ECEY6004/C PART 1

Wetlands, Wildlife, and World Survival!

Sustainability in the Early Years





2107703

Memories

When I was a child I lived in an area of South Africa with my family. I was very young, not at school age, so when my parents went to work and my brother went to school I stayed with a beautiful lady called Primrose.
Primrose would often take me and a small group of children to the mangroves and rice fields to see her family and friends.
I can't remember how it looked, or how long it took us to walk there, but I vividly recall being left to explore fairly independently, and the affect this had on all of my senses!
I remember Primrose would say, "you are not muddy enough" I remember thinking she was wonderful and the mangroves were full of bugs and creatures that excited me. It was an adventure!!



Discover

Location

Sustainability

Water

Colour

Wildlife

Climate Change

Plants

EcoSystem

Senses



Brazil - 'Pantanol'
150'000 square kilometres

France -
'Carmargue'
930 square
kilometres

Vietnam -
'Mekong Delta'
40'500 square
kilometres

India -
'Kerala'
1'605 square
kilometres

Australia -
'Kakadu'
20'000
square
kilometres

South Africa -
'Isimangaliso'
3'320 square kilometres

Botswana -
'Okavango Delta'
16'000 square
kilometres

Indonesia - 'Wasur'
4'138 square kilometres

South Asia - 'Sunder bans'
10'000 square kilometres

Florida - 'Everglades'
6'100 square kilometres



Wasur wetlands



Okavango Delta wetlands



Mekon Delta Wetlands



Everglades Wetlands



Carmargu Wetlands



Isimangaliso Wetlands



Sunderbands Wetlands



Pantanol Wetlands



Kakadu Wetlands

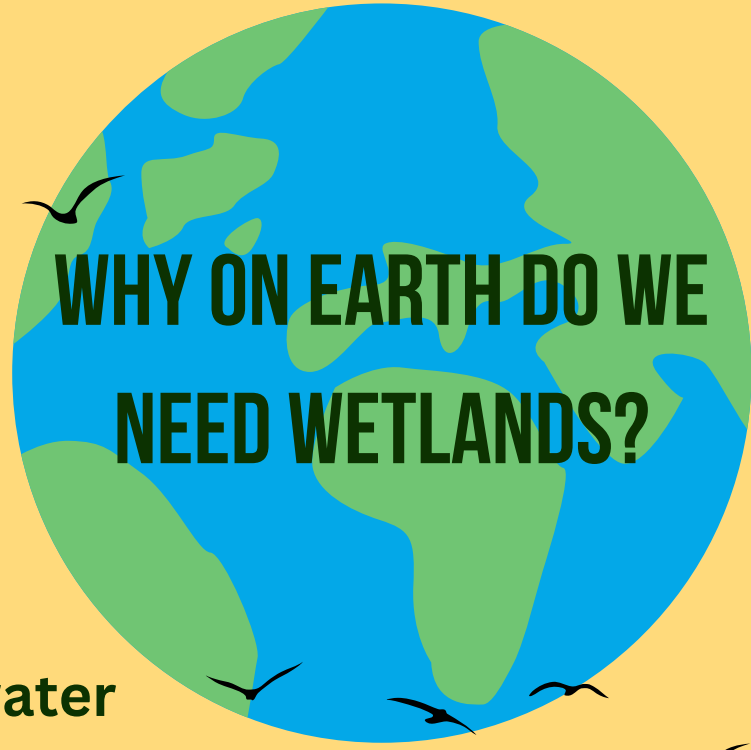
Kerala Wetlands





WHAT ON EARTH ARE WETLANDS?

- An area where land meets water.
- Can be fresh water, salt water or brackish.
- Entirely covered by water for part of the year.
- Home to plants uniquely adapted to watery soil (hydrophytes) also home to mosses and grasses.
- They exist in many climates.
- They exist on every continent except Antarctica.
- Also known as Swamps, Peatlands, Marshes, Fens, Bogs and more.
- Make up 6% of the earths surface.
- Home to a wide variety of species inclusing Birds, Mamals, Amphibians, Aquatic creatures, and insects.
- They are natural water filters.



