



West Coast Penguin Trust Annual Report, 2018

Once again the 2017-18 year has been a busy one for the West Coast Penguin Trust, continuing most of our pre-existing projects, completion of some and the start of others. Funding the Trust is an ongoing challenge, as it is for all community groups, especially so for those on the West Coast given the economic challenges our region faces. Seeking and acknowledging donations, applying for and reporting on grants takes up an inordinate amount of our manager's time. We continue to investigate options that may reduce our dependence on grants and donations but, so far with limited success.

During the financial year ending 31 March 2018, we have received project support as below;

- Further support from the Department of Conservation's Community Conservation Partnerships Fund. This fund directly supports many of the projects listed in the body of this annual report. Without the support of this fund we would be unable to carry on as a Trust thus, directly or indirectly, the Community Conservation Fund makes possible all those projects.
- At sea tracking of blue penguins in the Buller area: JS Watson Trust (Forest and Bird) with additional support from Museum of New Zealand Te Papa Tongarewa.
- Education, supporting schools and youth groups to use and apply our "Blue Penguins and Other Seabirds" resource and some community events: DOC, Scotlands Te Kiteroa Fund, the West Coast Community Trust and a Buller District Council community grant, plus earlier funding from The Sargood Bequest.
- The Community Conservation Symposium, to be presented by the Trust in June 2018, has been made possible with grants from DOC, the Lottery Grants Board (Environment & Heritage), and The Sargood Bequest.
- Fiordland crested penguin projects have been supported by DOC, Taronga Conservation Society, Wellington Zoo Trust and Greenstone Helicopters.
- Essential blue penguin monitoring and maintenance of the penguin protection fence: generous sponsorship from Mont d'Or Mining.
- New seabird leaflets have been updated and printed with the support of The Lion Foundation.

We are enormously grateful to all those mentioned above and to many others, through grants, donations or hosting donation boxes, for their generous support of our work, and many of which are listed on page 8 below.

Trustee Scott Freeman resigned as from the 2018 AGM due to his increasing workload at DOC and family commitments. Scott's quite unobtrusive wisdom, his advice and knowledge were greatly valued. We accepted his resignation with great regret. Scott will continue to help out when asked. Jenny Chandler was our part time Buller ranger for 2017 but due to work commitments is unable to continue this role. Thanks so much Jenny for your valuable contributions.

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

1. Charleston monitoring

The main study colony at the mouth of the Nile River was monitored every two weeks from 16 July 2017 until the last chick fledged and the first moulting adults were present on 30 December 2017. Most burrow monitoring in 2017 was carried out by ranger Jenny Chandler with Kerry-Jayne Wilson filling in on a few occasions when Jenny was away on other work.

In 2017 one or two adult Blue Penguins were seen at least once in 39 of the available burrows or nest boxes and one or two eggs were laid in 23 of those burrows (Table1). At least one egg hatched in 18 burrows with chicks fledging in at least 14 burrows. In two other burrows a chick probably fledged but we could not ascertain that with certainty. Just one pair managed to fledge both their chicks.

Table 1. Results of the burrow monitoring at the Nile River Blue Penguin colony, Charleston, 2017.

	2017	2016
Burrow occupied by adult/s	39	
Burrow in which eggs were laid	23	19
Burrow in which eggs hatched	18	
Burrow in which 1 chick fledged	13	8
Burrow in which 1 chick probably fledged	2	
Burrow in which 2 chicks fledged	1	2

Breeding success during the 2017 season was better than in 2016 but still lower than that in early years of this study when we could expect nearly half the pairs to raise two chicks.

Most colonies in the Buller Region are slowly declining. The key land-based threat is not stoats; uncontrolled dogs are still a problem in some colonies, notably in the Charleston and Punakaiki River areas. Some marine based threat may be contributing to the declines observed and we hope that our current research tracking the birds at sea using tiny GPS units will provide insights into the marine based threats. We hope to write up the data collected during the last 13 years for publication within the next 12 months.

2. Other Buller blue penguin monitoring

In addition to fortnightly monitoring in the Nile River-mouth colony, we check the following blue penguin colonies elsewhere in the Buller Region once or twice each breeding season; Punakaiki River-mouth, Bullock Creek, Perfect Strangers, Pahautane and Joyce Bay.

