MCCG BIRD SURVEY OF SECTION 12: GAP CREEK NOVEMBER 2016 to 2018 JIM BUTLER & IAN MUIRHEAD (BIRD PROJECT MCCG)

SITE: Section 12 Gap Creek – Mike Humphreys (Organiser)

<u>Location:</u> This section of the Moggill Creek Catchment is along Gap Creek which is embedded in Deerhurst Street Park (800m long) plus an indeterminate section (200m) at the northern end that reaches Gap Creek Rd. The entire section is about 1000m long and averages about 60m wide. The range of width is from 40m to 80m. Section 12 stretches from Brookfield Rd in the south to Gold Creek Rd in the north. The entry points are from the end of Kookaburra St or from Brookfield Rd.

Habitat: 1000 metres of Riparian Zone, 40m to 80m wide.

Gap Creek Bushcare Group: MCCG has been actively revegetating at this site for 15 years.

Notes from the MCCG Report on Section 12 (2011 updated in 2016)

<u>Description</u>: Gap Creek leaves Brisbane Forest Park and runs past several properties before joining Moggill Creek. Much of this section of Gap Creek is very rocky with some deep waterholes and natural stone weirs. The banks tend to be steep though some of the banks in the lower reaches are low. Deerhurst Rd. Park runs from Brookfield Rd. on the south a little past Kookaburra St. On the southern and eastern bank the park runs to Kookaburra St. On both sides, there is a road reserve adjacent to the northern end of the park. The road reserve is in between the park and two private properties, one on each side of the creek. The area of the park is almost 5h but this does not include the 1h or more of road reserve. The park includes water and a picnic table at the Brookfield end. At this point the Council has no plans for the road reserve other than that of a park. The road reserve has been largely cleared of weeds and replanted on both sides of the creek. There are also nine land for wildlife properties adjacent to the park which are being cleared of weeds and planted with native vegetation. A tenth property is slightly too small to join land for wildlife but is largely weed free and is heavily planted. In addition, there are three properties which are either actively clearing weeds and planting next to the park or have agreed for the bushcare group to clear and plant. The road verge along the uphill side of Kookaburra St. is being cleared and replanted. This amounts to about .5h and connects the park with some densely-planted properties along Kookaburra St. The remaining properties which are adjacent to the park are not actively planting native vegetation but are engaged in controlling weeds. These properties provide some cover for birds and other wildlife. The result will be that the width of the planted area (public plus private) will be double or even triple the width of the park for about half the park's length including almost all of the park that is included in the bird survey. Eventually there will be a total of about 12h of contiguous land that is largely weed free and densely planted (understory, midstory, and canopy) with native plants.

Biodiversity: Gap Creek is a potentially significant corridor between Brisbane Forest Park (Mt Coot-tha) and Moggill Creek. However, this Section was largely cleared with Gap Creek lined with a mix of river she oak (Casuarina cunninghamiana), black tea tree (Melaleuca bracteata), Syzygium smithii, Syzygium australe and weeping bottlebrush (Melaleuca viminalis). Cryptocarya obovata, Notelaea longifolia, Hymnospermum flavum, Rhodosphaera rhodanthema, Cryptocarya triplinervis, Aphananthe phillipinensis, Mallotus philippensis, Trema aspera, Streblus brunonianus, Ficus coronata, Ficus fraseri, Ficus macrophylla, Ficus rubiginosa, and Alchornia ilicifolia were also present along the creek and in the surrounding bush, though generally in very small numbers. Dense vegetation was found along the Creek though only ~10% remnant native species (scattered individuals) occurred, the remainder were weeds. Scattered forest red gum (Eucalyptus tereticornis), wattles (Acacia spp.) and brush box (Lophostemon confertus) remain away from the creek.

Major weeds along Gap Creek included camphor laurel, Chinese celtis, broad-leaved privet, broad-leaved pepper, lantana, ochna, silver-leaf desmodium (velcro weed), glycine, Singapore daisy, asparagus vine, Brazilian nightshade (Solanum seaforthianum), some Madeira vine, Easter cassia and mulberry. Wildlife is abundant in this Section, with red-necked and swamp wallabies, lace monitors and various species of glider being locally abundant. Koalas are to be seen occasionally.

