

## Sea Watch!

The Marine Sand Watch (new global monitoring system) was launched back in September 2024, using satellite data, ground tracking stations, and AI to track sand dredging activities. This system revealed that 16% of dredging occurred in marine reserves, highlighting the environmental impact of sand extraction. Marine reserves are designated to protect and conserve marine biodiversity. Dredging in these areas undermines their purpose by disrupting habitats and harming species that are meant to be safeguarded. Marine Sand Watch is a global monitoring platform developed by GRID-Geneva, a Centre for Analytics within the UN Environment Programme (UNEP). Around six billion tonnes of sand is dredged from the world's oceans every year this endangers marine life and coastal communities. Dredging can alter or destroy habitats because dredging produces noise pollution stopping marine animals from communicating and hunting. Biodiversity forms the web of life that we depend on for so many things – food, water, medicine and, a stable climate. Reducing biodiversity means we are actively changing our climate and environment. This new system should increase biodiversity and reduce dredging.

Chew Valley School Climate Action Team

# NEWSLETTER

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The climate action team have been busily working hard on a number of projects over the last month, many of which we'll report on to you in the coming newsletter editions. In the mean time, some of our members have been researching the latest climate science and are publishing their findings here...

## Antarctic Ecosystem Shift

Scientists have noticed a significant "regime shift" in the Antarctic ecosystem. This shift is categorised by changes in sea ice extent, ocean currents, and the distribution of marine species. The warming waters are causing krill populations to decline. Krill is a key food source for many marine animals which has an alarming and momentous effect on the entire food web, impacting species like penguins, seals, and whales. A regime shift refers to a large, abrupt, and persistent change in the structure and function of an ecosystem or other complex system. This shift occurs when the system crosses a critical point, often due to internal problems or external disturbances, in this case global warming, leading to a completely different state. This means that Antarctica as we know it could change and result in a dramatically different biome. These warming waters are also causing the sea ice to melt, rising sea levels and therefore putting multiple other ecosystems in danger.



## Fungal finds of 2024

Researchers have discovered several new and unusual plants and fungi species during 2024 including a toadstool with teeth, this unusual fungus, found near Tunbridge Wells in Kent, UK, has tooth-like structures



instead of the typical gills or pore. A Ghost Palm Known locally in Borneo as "wi mukoup" or "wee mukup,"

this distinctive rattan species was finally described after nearly a century. This is brilliant news for scientists as it shows while our known species of insects, animals plants and fungus may be reducing, there still so many species we haven't discovered or truly been able to study. This means we have a more diverse ecosystems on our planet than we thought and discoveries like these keep coming.

# Caring for the Environment Achievement Points

During December, Rodney received 4 points, Moreton came 3rd with 12 and Bilbie gathered a brilliant total of 27. However, Hauteville edged ahead with 29 positives and obtained first place.

Throughout 2024:

Moreton— 57 points



Bilbie— 66 points



Rodney— 73 points



Hauteville— 99 points