- To filter and enhance the quality of water
- To provide habitat and shelter to wildlife, fish, and insects.
- Reduce storm damage and flooding risk
- Increase water supply
- Provide safety for threatened and endangered plants and species
- Provide ecosystem productivity
- Recreation
- Education

Our local Wetlands

Llanelli Wetlands Centre













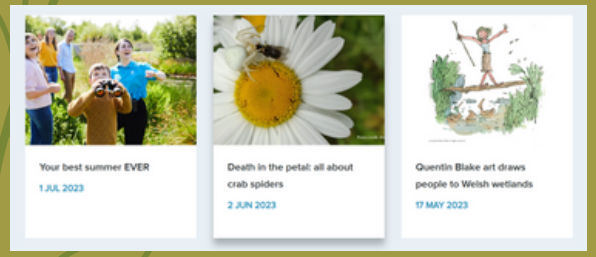




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Open in Google Maps
Get detailed directions

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100% of visiting teachers would recommend a trip to Llanelli Wetland Centre

> **"Children and adults had the best trip ever!!! We will definitely be returning."**

Explore

Visit at different times



Different seasons





Get to know wetlands





History



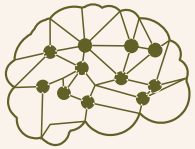


See things from different perspectives









Senses









Biodiversity



What can I do there?

Story time with Wetlands Wizard



Flamingo Talk

Print with nature



Bioblitz



Canoe Safari

Canoe Taxi



Feed all the different species of birds at the pond, with specialised diets and feeding techniques



Bird Watching



Bedazzling Butterflies



Family Sketchbooking



Pond Dipping



Marvellous Minibeasts



Quentin Blake trails

Moth Morning



Walk with Warden

What can I see there?









On my visits to the Wetlands I saw some beautiful scenery! Whether it was a cloudy, rainy or sunny day the colours of the water, sky, plants and trees took my breath away. All around I saw and felt nature. Everywhere I looked I saw life and vibrant inspiration to photograph and remind myself of the beauty the Wetlands possesses.



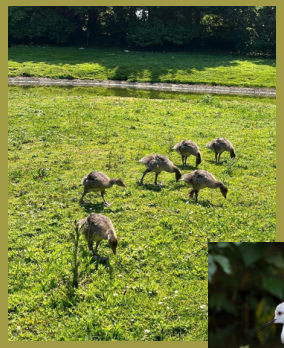


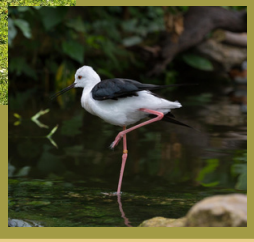






Who lives in a place like this?



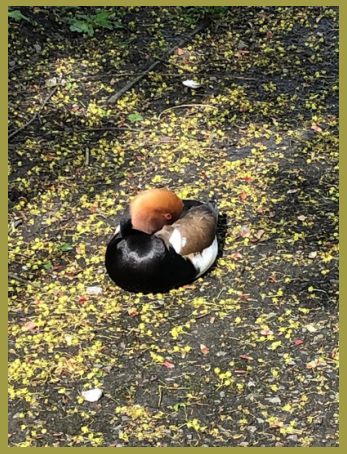






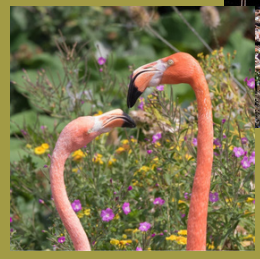


On my visits to the Wetlands I saw some wonderful wildlife! There are more different spieces of birds than I have ever seen, no two looked the same. It was so much fun trying to stay really still and capture a picture to reflect their beauty, but they hear you and they make their escape! The insects and bugs, reptiles and fish were all too clever for me, apart from a lovely slow turtle taking his time to climb back home after a hard day swimming.











What lives in a place like this?








On my visits to the Wetlands, my most wonderful moments and photos were captured when exploring the plants, trees and fungi. I had no idea just how incredible and diverse this area of land would be, and I only explored a small part. It was exciting, it was breathtaking and it affected me profoundly. As a Christian, I remembered how amazing creation is and found appreciation in everything I saw.







Special moments!

Although sadly I lost a fair amount of footage from my time spent in the Wetlands, I managed to save a few little snippets of some special moments.



