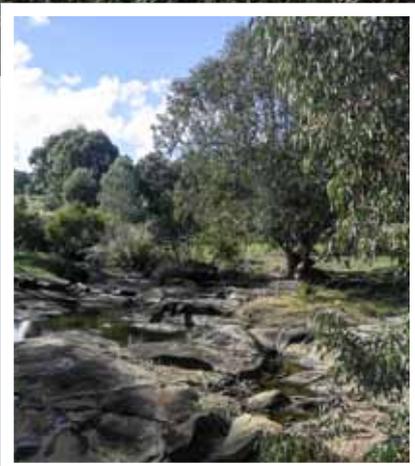


Enhancement and Protection of Marrinup Brook

CASE STUDY

ENHANCEMENT AND PROTECTION OF MARRINUP BROOK



ABOVE: Upstream of the property in state forest, Marrinup Brook - very well vegetated (photo: Derani Sullivan)

INSERT: Marrinup brook on Janet's property - Lacking a good intact riparian zone (photo: Derani Sullivan)

Project Title
Enhancement and protection of Marrinup Brook

PROJECT LEADER
Nerilee Boshammer

PROJECT MANAGER
Derani Sullivan

PARTNERSHIPS

Janet Smith (landholder) and Peedac Pty. Ltd. (planting crew)

PROJECT DURATION

September 2012 - June 2013

PROJECT AREA

Marrinup Brook

BENEFICIARIES

Fauna, general public, Marrinup Brook



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This project is supported by the South West Catchments Council, through funding from the Australian Government's Program, Caring for Our Country and the Government of Western Australia



Peedac Pty Ltd

Marrinup Brook, which is a tributary of the Murray River, starts near Dwellingup and flows through State Forest consisting of marri, jarrah and wandoo woodlands.

These upstream reaches of the brook are well vegetated providing vital habitat for wildlife. Halfway downstream the brook then flows through farming properties and unfortunately the vegetation here is quite diminished.

There has been considerable vegetation loss along the brook due to land clearing and more recently from a wild fire which swept through the area in 2007, killing a lot of riparian vegetation and resulting in loss of habitat for native fauna in the area.

Hence, Janet Smith, the owner of a small property in the middle reaches of Marrinup Brook which is about 600m from the state forest, contacted the South West Catchments Council.

She applied for funding under the SWCC Community Groundworks funding program to undertake a revegetation project to strengthen and widen the riparian zone of the brook which flows through her property.

Janet, who had already just fenced off the brook where it runs through her property to stop stock access which was causing erosion and consequently reduced water quality, was successful in her application under the Caring for our Country 'Landscape Scale Conservation' target.

The motivation for Janet to undertake this project was so she could see her children enjoying the natural bush and native wildlife on the property.



Janet Smith says, The brook has been degraded, especially since the bushfire swept through the property. It would be great to see the brook go back to its natural state. We need good habitat and I don't want to see feral animals and weeds anymore!

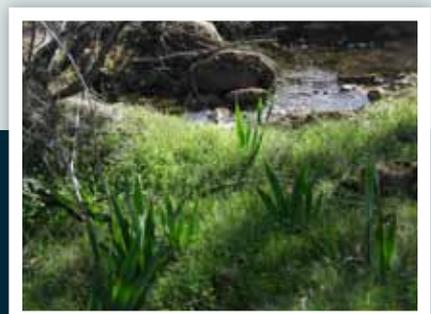
The project included onground activities such as weed control, revegetation and installation of possum boxes. Since the 2007 fire damaged vegetation and caused disturbance, many weeds have invaded the property. In summer the weed Narrow-Leaf Cotton Bush (*Gomphocarpus fruticosus*), more commonly referred to as Cottonbush, went berserk! Cottonbush, a declared species in WA which originates from South Africa, invaded the riparian zone and surrounding paddocks where it competes with native plants.

It is a perennial shrub and grows up to 2m tall and has distinctive seed

pods which are puffy swan-shaped structures covered in soft spines that are easily dispersed by wind and water.

Janet contacted the Department of Agriculture and Food WA to find out the best method of control of the Cottonbush and spraying was recommended. The area was hence sprayed with Roundup Bi-active, which is a frog-friendly chemical, prior to revegetation taking place. Control of the weed *Watsonia* was also undertaken by spraying the plants with Roundup Bi-active, however due to its hardiness, it will need a number of years of control in order to eradicate it entirely from the property.

Planting of 6000 local native seedlings along 500m of creekline was undertaken by a Peedac works crew, with the seedlings sourced from Hamel Nursery. Peedac Pty. Ltd., an Aboriginal owned and



TOP: The Peedac works crew
(photo: Derani Sullivan)

LEFT: The Peedac works crew hard at work
(photo: Derani Sullivan)

RIGHT: *Watsonia* invasion (photo: Derani Sullivan)



operated not-for-profit organisation undertook the planting, which was a great way to include local Aboriginal people in caring for Country. Greg Lane, the Peedac Coordinator said,

'It is great for the guys to undertake this work and get valuable experience as it opens up future opportunities for them in regards to full time employment.'

With an increased riparian zone of approximately 20 meters on both sides of the brook, it is hoped that vulnerable and endangered fauna listed under the EPBC Act which are known to be in the area, such as the Quokka, Forest red-tailed black cockatoo, Red-Tailed Black Cockatoo, Baudin's Black Cockatoo and Carnaby's Black Cockatoo may be able to find habitat here for shelter, food or nesting. Other native fauna found in the area that are not threatened but may also benefit from the revegetation include mammals such as the Western Pygmy Possum, Quenda, Glibert's dunnart, Western brush Wallaby, Common Dunnart and the Brushtail Possum. Habitat will also be available for other animals to utilise such as insects, fish, reptiles, frogs and birds. Two possum boxes were also installed on the property by Natsync Environmental to encourage wildlife back to the property. Derani Sullivan, SWCC Project Manager, stated 'It has been a wonderful project and so good to have an enthusiastic landholder that is doing her bit for the environment. It's not hard for a landholder to undertake onground works to benefit the environment, however they often require financial and/or technical assistance. Knowing that they also play a part in helping to improve other landholder's knowledge to lead towards positive behavior change is fantastic.'

Janet will need to be diligent in the future and undertake monitoring and spraying of weeds when necessary in order to ensure the planting is a success. Furthermore, pest animals such as foxes, cats and rabbits will need to be monitored as native animals start to return to the property, and control work carried out as is required.



'It will be wonderful to see the property again in another five years when hopefully there will be a wide riparian zone supporting native wildlife, and not just feral pigs which have been getting into the brook lately and causing stream bank damage.'

Derani Sullivan,
SWCC Project Manager



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