

Shrimptons Creek small bird habitat corridor progress report

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Summary and results

The Shrimptons Creek small bird habitat project was conceived in November 2011 while working on the plans to build The Habitat community native plant nursery and community food garden at Santa Rosa Park at the head of Shrimptons Creek. The Habitat was officially opened at 251 Quarry Road, Ryde in November 2012. In 2012 an initial bird survey was undertaken and photo points established.

The landscape

Shrimptons Creek Master Plan states:

The parkland is approximately 3.3 km in length running north-south...The creek embankment is steep with level ground beyond the embankments. A portion of the Parklands is classified as natural area although the majority of the vegetation along Shrimptons Creek and the adjacent parks have been highly disturbed with weed species more prominent. However there are some good stands of remnant plant communities situated within Shrimptons Creek Parklands. This includes three endangered ecological communities along Shrimptons Creek, Blue Gum High Forest, Sydney Turpentine Ironbark Forest and Sydney Sandstone Gully Forest.

It should be noted that the vegetation along this creekline does not connect to the Lane Cove River Valley due to the construction of Macquarie Shopping Centre over the creek in the 1980s. The only tenuous connection is through remnant vegetation along Epping Road and across through Macquarie University (both areas are ever diminishing in vegetation cover due to development).

Plants and formalising project

Plants were grown and initial plantings in Santa Rosa Park with volunteers from The Habitat nursery were undertaken in 2013 – 2014. These plantings were mostly canopy species suitable for acting as connectors between small bird habitat areas. Since then we have planted mid-storey vegetation from time to time with our nursery volunteers as time and sufficient rain permits.

In 2015 we formalised the plan for the habitat corridor and received funding to help with promotional materials from Greater Sydney Local Land Services. In 2015 we identified and started door knocking all residents who back onto Shrimptons Creek between Epping Road and Quarry Road (near The Habitat). All residents in our target area have been door knocked and invited to help with plantings via letterboxing or emailing.

In 2015 we undertook 2 plantings in Greenwood Park on each side the pedestrian bridge and in 2016 we completed another 2 plantings near Bridge Road (Greenwood Park and Tindarra Reserve) and a third at the south end of Tindarra Reserve. As 2017 was a very dry year, we didn't organise any planting events but continued infill planting with our nursery volunteers.

The History

When talking to the neighbours around The Habitat we were told that prior to 2007 (when the creekline was cleaned up) there had been many fairywrens in their gardens. Council received funding for the upper stretch of Shrimptons Creek (Santa Rosa Park) to undertake works started in 2007. This project removed all vegetation from Bridge Road to Quarry Road, except for larger trees, resulting in the loss of all native understorey flora, fauna and fauna habitat. Consequently the small native birds were no longer seen in this area or in the neighbours' gardens. The funded project involved replanting however the resulting vegetation is mostly canopy species and fairly open encouraging mostly noisy miners and parrots such as lorikeets and sulphur-crested cockatoos.

Between 2007 and 2016 the only remaining population of superb fairywrens and white-browed scrubwrens south of Epping Road were near Epping Road in Booth Reserve, ELS Hall and Greenwood Park and across Bridge Road in Tindarra Reserve. In 2016 RMS cleared a large area of lantana and blackberry from their land near Epping Road and Council contractors cleared an area of lantana near ELS Hall, these were the main breeding locations for the small birds. From 2016 the population of small birds south of Epping Road dropped to only 4 superb fairywrens and 4 white-browed scrubwrens. As at early 2018 this small population is hanging on, in and near, the small patches of lantana that have been left. Our plantings at this time and in this area were not of a size to compensate for these losses of habitat.

In April 2012 - 12 superb fairywrens and zero white-browed scrubwrens were recorded, with additional birds present on RMS land but not included in the survey. In 2016 - 8 superb fairywrens and 6 white-browed scrubwrens were recorded excluding RMS land. In 2017 after RMS and Council contractors cleared lantana and blackberry only 4 superb fairywrens and 4 white-browed scrubwrens were recorded including on RMS land. Note in January 2012 a photo was taken in Booth Reserve of a red-browed finch – this species has not been sighted since.

Our aim

Our aim is to provide suitable small bird habitat all along the creekline from Epping Road to Quarry Road and eventually have the small birds come back up the creekline to The Habitat and our neighbours gardens. How long will this take - 10 years – 20 years - never? Is the population large enough to be viable? Will new birds migrate to the creekline once sufficient suitable habitat is established? Let's find out.

