



West Coast Penguin Trust Annual Report, 2021

For my second annual report from the Chair of the West Coast Penguin Trust, I am excited to see success and progress in a number of areas of our work.

A few highlights from last year are as follows and more details are below.

Having been involved in blue penguin monitoring over many years, I was particularly pleased to see the progress on tracking blue penguins supported by the New Zealand Penguin Initiative. We have learned a great deal about the threats to penguins on land over the years and extending our interest into the marine environment with greater rigour will help us better understand the ecology of these smallest of penguins as they forage off the West Coast.

Also with the support of the NZPI, we are increasingly inserting Passive Integrated Transponders, or PIT tags, under the skin of blue penguins in our monitored Charleston colonies. The internal microchip can be read by a special antenna, either a handheld wand or a loop that penguins walk over or under. We hope to install a fixed PIT tag reader soon and that will launch our knowledge to a much higher level as we learn about partner and nest fidelity, returning chicks and so much more. Exciting times for our blue penguin research programme led by Ranger Matt Charteris.

We were all relieved to learn that predation by stoats did not eventuate to the high post mast levels forecast, but we took the opportunity to extend our knowledge about the behaviour of both stoats and tawaki in our three study colonies in South Westland and we have been working with the Department of Conservation to improve predator control in areas where tawaki breed.

Bringing penguin detection dog Mena and handler Alastair Judkins to the coast for a couple of weeks was also a highlight. It was wonderful to see the Vizsla get to work to find traces of penguin scent and help identify and confirm blue penguin presence in some key locations. Several of the schools we work with were fortunate to have Alastair and Mena join them during his time on the coast.

I was also excited to see penguin dissection classes underway with senior biology students in Greymouth and Hokitika, supported by DOC and local vets. I initiated similar classes with Buller High School a few years ago and the value of this kind of hands on work with local species cannot be underestimated. In addition, the work led to participation in a global penguin study – wonderful work from our Education Ranger, Lucy Waller.

Donations, both online and in donation boxes, remain essential to our work. We are hugely grateful to all those who continue to see the value in what we do and support our projects, and special mention is given below to donors. Regular donations are critical to a small organisation like ours and, last year, delayed a little by the COVID-19 lockdown, we launched an annual donation programme, inviting those who wanted to and were able to donate a minimum of \$50 a year.

Our new 'Supporter' programme encompasses other regular donors who contribute monthly and even fortnightly, and we are enormously grateful and honoured to be the recipients of those donations. Although the lockdown created a whole lot of worry for the charitable sector and donations were

impacted as certainty was so severely compromised, advice from those involved in fundraising was to let supporters know that donations were needed. If they could help - marvellous, if they were unable to help - that's fine of course but if people don't know we need financial as well as moral support, how can they help?! Our Supporters receive a slightly different newsletter and they go into an annual draw for a special gift. Details are on our website.

Special thanks go to the match funding sponsors. For the second time, our generous penguin fans promised to match donations raised up to \$3,000. Our supporters took a lively interest and raised over \$5,000 in the three months allowed, which our donors generously agreed to match in full. We are so lucky to have such wonderful people getting behind our work.

Big thanks also go out to those that have our donation boxes available for their customers and clients – the top performers are New World and J's Café in Westport, Underworld Adventures in Charleston and the DOC Visitor Centre at Punakaiki – thank you all!

The other Trustees for the 2020-21 year were Kerry-Jayne Wilson MNZM, Jill Cotton, Robin Long, Marg Costello, Martin Abel, Zoe Watson and I am immensely grateful for all the effort and diversity of experience and views they contribute. We were sad to say farewell to Trustee Leon Dalziel who retired from the Trust after six years of wonderful insight and contribution. We wish Leon well as he shifts some of his volunteer time to focus on a growing conservation project at home on the Coast Road. We are grateful to Dr Scott Freeman, former Trustee and DOC biodiversity manager in Buller, for input as Advisory Trustee.

Our activities for the year are reviewed project by project below.



Reuben Lane, Trust Chair

1. Charleston blue penguin monitoring

Data is a scientist's best friend and the longer we monitor penguins, the more we learn and understand. Our local knowledge will now be part of the bigger picture for New Zealand's blue penguins/kororā. The New Zealand Penguin Initiative has established a centralised database so that all those involved in penguin conservation around the country can contribute data and thus contribute to a better understanding of the state of blue penguins nationwide.

