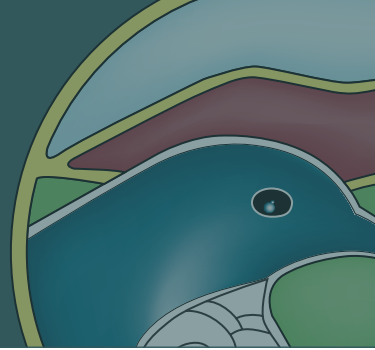


# Report from the Waikato Biodiversity Forum

held in Hamilton on Thursday 27 November



## Urban Ecology - What do we know? Where to from here for biodiversity in Hamilton City?

### Purposes of the day

- Work together to maximise outcomes for biodiversity in Hamilton City
- Network and share ideas with others who undertake conservation work
- Discuss where to from here for biodiversity in Hamilton City
- View sites of biodiversity enhancement in the city

### Introduction

The Forum began with people gathering for the field trips at Seeley's Gully, Managaiti Gully and a private gully with a QEII covenant. People had the opportunity to view and discuss the restoration work being carried out at these sites.

On returning to the hall the participants were invited, with afternoon tea in hand, to provide their insight into the inspiration they draw upon for their restoration work, the challenges of the work and what they have learned so far about urban restoration that could be useful to others. Around 70 people attended across the day with some coming after work.

### Presentations

Professor Bruce Clarkson, University of Waikato set the scene for urban ecology by detailing the significance of urban ecology. More than 50% of the world's population live in urban environments and in NZ the figure is 87%. Urban Ecology is an emerging, interdisciplinary field that aims to understand how human and ecological processes can coexist in human-dominated systems and help societies with their efforts to become more sustainable. Bruce presentation covered the benefits of urban ecology including the cooling or ameliorating heat islands e.g. urban microclimates, the developing co-use corridors–greenbelts to allow wildlife to disperse between habitats while provide a network of walkways, improving

community cohesion – working together for the common good; the civic pride facilitates neighbourhood green and vice versa and carbon storage – sequestration to counteract greenhouse gases.

Catherine Kirby University of Waikato gave a very information presentation on the importance of epiphytes to ecological restoration. She described the canopy flora as being a home for fauna such as weta, lizards, Archey's frogs and native falcon. Hamilton is missing 45% of the 29 epiphytes and vines species that occur in the Waikato. Options for restoration include placing seeds on the trees and re-introducing shrub epiphytes in baskets made out of chicken wire and weed matting. This work resulted in a 75% survival rate after 2 years and 64% flowering in 2014 of tawhiri and karo. Don't forget to keep looking up? More information on epiphytes can be found at [www.nzepiphytenetwork.org](http://www.nzepiphytenetwork.org) including how to obtain Catherine's Book "Field Guide to NZ's Epiphytes, Vines and Mistletoes".

Alice Baranyovits University of Auckland gave a really interesting presentation on kererū within fragmented urban landscapes. Factors impacting on kererū in these landscapes including human disturbance which reduces foraging time and increases nest abandonment and pollution from light, noise, air etc. In a Wellington study the presence of food and other kererū and control of possums were factors in habitat selection. It's important that there are a selection of trees, such as miro, puriri and taraire to provide year round berries and safe water sources and safe roosting/nesting sites. A high threat to kererū is window strikes including both houses and cars. Window strikes were the highest reason for rehabilitation in a study carried out in Auckland in 2013. Stickers can be obtained to place over car and house windows to deter kererū flying into them. There is more information on [www.kererudiscovery.org.nz/](http://www.kererudiscovery.org.nz/)



Alice Baranyovits presentation on kererū



Chris Smuts-Kennedy, consultant, gave an interesting presentation on what is happening around Cambridge. Tui are now breeding in town, more bellbirds are visiting in winter and there are a few kereru around. There is an occasional kaka sighted in winter, falcons have bred in the town and long tailed bats have been detected. At Chris's place there have well over 70 native plant species and 60 exotics providing food for birds, almost year-round nectar and fruit from spring to late winter, dense tree/shrub plantings for cover, tui breeding for the last 4 seasons, bellbirds visiting every winter, fantails, silveryeyes and grey warblers breeding, vegetation being managed specifically for invertebrates and a productive home garden and orchard. He encouraged people to push the boundaries by valuing 'wasteland' and guerrilla gardening.