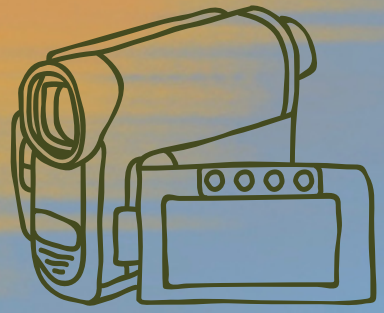


Wetlands 1 - Beautiful Mum and babies xxx

Wetlands 2 - Now this is what I call relaxing xxx

Wetlands 3 - Lets go for a walk family xxx





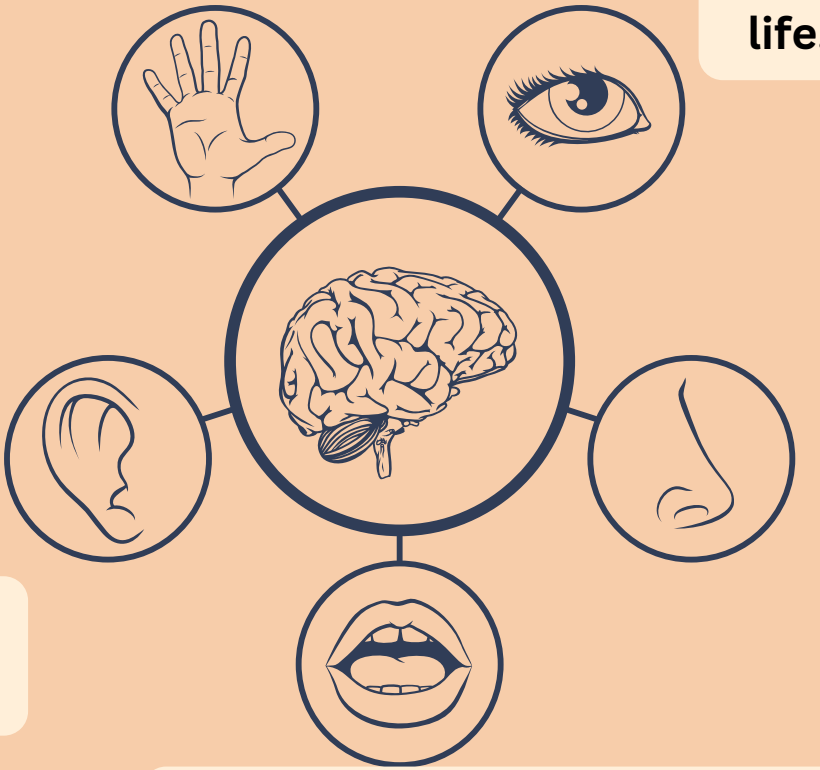
Llanelli Wetlands Centre

Additionally here is some professional footage to open your eyes to the beauty I have witnessed over the last few weeks!

Senses

- Small soft bird feed leaving my hand.
- Slow heavy steps in the thick mud.
- Sun on my face.
- Sea breeze.
- Moist air.

- So many colours, subtle and natural.
- Movement everywhere, nothing was still, from the water to the grass to the trees, everything danced.
- God, creation and life.



- Chorus of birds, loud and competing.
- Squelching of mud under my feet.
- Rustle of trees and reeds in the gentle breeze.
- Children playing.
- Buzzing of insects.
- Water trickling and moving fluidly.
- My own heart beat, living in this moment.
- My children engaging with me and with nature.

- Earth and mud
- Air perfumed with plants and flowers
- Algae and moss, fousty but pleasant.
- Sweet damp grass.

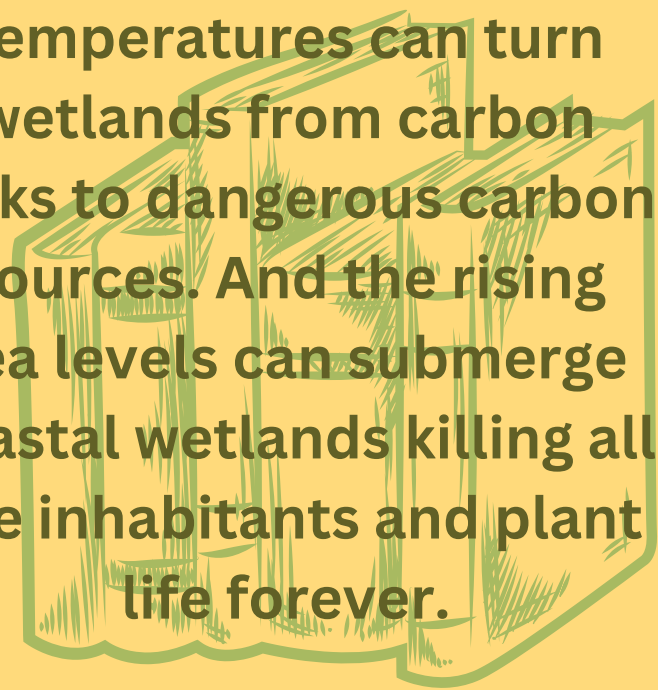
- The delicious cake and cup of coffee from the cafe.

