

September-19



Dear Club Members,

Alexander von Humboldt was born 250 years ago on September 14th. He was an incredible man, who travelled the world as a naturalist. He made a huge number of discoveries, a quick glance at the disambiguation page on Wikipedia reveals an astounding number of things that are named after him, more species use his name than any other scientist. Probably most notable of all was that he was the first scientist to raise the issue of climate change. As far back as 1800 he warned that humans were destroying our environment. Charles Darwin wrote that without Humboldt he would never have set foot on the *Beagle*.

He was the son of Prussian aristocrats, he was able to self-finance trips to the Americas, and became one of the first scientists to decide and explore the continents. Over his lifetime he travelled 24,000 miles, including the entire length of the Orinoco River in Venezuela (1700 miles). It's really hard to describe just how many things he discovered, how much data he collected, and how many theories he developed and proved. He was the first to recognise that Africa and South America would have once been a single land mass, long before the discovery of tectonic plates and the theory of continental drift.

If you've looked at a weather forecast recently, then you will have seen the work of Humboldt. He was the first to collect temperatures at different geographical locations, and then draw lines connecting places of the same temperature, creating what's known as an isobar. The modern maps we see with pretty coloured blobs showing how temperature fluctuates are the direct descendant of his way of presenting data.

In addition to being a scientist Humboldt was also a humanist. He argued that all the people of the world were a single species, and that no culture had any "god-given" right to dominance over the rest, or any sort of biological advantage. He opposed slavery, imperialism and colonialism. Dyeing his lifetime slavery came to dominate the economy of the Americas, and empire building was at its peak. It's hard to over state just how much his publicly stated opinions and beliefs set him apart from so many other public figures of the time.

For your colour inspiration this month I've taken inspiration from one of the species named after Humboldt, *Spheniscus humboldti*, otherwise known as the Humboldt penguin. This species lived on islands off the coast of Chile, right in the path of the Humboldt current, the Pacific ocean current that brings cold water to the South American coast, which was also discovered by Humboldt.

Happy Spinning

Katie

Further Reading-

Digitised versions of Humboldt's writing-

<https://www.biodiversitylibrary.org/creator/529#/titles>

BBC History magazine article on why we should remember Humboldt-

<https://andreawulf.typepad.com/files/bbc-history-magazine-1.pdf>

Andrea Wulf has written a number of books about Humboldt, you can find her website here-

<https://andreawulf.typepad.com/files/bbc-history-magazine-1.pdf>

5 minute TED talk on Humboldt-

<https://www.youtube.com/watch?v=EzakQuKqBeQ>

Article in Science on the life and work of Humboldt

<https://science.sciencemag.org/content/365/6458/1074>

If you have children this graphic novel looks like an excellent introduction to an incredible man-

<https://www.nature.com/articles/d41586-019-00958-5>

Humboldt Penguin-

https://en.wikipedia.org/wiki/Humboldt_penguin

Fibre Content- In case your parcel is missing the label

25% Llama, 25% Merino, 45% South American Wool, 5% Viscose Tweed Nepps.