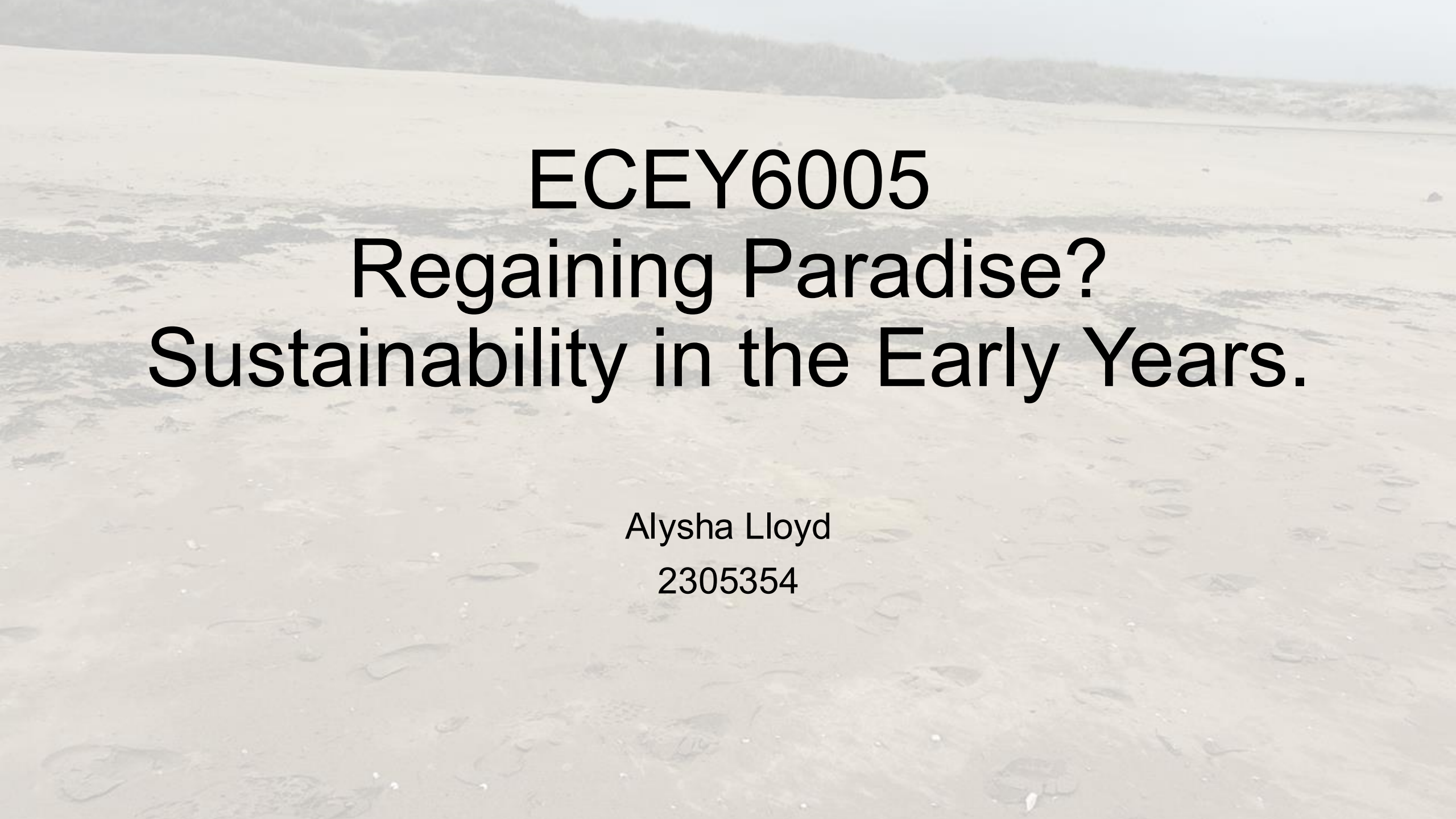


The background of the slide is a photograph of a sandy beach. In the foreground, there are numerous footprints in the sand. In the background, a dune covered in green vegetation rises against a clear sky.

ECEY6005

Regaining Paradise?

Sustainability in the Early Years.

Alysha Lloyd

2305354

Discover...

The area I decided to discover is Burry Port Harbor beach.

