The Hutton's Shearwater Charitable Trust

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Newsletter

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The 2017-18 season is well under way. Lots has been happening. A survey flight looking for prospecting birds didn't show any activity other than in the two known wild colony areas.

The Kaikoura launch of Richard Cuthbert's book about Hutton's was a combined welcome home event held at the Kaikoura Museum and was a success, with Richard joining the event by skype from the UK. Copies of the book are available from the Trust.

The welcome home Flash Disco gathered a small but energetic crowd.

One pest control flight has been done up to the colonies, with several goats and deer being shot. We have managed to secure funding for several more pest control flights during the season.

At the Te Rae o Atiu colony activity is heating up, and this is documented in the colony report..

Much is happening, with ongoing monitoring of the Te Rae o Atiu colony, much work having been done by John in organising both funding and research on the natural colonies, with Richard coming out later this month to do on the ground surveys, with a mark-resight population count planned for next year.

Ted Howard

Chair (and with Lindsay now living in Rangiora, acting geek of all trades)



An excerpt from Richard Cuthbert's book, with regard to plant species in the Kowhai Valley: "... more than 100 species in the valley... Their isolation, the absence of habitat modification from burning and grazing and the accumulated fertiliser from thousands of years of shearwater guano had created a rich and varied habitat, which included many rare and range-restricted species...".

Te Rae o Atiu - Colony Report

Activity at the Te Rae o Atiu colony is really heating up. As at the 12th of October we had recorded 58 PIT tagged birds visiting the colony. As at that date no eggs recorded yet. A couple of birds have extended the burrows, so that they will be difficult if not impossible to physically monitor in the future.

The source of the returning visitors is - one chick each from the 2012-13 and 2013-14 seasons. with most of the rest coming from translocations - 5 from 2006, 7 from 2007, 13 from 2008, 7 from 2012, 21 from 2013, and 2 that have arrived by their own means - presumably attracted by the sound system, and one with a very strange PIT tag number that we haven't been able to actually eyeball and see what its band number is as vet, but it has been a regular repeat visitor in the early hours of the morning - mostly just before dawn.

The analysis of burrow visits was also interesting. Looking at how many birds visited any of the burrows on any one day – one day one burrow had 6 visitors, 5 times a burrow had 5 visitors, 20 times 4 visitors, 79 times 3 visitors, 295 times 2 visitors, and 361 times just one visitor.

Looked at over the 7 weeks to the 20th, one burrow had 18 visitors, 2 had 15, 1 had 14, 1 had 13, 2 had 12, 1 had 10, 4 had 8, 4 had 7, 3 had 6, 5 had 5, 4 had 4, 1

had 3, 2 had 2, and one had 1.

The first PIT tag recorded was on the 29th August, but that just means it was the first day I got out there to start setting up recorders. 42 burrows have been active enough (visited at least twice as evidenced from pegs placed inside and out being disturbed) for me to set up recorders, and 32 of those have been subsequently visited by birds with PIT tags.

So the season is under way, and we hope to have more good news for you in the next newsletter.

Ted Howard

Breaking news: On the 1st of November two birds were sitting on eggs. The two birds sitting happened to be males, X17124 and X17216. These are two of the most successful breeders in the colony, but they have

followed very different pathways. X17216 has bred every year since 2012 with the same mate in the same burrow, raising four chicks through to fledging (and another lost). Its mate has returned and has only visited the one burrow in which they have raised their previous chicks. So far so good for the happily ever after story, but X17124 has successfully raised three chicks since 2012, with three different mates and three different burrows! Another illustration of the fact that we have a lot to learn.

More breaking news: as of 12th November fifty nine birds have returned, of which 27 are first time breeders, and two were born in the colony. Nineteen eggs have been laid, of which one was broken. With the prospect of more eggs to come, we are hoping for a good season!



