## **Refinding Yabbies**



## A children's short story by Peter Dillon, illustrated by Anna Lloyd

(This version is available from <u>www.brownhillcreek.org</u> as input to the Upper Brownhill Creek Stormwater Management Plan community consultation, May-June 2015. Protecting the stream ecosystem and recreation value is achieved only by Option D which provides flood protection without a dam. This story, which applies to many urban creeks, will soon be available in full colour format.)

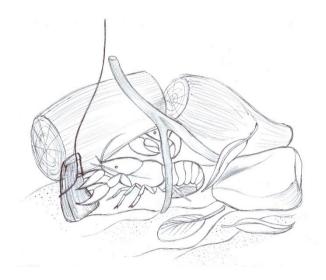
## **Refinding Yabbies**

A boy and his father went to the creek to catch yabbies. The sun was warm and the trees made dappled shade on the still water. The water was clear and gum leaves on the surface made sharp dark shadows drifting across the sandy bed. Yabbies hid under rocks and logs and had holes in the banks of the stream and none could be seen.

The father tied the meat on the string and the boy tossed it into the water, leaving the string limp on the bank. Lying down on the grassy bank they closed their eyes and saw the orange glow of their sunsoaked eyelids.



In a little while the boy checked the line. He whispered to his dad that there was a yabby sniffing the meat.



Patiently they waited until he was eating it and pulling it towards his hole. Then the boy gently, gently wound in the string until the yabby was over the scoop net that his father held. Suddenly his dad lifted the net out of the water and there was the yabby.



This was a beauty with a black shell and legs and bright blue claws. The yabby waved his claws defiantly and glared at the boy as he lifted it gently off the meat and into a bucket of creek water. The yabby flicked its tail and hurtled in circles around the bucket looking for escape.



Overhead a kookaburra laughed, cocked his head and looked longingly down from the tree at the yabby who had nowhere to hide in the bucket.

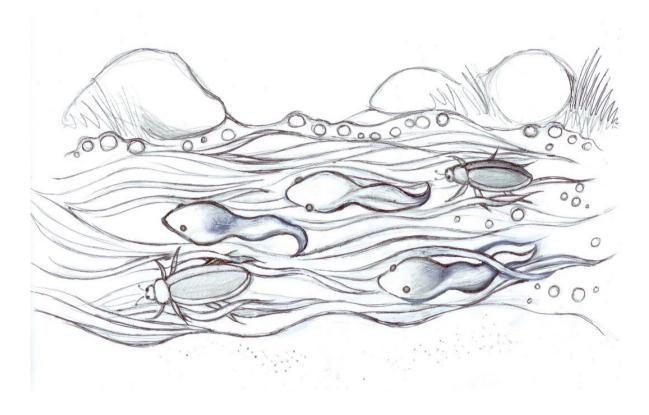


The bait was reset in a different spot and the bucket remained next to the boy while they repeated the cycle of waiting, stalking and snatching until it was time to go. Then they chose the best looking home for the yabbies and let them all go at once. This would be the place where they would start next time they went yabbying. Perhaps this was why they always caught some. Once before, they had cooked and eaten them, but it seemed unfair because the creek was so small and if all were caught there would soon be none.

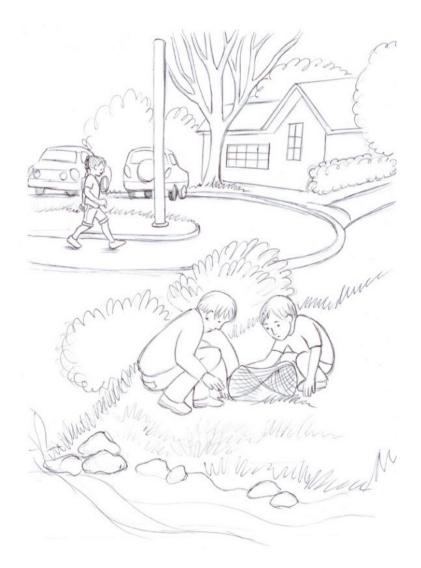
The boy grew up and in time he had a son of his own to take to the creek. But the creek had changed. There were many new houses and roads nearby. The creek water still trickled in the morning sun but it didn't sparkle and the tree roots and rocks were coated with a dull green slime.



Tadpoles and water beetles got stuck in strands of it and had to wriggle hard to escape. The yellow sand on the stream bed was covered by a layer of brown clay.



The big pools had become shallower and the shallow rills had been washed away. The father thought that this would not be his first choice for a home if he was a yabby. Noisy minors scolded each other from the old trees. Into the deepest part of the creek they tossed an opera house net, a new and improved way of catching yabbies. The grass bank was now too steep to lie on and was too close to the traffic on the nearby road to rest. They couldn't see if there were yabbies on the dark coloured bottom so after waiting to give yabbies time to sniff out the bait the boy quickly wound in the net to check. There was no yabby and tiny strings of clear slime hung down from the net.