Last year we reported on a poor breeding season for blue penguins in comparison to earlier years and we believe that was related to poor food availability. We hope to work with others to connect annual breeding success with marine conditions in the near future.

Our fortnightly nest monitoring at two colonies near Charleston showed that 2020 was a good breeding year for blue penguins in the area with breeding success up to 85% (chicks fledged from eggs laid). Breeding data along with short foraging trips observed through GPS tracking, suggesting that food was not a limiting factor for the 2020 season.

At localities where disturbance from people and dogs is expected, there was a corresponding lower breeding success (67%) than areas where disturbance is minimal. Both colonies comprise 27 nests, which adds up to around 648 burrow checks during the season.

Our Master's student, Luisa Salis-Soglio, has recently completed her Master's thesis, analysing our monitoring of blue penguin breeding success, and we look forward to seeing the summary and future

papers based on her findings. We are indebted to Luisa and to Kerry-Jayne Wilson for guiding and supervising the project.

2. Other blue penguin monitoring, predominantly in the Buller area

In addition to fortnightly monitoring at the Nile River-mouth colonies above, we checked five other blue penguin colonies in the Buller region twice during the 2020 breeding season, four of them burrow by burrow and a fifth one to gauge the presence of general breeding activity. Not all breeding burrows are necessarily known at these sites and therefore not all breeding burrows are monitored. Results appear similar to our more closely monitored colonies at Charleston with breeding success varying from 63% to 100% across the 19 monitored burrows.

We were delighted to add a canine tool to our tool box last year. Mena, a vizsla, and her handler, Alastair Judkins, came to the coast to survey several areas of interest to us for blue penguins. Mena is the only penguin detection dog in the South Island and is in great demand. Mena and Alastair surveyed areas around Hokitika, Charleston, the penguin fence north of Punakaiki, and from Tauranga Bay to Carters Beach, sometimes in very cold wet conditions. We were encouraged to see plenty of penguin activity below the penguin fence, around Seal Island and Fox River, along Beach Road at Charleston, all around Tauranga Bay and Cape Foulwind and east past Kawau Point to Carters Beach and the 'tiphead' past the airport. Penguin sign was less than expected on the north side of Hokitika, which we attribute to the continued coastal erosion and high sand cliffs there. We aim to repeat this doggy nose led survey every two years and build on the knowledge we achieved last year.

3. Cape Foulwind

The penguin, shearwater and fairy prion colonies adjacent to the Cape Foulwind Seal Colony Walkway remain a focus for the WCPT. There are few colonies of sooty shearwaters remaining on mainland New Zealand due to predation by mustelids, but they continue to nest at Cape Foulwind and, along with fairy prions, on nearby Wall Island.

Mustelid trapping and speakers playing sooty shearwater and blue penguin calls have been key to the Trust's management activities in the area. Monitored sooty shearwater burrows have increased from 2 in 2015 to 16 active monitored burrows in 2020. Despite our efforts, and in particular the trapping efforts of our Cape Foulwind Ranger, Gerald Freeman, it appears that very few sooty shearwater chicks have fledged between 2015 and 2020. A sample of blue penguin breeding in the area are monitored each year and it would appear numbers have remained stable since 2010. In a summer evening visitors can see a few sooty shearwaters circling overhead before crashing into the flaxes where they breed, and they may be able to hear blue penguins calling from the foreshore scrub.

Gerald took a step into retirement during the year and we thank him for all his dedication and wish him well.

The seabird calling speaker system has now been removed to be relocated to another area in the future and we continue to review the best way to support penguin and other seabird populations in this area.

4. Coast Road penguin fences

We are thrilled to report that a new penguin fence was built in Hokitika in time for the 2021 season. In an extension of their blue penguin management plan to protect penguins during the ocean outfall pipeline construction project on the north edge of Hokitika, Westland Milk Products wanted to do more to protect penguins in the area and used their contractor to complete the new fence. Penguins in that area will not be able to get onto the road or railway and will even have new areas to nest as WMP rehabilitate the construction site with an extensive planting programme.

The three fences erected between 2012 and 2015 along those bits of the Coast Road where most penguin road-kills occurred continue to remain effective with no road-kills reported from those areas since the fences were built. Before the fence was built, 6-8 penguins a year were being killed on the road in those areas. We are very grateful to Waka Kotahi NZ Transport Agency who are kindly providing \$5000/year for fence maintenance, and to the West Coast Network Outcomes Contract Team, primarily Fulton Hogan and WestReef, for keeping an eye on the fence and some maintenance tasks.