Hutton's Super heroes

This is Zoe. She is five, and happens to be the great great niece of Geoff Harrow. At school, she was asked to dress as her favourite Superhero. No TV, so her parents explained what a hero was. Of course, she wanted to go as Geoff - he saved birds! A bit tricky, but she was persuaded to go as a Hutton's Shearwater instead, and just look at the

result! The future looks to be in good hands.

Meanwhile, at the other end of the age spectrum, the original Hutton's Superhero himself has also had recognition for his services to mountaineering and conservation. Announced in the New Year's Honour's list, the investiture ceremony took place in May, when Geoff received a Queen's Service Medal from the Governor General, Dame Patsy Reddy. Anyone who has set foot in or flown over the Inland and Seaward Kaikoura mountains will know how much he deserved this! It was a monumental achievement to find the eight breeding colonies which were active in the 1960's, but think of how much country he had to cover to find them. Geoff remains a source of inspiration and encouragement for all those involved with the conservation of Hutton's shearwater/tītī.





Lindsay Rowe

Another in the Hutton's Superhero category is Lindsay Rowe. He has been a Trustee since the establishment of the Trust in 2008. During this time he has had a number of roles, especially as Treasurer and Manager of the Te Rae o Atiu colony. He has laso been the key figure (and very successful) in fundraising for the Trust. Lindsay moved to Rangiora a few months ago, gave notice of resignation,

and will officially resign at the next meeting in November. His contribution has been immense, as those who have been trying to fill the gaps created by his absence have discovered. Since leaving Lindsay has continued to contribute and has written up a set of protocols, methodologies, and results which ensure that key information is retained and developed. We wish Lindsay and Jan all the best in "retirement"!



Welcome Home Events

The spring return of our Hutton's shearwater/tīti from the overwintering in Australian waters is always a special event in Kaikoura's calendar, and this year was celebrated with a Disco for the children of the community, and a Welcome Home event which included the launch of Richard Cuthbert's new book.

The main event was held at the new Kaikoura Museum on the 23rd of September. For those yet to see it, the opportunity to have a look around the Museum was thoroughly enjoyed, and we were well looked after by manager Steph Lange. The event started with wine and cheese, followed of course by lots of conversation. Brett Cowan from DOC carried out the formal welcome, which was followed by the launch of

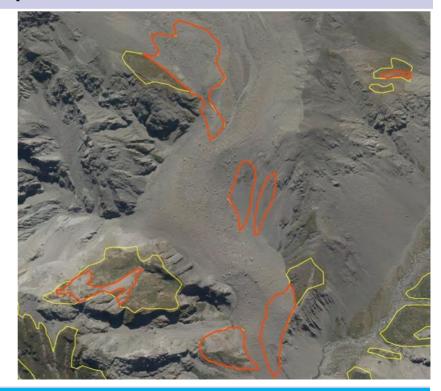


Richard Cuthbert's book "Seabirds beyond the Mountain Crest". Richard, being based in England was only able to attend by the miracle of Skype. While the connection wasn't as good as we had hoped, it was lovely to have Richard present to help

launch the book. Also in attendance was Imogen Coxhead from Otago University Press who are the publishers. Geoff Harrow, a friend of Richard's for over 20 years, can be seen beaming in the photo (wearing the Korowai).

Earthquake damage update

The recent release of new postearthquake imagery has allowed the first more accurate assessment landslide damage to the mountain colonies to be made. The photo shows the worst hit areas of the Kowhai colony, with the red outline indicating the loss of breeding areas, while the yellow outline shows areas which are still intact. The remainder of the Kowhai sites are largely intact, but this area was impacted to a greater extent than originally thought by the massive slip which deposited about sixty metres of gravel on parts of the site.



Book Review - Seabirds beyond the Mountain Crest

The recent publication of "Seabirds beyond the Mountain Crest" is another milestone in the story of Hutton's shearwater.

