



TĀWHARANUI OPEN SANCTUARY SOCIETY INC.

Newsletter 68. March 2019



A tūturiwhatu (New Zealand dotterel) named YO-YO protects three newly-hatched chicks, a sight that is only seen within hours of hatching, as the chicks soon get too big to crawl under her. In fifteen years of monitoring tūturiwhatu it is the first time this precious moment has been captured on film at Tāwharanui.



Three chicks in various stages of development. They all fledged.

Tāwharanui Open Sanctuary is a joint project with Auckland Council.



Coming events

Sunday in the Park: meet at the woolshed at 9.00am (wear sturdy shoes/gumboots; bring a bottle of water) BBQ lunch is provided.

- 7 April 2019
- 5 May 2019
- 2 June 2019: public Planting Day

Volunteer Days

Tuesdays 9am The Nursery team meets at the Tāwharanui nursery.

If you would like to join this dedicated team,

Contact: Ray Blackburn 425 4995. magsandray@gmail.com

Thursdays 9am A small group of volunteers meet at the Vol Hole for interesting track and maintenance work.

Contact: Roger Williams 425 9127. ropeworth@gmail.com

Volunteer checking (to be done in your own time) See page 11.

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Chairperson's Comments

Our new Information Trailer had a timely arrival with record visitor numbers to the sanctuary due to a run of hot summer days and the sealed road. Thousands have viewed it and learnt about the unique birds in New Zealand and why we have to protect them. The range and numbers of international visitors around the Christmas period was indeed surprising. They came from Oregon, South Africa, Ohio, Croatia, Korea, Wales, England, France, China, Germany, Poland, Lithuania, Serbia, Philippines, Canada, Brisbane, Perth, Sydney, Italy, Afghanistan, Russia, Borneo, Finland, Ireland, Colorado, Kentucky, Paris, Marseilles, Hamburg, Hungary, Bali, Czech Republic, Holland, Sweden, Chile, Taiwan, Austria, Florida, Japan and Macedonia. It was certainly most interesting and fun meeting such a wide range of people. Both local and international conservation visitors at the Trailer identified the birds they might see in the Park. Some happily stopped later to tell us what they did see. A big thank you to the volunteers who helped to inform our visitors about Tāwharanui. Now that the main holiday season is over, school children are arriving for school camps in the Park and the Auckland Zoo Education Programme will be using the Information Trailer to teach about conservation efforts.



Each TOSSI chairperson over the years has been involved with overseeing various stages of the Sanctuary's development: Hamish Alexander, building the pest-proof fence; Les Cave, the restoration of wetlands; Paul Williams, building the nursery; Steve Palmer, further nursery development and the introduction of rare plant species; Ngaire Wallen, up-grading the bird viewing hide and the entrance koru. And now with this excellent conservation education resource, we have moved forward with our *Education and Awareness Programme*, which I have inherited on the TOSSI agenda.

As well as many TOSSI volunteers putting in hundreds of hours into the Sanctuary, the birds themselves have been busy this season, nesting, laying eggs and bringing up their young. The takahē attempted a nest but no chicks have been seen, while tūturiwhatu (NZ dotterel) and toutouwai (North Island robin), pāteke and ōi (grey-faced petrel) have had a great season.

Recently I was walking out near the Huia Dams in the Waitakere Ranges, and I realised that after hearing the wonderful birdsong at Tāwharanui, I had forgotten how silent our forests are. However, the little riroriro (grey warblers) kept heartily warbling away. It made me wonder how they survive the rat onslaught, when other birds have suffered? The questions are: Does the riroriro technique of hanging a pear-shaped nest make it difficult for rats to get into the nest? Does hanging the pear-shaped nest on the ends of tiny branches high up in the trees make it difficult for rats to even get to the nests? Are their eggs and chicks so small that they don't even make an appetiser for hungry rats? And why were they hanging pear-shaped nests before rats even arrived in New Zealand? Riroriro have short lives of only five to eight years and for no obvious reason they are devoted host parents for the pipiwharau (shining cuckoo) who lay an egg in their nests. They have learnt to adapt and have a brood of chicks before the pipiwharau arrives back from the Solomon Islands. The riroriro's classified conservation status is protected endemic. It seems that they are successful survivors and have to be admired for their tenacity!