What did I learn about Wetlands?

Wetlands are important for biodiversity and fighting climate change.
Wetlands play a vital role in the fight against climate change. By soaking up heavy rainfall and acting like a sponge to filter and improve water quality and in a similar way prevent flooding. The wetlands can store twice as much carbon than all the world's forests! Can you believe that?

Wetlands are biodiversity hotspots. They are rich in plant life that provides food and breeding grounds for many animals. In the world's freshwater wetlands alone, about 100,000 different species of animals have been identified so far!

Wetlands face serious threats! Nearly 90% of the world's wetlands have been lost over the past 300 years. Urbanisation, agriculture and climate change are major threats to wetlands. Increasing temperatures can turn wetlands from carbon sinks to dangerous carbon sources. And the rising sea levels can submerge coastal wetlands killing all the inhabitants and plant life forever.

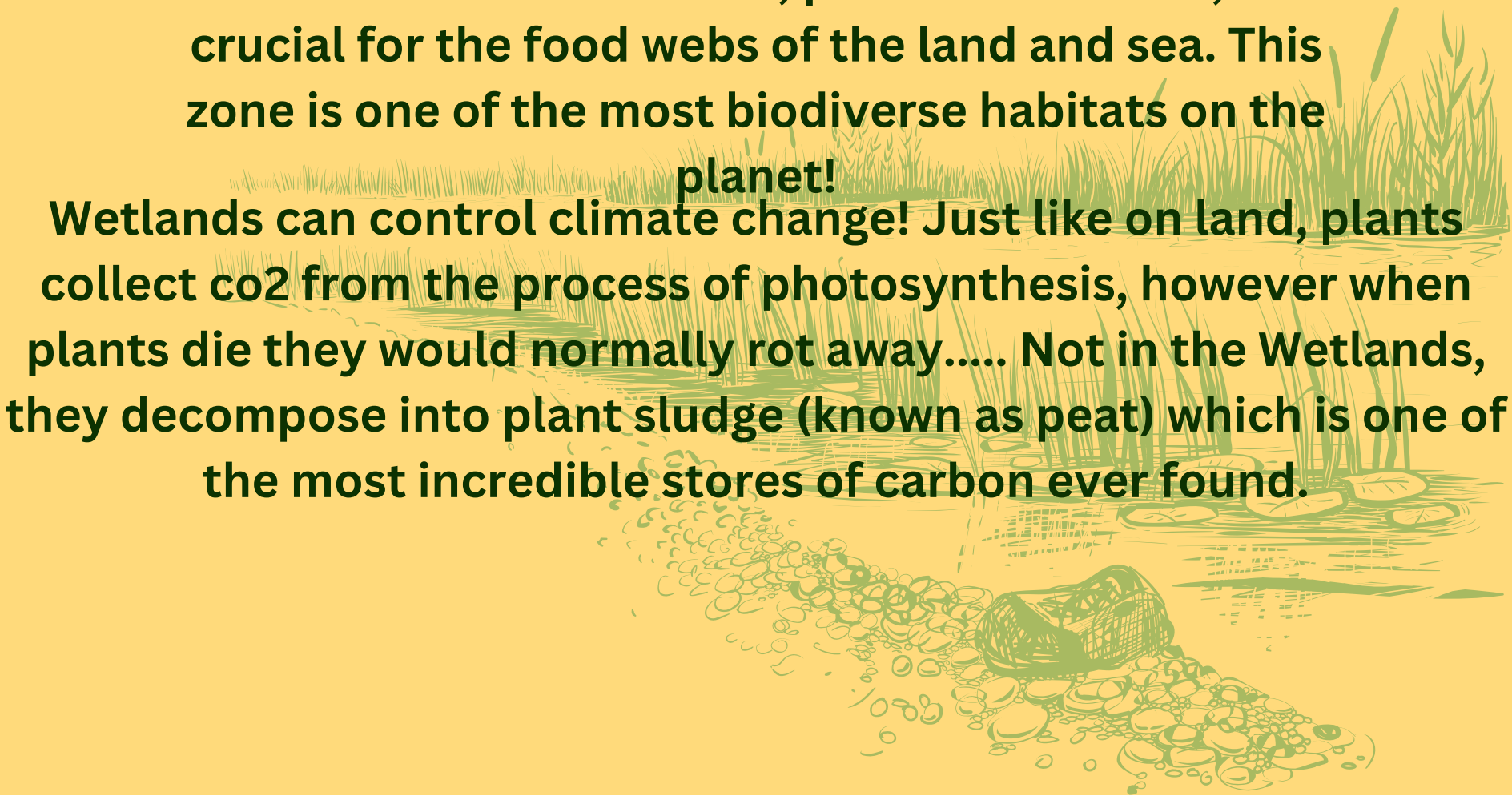


What did I learn about Wetlands?