Habitat Network and habitat corridors

In 2008 International Environmental Weed Foundation (IEWF), in partnership with City of Ryde Council and Hunter's Hill Council, ran a series of workshops as part of a Restoring Natural Capital (RNC) grant project, looking at landscape level ecological restoration. This RNC project was funded by a NSW Environmental Trust grant. Through this workshop series it was identified that most people in the local community did not know the local native plants (where to buy them or how to grow them), did not know most weeds or how to control them and it was highlighted that the community had noticed that we are losing our small native birds (such as fairywrens and red-browed finch). From these simple ideas Habitat Network was started which runs as an IEWF project and is the name by which IEWF is now generally known.

Habitat Network aims to connect people and native habitat, while teaching people about native plants, weeds and ecological restoration. It encourages and assists people in planting local native plant habitat with a specific focus on small native bird habitat connections in private gardens and as corridors to connect bushland areas.

For this project to grow and to support the creation of small bird habitat corridors and connections it became obvious that a local community native plant nursery which would attract and involve the community was needed. This would allow communication with a wider community of people while providing an affordable source of plants.

The Habitat community native plant nursery and community food garden

In December 2008 at a Christmas celebration for Ryde bushcare volunteers at Field of Mars Reserve Bev Debrincat, Pam Ward, Ryde bushcare volunteers Steve Holmes, David Martin, Michael Crane (Certificate of Horticulture from Ryde TAFE) discussed starting a community native plant nursery.

A business plan was first drafted in February 2009 - written by: Bev and co-authored by Pam Ward (Ryde – Hunter’s Hill Flora & Fauna Preservation Society (RHHFFPS), Steve Papp (FOM Environmental Education Centre), Robbie Renu (Mars Inc), Ryde bushcare volunteers Steve Holmes, David Martin and Michael Crane.

Mission: Through a community native plant nursery & community food garden to provide opportunities for the residents of Ryde and Hunter’s Hill to grow native plants and food plants. And in a fun way learn more about and work towards improving our local environment and creating habitat corridors.

Our vision: To grow a vibrant community nursery and food garden, supported by the local council and community.

From 2009 to August 2010 we lobbied all City of Ryde Councillors and finally in August 2010 the nursery was approved by Council to be at Santa Rosa Park. With a lot of help from Council the land was re-categorised as "Community Open Space" (endorsed by Council Oct 2011) and the Shrimptons Creek Master Plan was updated to allow the nursery.

We received a 2010 NSW Government's Community Building Partnership program (CBP) of \$18,323 which was sufficient to get this project up and running. In November 2011 The Habitat community native plant nursery and community food garden was officially opened by NSW Government MP the Honourable Victor Dominello. This was a fun event to which all local residents and the local community groups related to plants and the environment were invited.



Pam Ward at proposed site for The Habitat at Santa Rosa Park March 2010. Pam is standing on Shrimptons Creek which is a closed culvert at this top end.



Workshop at The Habitat Feb 2016

The science

In 2009 and 2010 we researched small bird habitat and made connections with Sue Stevens (who had completed her research project and thesis on Small Bird Habitat in the Urban Landscape), Steve Anyon-Smith (a bird expert who after many years of observation wrote an article “Habitat protection for small birds in Honeysuckle Reserve, Jannali”) and Kurtis Lindsay (a bird expert who helped with project planning, bird surveys and mapping).

We developed a simple diagram to explain / illustrate the structure and diversity of plants required for small bird habitat havens or islands. With the help of Virginia Bear (graphic artist from Little Gecko) we enhanced this diagram to have more of a visual impact. We also developed a range of printed resources and talks to further explain the concepts.

During 2009 and 2010 we were also doing on-ground works with Hunter’s Hill Council to establish some small bird habitat connections in Riverglade Reserve, Gladesville.

For this work in May 2011 the Habitat Network won both the Innovation Award (joint 1st) and a Highly Commended for Urban Landcare. These were awarded by Sydney Metropolitan Catchment Management Authority as part of their 2011 Regional Awards.

Growing plants

With Bev having been a professional bush regenerator, with experience growing native plants with Greening Australia as a volunteer and independently growing plants for bush regeneration projects,

and with Pam Ward having come from a plant nursery family and gardening background, we had growing skills already at hand. Many volunteers also have wonderful knowledge they share with us and so we are always learning.

During 2012 we started collecting cuttings and seeds from the local bushland with permission granted by both City of Ryde and Hunter’s Hill Council. As habitat for small birds is the focus, we concentrate on growing plants which are specifically suited to small bird habitat and not those that attract larger birds.