Alison Stanes

Open Sanctuary Senior Ranger Update

What a cracker of a summer! The Park saw some of its busiest days in memory, such as Waitangi Day when it seemed half of Auckland went to the beach. This was replicated across most of our regional parks as well as many local beaches, proving the importance of parks and open spaces to our sense of wellbeing, community and connection with nature, as a playground and treasured resource.



A long dry summer is great for beach goers and snorkelers enjoying clear water in the Marine Reserve but it can be harsh on the land-based flora and fauna. Some of our trees are starting to show signs of stress and we all look forward to rain soon, preferably at night!

These dry summer conditions were top of our minds as we went through the experimental reintroduction of giant kokopu to our waterways. Lower inflows into streams and higher water temperatures can reduce dissolved oxygen (DO) essential to fish survival. In-stream data-loggers have been tracking the DO values of the Waikowai Stream and this will later be correlated with the fish movements as tracked by their implanted PIT tags which pass by the in-stream antennae. Spare a thought for our various summer rangers, research students and interns who have all contributed to lugging around the 80kg of battery and charger required every day to drive these fancy electronics. The ultimate aim of this is to assess the suitability of our streams to support these native fish.

We farewelled two takahē recently. Both had been found a week or so apart unwell and displaying symptoms that included a lack of balance and clumsiness. Thanks to the many excellent observers who work on the Park both were noted and called in. We have a close relationship with the NZ Centre for Conservation Medicine (NZCCM) at Auckland Zoo and both were whisked away for expert care.

Tamahunga, born 2013, was one of our 2014 founders of the Tāwharanui population and named by Ngāti Manuhiri after their significant local maunga. He was picked up on 5 February in a very weakened state and half his normal weight. After a month of supported care at the NZCCM hospital along with blood tests, x-rays and last week a CT scan, we are none the wiser as to what ailed this bird and thus unable to direct treatment to any particular cause. The issue is fundamentally neurological and Tamahunga remained unable to balance or support himself and lacks awareness of his limbs. The difficult decision to euthanise him was made and we hope a post-mortem will shed light on what the issue was, as 11 birds remain on site that could be at risk.

Our other poorly takahē, Nokomai, has made a reasonable recovery of balance, limbs and other functions, though remains underweight. A re-examination of the genetic value of this bird was made and she ranks very highly. Consequently she has been recalled to Burwood who are best placed to maximise her reproductive potential to secure these genes. She was flown to Queenstown but could not land (well, her plane couldn't) and was flown back to Auckland for another attempt the following day. An extraordinarily well-flown flightless bird!

All of this has been a sobering reminder of our responsibility as kaitiaki (guardians) of these precious and vulnerable taonga.

Matt Maitland

Tamahunga remembered

My memories of Tamahunga are of a big strong healthy male bird, enjoying a mid-summer wash in Ecology Stream; a fluffed up bird, wings out and head low, charging across Lookout Paddock to assert his dominance over Kiko and Frana. On one memorable occasion when we came across him beside the Ecology Stream track, it was as though he had suddenly realised he was by himself, alone. He gave the very soft 'mmm' call several times, then with no answer, a slightly louder call with pitch raised a little. Still no answer, his call became very shrill and much louder. Still no answer, so he let rip with several calls that echoed through Ecology Bush from end to end, which could only be described as primeval. All this and he's only 8 metres away. I tell you, the hairs on the back of my neck stood up. Mel and Martin, who were with me, were speechless. My only disappointment at the time was that we didn't have a recorder operating.

Tamahunga, you will be missed but not forgotten — we only need to look to the north and see your namesake, Mt. Tamahunga, to be reminded.

Kerry McGee
Takahē Monitoring Team

Haere ra, farewell Tamahunga

As one of the original Ecology Trail Trio shown below, he is on the right with Kiko (left) and Frana (centre).



Summer activities in the Park



A productive day in the Nursery with 18 TOSSI volunteers and 20+ campers to help.

Right, Susan Gibbings shows campers the Nursery after their morning's work.

This feedback came from one of the campers, "We helped out yesterday at the nursery and I would like to say thank you very much for your guidance and patience with our children. You were all great. You all do such great work and the Sanctuary is amazing. Thank you for all you guys do. The Park is by far our favourite place to go." Stacey Balich.