5. Blue penguin foraging study

Again with the help of the New Zealand Penguin Initiative, GPS trackers were attached to several penguins for a day or two to track their foraging movements. With greater success in 2020, 11 tracks were obtained and all trackers recovered. The NZPI have created a new platform to store and share data for each group undertaking penguin research in New Zealand and the results of the 2020 season tracking, including mean dive time and maximum dive depth, can be viewed via our website.

In time, this data will be analysed in relation to marine influences including currents, climate events and commercial fishing, and linked back to our breeding success monitoring.

6. Education programme

The past year has been an exciting one with visits to several schools by penguin detection dog Mena and handler Alastair Judkins, penguin dissection classes with senior biology students including work on a global penguin nasal mite study, work on the second edition of our educational resource book and sharing our penguin education story with the Oamaru penguin symposium along with continued work with more schools in the region.

Education has been a growing component of our work since our inception in 2006. Giving children an understanding and appreciation of penguins and their environment is an excellent way to help them develop an enduring love for nature. Those life long values start with understanding and connecting to nature and our programme does that through everyone's favourite, the blue penguin or kororā.

Building and strengthening our relationship with teachers is key and we are honoured to be working with many wonderful and committed teachers across the region.

We also need to thank grant making bodies: the ANZ Staff Foundation, the Sargood Bequest, the West Coast Community Trust, the DOC Community Fund, Community Organisations Grant Scheme, Pub Charity, Buller District Council's Community Grants and many donations to keep this enormously important and valued programme going.

7. Awareness and outreach

Another major component of our work is sharing our message, raising awareness of issues that could adversely affect penguins and seabirds, building relationships with those that can help and collaborate, and seeking support for all that we do to protect the coastal and marine ecosystems in our region.

We maintain a website and facebook page, issue bi-monthly newsletters, present talks and attend events and markets where we can chat to members of our West Coast community.

A major achievement last year was the erection of warning signs at most beach access points across the region, encouraging dog owners to control dogs for the benefit of wildlife. The project was the culmination of work with District Councils and with DOC but is also the first step of a project that seeks first to raise awareness, then improve local rules or bylaws so that they are effective where awareness is insufficient to protect penguins and other coastal wildlife.

With coastal erosion increasingly on everyone's radar, it is important to be thinking of penguins when coastal rock protection is proposed. We were invited to provide comments and advice for two projects and as a result developed a set of principles that could help the regional council consider resource consent applications for such works.

We know coastal erosion is cyclical, but we also know that the climate crisis means more stormy weather – bigger and more frequent storms that will result in erosion as we saw in ex-cyclones Fehi and Gita in particular. Climate change brings changing marine conditions and that can severely impact penguin and other seabird foraging. Storms also impact visibility and reduce foraging opportunities that way as well as cause slips that could wipe out Westland petrel colonies. The Trust therefore took the opportunity to support measures to mitigate climate change through the submissions process on the recommendations of the Climate Change Commission.

With the yellow-eyed penguin dangerously close to extinction on the mainland, we also supported the creation of marine protected areas of the south east coast of the South Island.

Closer to home, we provided expert advice to the regional and Grey District councils and others regarding the dangers of lights to Westland petrels in relation to a proposal to mine on the Barrytown flats.

8. Tawaki pre-predator control project.

With a widespread mega mast during summer/autumn 2018-19, DOC advice was that stoat numbers would peak during autumn winter 2020 – as the Fiordland crested penguins or tawaki were breeding.

Our research to better understand the threat posed by stoats was therefore ramped up to include tracking tunnels, stoat lure dispensers with cameras to monitor activity, cameras on tawaki nests as well as annual breeding success monitoring introduced in 2019. Tawaki Rangers Catherine Long, Andre de Graff, Polly Hall and Sarah Kivi carried out the season's work led and supported by Trust Ranger, Matt Charteris. The three remote locations have been selected to enable greater understanding of different predator control methods.

We found that the predicted stoat predation of eggs and young chicks (pre-crèching at 21 days) did not occur. The impact from stoat predation seen in 2017 at Jackson Head was not repeated. It is believed that the stoats did not prey switch from rodents to tawaki due to a sufficient supply of rodents still being available in the forest and foreshore areas. Despite the 2020 tawaki breeding season not being compromised by stoat predation, DOC has accepted that tawaki eggs and young chicks are susceptible to stoat predation and will endeavour to include tawaki colonies in their landscape scale predator control programmes.