Neil Fitzgerald, from Landcare Research outlined findings gathered from his and John Innes's research on bird fauna in Hamilton City. Tui are increasing due to the Halo project but bellbird and kereru are rare. Neil detailed tui research results which included data that tui moving widely (20 km) in winter, have poor nest success, increase in numbers when ship rat and possum control is undertaken and have dispersed to nest in Hamilton after 4 years. Unfortunately the bellbird translocation failed to re-establish the birds. They are likely to visit and re-establish in the city (given ongoing pest control), but will take time. Waiwhakareke Natural Heritage Park will provide a core buffer in the future which will provide "spill over" of bird species into other parts of the City.



Discussion time-challenges and lessons

## Brightest Ideas for Hamilton City- Where to from here.

- Get more epiphytes and climbers into the trees in the city
- People power and community engagement
- Inspired to get kereru back into Hamilton
- Pest control pest control pest control
- Educate Council staff about planting for biodiversity e.g. more rewarewa
- More strategic planting for year round biodiversity especially food sources
- Guerrilla planting less lawns roadsides (not on blind corners/powerlines)
- Bank on banksias to fill the gaps
- Get information on pest control out there for everyone not just gully restorers - big push for this
- Experiment-you never know what you might discover
- Get young people involved
- Lobbying Councils for more support for biodiversity, research the Councillors you are voting for and meet the candidates
- Use window alert UV stickers for kereru
- Citizen science is important
- Plant natives and exotic (banksias) - birds don't mind especially for winter nectar
- Urban ecology is part of a global effort think global/act local network
- Gardening is contagious so it is worth getting a few people to start in the right way as it will spread
- Think about invertebrates and effect of insecticides
- More plants for gullies
- 500 green areas could be connected together to create the world first urban national park
- Need to keep at it
- Sharing ideas like Rex's gully walkways
- Have local and territorial authorities on board-their support is crucial in a quicker restoration solution
- Practical observation that you can bring back nature to own backyard
- Support Tamahere Community Nursery and more Wayne Bennetts
- The talks on epiphytes and kereru remind you of complete ecosystems and restoring to that level

## What has inspired you in your restoration work? Something from today or from your own work

Bringing back birds and provide food for birds, protecting our local treasures

Reconnecting on a spiritual/physical level to land/ water

Sentimental/memories created and leaving a legacy, leave better than when found

Stop erosion/erosion protection

Having a vision-long term changes

Sense of community if you are part of a group and the feel good factor of contributing

Knowing that each small step will contribute to the big picture

Seeing people "light up" when they get positive feedback on their work

Encouragement from authorities-assistance/leadership

Brings different cultural parties together and the social aspect

Involvement of children in conservation and restoration-they are so passionate and enthusiastic

People having the courage to make a start on what seems to be an impossible dream

Amazing projects by amazing people in amazing places-the dedication of people ability to persevere

Interest in what others are doing

Challenge of growing

Passionate about natural heritage and childhood experience exploring bush/wildlife

Urban gullies once farmland now replanted

Contribute a space to the community-a place of solace

Other peoples gardens are a source of inspiration

Family planting history

Richard Louv's book "The Nature Principle"

Physical and psychological benefits of environmental rehabilitation –both energetic and relaxing

Moral responsibility to ensure survival of native flora and fauna

Love of bush and the way walking through the bush makes you feel

Regulation creates an opportunity (e.g. stream fencing on farm-planting)

Transformation-reward/motivation

Successful projects witnessed are inspirational to starting and sustaining

Hearing dawn chorus and seeing bats and geckos

Passionate motivated people who know they are making a difference

Working toward making a bigger difference-connection of small projects has a huge impact

Power of collaboration-opportunities in urban areas ("Pairs of Hands")

Once you start, the good work spreads

The conservation legends out there

Creative, energising, seeing success, payback is huge, reach is from global to personal

Perspiration –inspiration

Generational inspiration –grandparents to mokopuna

Community pride and empowering value-do something for world/soul

Intrinsic value doesn't have to be justified or quantified by economic values

Restoring bush –restoring us

Gullies make city tolerable

Inspired by challenge of global warming –ability to act locally

Sense of community through restoration making friends and knowing neighbours

So many people involved and lots of experts initiating restoration

Worthwhile seeing what others have done –is an inspiration



Bellbird Neil Fitzgerald



## Challenges What are the key challenges facing restoration projects and particularly urban restoration?

If you do too much and can't keep up with maintenance (don't overdo it)

