

The Rushcutter Creek catchment rises on Timber Ridge and travels through suburban Port Macquarie under Bangalay Drive, Cathie Road and Rushcutters Way on its journey to Lake Innes and Lake Cathie. Along the way it cleans urban runoff of pollutants and nutrients for the betterment of the community and wildlife.

Rushcutter Reserve was commenced in 2005 when a neighbour took an interest in the area near his house adjacent to Moondarra Terrace and Spindrift Row on the floodplain and banks of the water course.

This work has met with great approval by the neighbours and people who use the walking tracks in the area, however the volunteers were in the position of fighting against one of the flood plains natural functions of transporting weed seeds onto the site. Weeds are distributed from the top of the catchment and this highlighted the need for more strategic planning by Landcare and the "Land Manager" (PM-HC) when commencing a site. Often sites were commenced by motivated neighbours who wanted to 'take care of the bush' near their house. While commendable the results were often ineffective, due to the ad hoc location of sites. Looking at the whole catchment gives a better indication of where the weed problems are likely to come from. So, it is important to adopt a more strategic approach otherwise much of the work on areas downstream is wasted.

Work has been done recently by the council to assess the health of all their urban reserves, prioritising sites to be worked on. This greatly assisted Port Macquarie Landcare Group to plan more strategically effective sites.

In 2009 we changed the focus of our work to Bangalay Drive and in 2011 to Mariners Way to connect to the already completed Timber Ridge site, which is at the very top of the Catchment. This will result in better outcomes for the area, along with greater satisfaction for the volunteers, as their work is much more effective. The benefits of the new strategy is already shown with less weed seeds germinating after the frequent storm events that have been experienced in the last few years.



This map shows the Rushcutter Creek catchment from the top of Lady Elliot Court to Spindrift Row. The catchment provides an important habitat link to Sea Acres Nature Reserve.

The most difficult weed we had to deal with was Taro (*Colocasia esculenta*). Taro is a fast growing aquatic weed with dark reddish purple stalks and very large, arrowhead-shaped dark green, velvety leaves (somewhat like elephant's ears), hence it's oft-used common name. In some parts of the world taro is harvested for its potato like tubers: 'esculenta' means edible. The plant is actually poisonous if eaten raw due to raphides (needle-shaped crystals in the cells of the plant) which leads to severe stomach ache. Taro pollutes water by trapping organic matter in its roots, producing foul smelling sediment. Disturbed plants can release toxins harmful to wildlife and rapidly out-competes natives. We have found no evidence of wildlife using the Wild Taro patches as habitat, which may be due to these toxins. It has the ability to destroy the canopy of the forest as its growth spreads.



In August 2009 we commenced work at the start of the infestation above Cathie Road. Two months later the primary knockdown was completed. To help its reproduction taro produces seeds, runners (stolons) as well as corms. Any part of the underground corms that are not removed will reshoot, thus requiring many years of follow up maintenance.

The photo below shows the same area as it is in 2013, filled with native grasses, rushes and sedges doing their job of filtering the pollutants from the catchment.



We had some fun getting into our waders, and when we didn't the results were very muddy...



As we moved further downstream the spreading infestation of Taro covered large areas of the creek, but consistent effort produced stunning results. The creek started running more freely and fish were seen for the first time since works commenced. However, the Taro is also growing in amongst the threatened tree Biconvex Paperbark *Melaleuca biconvexa* which is being impacted by these weeds in Port Macquarie. The image below shows the damage to the stands of Biconvex Paperbark. So why is Taro, a native of the Pacific islands herein Port Macquarie? More importantly, why is it in OUR swamp? Well....it was a residential gardening fad whose popularity has since worn off and some people took the cheap option of dumping Taro into the nearest waterway (our swamp).



The Rushcutter Reserve is so large and diverse that many methods of bush regeneration have been used. The Taro was mainly removed by hand and no supplementary planting was necessary.