Breeding success at our three study colonies found that 14 nests monitored near Knight's Point succeeded in raising 14 chicks to crèching stage, 25 nests at Jackson Head raised 22 chicks (88%) and 24 nests at Gorge River raised 20 chicks (83%) to crèching stage.

As further analysis is carried out on our camera imagery in relation to breeding success, results will be posted on our website.

We're indebted to the Wellington Zoo Trust and the Birds NZ Research Fund as well as donations from our supporters for ensuring that this project can continue and respond with greater effort when required.

9. Other Tawaki work

Although our focus is on the West Coast region, we know that wildlife do not observe boundaries! We therefore connect with and support research that will help the tawaki population and their conservation as a whole.

During the 2020 year, our valiant Trustee and Tawaki Ranger, Robin Long, was back in Stewart Island again, assisted by Simon Litchwark, to survey remote Pegasus Bay by kayak. They found 54 previously unknown tawaki nests and she noted that their preference for such rough coastlines in Stewart Island makes most of the population impossible to survey. The thinking is that there may be several hundred nests scattered around the coast.

Robin was supported on this trip by her mother, also a tawaki ranger, Catherine Long, knitting and selling beautiful possum merino penguin beanies and donating the profits from sales of her book 'A wife on Gorge River' to cover expedition costs. Our thanks also go to Aurora Charters for the ride to and from Port Pegasus and kayak loan by Phil Bradfield.

We maintain a close connection to and interest in the work of The Tawaki Project, now focussing their efforts on tawaki nesting in Milford Sound. A major step forward for that project and understanding the foraging habits of the species was achieved as they developed pengu.com, a tiny camera not much larger than a AA battery that could be attached to the back of a tawaki. The Tawaki Project is the first to focus on the ecology of tawaki, using GPS tracking to learn about foraging, travel before and after moulting, and discovering that winter migration takes tawaki thousands of kilometres to the south west of New Zealand.

10. Seal Island shag monitoring.

Despite being the most common New Zealand breeding shag, there has been very little research on the endemic spotted shag. Trust chairperson Kerry-Jayne Wilson has monitored a breeding colony of spotted shags on Seal Island at approximately monthly intervals since 2011. The number of shags using this colony has declined since 2017. Later this year, after ten years of observations, Kerry-Jayne will write a paper on population changes and the breeding cycle of these shags.

11. Seal Island seabird survey and restoration project

Trapping to prevent rats or stoats reaching Seal Island has been continued and traps have been obtained to extend this soon. We are enormously grateful to Trustee Margaret Costello and husband Jim for steadfastly maintaining the trapline over the past few years. In addition, self-resetting traps were installed on the island as a back up to continue the protection for sooty shearwaters, red-billed gulls and white-fronted terns that nest there.

12. Westland petrels

The Trust is less involved directly but remains connected (through interest and Trust affiliated field scientists) and supportive of the work to protect Westland petrels at their breeding colonies in the hills immediately south of Punakaiki.

We are delighted to see funding from the Conservation Services Programme (CSP) for new conservation projects led by DOC to better understand and protect Westland petrels. The CSP is delivered by DOC's marine species team, focusses on adverse effects of commercial fishing on protected species, and is paid for by levies on fisheries.

Lights - street lights, and lights on buildings or vehicle headlamps - remain one of the biggest but most readily addressed threats on land and we continue to advocate for lights to be reduced, aimed down or turned off in areas and at times where petrels, particularly juvenile petrels, could be at risk. We applaud both the efforts of the Dolomite Point Redevelopment Project team in ensuring that lighting in and around the new visitor centre at Punakaiki will not adversely affect Westland petrels and the initiative by Waka Kotahi NZ Transport Agency to switch off street lights in Punakaiki during the most critical time of year.

Other threats include fisheries bycatch both in New Zealand and South American waters, the loss of breeding habitat caused by storms, destruction of burrows by goats, and major potential threats due to pigs or dogs entering the colonies.

13. Upskilling Trust staff and trustees

Although this annual report predominantly covers our work during our financial year to the end of March 2021, a couple of things are worth mentioning that happened since then including our attendance at the Oamaru Penguin Symposium. The event is usually biennial and was held over from 2020 due to the lockdown.