Growing up in the seaside town Burry Port I never appreciated the beach, I would regularly go and spend the day down there building sandcastles, picking shells and playing in the sea. However, until participating in the John Muir award I never understood the beauty of the beach, nor how incredibly lucky I am to have it on my doorstep.

Burry port is a small costal town situated in Carmarthenshire, South Wales. Before the 19th century Burry Port was non-existent, just a rural area consisting of farms. However, due to the high demand for coal a harbor was built in the 1830's and made Burry Port an important industrial and ship center in South Wales.

Burry Port is famously known for being where Amelia Earhart came ashore after completing her flight across the Atlantic in 1928.

(Source: authors own)



(Source: Tide Forecast, no date)



28th June 2025

On one of my recent visits to Burry Port beach, the weather was far from my own person version of ideal. It was wet, windy and grey, and I wasn't sure how much exploring I would be able to do on such a bleak day. However, when I arrived at the beach, I was surprised by how calm the atmosphere felt. The tide was going out, and the sound of the waves crashing against the shore along with the wind howling across the sand dunes created a strangely therapeutic experience. The air was damp and carried a strong smell of salt and seaweed. Again, making me feel at peace despite the weather.

I sat on the beach for over an hour, listening to the sea as it left the beach. As I watched, I spotted a group of seagulls flying above the rocks, occasionally swooping down in search for food I presume. Their calls echoed across the beach, adding to the natural background of the beach.

Although I did not explore the beach on this particular day, I benefited personally from this trip. I left calm, relaxed and re-energized by the wild beauty of Burry Port beach on a bleak day.

(Source: authors own)



Explore...

On one of my visits to Burry Port beach I saw clear blobs along the sand. At first, I was unsure of what they were... After inspection I believe they were moon jellyfish.

I wondered why there were so many jellyfish along the beach...

Jellyfish often stay in shallow waters to feed on plankton; they then get stranded ashore as a result of strong winds and currents. Jellyfish are made up of mostly water, when they get washed up along the beach they sadly dry up and as a result die quickly (Roesnberg, 2021). According to Hayes (2022) jellyfish have the ability to sting thousands of years after dying.

I wondered what can jellyfish tell us about our seas...

The waters that surround South Wales are home to a variety of jellyfish species, particularly during the warmer months.

Jellyfish are considered as natural indicators of ocean health due to being sensitive to chemical imbalances such as pollution, therefore changes in their population reflect the changes within their ecosystem (Chetan-Welsh, no date).



(Source: authors own)

When exploring Burry Port beach, I realised the rocks were covered in a green grass like plant, I used a plant identifier app and found out it was a form of green algae called *Ulva lactuca*, also known as “sea lettuce”.

The beauty of the *Ulva lactuca* really caught my eye, its colour was so bright, and it really created a spectacular view spread across the rocks.

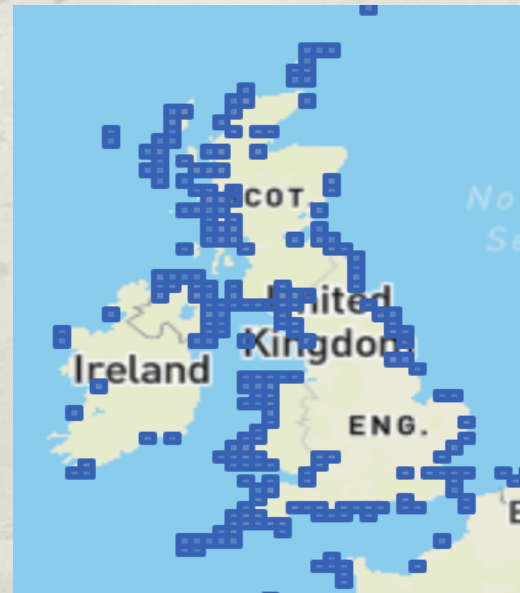
I wondered what is Ulva lactuca...

According to National Institute of Environmental Health Science (no date) *Ulva lactuca* is a form of green algae, which are tiny organisms that inhabit aquatic environments and, like plants, use photosynthesis to generate energy from sunlight.

Thus, algae plays an important role in coastal ecosystems by producing oxygen and supporting life in the water (Peters *et al.*, 2024).

Furthermore, algae such as *Ulva* also provides food and a habitats for thousands of tiny organisms (Peters *et al.*, 2024).

As shown on the map, *Ulva lactuca* is found around the coast of the United Kingdom. It typically attaches itself to rocks and rockpools along the coast.