No penguin sign was evident in the Punakaiki River-mouth colony in 2016 or 2017. An uncontrolled dog was observed near the colony prior to the 2016 season and penguin remains found indicate that predation by a dog was responsible for penguin deaths.

At the Bullock Creek colony only three of the nine burrows were occupied by penguins but with a single inspection it was not possible to determine if they were breeding. There had been about five breeding attempts at this small colony prior to 2016. The reason for this decline was not apparent but as the colony is close to town, dog kills and/or human disturbance are likely causes.

Perfect Strangers colony is one of the colonies protected by the penguin fence built in 2014. The penguins nest in amongst jumbled rocks and it is impossible to monitor actual nests. There appears to be a small increase in penguin activity at this site since the fence was built.

The Pahautane colony is also protected by the penguin fence and, like Perfect Strangers, nests cannot be inspected due to the nature and depth of the limestone crevices. Three new rock and cement nest boxes were installed in 2016 hoping that these will be occupied by penguins and breeding success can be monitored. A small cave and other nearby burrows have been visited by penguins but do not yet have penguins nesting there. This colony is adjacent to that bit of highway where most penguins were run over before the penguin fence was built and presumably many of the birds killed had nested in this colony. No penguins have been killed on the highway since the fence was built and we hope that penguin numbers will now slowly increase.

Joyce Bay had 15 occupied burrows in 2017 up from just nine the year before but still fewer than the 35 found in 2008. During the last three seasons, few birds have bred there and there has been little sign of penguin activity leading us to suspect that the number of adult penguins killed by dogs at this once thriving colony since 2008 has been greatly underestimated. Planned sub-division in Joyce Bay will result in increased pressure on birds there.

The Rahui Colony is on private land and for both 2016 and 2017 the landowners asked that we did not disturb their penguins. Anecdotal information indicates that numbers breeding in this colony continue to increase.

Most penguin colonies in the Buller Region are in decline, by far the major land-based threat being roaming dogs although planned land development poses an additional threat to the once thriving Joyce Bay colony. The Truman's colony near Punakaiki has been all but extirpated probably by disturbance during night time visits by tourists from a nearby backpackers. There is a demand from tourists to view penguins but uncontrolled viewing results in disturbance to the birds that tend to then abandon that colony. The Trust is investigating the possibility for controlled paid viewing of penguins.

Those colonies that are protected, Rahui (private land), Perfect Strangers and Pahautane (penguin fence), are stable or recovering.

3. Cape Foulwind.

The penguin and shearwater colonies adjacent to the Cape Foulwind Seal Colony Walkway have been a focus for the WCPT ever since the Trust began. In past years we have worked with DOC revamping the interpretive signs and we manage both blue penguin and sooty shearwater colonies with a vision that numbers will increase to enable public viewing of both species. Shearwater numbers have increased to the point that, on summer evenings, visitors should see a few birds circling overhead before crashing into the flaxes where they breed. From just 2-3 eggs laid each year when management began, in the last three years eggs have been laid in 13-16 burrows annually. Shearwaters are extremely vulnerable to predation by stoats. The Trust maintains trap-lines at the penguin and sooty shearwater colonies at Cape Foulwind and traps are checked fortnightly from late July to April. These trap-lines are primarily to kill stoats to protect the shearwaters and to prevent stoats and rats from accessing predator-free Wall Island just offshore. While we have enabled shearwaters numbers to increase, few if any have successfully fledged chicks. In 2017 we increased our trapping effort adding 10 Goodnature self-resetting A24 traps to the existing traplines, but even greater trapping effort is

required. Motion activated cameras were installed at five shearwater burrows to document predation events, but the video clips are yet to be viewed.

4. Coast Road penguin fences

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. Prior to the fences being built, 6-8 adult penguins were killed there annually. New Zealand Transport Agency have kindly provided \$5000/year for fence maintenance to be carried out by Fulton Hogan and/or WestReef Services.

5. Blue penguin foraging study

Our blue penguin foraging study was funded by a grant from the JS Watson Trust through Forest and Bird and supported in kind and with analytical help from Te Papa. A paper incorporating our tracking studies up to and including 2016 along with similar studies carried out in Wellington and the outer Marlborough Sounds has been published in the New Zealand Journal of Zoology; a summary of the findings and a link to the paper can be found at <http://www.bluepenguin.org.nz/foraging-study/>.