In February, Auckland Zoo began its education programme for schools. School groups come in for a packed 24-hour stay (including camping overnight) in the Park. Activities include monitoring animal activity; learning how to use GPS equipment; identifying birds; learning about conservation and pest control. Above left, TOSSI's Education Coordinator, Marguerite Vanderkolk, explains to a group of students how the predator fence works.

Part of the programme includes instruction from the *Experiencing Marine Reserves (EMR)* organisation, teaching students snorkeling skills, fish identification and about marine ecology.

Right, a group of students fully kitted out in wetsuits, flippers, masks and snorkels, head out to explore the marine life around the rocks near the campground.

How did the 4th rarest duck in the world end up at Tāwharanui ?

The pāteke (New Zealand brown teal) is a small brown dabbling duck, smaller than any of the ducks on the Park (see photos on page 12). In non-breeding seasons, the female, male and juvenile, look alike. In breeding plumage, males will display a chestnut coloured breast and a greenish coloured head, along with a mallard-like, white stripe on each side of their flank. The distinctive whitish narrow ring around each eye helps to identify them. Their head, face and throat are a rich mottled brown. They can be seen along the Ecology Bush stream, Mangatawhiri wetland and the lagoon in pairs or a small flock. The main breeding season for pāteke is from July to November. They usually lay five-six cream-coloured eggs and the incubation period is 27-30 days. A seriously endangered duck, it was absent from most of the mainland, except a relict stronghold at Mimiwhangata in Northland.

In 2006 funding was secured from Wetland Care NZ from money provided by Banrock Station Wines to provide for wetland restoration materials used for propagating plants at the new TOSSI nursery, and for the proposed translocation of pāteke. In August of 2007, a sponsorship workday and lunch was held with more than 100 supporters in attendance. Representatives from the Pāteke Recovery Group who raised the birds, evaluated the habitat. Digger work was completed to enhance the habitat by providing shallow ponds and the base for a walkway. Auckland Council was 100% in favour of this proposed translocation and encouraged TOSSI to take the lead.

The release day finally came on World Wetland Day, 2 February 2008. 24 pāteke were released into wetlands at Tāwharanui Regional Park. With the Minister of Conservation, Auckland Council Chairman, Mahurangi College kapahaka group and several other honoured guests on the stage, the stars of the show were quietly waiting in boxes behind the crowds. Volunteers had put their heart and soul into countless hours of planting and track construction, building boardwalks, bridges and raising plants in TOSSI'S nursery, to make this day a reality.

Between 2008 and 2010 a total of 124 pāteke were released in four cohorts. For the first few years the pāteke generally stayed in the park, but gradually reports were coming in that some had dispersed and were observed in Christian Bay wetlands and estuary area, and the Omaha Wastewater plant and storm water ponds. A few outliers were reported from Mahurangi River in central Warkworth and Mansion House Bay on Kawau Island. Today, we have three distinct populations almost equally distributed, and most years, these are increasing. The three groups are considered a meta-population, each mostly separate but with interchange of birds and genes between each.

In 2013, Tāwharanui was invited to participate in the National Pāteke Flock count. Matt Maitland put together guidelines for volunteers to follow when monitoring. Monitors fill out field sheets after each count. Counts are to be carried out in February, and heavy winds and rains are to be avoided. Ducks don't mind the rain but volunteers do and streams can be dangerous when water is rushing over the banks. Safety first, at all times. This year marks the seventh survey (see Flock Count data below) with over 27 volunteers participating. New volunteers are always welcome and you will be paired up with an experienced monitor. It is not a "walk in the Park", as there is some bush-bashing to get through to the streams and wetlands. Gum boots are a must!

Sharon Kast

Location	2013 22-Feb	2014 10-Feb	2015 12-Feb	2016 12-Feb	2017 17-Feb	2018 21-Feb	2019 13-Feb	2020
<u>Tawharanui</u>								
Mangatawhiri/wetland/lagoon	5	6	7	7	17	21	15	
Camp wetlands/roadside drains	0	0	0	0	0	7	3	
Hayter's wetland/Lagoon stream	2	1	7	0	0	0	0	
Anchor Bay road drains	0	0	0	0	0	0	0	
Waikokowai (Ecology) Stream/stock dam & gullies	13	16	20	16	22	8	21	
Omaha Heights (Hubbard's) pond and stream	12	2	7	16	11	13	25	
<u>Total Tawharanui</u>	32	25	41	39	50	49	64	0
<u>Other Sites</u>								
Christian Bay/wetlands, lodge area	*0	22	31	10	36	17	37	
Omaha Storm water ponds	*0	21	31	16	26	38	15	
Omaha Wastewater	0	0	0	7	32	30	25	
<u>Total Other Sites</u>	0	43	62	33	94	85	77	0
<u>Total All Sites</u>	32	68	103	72	144	134	141	0

Summer in the Park



Record crowds came to enjoy Tāwharanui on Anniversary Weekend and Waitangi Day. Overflow areas for parking had to be opened up near Anchor Bay.