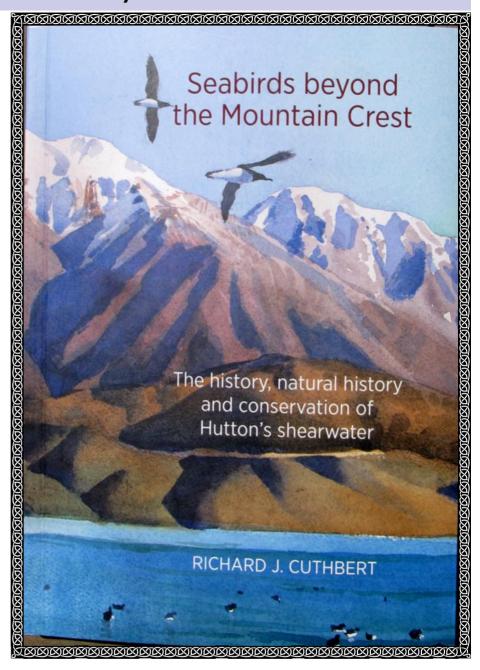
Although Richard and other scientists work has been published in many papers scattered throughout the scientific literature, this is by far the most accessible read and provides a picture wider than just the ecology of the bird itself.

It weaves together the three major strands of the story of Hutton's; Maori mythology, place names and cultural use, Geoff Harrow's explorations, and more recent scientific studies.

It shares some insights into the complex ecology create by the importing of nutrients from the sea and burrowing into steep mountainsides. This results in a diverse ecosystem, with communities and species of plants and animals found only associated with burrows.

As well as good science, Richard demonstrates a deep understanding of the ecology of the Kaikoura Ranges, born of spending a lot of time in the field, and developed to a point where the study and observation gave him an intuitive feel something that not many scientists write about but is very real.

Some key insights are shared with regard to the contraction in the number of breeding colonies.



"Pigs were present in all of the extinct colonies and in the areas adjacent to and bordering the Kowhai Valley and Shearwater Stream. They were only absent from the two remaining colonies of Hutton's shearwaters" - a convincing case for pigs being the major cause of the decline in breeding colonies.

Stoats were found to have little impact on the population largely

because of the high numbers of birds present.

If you would like to get an understanding of Hutton's, the ecology of the Seaward Kaikoura's, living and working in the mountains, and scientific fieldwork, then Richard's book provides all that and more in a delightful read. The book will soon be available for purchase on our website.

Research Funding from MPI Approved

The potential damage to the mountain colonies caused by the November earthquake has been a source of concern to the Trust over much of this year. Finding out the extent of damage has been complicated by ongoing safety issues in the mountains, with the research hut in the Kowhai colony being closed, and the helipad being destroyed at Shearwater Stream (which is still out of bounds to field parties).

The only on the ground visit was a quick trip to Kowhai, which showed that, in addition to 10-15% loss of colonies to landslides, there had been a significant degree (36%) of burrow collapse in the small sample the team was able to check.

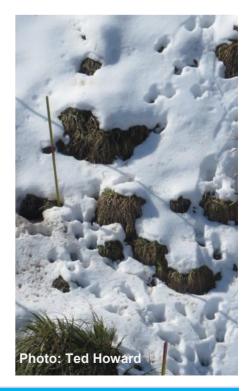
The potential impacts of earthquake damage on the population are very difficult to estimate from such limited information, so Trustee Lindsay Rowe put together an application to the Ministry of Primary Industries (MPI) seeking some funding from their earthquake relief package to carry out repeat population surveys.

This funding has recently been approved and was first announced at the Welcome Home celebrations. This funding will allow effectively repeats of the two methods of population study previously undertaken; fieldwork on site counting burrows, and a mark-resight

exercise involving spray painting in the colonies birds counting what proportion of these birds are recounted during surveys at sea. Sophisticated statistics are then employed to come up with a population estimate. Between the two techniques we will get a reliable estimate of the change in population as a result of the earthquake. The fieldwork for the burrow surveys will take place in December this year, while the mark-resight exercise will be in September 2018, postponed from this season because of safety concerns. The December fieldwork will be led by Dr Richard Cuthbert (whose recently published book is featured elsewhere in this newsletter), while Dr Paul Scofield will lead the mark-resight exercise. In addition to the population estimates, assessment of the ongoing threats and implications for population recovery will be undertaken.