In 2017 we tracked blue penguins at Charleston in August and October. In August we obtained five tracks from three penguins; the birds were feeding up to 150 km offshore mostly to the north-west of the colony with one track looping west then south-west of Charleston. In October we obtained five tracks from two birds that had dependant chicks onshore. Both birds were feeding to the north-west of the colony generally 20-25 km offshore.

6. Education project

Our education ranger, Lucy Waller, has made connections with various schools in the Greymouth and Hokitika area. With the primary schools she is using our education resource developed in 2014 by Zoe Watson. Rather than one off visits to as many schools as possible, Lucy is instead developing on going connections with more intensive programmes at selected schools both in the classroom and in the field, and based upon our resource, over the years expanding this to more schools. This is proving to be more successful at developing conservation awareness than our previous strategy. This year, Lucy has also been exploring ways to connect with secondary schools, and Lucy and Jenny attended the Schools Science Fair in Westport in August.

7. Awareness and outreach

The West Coast Penguin Trust uses penguins to take conservation messages into West Coast homes through our work in schools (see above) and to the wider Coast community through our awareness and outreach programme. Regular updates on our work appear on our website and facebook page with periodic media releases in local newspapers. Where possible, we attend local markets and events. While the sales at these events help offset costs, connecting with West Coast people is our primary purpose at these events. Thus, we favour those events where we connect with locals over those attended mostly by tourists. We attend the summer markets at Fox River two or three times

each season, the annual Punakaiki Petrel (Taiko) Festival market and last year we attended the Grey Street Fare, the Camerons annual market and an Okarito market event.

The Petrel Festival, the Tauranga Bay Conservation day and the Charleston 151 anniversary events provided great opportunities to meet locals and offer talks and field visits. Public talks have also been given by Trustee Robin Long in Hokitika and Chairperson Kerry-Jayne Wilson in Westport.

We are enormously grateful to those businesses that give us donations or make a collection box available. The tee shirts and reusable shopping bags kindly designed for us by Giselle are popular sales items. We reprinted out West Coast Seabirds leaflet and thanks go to designer Jason Blair for his work on this.

To ensure that penguin and seabird habitat is protected and penguins and other seabirds are not adversely impacted by development, we maintain a watching brief for consent applications and management plans.

8. Tawaki pre-predator control project

This project was funded by a DOC Community Conservation grant and the final report on our four years' work is available on the Trust's website: <http://www.bluepenguin.org.nz/wp-content/uploads/Tawaki-report-2018-Final.pdf>.

The project was designed to assess which predators posed a threat to Fiordland penguins in South Westland, using motion activated cameras to record visits to nests by potential predators. The summary and conclusions from that final report are:

1. Nests of Fiordland Penguins were monitored using motion activated cameras for four breeding seasons at two colonies and a single breeding season at a third colony, all in South Westland.
2. The objective was to determine which introduced mammals preyed on Fiordland Penguin eggs, chicks or adults.
3. Stoats were the only introduced mammals recorded preying on Fiordland penguin eggs or chicks, but only in some years with marked differences in the level of predation between our two study colonies. The reasons for the year to year and site to site differences observed could not be determined.
4. Landscape level predator control appears to benefit Fiordland penguins but data to support this is largely anecdotal. Further research is required.
5. Predation by stoats appears most intense in years following masting of beech or podocarps in nearby forests, but more rigorous testing of this is required.
6. Landscape level control of predators immediately following masting in nearby forests appears likely to benefit Fiordland Penguins.
7. Possums, rats and mice do not appear to pose a threat to Fiordland penguins.
8. Fiordland penguins do not perceive any of the introduced mammals present as a threat.

9. The Tawaki Project and Tawaki Coalition

The Tawaki Project (TTP) is led by Dr Thomas Mattern and Dr Ursula Ellenberg, and the close collaboration between the WCPT and TTP has been recognised by us uniting under the banner of The Tawaki Coalition (TTC). The TTC provides both parties with advantages when seeking funding and allows us to more easily share resources and expertise. Both projects share a study site at Jackson Head which has allowed both projects to share logistics saving money for both and reducing the number of fieldworkers at that site. The Taronga Zoo in Sydney and the Wellington Zoo are the initial funders of The Tawaki Coalition, which aims to work together to achieve the greatest conservation outcomes for the species based upon good science.