The crowds provided a captive audience to experience our new Information Trailer. The Trailer was positioned at Anchor Bay 32 times from 26 December - 24 February. An estimated 1700 people stopped to look at the Trailer and talk with the TOSSI guides who assisted with the Trailer over the summer season. Visitors from over 30 different countries were recorded. Responses and feedback from the public was overwhelmingly positive.



Young and old alike were intrigued by what they saw through the peep-holes: models of the nests of kiwi, takahē, ōi and kororā (little blue penguin).



It wasn't just the public who appreciated the Information Trailer. Several experts also had a close look.

Left, Tim Lovegrove, Senior Regional Advisor (Fauna), Auckland Council, who colour bands all the toutouwai (robin) chicks at Tāwharanui, insisted that the toutouwai in the diorama should have a colour band as well, for the sake of authenticity.

They may look like school boys up to mischief (right), but in fact James Ross and Chris Gaskin (front), both Hauraki Gulf seabird specialists, were inspecting the ōi (grey-faced petrel) nest and egg in one of the Trailer's peep-holes and gave their approval. Together, over the last seven years, they have encouraged ōi to nest back on the mainland and the birds have now developed a very successful colony at Tāwharanui.



Left, Kevin Parker, an independent Bird Ecologist who has lead many bird translocations to Tāwharanui, checks out the kiwi nest. He lives near Tāwharanui, so he keeps a close watch on the birds.... and the surf!

When the Trailer was not set up at Anchor Bay, it was located at the campground, opened up in the evenings by the Camp Hosts, for campers to have a look at.

TOSSI Guides, Sally Richardson and Alison Stanes, gave talks and guided night walks for campers over the summer.

Right, campers listen to Sally giving one of her talks.



Tūturiwhatu (New Zealand dotterel) take time to adapt

Tūturiwhatu had millions of years with no predators to sniff them out. Life was easy back then and they are taking a little time to adapt. For this reason they only do well on sites where predators are managed. Tūturiwhatu have learnt to nest out in the open so that they can see predators coming. There is a **shortage of males because they sit on the nest at night and can't see predators approaching.** Tūturiwhatu have long lives, sometimes living up to 22 years and they faithfully return to the same nesting territories year after year.

At Tāwharanui this season, three pairs adapted to improve their situations. A juvenile pair who were first-time nesters, learned from their experience last year when they nested right beside a beach access track at Anchor Bay where hundreds of beach-goers trundled by. The three days they took to set up the nest were most likely quiet until a sunny weekend when to their surprise the human invasion began. Naturally they were on and off the nest regularly as people walked within metres of their haven causing the eggs to fail. But they sat on the nest optimistically for 58 days instead of the normal 30 when the eggs should have hatched.

This season the pair returned to the same site but hid their nest so cleverly away from the track that none of the three tūturiwhatu monitors found it until two chicks appeared in the north-facing plantings fenced off from the beach crowds. The summer sun on the bank heated the sand so much that not even people could walk on it with bare feet. The solution was the A-frame shelters built by Sam Ross for a school community project to shelter chicks from black-backed gulls. The shelters provided much needed shade (see photo on page 9). The mother bird was seen standing on top of a nearby trap box surveying the scene as her two chicks sheltered in the shade of the A-frame below her. As the chicks grew they moved with their parents to the shade of the macrocarpa trees where the family happily hunted grubs just behind large groups of picnickers sprawled about on the grass in the shade of trees, pagodas and tents close by. When the chicks fledged, the family moved off to the Omaha Reserve sandspit close to the feeding mudflats of the Whangateau Harbour.

