



Piako

Catchment Forum

What's Happening in the Piako Catchment... December 2020

What's new with the Piako Catchment Forum

Meet our new Co-ordinator

There's been a flurry of activity at the Forum as we have welcomed on board Vicky Kelly as our new co-ordinator.

Vicky has worked with many community led not-for-profits, including the Manawaru Heritage Centre.

She has a special interest in environmental advocacy and permaculture.

We look forward to 2021 and all it may bring.



Wishing you all a very Merry Christmas and a Happy New Year We hope you all have a safe festive season!

And remember to conserve water this summer so there is plenty for all!



Working Bee at the Metcalfe Kahikatea Forest Fragment



Volunteers ready to go!

Photo courtesy of Jude Tisdall, PCF

Richard and Carol Metcalfe welcomed an amazing group of 18 volunteers onto their land for a big working bee. As part of the 'Connecting the Waitoa' project, this is the second site the Piako Catchment Forum has started working on. The project aims to restore and reconnect, as much as possible, the remaining fragments of lowland kahikatea forest. Only 1% of the original extent now remains and this is quite degraded due to drainage, stock access and introduced pests.

Native Seed - What to collect now...

Coprosma rotundifolia



Large bushy shrub with wide-angled twigs bearing pairs of small rounded slightly hairy and often purple-blotched leaves.

Leaves 15-25mm long x 10-20mm wide, covered in small hairs, rapidly tapering to a sharp tip. Fruit orange or red on very short stalks.

Propagation technique

Easy from fresh seed and semi hardwood cuttings. An attractive shrub to small tree that does well in dappled light.

Should be planted in a free draining but moist, fertile soil.



Information thanks to www.nzpcn.org.nz

Photos courtesy of Jude Tisdall, PCF

The Metcalfe Waharoa kahikatea forest fragment is close to Hawes Bush and this winter the cluster of trees in between Hawes Bush and the Metcalfe's first QEII covenant will be replanted with a mix of canopy species, to fill the gaps, and understory species.

Volunteers, at the working bee, included people from Friends of Hawes Bush, Waikato Weedbusters, Transition Matamata, Waikato Regional Council, Forest and Bird, QE2 National Trust and of course Piako Catchment Forum, led by our own Steering Group member Jude Tisdall.

Carol made some beautiful muffins and fruit cake and Jude pulled off a half decent Greek orange syrup cake!

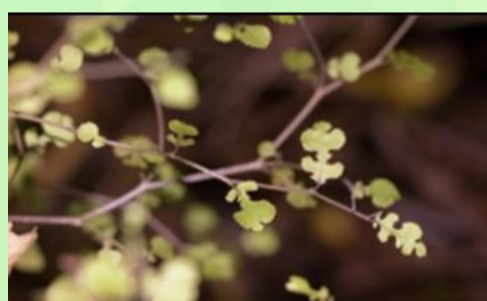
One of the species found was a juvenile specimen of *Streblus heterophyllus* or turepo. This small tree would have been typical of the small leafed trees found in the lowland kahikatea forests but is now quite uncommon.

Jude and her crew had managed to collect some *Streblus heterophyllus* seeds last summer, along the Waitoa. They have been slowly germinating over the last few months and they now have 21 little plants from a few mm high to 10cm. That doesn't sound much but very few nurseries offer a species like this which is only used for restoration of these special forest ecosystems.



Volunteer Raewyn behind a juvenile *Streblus heterophyllus* or turepo

Photo courtesy of Jude Tisdall, PCF



Up-close look at the *Streblus heterophyllus* or turepo and it's violin shaped leaves.

Photo courtesy of www.nzpcn.org.nz

Nationally threatened bat species discovered in Morrinsville!

Morrinsville might best be known for its cows - both the bovine and fiberglass types. However, surveys undertaken during COVID-19 lockdown have confirmed our town also hosts a precious piece of native biodiversity, the long-tailed bat (pekapeka whiore roa in Māori). As with the big community effort to clean up the river walk along the Waitakaruru stream, this discovery is an unexpected positive outcome from the Covid-19 lockdown.

Just before lockdown, Dr. Norman Mason (Morrinsville resident and ecologist at Manaaki Whenua -Landcare Research) borrowed five acoustic bat monitoring devices from the Waikato Regional Council for a science project with Te Kura o Waharoa. These devices record echolocation calls bats make as they fly. With nowhere to go except public spaces within walking distance and thousands of dollars' worth of monitoring equipment sitting idle, he decided to check whether there were any bats living in or around Morrinsville.

Tall forests next to waterways are considered prime bat habitat, by providing corridors for movement through the landscape and access to abundant food (flying insects). This is especially true in areas like Morrinsville where most of the native bush has been cleared. Since previous generations in Morrinsville have either retained or planted big trees along our main waterways - the Piako River and Waitakaruru Stream - there was good reason to believe that's where bats would be found if still present.

But this was a pretty big "if". No bat surveys had been conducted in the Piako catchment (except at the base of Kopuatai Peat Dome) in the 20 years since Dr. Kerry Borkin (who is from Manawaru, and now works for the Department of Conservation) completed a Waikato-wide survey as a post-graduate student. There was grave concern that local bat populations in the Piako might have died out during this time, since bats are vulnerable to predation and competition for roosting sites (holes in trees) from possums and ship rats.

Dr. Mason found bats are permanent Morrinsville residents rather than mere visitors. At least one potential roost tree has been identified and there are likely others in the wider Morrinsville area. With the help of two other volunteers (Aimee O'Sullivan and Teresa Simons), surveys are ongoing at six sites in or around Morrinsville to get an idea of how bat activity changes across seasons and in response to weather.

After the initial success of the Morrinsville surveys, and once lockdown restrictions lifted, he broadened the study to eventually span the majority of the Piako and Waitoa rivers, the Waitakaruru Stream and eastern tributaries of the Waikato River. Bat activity has been recorded at almost all sites, except in parts of central Morrinsville, north of the Kopuatai Peat Dome and the northern-most Waikato site.

"Although we know that bats are still present in Morrinsville and the broader Piako catchment, there's still a lot we don't know, including basic facts like the rough population size or trends in population size.

"Getting this information requires specialised expertise in catching and handling bats, as well as a lot of time and effort! The hope is that we will partner with bat experts in the near future to get more information on the health of our local bat populations."

In the meantime Dr. Mason is exploring options to involve the Morrinsville and broader Piako communities in giving our bats a helping hand. Two bat-focussed events are planned in the new year.

The first is for the landowners who generously provided access for surveys. This is intended as a "thank-you" for their support and as an opportunity to share practical ideas for keeping down rat and possum numbers.

The second event will be open to the community and focussed on beginning discussions on community-wide pest control efforts in Morrinsville. An off-shoot of the Predator Free Hamilton group has been set up in Cambridge, and this could provide a useful example for Morrinsville residents to follow.

Anyone interested in finding out more about bats in the Piako can e-mail Dr. Mason: masonn@landcareresearch.co.nz

For more information about the Piako Catchment Forum have a look at:

www.piakocatchment.co.nz

www.facebook.com/PiakoCatchmentForum/

Or email:

piakocatchment@gmail.com



The Long-Tailed Bat
Pekapeka Whiore Roa

Photo courtesy of the Department of Conservation