They tried again in all the father's old favourite spots that they could still find, but they caught no yabbies. The son was disappointed, but not as much as his father who had an empty feeling inside. "Where has my beautiful creek gone?" he asked his son. "There is no home for yabbies and the peace and tranquillity have gone. I really wanted you to enjoy what I had loved as a boy." On a rainy day some time later the son and his father went for a walk in the rain. The boy dropped twigs in the gutter and walked beside them as they floated along.



The rain grew heavier and after they turned the corner the boy had to walk very quickly and soon he had to run to keep up. His dad hurried behind with his umbrella. As they went past a house being built they jumped over a stream of dirty water flowing down the driveway.



The boy lost track of his twig as the water in the gutter turned brown. Suddenly the water gushed down a hole and disappeared. "There must be a drain pipe below" said his dad "and I think I know where it goes." Soon they came to a bridge across the creek. "Look at the waterfall" said his son, pointing to the brown water pouring out of a concrete pipe in the river bank and splashing into the creek below.



A billow of brown foam rose from the base of the fall, with its tail drifting downstream breaking into floating foam balls that got caught on branches and pieces of rubbish. "The creek has changed colour and the flow is so much faster downstream' observed the boy. His father agreed. "It must be hard for any yabby to survive in this, although they must have survived floods before these houses were built." The two of them walked upstream away from the houses. In the steep and narrow valley the grass was wet, so they kept to the path beside the creek and sheltered under the trees when the rain got heavier. Wattle stems lined with yellow flowers drooped under the weight of the clinging drops of water.



As the rain cleared, blue wrens twittered in the bushes and black cockatoos squawked and sent down a shower of pine cone shavings as they feasted on the nuts high in the old stone pines.



A little rivulet with a grassy bed trickled clean water into the side of the creek and there was no slime. "Why don't we come up here to go yabbying?" asked the boy. The next weekend they did and they caught a yabby the first time they pulled up the net.

It's hard to say who was more excited, the boy seeing his first yabby or his father seeing history repeated and reconnecting with his childhood. They found a lovely deep pool with plenty of places for yabbies to hide, and when they finished yabbying the boy tipped the bucket into the creek and let them all go, flicking and crawling their way in all directions.



The son was hoping he would catch some of them again soon and along with some of their yabby friends. The father began to hope that maybe one day he could bring his grandchildren there and they too would be fascinated with nature's hidden treasures.

## A Deeper Message for Families

As the father thought more deeply about their experience and the growth of the city he began to wonder if it was possible to have more people living in the catchment and still have yabbies? Is it the fast, brown, foamy stormwater runoff and rubbish from houses and streets that drives yabbies out? Slowing down and cleaning up the stormwater would be an obvious way to protect the yabbies and other stream creatures, especially in an urban area where the population is growing.

Before any houses were built rain infiltrated the soil and watered the native plants and trees. If the rain was sustained or heavy the soil became saturated and rain ran off overland, forming puddles that when filled overflowed, and eventually connected up and flowed to the nearest creek. The moist soil also drained gently downwards to underlying groundwater that flowed very slowly below ground and where this intersected a stream provided the flow that is evident when it is not raining.

When a house or road is built, the roof and pavement give runoff immediately so there is much larger runoff and it occurs much faster than before. Soil underneath remains dry, and the gutters and drainage pipes connect the water and convey it quickly to the creek. As housing density increases and blocks become smaller, the proportion of hard surfaces grows and the runoff peaks increase beyond those than the creek had previously had to carry.

Houses and roads also bring more rubbish, pollution from oil and metals, fertilisers and pesticides, sewer overflows and mud from building sites. Deciduous street trees lose their autumn leaves bringing a sudden organic load to the creek that can rob the water of oxygen and make conditions difficult for yabbies and other stream creatures to survive.

However, it is possible for houses and creek creatures to co-exist if peak stormwater runoff rates and water quality are kept similar to that which flowed off the land before it was built on. Measures include detention storages, (rainwater tanks with slow release to street or wells), permeable pavements, groundwater recharge, infiltration traps to water perennial street trees, filters and raingardens to improve stormwater quality, and basins and hay bales to trap mud in runoff during house construction.

This is a whole of catchment issue and solutions need the majority of landowners to take some responsibility, and for local, state and commonwealth governments to help with information, planning rules, policies and resources. There is also a vacancy for private sector sponsorship of programs to restore stream habitat and ecosystems and improve water quality while reducing flooding and greening our cities so that they are safe and pleasant places to live. This is important with a growing population in a warming climate where every bit of natural environment will become increasingly precious. "Friends of parks" programs really need more volunteers of all ages to help restore and protect these remnant natural resources, especially along creeks. If you are interested you can find your local Friends Group at: <u>http://www.communitywebs.org/friendsofparks/</u> Water Sensitive SA can provide more advice on stormwater management at household and street scale: <u>http://watersensitivesa.com/news/water-sensitive-sa-steering-committee</u> Nature Play SA <u>http://www.natureplaysa.org.au/</u> gives ideas and resources to encourage children to experience nature. Among the suggested *51 things to do before you're 12*, is to catch a yabby.

The yabby is a key indicator of our ability to sustain creeks for future generations.