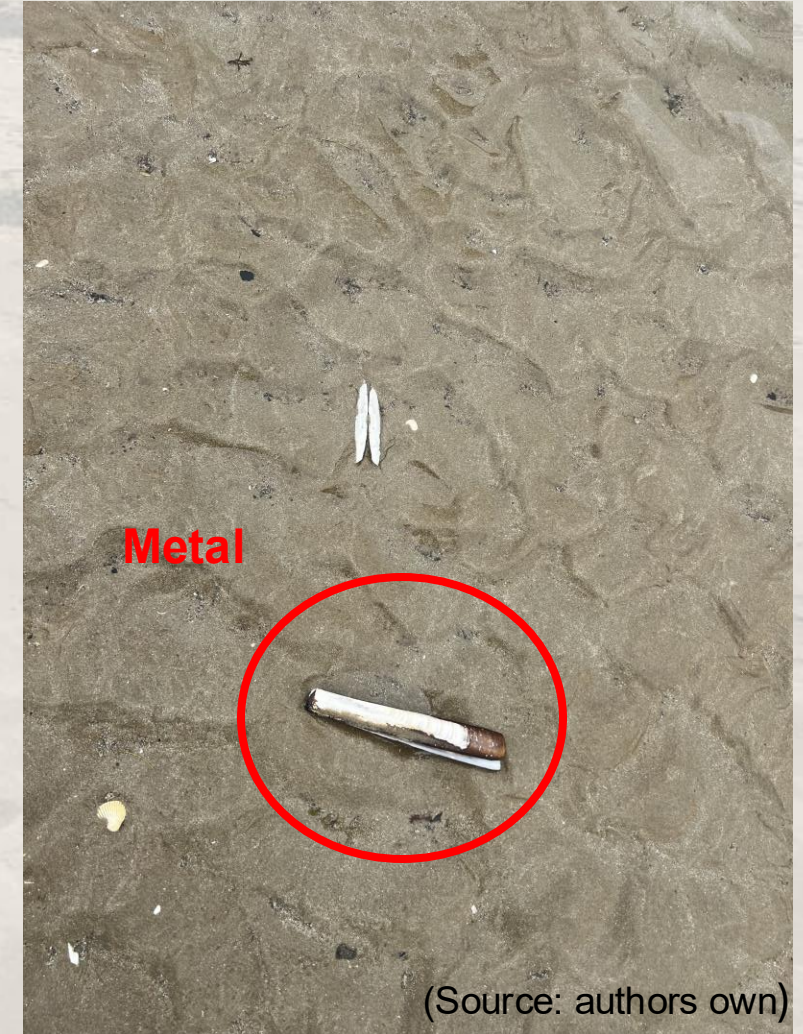
(Source: Marlin Marine Biological Association, no date).





Conserve...

When exploring the beach I realised litter was a big issue, all along the beach there were bits of rubbish washed up on the shore. My children could not believe the amount of plastic that we found, I explained that it more than likely had come from the sea. We carefully collected all the rubbish and disposed of it correctly.



(Source: authors own)



This is all the rubbish we found on just one of our trips to Burry Port beach, mainly plastic.



(Source: authors own)

Researchers suggest up to 12 million tons of plastic are thought to enter the ocean annually, and by 2050 if this does not stop there could potentially be more plastic than fish in our oceans (Abelvik-Lawson, 2020).

I wondered how does plastic get into the ocean to begin with...

Littering- When we throw rubbish on the floor it can be picked up by rainwater and wind often carry the rubbish into streams, rivers and drains all of which lead to the ocean.

Flushing products down the drain- Many items such as wet wipes, sanitary products and nappies are flushed down toilets daily. These begin to break down and are too small to be filtered out.

Throwing recyclable plastics in the bin- Due to plastics being light weight when they are being transported to landfills they blow away and end up in our rivers and make their way into our oceans. (WWF, no date).

What is the common theme here? **Us, humans.**



(Source: The Ocean Clean Up, no date).



(Source: Clean Water Action, no date).



(Source: Reuse This Bag, 2021).

Plastic in the ocean is detrimental to all kind of sea life; they mistake the plastic for food and end up with their stomachs being filled with plastic, which can result in death.

