

Shakespear Open Sanctuary Society Inc.



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Shakespear Open Sanctuary Society

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The Park reopened on 1st December to all visitors.

Sossi celebration on 4th December marred by rain, but well supported .

Sossi arranged a celebration for members and volunteers on 4th December which unfortunately was marred by the onset of continuous rain about 11am. The celebration included guided walks starting at the Waterfall Gully pedestrian gate, a display of Jeff Thomson artworks and trading table at the Woolshed and a sausage sizzle under canvas outside the woolshed.

12 hardy souls braved the weather to participate in the Waterfall Gully walks which were abbreviated because of the wet conditions.

A good number of supporters, volunteers and others visited the Woolshed and sausage sizzle.

The opening of the nearly completed new nursery took place under cover at the Woolshed also in view of the inclement weather. At this time speeches were given by Allan Parker – chairman of Sossi and Matt Maitland-Open sanctuary coordinator and a special thankyou and presentation was made to retiring Nursery manager Raewyn French who has led the project since its inception in 2008 (see article below)



Allan Parker presenting Raewyn French with Morris & James plaque

Open Sanctuary Coordinator update

Shakespear Regional Park and Open Sanctuary reopens.

It was a great day on 1 December to officially remove all the 'park closed' stickers and signs and open the gates to welcome back our visitors. Many positive comments were

passed by visitors along the lines of 'it's great to be back'. Thank you all for your patience and support over these last five months, we hope that the changes made via pest eradication will be worth the wait.

Please remember to check your vehicles and belongings for any stowaway pests before visiting. A pest-proof fence and pest eradication allow us to create an open sanctuary; eternal vigilance will allow it to prosper.

Animal pest eradication progress.

The conclusion of aerial baiting in August now seems along time ago. Monitoring the consumption and breakdown of baits on the ground enabled us to be sure that there was a good uptake of bait and that any not consumed have now broken down, enabling the safe return of livestock and park visitors.

This ambitious multi-species pest eradication of course had ten target pest species. The focus of the last few months has been to search for, detect and remove any surviving pests. A ground-based operation servicing some 500 permanent traps and similar number of bait stations and tracking tunnels, has been the front line of this phase of the operation.

Tens of thousands of trap nights have yielded only two male stoats and a single male Norway rat, so we are ecstatic with the success of the eradication programme to date. These traps will continue to be serviced regularly as they also provide our ongoing pest detection network. If you'd like to join our volunteer trapping or tracking tunnel team please get in touch. It's a great way to explore the park and have a lovely walk knowing you're making a great contribution to the park and NZ's wildlife. Full training will be given and there are lines that suit most abilities and time commitments.

Rabbits, hedgehogs and mice were always considered to be among the most challenging of the ten pests to eradicate, based upon experience with similar projects elsewhere. At this stage we have found no sign of surviving mice or hedgehogs. Long may this last. A trained hedgehog detection dog and handler has visited the park and found no sign. Further follow up visits are planned. Dogs proved to be the most effective tool for detecting hedgehog survivors during the similar eradication programme on Rangitoto and Motutapu Islands. No mice have as yet been detected from the tracking tunnels or the fiddly mouse traps set inside each of the rat and stoat trap boxes.

Rabbits have been followed up using a trained pack of beagles and handler Don Thompson. Don and his dogs have covered many hundreds of kilometres over the sanctuary searching all available territory. Experience, cunning and lateral thinking are all needed to both find and remove any remaining rabbits, especially as they get socially isolated and the grass cover takes off due to the absence of stock. A total of fourteen rabbits have been removed and we think we may have removed the last one. We know that the rate at which rabbits can breed, especially in the absence of predators, that any survivors will quickly multiply, so it is imperative that we keep on keeping on, and make absolutely sure that none remain.

Ecological Recovery of Shakespear Open Sanctuary

With pest animals gone we can now look forward to the ecological recovery of Shakespear Open Sanctuary. What might the future look like?

The first phase is to be sure that we have indeed achieved our aim of eradicating the deadly threat that mammalian pests pose. A minimum of twelve months after the completion of aerial baiting must pass before we can be sure the open sanctuary is pest free.