Several of our team were able to go over to Oamaru in May to make the most of presentations covering the latest in the world of penguin science and conservation as well as invaluable networking. We were proud to see Trustee and Tawaki Ranger, Robin Long, present on her tawaki survey of Pegasus Bay and Education Ranger, Lucy Waller, present the background and her approach to our education programme. There was plenty of interest in both and we are talking to other blue penguin conservation groups as to how to best share our educational resource with them.

Our two newest Trustees, Martin Abel and Zoe Watson, took time out to attend an excellent community governance workshop back in November, arranged by Development West Coast. Other Trustees received this excellent training, presented by Westlake Governance, in 2017, so this was a very useful opportunity to bring Martin and Zoe up to speed and for them to present key messages back to the Trust as a whole as an important refresher. As a result, we have re-visited our vision, mission and operating strategy with those elements in mind.

14. Trust board meetings

The Trust board again met four times during the financial year, taking the opportunity to build in zoom capability with the help of the relatively central and well equipped venue, the Cobden Anglican Church, thanks to Vicar and IT whiz, Tim Mora. Using zoom has been useful in enabling Trustees to participate when in distant parts of the country or harbouring cold and flu bugs.

As we've noted before, running the Trust - the manager, the accounts and the meetings for example - can be the most difficult aspect to fund so we remain very grateful to DOC and funding from the DOC Community Fund to help cover those essentials so that we can fundraise for other areas of work such as penguin research and education.

15. Conservation leadership

While the Trust has as its vision 'West Coast seabirds and their habitat are healthy and thriving' and our focus is on the conservation of penguins and other seabirds and work to achieve that including through community awareness and education, we are the only community conservation organisation that covers the whole region. We know that other groups are contributing to our vision through their own species or area focussed projects and, with our 15 years of experience and useful skill set, we recognise the opportunity to play a small part as a conservation leader for the region.

In 2018, we presented the first Community Conservation Symposium with a conference day at Shantytown and field trips and workshops at various sites.

Support for that event has prompted us to plan for another in winter 2022 and we have secured funding from the DOC Community Fund and Lottery Environment and Heritage Fund to keep event fees to an absolute minimum.

Thanks to our Trust Team

Patron

Craig Potton MNZM

Trustees

Reuben Lane (Chair)

Kerry-Jayne Wilson MNZM

Jill Cotton

Robin Long

Margaret Costello

Martin Abel

Zoe Watson

Dr Scott Freeman, Advisory Trustee from DOC

Manager Inger Perkins

Rangers Matt Charteris, Robin Long,
Gerald Freeman, Lucy Waller,
Catherine Long, Sarah Kivi, Andre
de Graaf and Polly Hall

Accounts Karen Grant

Website and IT services

Leon Dalziel of Baby-e Website Design

James Kim

Appendix 1. Publications and reports from the Trust or under the Trust by-line

WCPT person in bold

Refereed papers and book chapters

Waugh, S.M.; Barbraud, C.; Delord, K.; Simister, K.L.J.; Baker, G.B.; Hedley, G.K.; **Wilson, K.-J.**; Rands, D.R.D. 2020. Trends in density, abundance, and response to storm damage for Westland Petrels *Procellaria westlandica*, 2007-2019. *Marine Ornithology* 48: 273-281.

Long, R.; Litchwark, S. 2021. A survey of Fiordland crested penguins/tawaki, (*Eudyptes pachyrhynchus*): Northeast Stewart Island/Rakiura, New Zealand, September 2019. *Notornis* 68(3).

Conference Presentations

Long, R. Tawaki population surveys, Stewart Island/Rakiura. *Presentation to 12th Oamaru Penguin Symposium*, 6 May 2021

Waller, L. Penguins connect children to nature, conservation and ecology. *Presentation to 12th Oamaru Penguin Symposium*, 6 May 2021

Submissions

Perkins, I. Proposed South-East Marine Protected Areas, 31 July 2020

Perkins, I. Climate Change Commission Recommendations, 9 June 2021

Wilson, K.-J. Westland petrels and the proposed Barrytown J.V. Ltd mine, 2 June 2021

Popular articles

Wilson, K.-J. 2020. Database of NZ penguin colonies. *Birds New Zealand* 25; 7.

Public talks

Wilson, K.J. The world of penguins. Carters Beach Community Association, Carters Beach. 17 March 2021.

Wilson, K.-J. Westland petrels. Punakaiki, 7 and 8 May 2021.

Perkins, I. West Coast Penguin Trust, who we are, what we do and latest news. Greymouth, 11 May 2021.