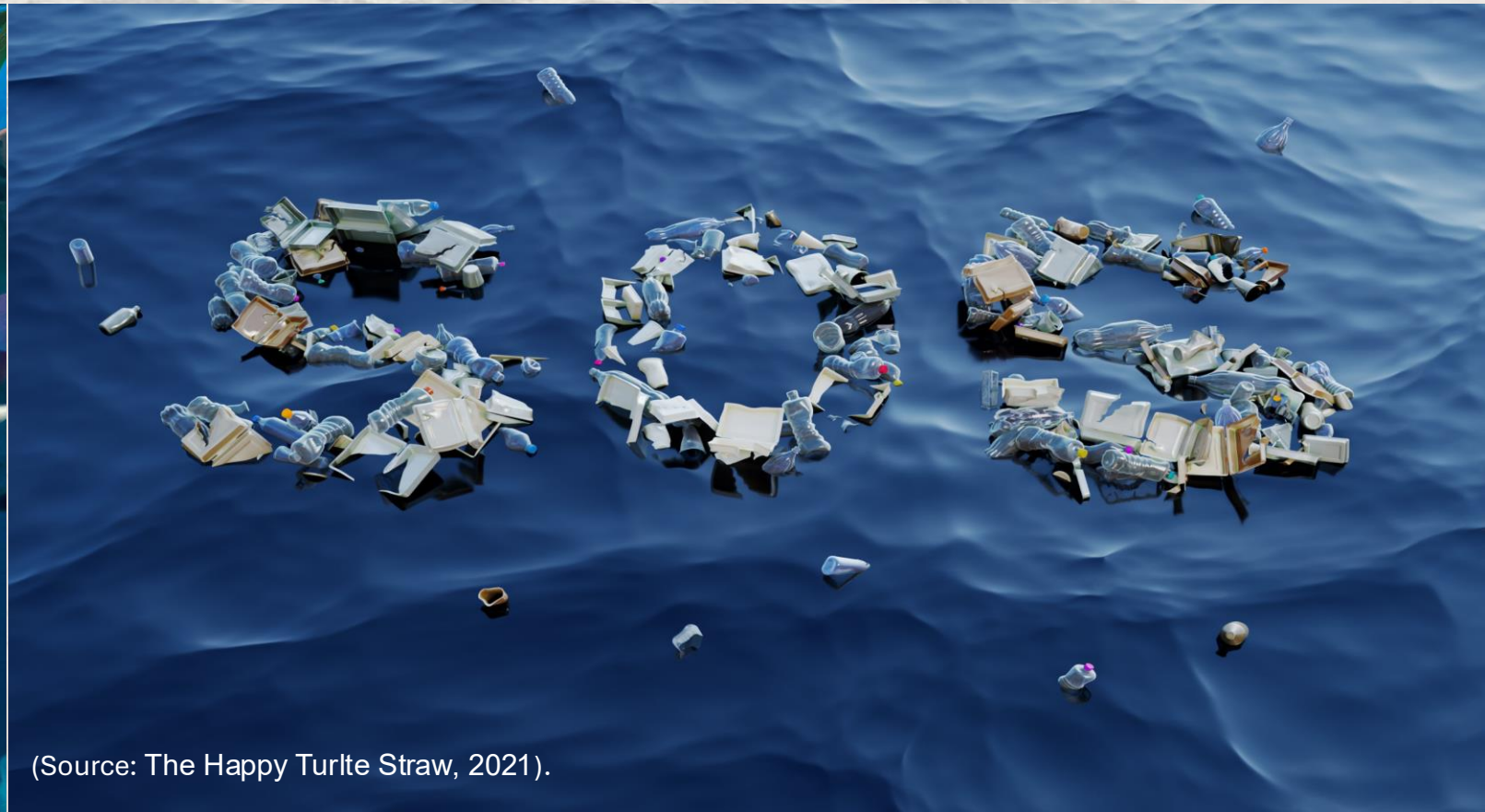
Moreover, after entering the ocean, the plastic begins to break down into tiny pieces called microplastics, these enter the food chain and seriously damage sea life (WWF, no date)

I wondered, does this mean we are consuming microplastics as a result...

According to Plastic Soup (2021) yes, us humans are consuming microplastics due to small marine life consuming microplastics and then being eaten by bigger Sealive which humans eat. Thus, our food chain contains microplastics and toxins.



(Source: Oliveira, no date).



(Source: The Happy Turlte Straw, 2021).



(Source: Oliveira, 2022).



(Source: Jag, 2019).



(Source: Re Purpose, 2022).