During that time we can expect to see the recovery of some of the resident wildlife. Based on experience at Tawharanui Open Sanctuary and elsewhere, we will probably see significant increases in the numbers of birds such as kereru and tui. Alongside this will be a proliferation of invertebrates and seedlings, good indicators of healthy habitats. Locally resident threatened species such as NZ dotterels have already successfully fledged chicks at Shakespear this year. Before predatory mammals were removed from Tawharanui, the local dotterels struggled to produce any young at all.

The next phase is the 'wait and see' period, during which with patience and keen anticipation, we watch for the changes. Species such as bellbird, pateke and kakariki we know regularly visit Shakespear from nearby Tiritiri Matangi. We expect them to become more abundant and to breed very successfully. Bellbirds were absent from Tawharanui before pest animals were removed in 2004. In early 2005, bellbirds arrived en masse from nearby Little Barrier/Hauturu and quickly became firmly established. Within five years bellbirds had become the most numerous native bush birds at Tawharanui, and the population was robust enough to allow 100 birds to be removed in 2010 for translocations to Waiheke, Motuihe and Hamilton.

The 'waiting and seeing' phase may be quite protracted, so we will need to be patient. As this is the beginning of what we hope will be "forever" for wildlife at Shakespear, there is in fact no hurry, although of course we are all keen to see rapid recovery and change. Grey-faced petrels colonised Tawharanui four years after pest eradication and they are now slowly but surely increasing. Importantly they demonstrate the potential for seabirds to recolonize naturally. It will be years however, before these and other petrels become abundant enough to be major drivers of ecosystems.

Some species can be quite cryptic and thus difficult to determine if they are present or not. We surveyed Tawharanui for geckos reasonably thoroughly before the pest control and found none. However, after five years without pests, the same site surveyed by the same method yielded a healthy population of forest and green geckos. On Tiritiri Matangi common gecko were discovered some fourteen years after pests were removed. At Shakespear we have already witnessed the discovery of the shore skink, previously unknown in the park, in just a few short months since pests were removed (see reptile article in this newsletter).

The third phase of ecological recovery is the active reintroduction of absent species. The fundamental premise of any reintroduction is that we know the reason for their demise in the first place, and in most cases this is a combination of predation and habitat loss. Once limiting factors (such as pest mammals) have been removed, we can then consider the return of these species. Early candidates for reintroduction will be those that we know have good prospects but cannot recolonise by themselves, as they are poorly flighted or flightless, e.g. kiwi and whitehead. Success will beget success and in future may allow us to entertain reintroducing more threatened or conservation-dependent species.

The fourth phase will be export from the open sanctuary by both natural dispersal to the gardens and reserves of the Whangaparaoa peninsula and the Gulf islands, and by translocation from what we hope will be robust and secure populations at Shakespear, to other sites where pests are managed or removed.

Each of these phases are not separate, they will overlap considerably over the coming years. Habitat is everything and underpinning all of this is the continuing enhancement of Shakespear Open Sanctuary through volunteer-led revegetation and the maintenance of our pest free status.

Exciting times are ahead. Keep visiting and watching, who knows what wonderful wildlife you might see as we continue to grow.

Kind regards,

Matt Maitland

Open Sanctuary Coordinator

I can be contacted at matt.maitland@aucklandcouncil.govt.nz or 09 426 1200

Shakespear Open Sanctuary – New lizard record.

One of the immediate benefits of the aerial poison application revealed itself within two months of the third and final treatment in early August.

Shore skinks (*Oligosoma smithi*) were identified in the sand dunes at Te Haruhi Bay in a short, sharp survey between 22nd and 29th September 2011. These skinks are not uncommon on North Island beaches and live in suitable habitats in a range from Gisborne around the top of the North Island to Piha on the west coast. However they have not previously been identified at Shakespear despite a series of surveys going back five or six years.

After a live specimen was initially spotted leaving a DoC200 trap box located in the dunes, an array of six pitfall traps were deployed close by this sighting and over the next week, four shore skinks were caught. Since then a further two have been caught and three more observed without capture. These were all adults so have obviously been there prior to the fence construction and aerial poison application.



