and how, in many ways, it is still exactly the same. It is their traditions that maintain the sentiment. I spoke with one older man and he told me, "The waters are changing lassie." I have heard stories back in America about the intense raincover of the UK. I now presume that a changing climate is the main reason

for this. I will be learning more about what is happening here, and I intend to venture to Ireland and England to discover what climate change and intense rain has done to the other lands of the United Kingdom.

### **Scotland:**

After investigating the area, learning more from the locals, and conducting some research of my own, I have learned a great deal about the climate of Scotland. The mountains, along with being beautiful, are the predominant regulator of the Scottish climate. Most shifts in climate can be attributed to what is [happening in the mountains](#). Waterflow determines the quality of soil, which overall affects the moors and plant life. Scotland has always been known for its great deal of rain, but excess rain and runoff is having detrimental effects on those things below the mountains.

In 2019, the Climate Change and Marginalized Communities Workshop declared that Scotland is in an officially declared climate crisis (Climate). The outcomes of this announcement are slow-moving. There is a significant knowledge gap between policymakers and the people to determine the best course of action to combat climate change (Climate). It is also noted that there is an increased effect of climate change on marginalized communities and wildlife here. The increase in flooding and the rising temperatures are posing great risks to marine life in particular. They seem to be drifting north to the cooler regions (Soil). The people of these regions face the harsh reality of the heat and rain, as they are the ones most exposed to the elements. I can't help but wonder if this is an effect that spans far beyond the borders of Scotland.

## **Ireland:**

The next place I ventured to was Ireland- a heavier tourist destination than Scotland, especially during this time of year, as it approaches St. Patrick's Day. While Scotland has its highlands and lochs, Ireland has cliffs with water encasing the bottom ridges in vibrant shades of blue. As I stare at the Cliffs of Moher, I look out into the endless juts of stone, and I see the water lapping up against it in white foam. Similar to Scotland, Ireland is changing just as greatly. The people here speak of the heat and the subtle deterioration of their beloved mountains and rivers. Since 1980, Ireland has warmed 0.5 °C (Sweeney). For those who don't follow the metric system, that is almost 33°F. If one were to think about the difference between a snowy winter day and a summer day, that would be approximately the amount that Ireland has warmed over the course of 30 years. These changes also have great impacts on the water systems in Ireland with increased risk of flooding and drought (Sweeney). The heavy precipitation in Ireland can also be attributed to the increased temperatures, and it has been determined that the average amount of rainfall per year is increasing (Steele-Dunne). The amount of rainfall has increased within the ballpark of a 10% increase in average yearly rainfall, which equates to about 8 inches in total (Beament). During this research, I also found there was an answer to my question about the effects on locals as one source says, "adaptation, however, is proving to be a complex concept to gain public acceptance (Sweeney)." This seems especially true from what I have seen from the people so far.

## **England:**

The last stop on my United Kingdom journey is England. With its many palaces and buses lined down the busy streets, England remains the most heavily toured of all the countries in the UK. Current research focuses mainly on the impact of climate change on water systems. I walked along the murky brown canals lined with a filmy green algae substance, another consequence of the heat. My ongoing question was addressed in England as well as it seems they are making great strides toward waterway management solutions (Lorenzoni). This, as well as the knowledge these locals have about their own climate, shows me greatly that they are being educated about ways to solve the problem. There is also information on the effects of global heating on crops in England and Wales. In one scenario, the increase in carbon dioxide would actually be beneficial for the crops planted at an earlier time in the season (Semenov). However, this scenario does not take drought into account. Expected droughts will cause lower crop yields, specifically with wheat - a major farm crop in England (Semenov). Droughts will also cause rivers in England to flow at a higher rate during the winter and at a lower rate in the summer (Arnell). This has also been prevalent among the farmers who I have talked to here, all mentioning great trouble with their crops in the past few years.

## **Reflections:**

The rainy countries of the UK are slowly drying out. In this experience, the heat and the rain were the most notable aspects of this trip. If the trend continues, it will

begin to have major impacts on the plants and the way of life of the people who live here, people who I have developed a great care for upon meeting. The next leg in this journey is to explore Asian countries and compare the effects of climate change on those countries to those here in Europe. I end my time in Europe with a walk around the waterways of England and with a shudder, I ask myself, "how did this happen?". I fear there may be too many answers to that question.

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