

Blue Mountains stream health: Lawson Creek, progress and setbacks

-- Peter Ardill

How can you help to monitor the health of your local stream? As discussed in November Hut News, BMCC measures a stream's health by sampling for water bugs annually. Declines in bug diversity and populations can reflect a deteriorating stream environment. To thrive, bugs require favourable stream conditions, including suitable water, well vegetated banks and a range of pools, shallows and natural debris.

Perennial Lawson Creek is a place of significance for the Gundungurra community. Forming south of Lawson retail centre and nourishing the World Heritage Area, the creek has been subjected to many health challenges. In 2010 massive sediment flows originating from urban construction work destroyed 200 metres of stream



Degraded vegetation and erosion at Lawson Creek caused by unauthorised dog activity P Ardill

habitat. On occasions, raging stormwaters have gouged sections of creek bank.

BMCC natural area managers and South Lawson Park Bushcare Group members have engaged with these issues. Additionally, the bushcare group manages several ecological restoration projects, restoring indigenous vegetation. BMCC natural area managers have created a Lawson Parklands conservation area near the creek, where indigenous vegetation will naturally regenerate.

Improved vegetation density stabilises creek banks, filters polluting nutrients and supplies natural debris and cooling shade. Tested regularly by bushcare streamwatchers, Lawson Creek water quality is usually satisfactory: good oxygen levels and low phosphate (faeces, fertilisers), minimal salinity, appropriate chemical balance and low turbidity. Recent BMCC stream health checks have recorded "Fair" to "Good" scores, an improvement.

But a new threat to Lawson Creek has emerged. Unauthorised off-leash behaviour by dogs has vegetatively denuded sixty metres of creek bank. The resulting erosion and siltation of water has destroyed bug habitat (see illustration). Remediation of this ugly degradation will cost BMCC and ratepayers thousands of dollars.

To support the health of your local stream, inspect regularly, exercising caution near water. Report wildlife die-offs and environmental damage. Check unusual occurrences of silty water and foul odours. Monitor your stream's health ratings at <https://www.bmcc.nsw.gov.au/waterquality>

(Peter Ardill is a Streamwatch practitioner and accredited bush regenerator.)

Landcare Volunteering in Broken Hill

-- Meredith Brownhill

Broken Hill is a great place for a holiday. It's a centre from which to travel to many new and established National Parks in western NSW. Broken Hill is Willyakali country which connects to Paakantji land at Menindee on the Darling/Baaka River.

Having a love of the Mulga and Saltbush country, I joined Landcare Broken Hill and, when on holiday last winter, I volunteered to work on the Imperial Lake Landcare site. I spent three Saturday mornings with local volunteers creating a nature reserve with walks and picnic facilities near an old mine site on the outskirts of town. The plan is to regenerate the site and to build an environmental education centre.

Lovely *Eucalyptus camaldulensis*, River Red Gums, surround the lake which has the rare Broad-shelled Turtles, *Chelodina expansa*, in it. Black Swans were present and mellow calls of the Spiny-cheeked Honeyeater could be heard which added to the ambience of western red earth country. Oldman Saltbush, *Atriplex nummularia*, abounded with its grey-green leaves and lovely purple flowering *Solanum ellipticum* was scattered over the red earth.

Volunteers were busy installing drip water hosing and clearing walking tracks. My bushcare job was weeding something new to me, called Matchheads Weed which was destined to be composted under black plastic in the hot western sun to kill the seed. I also planted my first Mulga Tree, *Acacia aneura*. This was an historic

moment.

A "Trees for Travellers" project is underway, for visitors to plant trees at Imperial Lakes to offset their holiday vehicle carbon emissions as well as helping the local environment. <https://www.facebook.com/LandcareBrokenHill/>

Getting to know the local community, being inspired by their enthusiasm and caring for the local ecology all added up to a splendid holiday, plus birding at Menindee Lakes and watching the sunset over Broken Hill. Next time you go out west, join the local landcare volunteers and give them a hand. It is a wonderful way to make friends.



Mulga planting at Imperial Lake