Pest animal keep coming back Hard to get all of them

Finding enough people and ongoing

Sustaining volunteers -keeping enthusiasm up

Lack of leadership-no drivers

Continuity of people and expertise and funding and succession planning

Funding especially for boardwalks, access tracks, timber equipment and operational costs

Put in work now then someone destroys/changes it e.g. neighbours dumping garden rubbish

Sometimes HCC doesn't do any work on their land even though neighbouring private owners are

Weeds weeds weeds

Going to the right agency person in the first instance

Getting multiple owners together to get motivated

Rules

Urban development bridges and motorways

Making a start (where to start) and making a plan

Planting the right species to ensure regeneration underplanting in dry shady conditions

Education

Pest animals including cats (the great debate)

Looking after the wetlands

Sustainability e.g. weed control

NEIGHBOURS!!/boundaries

Values/opinions conflicting

Structures e.g. walkways, council requirement

Urban vandalism

Using ecosourced plants

Keeping the interest e.g. properties sell change owners

Access in gullies

Health and safety changes coming up, volunteers

Motivating volunteers-increase it social and environmental knowledge

Lack of community support or perception that someone else will do it i.e. council responsibility

Political and peoples level of commitment

Barriers to restoration methodology-on the ground planting etc, monitoring and lack of sharing and citizen science

Physical access-terrain and ownership

Getting youth involved

Council may need more relationship building with groups

Aging work force-succession

For groups-How to evaluate progress and achievement?

Having the big vision and a plan

Organic vs herbicides

Reliance on gullies for high storm water flows

Inspiring leaders-motivators

Setting a vision/goals-consensus decision e.g. exotics for birds

City planning subdivisions gifting of gullies but no requirement for restoration

Lack of understanding about biodiversity

## Lessons: What you have learned so far about urban restoration that could be useful to others

You really need a good plan before you start

Knowing which agencies can help-knowing the person to contact

Cities-lots of people in a small area-can harness this quite easily more resources more profile

Having a nursery and being able to grow the plants (ecosourcing)

Lessons from Mangaiti Gully-having a regular event/working bee e.g. first Sunday every month

Visit other restoration areas and network

Use Moira -she can help start up groups, get help with contacting people and putting together a plan

Get to know agency people

Look at opportunities to introduce invertebrates, birds, rock hotels for lizards

Look at people's backyards

Research techniques for eradication of different weeds

How to set up environmental trust legally and easily

Need a Green Plan for Waikato

Establishing tree canopy cover as quickly as possible

Knowing the best way to clear exotics/weeds scorched earth policy vs plant as you go

Get Councils to recognise value of restoration

Find good advice from the start

Value of collaboration (different skills experience)

Up front planning is key

Mentors for new individuals/groups

Build good relationships

Enjoy/have fun/celebrate successes however small

Involve community/youth

Good communication/shared vision

We need a broader vision-bigger pictures-for the city to filter down important in urban planning

Multi-value propositions- restoration can be ecological/ recreation/cultural

Well established plantings inspire-so you see what you can achieve

Use art to accentuate natural features

Regular meetings, good communication and regular working bees are important

Find out what motivates people –the hook to get support

Take on manageable chunks –focus, 1m2 each time and quality

Look for reference sites and visit similar properties and projects

Keep positive

Practical ways of coping with weeds-making it easier

Collaboration is the key

See project as a long term project

Constant care-3yrs minimum attention

Need good access to the site-acquire surplus off cuts of timber

When going gets tough get inspired by others

Inspire others by what you are doing–be visible

Tap into your networks –become part of a restoration network e.g. the Waikato Biodiversity Forum

Council offers support e.g. plants and advice

Use networks-for wider communication (awareness of what different groups use), media, social media target your audience

Working with others is an important aspect

Clear idea of what you are aiming towards

Good working team-plan for succession

Good leadership

Two or three people who are really committed

It's a social event have food and FUN

Celebrate successes

Ownership of neighbourhood by people for people

Documenting what you are doing –photos

Monitoring is important

Good things take time- Be patient and realistic

Work with what you've got

Start with your best area

Respect different culture of values

There was a wealth of feedback on the questions discussed especially lessons learned. The raw data is available which would make valuable reading. And full ppt presentations are also available from [Moira m.cursey@xtra.co.nz](mailto:Moira.m.cursey@xtra.co.nz)



Epiphyte Catherine Kirby