Wetlands are the SUPERHEROES of the natural world!

The ecotone boundary zone shares characteristics of all land and sea creatures, plants and matter, it is crucial for the food webs of the land and sea. This zone is one of the most biodiverse habitats on the planet!

Wetlands can control climate change! Just like on land, plants collect co2 from the process of photosynthesis, however when plants die they would normally rot away..... Not in the Wetlands, they decompose into plant sludge (known as peat) which is one of the most incredible stores of carbon ever found.



The special soil stores water in rainy seasons to release in the drier seasons.

Wow!



The Wetlands act as a giant sponge!!

Soil, plants and organisms filter out and clear water of pollutants using microbiomes.

Conserve

Knowledge and Awareness

Don't use chemicals at home or in the garden

Bring the wild home

Be responsible with waste and recycling

Make eco-friendly choices

Learn and teach others

Become a Wetlands warrior

Don't waste water

Visit Wetlands, but tread carefully

The best bits!





"You are not muddy enough"













What happens now?

Throughout my journey in the Wetlands I have come to understand its importance in the world. I have realised the impact it has on our planet and the need to learn, educate and help to conserve it.
BUT WHERE DO WE BEGIN?

It is the most wonderful place to visit, my family and I have donned our wellies and re-ignited a passion for exploration and nature.

There are so many things we can do and are ready to do to start protecting our Wetlands.

HOWEVER.....

BARRIERS!



After visiting the Wetlands and exploring all it has to offer, after walking through the mud and getting up close and personal with the plants and creatures I realised my actions could cause some damage. One of the first ideas for conserving the Wetlands is to leave them in peace to grow and flourish! To tread carefully and stay away if possible.....Oh dear!

I must share what I know with the children I teach?

BUT

I can't take them all to stomp around the Wetlands!

..... how do I do that?

Can I bring the Wetlands to the children???



The Plan!

The best and safest way to teach children about the power of the Wetlands is to grow our own!! I will begin in the Summer holdidays!! I will carefully research what I need and with my children we will create an area that will grow and flourish into a wild wetland of our own!!

I have my PGCE from September, that gives me a year to grow a dynamic minibog to share with all the children I meet in my future as a teacher! While I will not be able to bring them all to my garden I can ensure the knowledge and each experience is shared by documenting and capturing the mini wetland regularly. Our own minibog!! If this is successful I could be insightful in creating them at future schools and settings! We could understand exactly what is happening and watch it all develop and grow through the seasons.



What a wonderful Wild World we could create!

Research

- What equipment do I need?
- What materials shall I use?
- Do's and don'ts.
- Get inspired by examples.
- Pledge of commitment!



Start here

To begin...

The best time to create your mini wetland garden is early spring to late summer

If you don't have a lot of space or soil in your garden you can use a large container or an old dried out pond

Mark out your area

Make sure you pick a spot away from overhanging trees, the sun is important!

Choose your soil carefully, consider non peat and eco friendly.



Equipment and Material

Dig a hole, 45-50cm deep- Shovel

Line the hole and pierce plastic with a fork

Add a 3-4 cm layer of gravel or grit

Fill back in with soil and a small amount of compost.

Plants can now be bedded into garden, water if the area is not getting naturally waterlogged

Plants

Plant a mixture of tall and shorter plants

Choose plants that flower and plants that have a structured quality

Avoid plants such as sedge or gunnera

Keep on top of plant maintenance

Leave space in between plants for rapid growth

Good examples of plants are: Yellow Iris, Meadowsweet, Creeping Jenny, Marsh Marigold, Hemp Agrimony, Willow and Dogwood.













Invigorating inspiration for our backyard bog!









I Hayley O'Malley have taken the first step in becoming a Wetlands Warrior!



I will continue to learn and teach others, and fight for our wonderful planet, preserving it for future generations.