(Source: National Geographic , no date).

Beach Walk

by Megan Nicole Morgan

Taking a walk along the beach is fine.
Feeling ocean breezes, hearing waves crash;
Moments such as these can be so divine,
But then I look around and see some trash.

Is picking up all of your trash so hard?
Is it laziness or a lack of care?
I don't think you would do this to your yard,
So why would you do such a thing elsewhere?

You should know I'm not trying to be mean
Or act like I am perfect all the time.
I wish and hope for the earth to be clean;
If that can happen, it would be sublime.

To keep things clean, can we all do our part?
I think today is a good day to start.

(Morgan, 2022).

When I was exploring how rubbish ends up in our oceans and how it affects our sea life I found this poem. The poem made me think why do we do it? Is it laziness? Or is it a lack of education?

What more can we do together? What more can I do personally? How do I ensure my children understand the impact of littering.

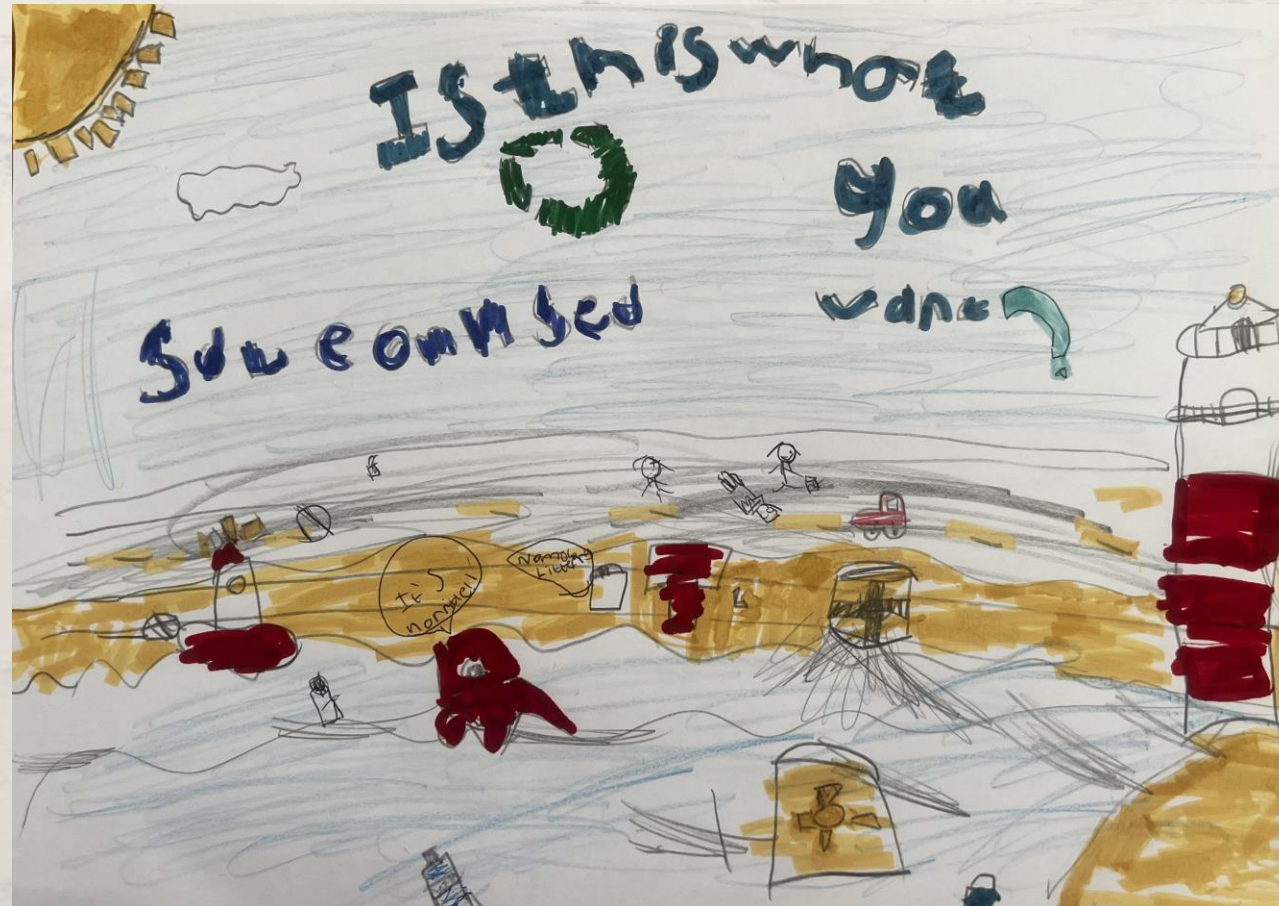
It also made me reflect on myself, as a child did I litter? Did I fully understand the impact on my action?. As an adult have I always played my part? Have I ignored rubbish I have seen along the beach previously? Have I not recycled materials which are recyclable? How do I rectify my own actions?