Shore Skink. photo Chris Wedding

It is thought that, when predators such as rats and mice are present, these skinks are confined to reduced, secure ranges that then limits their activities in foraging for food or seeking out a mate. This then reduces the survival chances of the species and the numbers that can be detected. When the predators are removed they can expand into broader ranges and exist more comfortably and multiply with greater freedom, with enhanced survival chances for the young. An added bonus is that they are then easier to survey. It was known that rats and mice were present in the dunes and campground area so this discovery would tend to bear

testimony to the theory. It is to be hoped now, that these skinks can continue to flourish in expanded habitats free from the predator threat that everyone has worked so hard to achieve.

In modern times there has generally been considered to be nine species of lizards in the mainland portion of the Auckland Ecological Region (AERm), that is, excluding the Hauraki Gulf Islands .

Of these the Shakespear Open Sanctuary now has six – Moko skink, Copper skink, Ornate skink, Shore skink, Auckland Green gecko and Pacific gecko. It is extremely likely that the Forest Gecko is also present in , as yet, undiscovered pockets as this is quite a common species in the North Island. Of the remaining two, the Common Gecko is not as common as it's name implies, but having said that, this species was re-discovered on TiriTiriMatangi in late 2004, some years after the pest eradication exercise on that island. It was first identified from a tracking tunnel print and later positively identified living in fissures over the cliffs. They are now slowly expanding onto the rest of the island. We can speculate that the geology of Tiri cannot be too dissimilar to the geology of the Open Sanctuary cliffs and therefore that the possibility exists for a similar survival scenario for this species.

Only time will tell, but many years elapsed from the eradication of pests on Tiri and the rediscovery of the Common gecko, which only emphasizes the need to proceed with caution particularly with regard to any proposed programme of reintroductions.

The ninth species – the striped skink is secretive, elusive and cryptic and little is known about it. It is believed to be unique



Ornate Skink

in NZ skinks, in that it has exceptional climbing abilities and

spends at least part of it's time in the forest canopy. It may live in the epiphytes that adorn the larger forest trees, where it finds the high moisture micro climate to it's liking. There are only two records in the AERm, as far as I know, so there is little likelihood of us finding the striped skink.



Pacific gecko

Although the discovery of the shore skink is modest in terms of it's rarity it is indicative of the herpetofaunal diversity that

already exists in the Open Sanctuary and is an encouraging portent of the possibilities that lie ahead for us as the sanctuary grows and develops.

Dave Craddock

The Shakespear Native Plant Nursery

In November the ASB Community Trust granted the Society \$8400.00 to help fund the expansion of the SOSSI run nursery.

For those that might not know the nursery is located next to the park office at Te Haruhi bay and is funded, managed and operated by SOSSI. Native plants are grown from seed collected at Shakespear and when ready planted at Shakespear to complete the cycle and restore the bush. All of this is done in accordance with a long-term plan to provide food and shelter for resident and returning wildlife.

In 2008 SOSSI agreed with the Council to setup a small nursery as a trial. The nursery was constructed in 2009 with the help of the ranger staff and was soon producing plants.

Raewyn French managed the project for SOSSI from the start and the trial proved to be a complete success after just one year of operation. Work in the nursery has become a popular activity and every Tuesday Raewyn has plenty of helpers producing 4000 native plants annually.

The successful trial soon led to an agreement to expand the nursery to handle 13,000 plants and meet the requirements of the annual planting programme and the long term revegetation plan.

We started fund raising straight away and received a grant from SkyCity and a financial contribution from the Auckland Council that enabled us to make a start on construction. The grant from the ASB enables us to complete the project.

Raewyn successfully established the nursery and has recently decided to step down as nursery manager and Margaret Chappell has taken up the role. However Raewyn will continue to provide advice and work in the nursery.

Barry Finall has been supervising construction of the nursery expansion and has used his experience as a builder to ensure costs are kept down and standards of work kept high. For example the irrigation system will have sensors that respond to changes in weather conditions and ensure that the young plants get the water when they need it and the sprayers switch off when it rains.

The Council, and in particular, the ranger staff continue to provide us with good support in the nursery and that is appreciated.

For those who enjoy being involved with the full cycle of plant life the nursery will continue to be a satisfying form of voluntary work.

Allan Parker

**Merry Christmas and Happy New Year to all our Sossi Supporters
from the Sossi Committee**