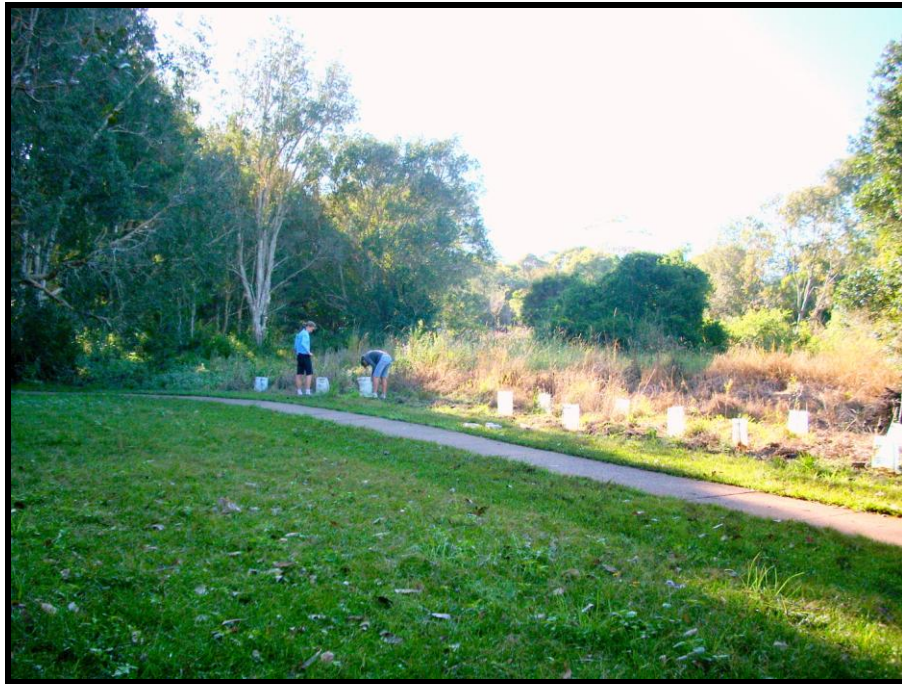
Below you see the revegetation of an area of Rushcutters Reserve that was previously mown.



The revegetation of this mown area reduced maintenance costs to council and was appreciated by neighbours, (increasing their enjoyment of the area with a more shaded walkway) as well as local wildlife. Staff from GE Money assisted with the mulching and planting of this site which resulted in widening of the corridor making it safer habitat for the native wildlife and improving koala habitat.



The early work shows the continuing problem faced by the volunteers as they worked in the middle of the catchment.



The early plantings from June 2008 are starting to have a positive impact on the site.

On the floodplain there was a lot of planting required as it had been mown for years and the soil had been compacted so there was little native seed stored in the soil that could germinate. This is an early planting in 2008.



You can see the remarkable natural regeneration that has supplemented the original planting. The closing of the canopy is what we want to achieve.



Another major weed we had to deal with was the large edge infestation of Wild Tobacco. We had the assistance of the Conservation Volunteers of Australia Green Gym Team, who worked 3 mornings each week and cleared all the Wild Tobacco, Lantana, Farmers Friends, White Passion Flower and Castor Oil Plant ready for edge sealing plantings.



The photo below shows the change to native vegetation from weed. Bottlebrush, Foambark, Dianellas and Cheese Tree can be seen on the edge.



In 2010 we had professional assistance from The Port Tree Fella to remove large Cocos Palms that were impacting on the site due their prolific seeding each year. The funding that enabled us to do this was from the Council Community Grants program.



This photo shows volunteers using the Weed Wackers Manual which was produced jointly with Council to assist in the training of Port Macquarie Landcare Group volunteers. Each site has its own manual listing the 30 most common weeds volunteers will need to deal with and how they can be managed. These manuals are being used by other Landcare groups and Bush Regeneration Teams.

This project which commenced in 2005 was brought to Ecological Maintenance status in December 2012. This means Port Macquarie Landcare Group are able to hand over to Council's Bush Regeneration teams for minimal maintenance.