Another pair, the female of which is banded Yellow-Orange and nick-named YO-YO, adapted to avoid the heat by nesting half way up a sand bank in a hole abandoned by rabbits. This is the **first time ever at Tāwharanui that tūturiwhatu have nested** where they had no visibility around them. (photo right shows YO-YO outside her burrow). For 30 days the female sat during the day in shade and the male sat at night while monitors watched and waited, expecting a cave-in of sand any moment. Three days after the chicks fledged the bank caved in and completely covered the nest site. This is the only pair this season where all three chicks survived and fledged (see photo on front cover).



The third pair to demonstrate adaptation this season was YR-WG (known as Ear-Wig) and his unbanded partner. Their nesting territory is on the beach at West End just outside the pest-proof fence. Two chicks disappeared one by one, most likely to the black-backed gulls. Then the parents and the last chick also disappeared. Naturally I assumed that the last chick had been eaten by the gulls and that the parents had returned to Whangateau mudflats for a feed before attempting another nest. But three weeks later in the back of the dunes, squashed between two other nesting territories, was YR-WG, his partner and a chick almost ready to fledge. Probably under cover of darkness the parents with a small chick made a desperate walk over a kilometre and moved into terrain with far less food to bring up their last chick away from black-backed gulls. It is said that there seems to be an unwritten rule among tūturiwhatu that **if you have chicks you can cross other's territories, and that is** exactly what happened.

So we can see that in time these small endearing little birds are making efforts to adapt to the new problems inflicted upon them during nesting season. This season Tāwharanui will fledge 16 chicks from 17 pairs which is well above the fledging rates of most other sites.

Alison Stanes



Above, tūturiwhatu (dotterel) chicks found shade under one of the A-frame shelters built for protection from black-backed gulls.



Above, Senior Ranger, Maurice Puckett talks to a group of summer campers who came to watch the newly arrived takahē, Heaphy and Rochfort, being released into their holding pen. There are currently 12 takahē in the Park.



Above, Roger Williams and Sharon Kast, in the Thursday work group lowered the edge boards on the long Thompson Loop boardwalk so that the mower can travel across it to mow the track.



Pacific Discovery volunteers repair a sand ladder under the guidance of Alison Stanes, not knowing that three hours later the same ladder would be used by medics to lift a patient to a waiting helicopter.

In preparation for the summer influx of visitors, the group also constructed large wooden 'traffic islands' which were placed on the dusty road to Anchor Bay, to slow down the cars.

At the first work day of the year, on 3 February, Ali Burt and her granddaughter Mia, were in a group which weeded the drainage swale near the woolshed.



Nursery Report

The Nursery group has been busy filling up all the available spaces in the Nursery with plants for the autumn planting season. Although nearly all the kanuka has been potted up into PB3s, the manuka seedlings have been planted into peat pots and T28s as well. Some of the latter had to be replanted as we had a number of deaths. With the hot weather, we have all appreciated working in the fresh air under the shade of trees, often serenaded by bellbirds.

We were grateful for the assistance of regular campers (up to twenty-nine at a time) in January, friends and relations of Nursery workers in February, and Pacific Discovery students in March. On March 5, over 1300 seedlings were put into PB3s, which was a record amount.

Although the preparation, planting and processing of bread trays, each filled with 20 PB3s, is our main task at this time, other tasks are also completed. Some seedlings are still being pricked out, manuka seeds sifted, sticky seeds de-fleshed before planting, and seeds such as puriri, kowhai and muehlenbeckia are being planted. Everything is growing vigorously with the summer heat and the regular watering.

Only a few more sessions will see the end of the bagging of plants for this year's planting.

Susan Gibbings

Join the Fence Team

We are calling for Predator Fence Checkers.

You would be joining a team of 20 others who work in pairs, one each side of the fence, taking a turn every 10 weeks and choosing a day in the week as rostered, starting from Wednesday through to the following Wednesday. You will be introduced to the procedure of recording your time in the Park, the gear you take on your check and recording your observations. You will then be walking approximately three kilometres over a three hour period, checking the fence which includes the buried skirt, cap and netting; checking that culverts are clear; posts are erect, etc.

This offers a great opportunity to enjoy Tāwharanui Regional Park while ensuring the reintroduced species are protected to the best of our ability.

For more information contact:

Roster Compiler

Richard Taylor

021 102 1065

rb.taylor@auckland.ac.nz

TOSSI on Facebook

TOSSI is on Facebook. You can find us by searching 'Tāwharanui Open Sanctuary Society Incorporated' or using the URL <https://www.facebook.com/TOSSI.NZ/>

Please feel free to post photos and other updates that you feel followers will be interested in. Follow the page to get notifications of upcoming events.