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 shags at this colony were counted 12 times since 1 June 2017. The colony was occupied each visit up to and including 3 December 2017 but at most just two shags have been present on each of five visits on or after 20 December 2017. The reason for their absence is not apparent but it could be related to the unusually warm seas off the West Coast last summer. Eventually she will write a paper on population changes and the breeding cycle of these shags. This project is not funded by DOC CCPF2 035. Voluntary time on this project amounts to about 24 hours/year.

11. Seal Island seabird survey and restoration project

Seal Island sits just offshore from Fox River and can be accessed by foot at very low tides or by kayak in calm weather. Previous visits by DOC and the WCPT found some nationally rare coastal plants on the island. There are two small sooty shearwater colonies and red-billed gulls and white-fronted terns also nest there. Tracking tunnels indicated that mice are the only introduced mammal present.

A trapline has been established on the adjacent mainland in order to try and prevent stoats and rats accessing the island. In 2018 additional visits will be made to obtain further data on the numbers of seabirds present and extra tracking tunnels will be deployed. We have invited a lizard expert to accompany us to undertake a search for lizards and we plan to have a botanist visit the island to determine the status of any rare coastal plants that may be present.

12. Westland petrel survey

For this project we work in collaboration with Dr Sue Waugh from Te Papa who is leading the Westland Petrel research. The WCPT undertakes most of the monitoring of burrow occupation and breeding success in the smaller Rowe Colony and assists Dr Waugh in the larger Study Colony as required. Annual monitoring of other colonies in the Scotsman's Creek catchment is a priority and the Trust continues to work with DOC and Dr Waugh to achieve this.

13. Cobden Aromahana Sanctuary Project (CASRA)

With DOC, Council and community support, this project is going from strength to strength. The Trust provided material for a series of information panels on penguins and other coastal birds, one of which was taken out by ex-cyclone Fehi and needs to be replaced.

A few blue penguins nest in the area but road-kill and dogs have posed threats to them. The lagoon area has been developed primarily for recreation and new walkways are being enjoyed by dog walkers; most dogs are now on leads. New Council signs proclaim the presence of penguins and we have welcomed consultation from the Council when planning new developments in the area. Meanwhile we continue to contribute to the project as appropriate.

14. Community Conservation Leadership workshop

The WCPT is one of the largest of the West Coast community conservation groups and over the last 10 years we have encountered many of the challenges facing community groups working on the Coast. The DOC Community Conservation Fund has provided seed money for us to run a symposium where experts will present talks and workshops to upskill ourselves and other community groups. This event will be held on 14 June 2018 with fieldtrips visiting a variety of conservation projects the following day. Preparation for this event continues to require a lot of our manager's and Trustees' time, but with presenters confirmed, supporters and sponsors on board and enrolment numbers increasing day by day we look forward to a successful event.

15. Upskilling Trust staff and Trustees

Our manager, four of the Trustees and our education ranger attended the Oamaru Penguin Symposium 3-4 May 2018. This biennial event is less formal than most conferences attracting researchers, wildlife managers, conservation workers and others interested in penguins. It is a good opportunity to hear about current penguin research and conservation, and to network with other people working with penguins. These meetings are particularly important for those of us in the provinces who have fewer opportunities to network than do city dwellers.

The next International Penguin Congress is due to be held in Dunedin in August 2019. The Trust plans to send a large delegation to that event.

16. Trust board meetings

The Trustees met four times over the last year. There has been a lot of Trust business to get through each time so on two occasions we have stayed together the night following the meeting to enable discussions to continue. Even with these meetings, most Trust business is still conducted by email. With Trustees and staff spread from Westport to south of Hokitika, wherever on the Coast we meet there are significant travel costs. Our funding from the DOC Community Conservation Partnership Fund has met meeting costs and continues to do so under the DOC Conservation Fund, for which we are enormously grateful.

We enjoyed a month-long internship by two Americans, Micaela O'Leary and Niko George from the outdoors company Patagonia. They took a long hard look at many aspects of the Trust's operations,

particularly relating to awareness, and made numerous useful suggestions how we could operate more efficiently.