Share...

The John Muir has inspired not only myself but my children. After seeing all the plastic along Burry Port beach my children were upset and disgusted, they wanted to help me do something to make people aware of the problem.

So, we created posters which we could put up along the beach.

My daughter decided to create a poster with slogans "Is this what you want?" and "save our sea". This made me feel a sense of pride, that my 7-year-old daughter understood the consequences of our actions. We have also decided to share her poster with her friends in hope to inspire them too.



I have also signed myself up to join the 'Little Champion' scheme which is a voluntary scheme to litter pick in Carmarthenshire. I pledge to litter pick with my children at least once a month in our local beaches and parks. I aim to share our findings on social media in hope of inspiring a another family.

John Muir

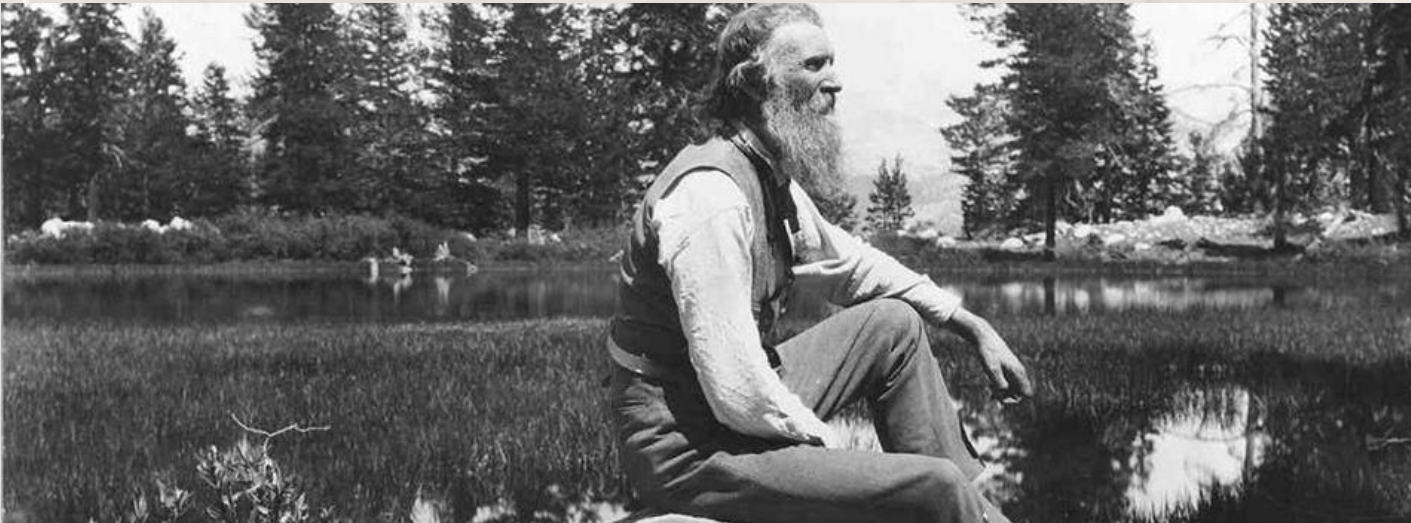
Who is John Muir?

John Muir was an activist, campaigner, conservationist, explorer and writer who was born in 1838 in Scotland and emigrated to the United States with his family at the age of 11.

Why is he important?

John Muir had a passion for wild places; he explored them, wrote about his experiences and then campaigned in order to protect them. He believed by protecting wild areas the environment, wildlife, and the wellbeing of people would benefit. His writing inspired others and educated them on the importance of wildlife and influences the first national park system in the world.

(John Muir Trust, no date).



(Source: National Park Service U.S. Department of the Interior, no date).

***“When we try to pick out anything by itself,
we find its hitched to everything in the universe.” – John Muir***
(National Park Service U.S. Department of the Interior, no date).

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