Reflection

By accepting the challenge to discover, explore, conserve and share in nature through the John Muir Award, I have changed. Not just me, stuck in a loop of work, study and single parenthood, but my children and the relationship we share with each other and our environment. I would never have considered that this award would heal us and bring us closer.

Life is challenging, I am a positive person but sometimes we find ourselves facing difficulties in every direction. BUT.... Nature restores balance, balance aids thought and open mindedness, and open mindedness brings change.

We are ready as a family to begin this challenge in our garden this summer, my landlord, neighbours on both sides and my parent's and brother are all keen to be involved and invest in making it a project to be proud of. My garden isn't a pretty one, but it's going to be the ideal environment for a Wetland, Wildlife and World Survival Challenge. xxx

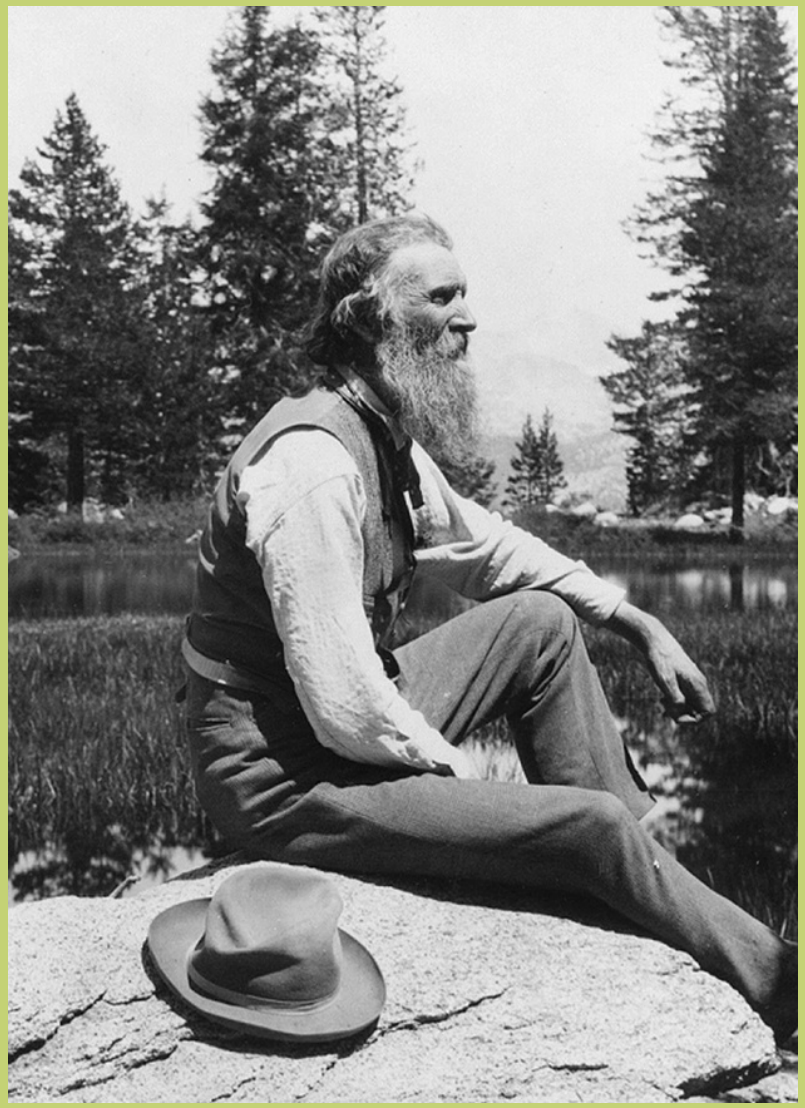


Not only was I inspired to begin creating a Wetland habitat, I have also created a poem to help children understand why it's so important to be careful and think about looking after our very special Wetlands.

Poetry again is something I love and had lost sight of.

Once upon a Wetlands

Once upon a Wetlands please be careful where you stand!
There's a million little minibeasts marching in a band.
Once upon a Wetlands please be careful where you jump
There's moss and shrubs and lilies that will really take the hump!
Once upon a Wetlands please be careful where you land,
There are turtles frogs and insects who just wouldn't understand.
Once upon a Wetlands please be careful what you touch,
There's lizards, snails and truly they won't like you very much.
Once upon a Wetlands please be careful where you play,
The Sundews with their tentacles might just get in the way.
Once upon a Wetlands please be careful not to stomp,
There are Super heroes hard at work, living in this swamp!



Thank you John Muir for reminding me how wonderful our world is!

THANK YOU