

The Importance of Lake Claremont and Preserving our Wetlands

By Liliana Lane

Lake Claremont has been a part of my life and forms some of my earliest memories. My Dad used to take my two younger brothers, our dog Stevie and I to Lake Claremont. He made the 70 hectares of wetlands and urban bushland into a world he created for us called the 'adventure swamps'. When I was little, the 'adventure swamp' was a place of wild discovery; full of unique birds, interesting posters telling you about the types of plants and the natural beauty of watching the lake change colours with the sunset. Lake Claremont was and continues to be an integral part of my life. I can't begin to imagine what life would be like if organisations like the *Friends of Claremont* didn't fight for the conservation of wetlands like Lake Claremont.

Wetlands are areas of land that either has water covering the soil or are saturated with water for at least part of the year. When there are periods of where it's dry the term 'seasonal' is adopted. The water can come from a nearby river, sea or lake; or it can be groundwater which seeps up from underground aquifers or springs. The duration and depth of the seasonal flooding deviates. They are neither all dry land nor completely submerged underwater but have characteristics of both and are therefore classified as transition zones. Wetlands exist in many kinds of climates and exist on every continent except Antarctica. They differ in size and can be found along coasts as well as inland. They host a variety of diverse organisms and are often regarded as one of the most bio-diverse ecosystems. Lake Claremont is classified a *seasonal wetland*.

Wetlands are a unique ecosystem. Wetland vegetation (called hydrophytes) have specially adapted to the hydric (watery) soil. Unlike more frequently flooded wetlands, seasonal wetlands are often able to support trees as well as other sturdy vegetation rather than being predominantly made of mosses and grasses. Lake Claremont hosts a recorded 87 species of water birds, with the most common being the Pacific Black Duck, Grey Teal and Eurasian Coot and the rarest being Freckled Duck.

Serving as fundamental parts of our natural environment, West Australian wetlands such as Lake Claremont have been formed over millions of years. They are a complex system of linked seasonality and wildlife. They also hold great significance for Indigenous and non-Indigenous cultures for their wildlife, spiritual connections, sources of food and water and areas for recreation and relaxation.

Prior to European settlement, what we now know as Lake Claremont was a large wetland area.

Abundant in plant and animal life, it was a large part of the hunting and gathering of food of the Mooro people. Aboriginal communities continued to live in the area until the 1940s when they either abandoned or were pushed out from rising water levels in the area and the pressure from European settlers exiling indigenous Australians. Lake Claremont is recognised as a significant heritage site for Aboriginal people.

Since the urbanisation of Lake Claremont in June 1928 when Britain established the Swan River Colony at least eighty per cent of landlocked wetlands on the Swan Coastal Plain have been destroyed. I remember seeing signs around the trail where we would walk from the 'Friends of Lake Claremont' talking about volunteering to help rehabilitate and restore the wetland.

Wetlands can be very vulnerable to the impacts of climate change such as changes in temperature, rainfall, sea levels and extreme weather events. They are an also important part of our response to climate change. Being among the most effective at reducing greenhouse gas emissions by trapping and storing carbon dioxide. Wetlands around the world are estimated to store over one-third of the Earth's carbon dioxide. Nature has a symmetry to it, just like our lungs take in oxygen to breathe, the wetlands are the lungs of the earth. Without careful conservation, the destruction of wetlands, such as Lake Claremont results in significant releases of greenhouse gases into the atmosphere; choking us and the earth. Playing multiple roles, the wetlands also moderate the impacts of flooding storm surges and rising sea levels by acting as sponges, distributing both water and fostering life.

In August 1989 a research paper was presented to the Town of Claremont council reporting that there were "sufficiently large quantities of phosphorous for its waters to be classified as hypereutrophic" (Town of Claremont, n.d.). This means that the water was too rich in nutrients and minerals and would have severe and frequent algal blooms and low water transparency. The excessive algal bloom can result in significant reduces of oxygen levels. This would have prevented organisms from functioning at lower depths and consequently hurt the other animals in the food chain of Lake Claremont. Over the years many management plans and thousands of dollars have gone into the conservation of Lake Claremont. In 2003, the Friends of Lake Claremont was established to help organise volunteering to help. Without the help of our community, Lake Claremont wouldn't be habitable for many of the animals who now thrive there.

On our trips to the Adventure Swamps, Dad used to help us form our words, reading the plaques placed by conversationalist explaining the different types of birds and other wildlife. We'd spend hours of quiet time trying to read, search and match up descriptions and pictures to the birds we could see flying, swimming and feeding in and around the water. My favourite spot is the lookout shelter where one day we found a nest in the peak of the ceiling. Each day we'd visit and in a hushed whispered-wonder, we'd watch the two baby birds nesting grow. The last time we saw them, the next day we came to find the nest on the ground with soft feathers in it and the birds flew. I always thought I could spot them.

My time spent running and peaking over the planks, paths and rocks at Lake Claremont shaped me into how I see nature today. The conservation and preservation of our wetlands is critical. For those that create protections in both fundings, time and physical effort are to thank for my view and foundational adventures through these dynamically beautiful wetlands. The unique and diverse flora and fauna living there, the cultural significance to Indigenous peoples, the importance to the environment and the fundamental role it plays within the Western Australian eco-system all tie together. We need the lungs of the earth like we need our own lungs. To survive.

Additional resources regarding Lake Claremont as well as volunteering opportunities can be found here: <https://friendsoflakeclaremont.org/>

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