In 1990, a BCC work crew removed weeds from the south-east side of the park and planted about one hectare of land. However, with no maintenance many of the plants died and weeds regrew. Some Grevillea robusta, Toona ciliata, and Acacia spp. survived. The current Habitat Brisbane project started in 1999. Since then the Bushcare Group has removed weeds and planted 95% of the southern and eastern side of the park and about .6h on the northern and western side. Habitat Brisbane installed a water line along about 60% of the southern and eastern side which has been very helpful in maintaining the plantings. Habitat Brisbane also removed a number of large camphor laurels from the southern and eastern side of the park. A National Heritage Trust Grant in 2008 and 2009 was also used to remove and mulch a large number of camphor laurels and privets from the area at the northern end of Kookaburra St. The grant was also used to partially support three private landowners to remove large weed trees. As part of the NHT grant the bushcare group planted over 100 Richmond Birdwing Butterfly vines in the Park. Unfortunately, a significant number of these were washed away in the floods of 2008 and 2009 but most have been replaced. Since then we have received an Energex grant and CCA funding from the Brisbane Cite Council on two occasions. The Energex grant was used to support two private landowners clear large weed trees and to start clearing the large weed trees on the northern and western side of the park. The first CCA grant was used to clear and replant about .2 hectares of parkland plus .2 hectares of adjacent private land on the northern and western side of the park. The other was used to clear the remaining camphor laurels adjacent to Kookaburra St. plus some weed trees on an adjoining land for wildlife property.

<u>Water</u>: Gap Creek is the major waterway through the Section and is joined by a significant tributary near the intersection of Deerhurst and Brookfield Roads. Gap Creek doesn't flow continuously, comprising a chain of waterholes for most of the year. Flooding occurs in heavy rain, particularly with the backing up of Moggill Creek during high tides. A small amount of gully erosion, caused by overland flow, occurs within the park, extending from the creek to inside the fence of the adjoining private property. We have attempted to bring this under control in the park through sand bags and the planting of Lomandra spp and other species. The floods of 2008 and 2009 washed out new plantings (about 100 plants), flattened some old plantings and caused some creek side erosion. It knocked down trees which also made maintenance more difficult, slowing down the work of the bush care group. Subsequent flood events caused further damage. In response, we are significantly increasing the density of our creek side plantings.

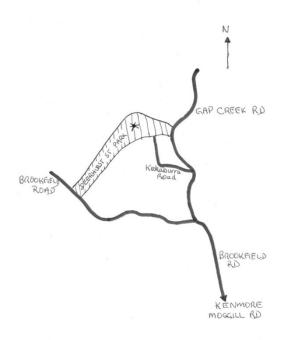
BIRDATA OFFICAL SURVEY METHODS #1 and #4:

- 1. <u>2 HECTARES X 20 MINUTES: SYSTEMATIC BIRD SURVEY (Population and Occurrence Trend Value)</u>: The 2 hectares consists of the Northern 350m of the 800m riparian zone that is associated with Deerhurst Rd Park. The average width of the riparian zone is 60m (range: 40m to 80m). Centre-point of the 2 Hectares: 27^o 29′ 27.72″ S; 152^o 55′ 19.61″ E; Elevation 49m
- 4. <u>FIXED ROUTE SURVEY: UNSTANDARDISED BIRD SURVEY: (Occurrence Value):</u> The route will start at the northern end (Kookaburra St entry) and travel down the western side of Gap Creek; at Brookfield Road the route will cross Gap Creek and travel back along the eastern side of Gap Creek. Point to register data: 270 29' 27.72" S; 1520 55' 19.61" E; Elevation 49m



SURVEYS SUBMITTED TO BIRDATA:

DATE	1. TWO HECTARES X 20MIN	4. FIXED ROUTE	COMMENTS
17/11/16	New site registered, surveyed	Not Surveyed.	Creek not running; some deep waterholes.
13/12/16	Surveyed	Surveyed	Creek not running; some deep waterholes.
11/01/17	Survey # 1823364	Survey # 1823368	Creek running strongly. Perfect morning
21/01/17	N/A	Survey with Steve	Creek running strongly.
16/02/17	Survey: # 1827246	Survey # 1827247	Creek not running, some deep waterholes
16/03/17	Survey # 1830103	Survey # 1830104	Creek not running, some deep waterholes
17/04/17	Survey # 1833689	Survey # 1833690	Creek running calmly. Perfect morning
22/05/17	Survey # 1837752	Survey # 1837753	Creek running calmly, Deep fog but perfect
18/06/17	Survey # 1880062	Survey # 1880067	Creek running calmly, perfect morning
11/07/17	Survey # 1882721	NS	Creek running slightly, perfect morning.



BIRDATA SURVEY POINTS: MAY 2017

