NORFOLK ISLAND REGIONAL COUNCIL

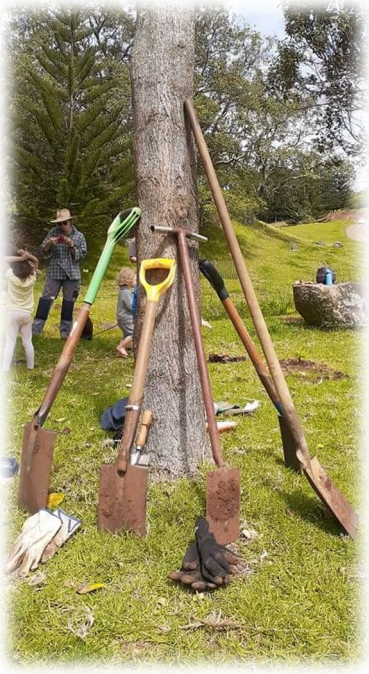
MEDIA RELEASE

Cascade Creek community planting day at Cockpit

The weather gods blessed us once again on Sunday with clear skies and a gentle breeze - perfect conditions for breathing life back into one of our many degraded waterways, Cockpit Creek. The aim of the planting was to kick start the rehabilitation of the creek, its' banks, and the beetles, larvae and eels that call it home. Starting at 9am, about 40 volunteers came together to put 320 native trees in the ground. The morning was beautiful, with kids and puppies running around as everyone else enjoyed a cuppa and some morning tea once the job was done.

Our riparian areas here on Norfolk are an extremely important, yet also extremely overlooked ecosystem that have been exploited and degraded for generations. The threats facing our waterways are numerous: high nutrient content, invasive weeds, cattle disturbance and past land management practices are just some of the issues that threaten the biodiversity of these fragile systems.

As we all know, Norfolk has become home to many invasive weed species over the years. Olive, Hawaiian Holly and Porpieh are some of the most prolific examples and while they can be a nuisance in paddocks or in gardens, they also pose a threat to the general health of our creeks. Many of these exotic species are allelopathic, meaning that they actually inhibit the growth of any other species in the area through the use of biochemicals that they release into the soil. This can create areas with little to no biodiversity, both amongst the plants and as a result amongst birds, fungi and freshwater organisms. Not only do these weeds have the ability to reduce biodiversity around our creeks, they can also greatly effect the quality of the water in them. Porpieh (Cherry Guava) for example, produces masses of fruit each year. Although this fruit is enjoyed by humans and birds alike, much of it falls to the ground or into the waterways and is left to rot. In these creeks with relatively slow water movement, the fermentation of these fruit falls, acidifies the water, creating an often uninhabitable environment for the freshwater creatures within them.



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As well as battling woody weeds, our creeks are also being invaded by water weeds. Papyrus, Water Hyacinth, Elodea (Oxygen Weed) and Salvinia to name a few, are widely established throughout most of Norfolk's creeks. With plenty of sunlight, nutrients and water, they overtake and clog up a once healthy and trickling stream, turning it into a stagnant and smelly pool. Although we can visually see the clogging effect of these water weeds on the surface, much of the damage that they do is actually deeper down. In a healthy ecosystem, plants will photosynthesise and release oxygen into the water which can then be used by other living organisms in the creek. In a damaged system, like many of the ones that we see here, there can be massive imbalances. These imbalances can occur when there are excess nutrients in the water (from silt, cow manure, fertiliser runoff, old septics etc), which in turn allows for a higher growth rate of algae and plants. When these plants and algae die off, an enormous amount of oxygen is consumed by the bacteria that are trying to breakdown the dead organic matter, thus depriving any of the other fish, eels, shrimp etc. in the creek of that precious oxygen. By planting the creek banks out with native trees, ones which would have naturally occurred there in years gone by, we can aim to rejuvenate the ecosystem. We can increase habitat for birds and help to improve water quality. Eventually in coming years the shade created by the canopy will help to suppress excessive water weed growth, which means there will be less need for human intervention to manage them.

High nutrient levels in our creeks, whilst initially sounding like a good thing, is in fact detrimental. Though nutrients are obviously needed for growth and regeneration, nutrient rich waterways are often a result of mismanagement. On Norfolk, many of our creeks are open to cattle. This form of grazing, whilst not only unnatural, negatively impacts the health of the creek. Cows eat a lot! And obviously what goes in, must come out. Much of what comes out then winds up in the waterways and it has actually been proven that cows defecate up to 5 times more often when they're standing in a stream as opposed to on land! This creates an unhealthy environment, not only for the freshwater species, but for the wading birds and humans. As a cow walks through a creek, it damages

the bank, the creek-bed and the underwater habitat. 'Pugging' occurs when the cows leave their deep footprints in the soft, muddy banks of a creek, creating small pools of water that are then trapped, unable to flow away. These little pools become stagnant, with oil slicks and rotting plant material creating a toxic puddle of sludge that eventually permeates into the rest of the stream.

Cockpit is prized as a place of beauty by much of the Norf'k Island community. It is home to one of our very few waterfalls and has been the playing ground for children of many generations. Norfolk Island Regional Council recognises not only the intrinsic and historical value that this reserve represents for Norf'k Islanders, but also the ecological value. We would like to thank the Norfolk Island Cattle Association for their co-operation in the exclusion of cattle from the creek, and also the Norfolk Landcare Group for all of their past work in the area. Thankyou also to all of the volunteers that came along to help bring this vision to life.

Picture this: a beautiful stream, flowing and gurgling over big basalt boulders. The sunlight filtering down through a soft canopy of Pungas, Cordylines and Whitewoods, catching on the iridescent wing of a dragon fly as she flits around dipping her tail into the clear water, laying eggs. Overhead a golden whistler whips its song through the branches of the Ironwood and the quick red breast of a male Robin darts amongst the Meryta flowers.

This is our vision. Thankyou all for being part of it.

Lilli-unna King
Environmental Project Officer
29th September 2021