Thanks to our sponsors and supporters

We are very grateful for the on-going support we have received from our sponsors, supporters, regular donors, and those who have provided in-kind support. Without their assistance, plus that of numerous volunteers, we would have achieved so much less over the past year. Special mention goes to the following:

DOC Community Conservation Fund
Lottery – Environment & Heritage
Museum of New Zealand Te Papa Tongarewa
Taronga Conservation Society Australia
John Dunbier & Mont d’Or Mining
Wellington Zoo Trust
The Sargood Bequest
Predator Free New Zealand
Scotlands Te Kiteroa Fund
The Lion Foundation
Greenstone Helicopters
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NG Bishop
Nicky Armstrong and Peng
J’s Café, Westport
Punakaiki Crafts and Café Nikau
Ross Store
Hokitika i-Site
Underworld Adventures, Charleston
SunshiNZ, Hokitika
Thanks also to those whitebaiters who have
donated to our Trust

The West Coast Penguin Trust – who we are:

Patron

Craig Potton

Trustees

Jill Cotton

Leon Dalziel

Scott Freeman (resigned May 2018)

Robin Long

Marg Costello

Kerry-Jayne Wilson (Chair)

Tim Shaw, Advisory Trustee from Department of Conservation

Reuben Lane (Advisory Trustee)

Manager

Inger Perkins

Rangers

Robin Long, Jenny Chandler and Lucy Waller

(all staff are part time)

Web site services

Leon Dalziel of Baby-e Website Design

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

(WCPT person in bold)

Refereed scientific papers:

Long, R. 2017. A survey of Fiordland crested penguins/tawaki (*Eudyptes pachyrhynchus*) from Cascade Point to Martins Bay, South Westland, New Zealand, 2014. *Notornis* 64; 206-210.

Mattern, T. & **Long, R.** 2017. Survey and population size estimate of Fiordland penguin (tawaki; *Eudyptes pachyrhynchus*) in Milford Sound/Piopiotahi, New Zealand. *Notornis* 64; 97-101.

Waugh, S.M., **Wilson, K-J.** 2017. Threats and threat status of the Westland petrel *Procellaria westlandica*. *Marine Ornithology* 45; 195-205.

Conference presentations:

Long, R., Wilson, K-J. Pre-predator control study of the impact of introduced predators on tawaki. 11th Oamaru Penguin Symposium, Oamaru, 3-4 May 2018.

Mattern, T., Putz, K., Garcia-Borboroglu, P., Ellenberg, U., Houston, D., **Long, R.**, Luthi, B., Seddon, P.J. An epic journey – long-range dispersal of Tawaki during the pre-moult phase. 11th Oamaru Penguin Symposium, Oamaru, 3-4 May 2018.

Mattern, T. **Wilson, K-J.** Workshop: conservation needs for New Zealand penguins. 11th Oamaru Penguin Symposium, Oamaru, 3-4 May 2018

Other reports:

Wilson, K-J., Long, R. Tawaki / Fiordland Crested Penguin Conservation Management; Predator control – four-year final report, 2014-2017. <http://www.bluepenguin.org.nz/wp-content/uploads/Tawaki-report-2018-Final.pdf>

Wilson, K-J., Barthel, A., Lipson, M., Fogwill, C. Turney, C. Observations of seabirds on the Auckland Islands and Campbell Island during the Australasian Antarctic Expedition 2013-14. <http://www.bluepenguin.org.nz/wp-content/uploads/Observations-of-seabirds-on-the-Auckland-Islands-and-Campbell-Island-during-AAE-expedition-2013-14-Dec-20171.pdf>

Popular articles:

Wilson, K-J. 2017. Petrels of the rainforest. *Forest and Bird* 364; 46-47.

Public and other talks:

Wilson, K-J. Refloating moa's ark; conservation of birds in New Zealand. Seminar, Centre for Nature Conservation, Goettingen University, Goettingen, Germany. 15 August 2017.

Wilson, K-J. Puffins guillemots and Vikings; a naturalist's travels in the Shetland and Faroe Islands, Iceland and Greenland. Public library, Westport. 24 April 2018.

Wilson, K-J. Westland petrels. Punakaiki, 27 & 28 April 2018

Long, R. Tawaki. Westland District Library, 28 February 2018

Perkins, I. Conservation Board (21 July), Hokitika Soroptimists (26 February) & Hokitika Rotary (14 March)