Monitoring and bird surveys

The Shrimptons Creek project was conceived in 2012. Mark Cachia and Bev Debrincat undertook a baseline bird survey on 15 April 2012 – see list below.

Sightings near The Habitat and along the creekline are recorded on an on-going basis if significant, ie new or target species.

Photo points were established in January 2012 and a set of photos taken. Also some of the birds and animals seen at that time were photographed.

Photos are taken of every planting day.

We carried out another comprehensive bird survey in Spring 2016 – see list below.

In April 2012 - 12 superb fairywrens and zero white-browed scrubwrens were recorded, with additional birds present on RMS land but not included in the survey. In 2016 - 8 superb fairywrens and 6 white-browed scrubwrens were recorded excluding RMS land. In 2017 after RMS and Council contractors cleared lantana and blackberry only 4 superb fairywrens and 4 white-browed scrubwrens were recorded – and noted no small birds present on RMS land. Note in January 2012 a photo was taken in Booth Reserve of a red-browed finch – this species has not been sighted since.

	Superb fairywren	White-browed scrubwren	Red-browed finch
Jan 2012 - photo			1
April 2012 - survey	12	0	
August 2016 - survey	8	6	
2017 July to 2018 April - observations	4	4	



Red-browed finch at Booth Reserve near Epping Road - January 2012

NB red-browed finch has not been recorded in surveys. White-browed scrubwrens and superb fairy-wren have been recorded. These are the target species for this project.

Grants

In February 2015 we received funding of \$1000 from Greater Sydney Landcare Network to produce introductory brochures for engaging the neighbours, who back onto Shrimptons Creek, and Habitat Network stickers.

Annually Johnson Controls Inc (JCI) have provided funding of \$1000 to help with bush regeneration at Greenwood Park and have also volunteered their time for either doing a half day's weeding or planting.

Community Engagement

Utilising the introductory brochures and with a native plant in hand from 2015 through to 2016 we door knocked all properties that back onto Shrimptons Creek. When the resident was home we explained the project. If not at home we left the brochure and plant at the front door.

Before each planting we door knocked the next strip of houses from where we left off the previous time and we invited them to the next planting. For each subsequent planting we then letterboxed all other neighbours previously door knocked and if we had collected an email address we emailed an invitation.

The following table shows numbers of houses door-knocked.

Location	East side of creek	West side of creek	Existing members	Date door knocked	Added to Shrimptons email list
Kent to Epping	26	5	0	2015-05 or 2015-10	9
Bridge to Kent	27	23	0	2015-05 or 2015-10	3 (1 reg vol now)
Quarry to Bridge	29	31	9	2016-03 or 2016-04	Total now 33 from door knocks and from plantings
TOTAL all		141	9		

Letter boxing

- For 1st planting day – Aug 2015 – door knocked Kent Road to Bridge Road east side
- For 2nd planting day – Nov 2015 - letterboxed Epping Road to Kent Road to 500 residents (except those being door knocked) with help from Greenwood Park bushcare volunteers and Council plus Council organised sausage sizzle – this included many houses outside of target area to encourage new bushcare volunteers
- For 3rd and 4th – March and April 2016 - door knocked remainder of residents and letterboxed all other target audience residences.

After each planting we add new local volunteers to our planting volunteer email list for future contact.

Shrimptons Creek small bird habitat plantings

Plantings have included planting of habitat havens or islands using 100 plants per haven.

Habitat connectors of 3 to 5 *Hakea sericea* or a *Melaleuca lineariifolia* or a *Syncarpia glomulifera* have been planted by various groups of volunteers from The Habitat.

- In July 2013, November 2013, April 2014 *Melaleuca lineariifolia* and *Syncarpia glomulifera* were planted in the upper section between Quarry Road and Bridge Road on the eastern side of the creek.
- April/May 2016 some clumps of 3-5 *Hakea sericea* were planted in the upper section between Quarry Road and Bridge Road on the eastern side of the creek and also between the Greenwood Park plantings and Epping Road.
- 2017 small groups of volunteers from the nursery including a corporate group and work experience group from House With No Steps undertook in-fill planting and some weeding in the 2 sites near Bridge Road, also some in-fill planting in the north garden area of Flinders Park and within Santa Rosa Park. These activities are continuing into 2018. A small habitat island was planted near the nursery in 2017 and is being extended in 2018.
- Follow-up plantings of dense areas and *Hakea sericea* connectors are still needed all along the project area. Council will also ask the contractors looking after ELS Hall and Booth Reserve to plant some *Hakea* protective habitat when contracts recommence in July 2018. Some plans are also in place for 3 new habitat havens for preparation and planting in 2nd half 2018.