The results of the research will provide a clear direction for the future management of these mountain colonies. If, for example, the results showed that there has been substantial losses to the adult bird population, then serious consideration would have to be given to more intensive management such as predator control and establishment of additional mountain colonies.

A small part of the project was to consider the possibility that the disturbance to breeding grounds would cause birds to prospect other areas for suitable breeding habitat. When there are snow levels shallow enough for birds to dig through, they do so and excavate and clean out their burrows. When this happens dirt trails are left on the snow, making spotting fresh burrowing from the air possible. helicopter flight was carried out to look for such birds, but unfortunately no birds were seen outside of known areas, and only a very few within known colonies. It appears that the birds are very late this year to return to their mountain colonies. The photo below shows a burrow visible just to the left of the centre-left post.



Hutton's shearwater 'Fallout' - by Trustee Lorna Deppe

Research as well as awareness campaigns with regards to fallout in Hutton's shearwaters had been focused on the fledging season (March / April). However, it is also known that adult birds crash land in and around Kaikoura, predominantly during the first months of the breeding season (September - November). Previous observations indicated that this seemed to happen in much lower numbers and with hardly any fatalities. Until last year, the estimate had been less than 10 birds per season. Following the fallout study during the 2016 fledging season, we attempted a closer look at reported adult numbers at the start of the 2016/2017 breeding season and received reports of about 20 birds.

The recent tragic event at the start of the 2017/2018 breeding season, with 12+ birds being killed on a short stretch of Beach Road after a wet and foggy night by morning traffic, brought both new awareness and concern to the issue. The Trust is collecting data from this season's reported crash landings and has launched new fallout awareness campaign, now covering the whole breeding season (September - April). A Hutton's shearwater awareness poster has been distributed, informing people of how to rescue fallen birds as well as preventing road kill or predation of birds on the ground. The poster is on both

the website and Facebook. Fallout and rescue procedure information has been updated on the website.

Despite road closures following the earthquake, Kaikoura experiencing a high amount of road traffic due to an influx of construction crews. This brings a lot of new people to town who have not heard about Hutton's. A common misconception is that Hutton's shearwaters can take off as any other bird does, however, they struggle to fly from flat ground as they are used to taking off from higher ground like a cliff or slope up the mountains or from the crest of a wave out at sea, including some wind under their wings. Their dark grey and white colour also makes them difficult to see against a tarmac background. The Trust is therefore urging drivers to take extra care and drive slowly during September to April when the birds are around. Road signage has been put in place, which we hope to add to in future.

The request to keep pets (predominantly cats) inside at night to avoid predation, so far appears to not resonate much with people as encountering domestic cats at night is still a common occurrence. Fallen birds have a good chance of survival if rescued, and it appears unnecessary to lose birds to predation or road kill, both of which can be avoided or at least minimised by people becoming

aware of the issue and taking care. Luckily, a lot of people in our community actually do, and have helped many of these birds to get back on track.

Hutton's shearwaters are long-lived and reproduce slowly, fledging one chick per year which then needs to survive at least 3-5 years out at sea until successfully breeding itself. The loss of an adult bird is particularly impactful on the population and even small numbers of adult birds lost are of concern. Moreover, if an adult bird gets killed during breeding, the remaining partner can't raise the chick alone, so if we lose an adult bird we lose its chick too.

As well as raising awareness and facilitating the rescue of fallen birds, the HSCT is also once more liaising with the Kaikoura District Council (KDC) with regards to the implementation of fallout mitigation measures. The rebuild programme brings opportunity for an accelerated update of street lights to wildlife friendly LED fixtures, following standards set out by the International Dark Skies Association (http://www.darksky.org). The study investigating fallout of fledglings reported on in previous newsletters is now in press and will be published in Notornis this December. The results will be part of the submission and consultation process to come.