

## December in Our Catchment

The floods have left their mark all over the catchment. Life was quite exciting in Queanbeyan for those couple of days. Floods have a purgative effect for catchments; they clear banks and move sand slugs, reorganise snagging and change channel direction. They also refresh the surrounding flood plain soils, and refill the local aquifers. It's not all bad!

### Your Reports

No-one so far has reported in a 'turkish coffee' turbidity. That means that while the water carried a heavy silt load in the flood, the silt load has fallen back quickly. This should mean that watercourse basements will not become muddy and silted. For upland and tableland lowland waterways, that is important, as it allows the gill breathers to get a fresh start. Many of them are the top predator macroinvertebrates as well as the main foods for fish, tadpoles and other riparian feeders. At cleared sites, you may continue to observe high temperatures in shallow water. This will depress dissolved Oxygen if flow slows to a trickle in the coming hot weather. The pH for most places (I haven't any reports from Sullivan's Ck yet) is in that very good band of 6.5–7.5. Jerrabomberra Ck is a little elevated, but this coincides with reports of extensive bank disturbances. There are also some unusual phosphate readings...again the product of fresh soil disturbance, perhaps.

### The shrubs that ought to be on your river bank or dam margin.

I've written about the importance of the bank vegetation before (July, 2010). Now, after the scouring by the floods, and before the weeds run rampant across the site, you might consider planning an autumn planting campaign for the river bank. Here are a few suggestions.

*Acacia dealbata* Silver Wattle: a tall shrub or small tree, not very long lived, with a spreading crown of feathery silver green foliage. It seeds profusely, and germination is usually relatively high. It supports many insects when in flower, and Botany Bay Weevils and red and black mealybugs across much of the year. It thrives along river and creek margins, and may be the dominant in Tablelands Riparian Shrubland communities. It thins out over time but comes back strongly after fire.



*Acacia mearnsii* Late Black Wattle: flowering a little later than most wattles, and often growing up the bank from the silver wattles, *A. mearnsii* extends the available food time for many flower dependant insects and their predators. It too seeds well, and is short lived. It is susceptible to root rot fungus (*Armillaria luteobubalina*).

*Leptospermum obovatum* River Teatree: Flowering in early summer, and growing at the very edge of waterways, this shrub, to 2m, is vital to running water systems. Like the dreaded *Salix* species, river teatree forms dense root mats at the water edge, that contribute to both bank stabilisation and sediment deposition. It will also grow in the margins of wetland flood-runners and farm dams. When it, the Burgan and *Bursaria* are in flower the air almost goes tan with the lycid beetles and mimicking soldier beetles, weevils, longhorns, blister beetles and wasps. This provides food for many others!

*Callistemon sieberi* River Bottlebush: the quintessential riverbank plant, it forms an integral part of both Tablelands Riparian Shrubland and *Casuarina cunninghamiana* Tablelands Riparian Woodland. Able to withstand long periods of inundation and flexible enough to survive high to flood strength flows, this shrub is happy to have its feet wet much of the time but thrives just as well in flood-runners and dried creek beds. It flowers in the late summer to autumn.



*Grevillea juniperina* subsp. *fortis* Juniper-leaved Spiderflower: a genuine local (only found along the Murrumbidgee between Cooma and Cussacks Crossing, and along the Molonglo River, Ginninderra Ck, Burra Ck, Jerrabomberra Ck and the Queanbeyan R) this dense, spiky shrub to 1m grows in sandbars, cobbles, and almost anywhere else in floodplain areas. It flowers strongly in spring but continues across the seasons. Its thicket habit provides sanctuary for all manner of animals.



*Pomaderris eriocephala*: growing up to 3 m in gullies, this shrub flowers late in spring and attracts plenty of insect life. Its moderately dense crown provides good cover in the summer and autumn, so allowing accumulation of litter and development of a moss, liverwort and lichen soil crust.

*Lythrum salicaria* Loosestrife: like the river bottlebrush, loosestrife prefers waterlogged soils and has spongy lower bark and flexuous stems to assist its preferred life style. The rose pink of the native variety attracts plenty of visitors. The plants bind the cobbles at the edges of riffles, and at about 1.5 m, cast dappled shade along the watercourse.



*Rubus parvifolia* Native Raspberry: frequently a ground hugging scrambler, the native bramble is rarely as aggressive as its imported relatives. In 'old growth' River Sheoak Tablelands Riparian Woodland, native raspberry is a structural element, on the sunny bank above the bottlebrush and teatree but before the thickets of Burgan, *Pomaderris* and *Bursaria* develop. The fruits are rarely plentiful, but are widely sort after by native and feral alike.

And there are quite a few more!

## Calendar

I'll be back in the Queanbeyan office on 10<sup>th</sup> January. The next sampling weekend is 15<sup>th</sup> and 16<sup>th</sup> of January.

Thank you for a wonderful 2010. The Very Best for the New Year, 2011!

Stephen Skinner, Molonglo Catchment Waterwatch Coordinator.