Habitat Havens or islands planted with 100 plants

These are planting events promoted with the community surrounding Shrimptons Creek.

- August 2015 planting at Greenwood Park just to south of pedestrian bridge – 10 volunteers attended
- November 2015 planting at Greenwood Park to the north west of the pedestrian bridge – 16 volunteers – 2 from target area and joined Greenwood Park bushcare group
- March 2016 planting at Greenwood Park next to Kent Road – 8 volunteers – 2 from target area
- April 2016 planting at Tindarra Reserve next to Kent Road – 17 volunteers – 3 from target area
- August 2016 Johnson Controls Inc under supervision of Council planted a large 200 plant habitat area in ELS Hall on west side of creekline.
- November 2016 planting at Tindarra Reserve south end - in-fill planted previously planted area (planted by Tony Finnemore) – 11 volunteers – 1 from target area.

Species list of plants used in habitat havens or islands and as connectors

Connectors:

Hakea sericea

Melaleuca lineariifolia

Habitat havens or islands:

Acacia echinula

Acacia linifolia

Acacia longifolia

Acacia suaveolens

Acacia ulicifolia

Bursaria spinose

Dianella caerulea

Dianella longifolia

Einadia hastata

Glycine clandestina

Hakea salicifolia

Hakea sericea

Hardenbergia violacea

Kunzea ambigua

Lambertia Formosa

Leptospermum polygalifolium

Leucopogon juniperinus

Lomandra longifolia

Melaleuca lineariifolia

Melaleuca nodosa

Micrantheum ericoides

Ozothamnus diosmifolius

Phyllanthus hirtellus

Platylobium formosum

Platysace lanceolate

Pomax umbellata

Trachymene incisa

Woolsia pungens

Xanthosia pilosa

Zieria smithii

Bird surveys and fauna sightings

Note January 2012 – Red-browed finch photographed in Booth Reserve.

Bird survey April 2012

Australian black duck
Australian magpie
Buff-banded rail
Crested pigeon
Eastern spinebill
Grey butcherbird
Indian myna
King parrot
Laughing kookaburra
Magpie-lark
Noisy minor
Pied currawong
Rainbow lorikeet
Sacred ibis
Sulphur-crested cockatoo
Superb fairywren

Bird survey October 2016

Australian magpie
Buff-banded rail (2 adults with 1 chick)
Channel-billed cuckoo
Crested pigeon
Dusky Moorhen (with chicks)
Eastern rosella
Galah
Grey butcherbird
Laughing kookaburra
Noisy minor
Pied currawong
Rainbow lorikeet
Rock dove
Sulphur-crested cockatoo
Superb fairywren
White-browed scrubwren

Birds sighted at or near The Habitat

Australian magpie
Buff-banded rail
Common koel
Crested pigeon
Figbird
Grey butcherbird
King parrot
Little lorikeet
Masked lapwing
Moorehen (Flinders)
Noisy minor
Pied cormorant (Talavera Rd)
Pied currawong
Pink galah
Rainbow lorikeet
Red-browed finch (Booth Reserve near Epping Road)
Sacred ibis
Sulphur-crested cockatoo
Superb fairywren
White-browed scrubwren (ELS Hall)
White-faced heron

Other fauna

Brush-tail possum
Diamond python - reported as 2 metres or so long, near Bridge Road
Lace monitor (Talavera Road)
Long-necked turtle
Water dragon
Water skink

Frogs at The Habitat

Crinia signifera
Eastern striped marsh frog
Peron's tree frog

Native bees at The Habitat

Blue-banded bee
Carder bee (African)
Neon cuckoo
Teddy bear bee
Tetragonula carbonaria

Photos



Quarry to Bridge July 2013 –
volunteers from The Habitat



Quarry to Bridge near Bridge Road April
2014 – volunteers from The Habitat



Epping to Kent - Greenwood Park planting
August 2015



Epping to Kent - Greenwood Park planting
November 2015



Epping to Kent - Greenwood Park near Kent Rd planting March 2016



Kent to Bridge - Tindarra Reserve near Kent Rd planting April 2016



Tindarra Reserve – work experience team planting November 2016



1 indicates location of March 2016 planting site at Greenwood Park
2 indicates location of April 2016 planting site at Tindarra Reserve