NEWSLETTER CONTRIBUTIONS WELCOME

If you would like to write a brief article about any activities you've been involved in, or an experience you've enjoyed in the Park which you'd like to share, please email it to me: editor@tossi.org.nz
And if you have any good photos of interest, please supply a brief caption and email them to me.

Marguerite Vanderkolk

Editor.

Trapline Volunteers Needed

Trapline volunteers help maintain the network of traps and bait stations throughout the Park. They serve a crucial role in detecting and eliminating pest predators that have somehow managed to get into the sanctuary. Volunteers adopt a line which they usually service once a month. You can do this alone or with a friend to help share the load. The lines vary in length and difficulty: some are physically demanding, others are literally a walk in the Park! Full training and advice will be provided.

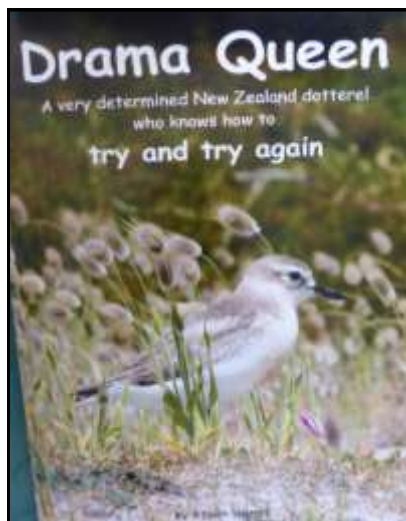
If you are interested please contact
James Ross: jjross801@gmail.com



TOSSI monogram patches are available for sale with black or white surrounds, to sew on garments — hats, shirts, fleeces etc.

Cost: \$15

Contact: Sally 09 425 0161



Children's Book: *Drama Queen*

A delightful story about a tūturiwhatu (NZ dotterel) that lives at Tāwharanui. Excellent birthday or Christmas gift.

Cost: \$20

Contact: Alison 09 524 0291

TOSSI Committee

Chair	Alison Stanes	09 524 0291
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Application form for NEW MEMBERS

Tāwharanui Open Sanctuary Soc. Inc.

Name(s): _____

Address: _____

Phone No. _____

Email _____

Membership fee:

\$20 single membership \$ _____

\$30 Family membership \$ _____

Additional contribution (optional) \$ _____

(Donations over \$5 are tax deductible)

Total amount enclosed \$ _____

Membership as a gift to family or friends:

A gift membership will be sent to you.

Recipient's name: _____

Recipient's address: _____

Please make cheques payable to Tāwharanui Open
Sanctuary Society Inc. and return to:

TOSSI Membership Secretary

PO Box 112

Matakana 0948

You can also pay by bank transfer to:

ANZ 06-0483-0072390-00

The membership name should be clearly referenced if the payee name is different to the membership name, e.g:

Payee	Payment details	Membership
Bloggs, J.	\$20/\$30	Bloggs Family

If making a donation with membership, please reference clearly.

Spotted in the Sanctuary



Getting our ducks in a row!
Volunteers at Tāwharanui have again been involved
in the National Pāteke Flock count.
(see article on page 5)



Left, a well camouflaged forest gecko,
photographed by a member of the public in the
bush at Tāwharanui.

'Moko-piri-rakau' (meaning: tattooed lizard hiding in tree) is the Māori name for the forest gecko which is generally nocturnal but will sun-bask in safe places.

However, gecko in the upper North Island are often active during the day. It is an arboreal species which lives in forest and scrub, in leatherwood and shrub areas, as well as beech forest, mixed broadleaf, podocarp forest, and manuka scrub.

They eat insects, moths, flies, fruit and nectar.



A seed of the rare and endangered pirirangi (mistletoe) was grafted in 2014 onto a totara branch by Steve Palmer (ex-Chair of TOSSI).

In the above photo, a bud can be seen emerging from the right hand end of the sticky seed.

Above right, the bud then developed into leaves.

The photo on the right was taken in January this year shows the healthy pirirangi hanging from the totara branch.

We have no record of how many kisses were enjoyed under this mistletoe on 25 December last year!

Maybe this year...?

