



# The Hutton's Shearwater Charitable Trust

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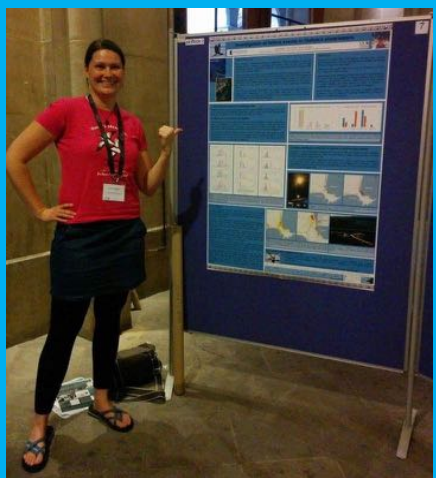
**Newsletter**

## In this issue



*Welcome home celebrations*

*Page 3*



*International presentations*

*Page 4*



*Research Report*

*Page 5*

## Ted's Talk

The Hutton's are back. Ailsa and team organised a "flash" disco to welcome them back which was held on the 31st August, with about 50 people attending. It is great once again to most days see the rafts of Hutton's feeding in the bay as I make my morning coffee.



Lindsay has reported that birds are nesting at Te Rae o Atiu, with the first of the chicks hatched at the colony returning.

Geoff sent me a letter in early August detailing the information he has on earlier colonies. His reports show clearly that there were multiple colonies on the seaward Kaikoura ranges from the headwaters of the Cribb northwards including at least 2 on Mt Fyffe. In the Clarence/Waiau Toa catchment

there were colonies on both sides, including in the headwaters of the Jam and Dee streams, with the last reports of Hutton's on Mt Tapuae-o-Uenuku coming from 1934, and the last reports from the Jam coming in the early 60s. The only remaining colony in the Clarence/Waiau Toa catchment is at Shearwater Stream. Even since the 80s there are fewer active burrows in the lower parts of the Kowhai colony. It seems that the biggest issue for the birds is mammalian predators, rats, stoats and ferrets in particular, humans and pigs adding extra pressure.

We had the unveiling of Sam Mahon's bronze Hutton's as our new "Iron Ranger" on the DOC track at the base of the Te Rae o Atiu Colony at our welcome back event on the 24th August. Our thanks go to both Geoff and Sam for their work - a magnificent result.

We had 2 resignations since my last report, being sad to lose Sabrina as administrator and Bill as Trustee. Both will be sorely missed, and both were great assets to the team.

## Ted's Talk (cont.)

Nicky took our Hutton's to centre stage in the international birding community with a presentation to a conference in Scotland, and all reports are that it was superbly done and well received.

We had an amazingly strong set of applicants for the position of administrator. I am very pleased to have Elspeth and John in the role and developing new sets of systems. The trust is in a sound position looking forward.

The future of the birds requires ongoing work. We cannot put predator proof fences around the wild colonies as snow and rock-fall make it impossible; we need other strategies. Predator control must be our major focus. Our thanks to DOC, ECan and Puhi Peaks Station for their ongoing efforts in this most critical and dangerous of roles. Ensuring that our effectiveness in predator control continues to increase must be the major focus if these amazing birds are to have a future in the wild. The ongoing gift from Tukete Trust

of the license to occupy the Te Rae o Atiu colony is fundamental to the survival of this colony, as is the ongoing work of the many professionals and volunteers involved.

Thank you for sharing this journey with us and our taonga Hutton's Titi. Your ongoing active participation is required for these birds to have a secure future.

Arohanui.

**Ted Howard**  
Chairman



## Te Rae o Atiu - Colony Report

Well, the new season is upon us and many of our Hutton's shearwaters have returned. The first indication that birds were back was seeing three nest boxes had been visited on 29 August and up to 29 have been visited in a week since. Numbers of birds back at this time are greater than other seasons: over 45 have been recorded by the PIT tag readers including 18 from the 2012 and

2013 translocations. Also back is X17334, the first of our own chicks to come back.

I checked the colony this morning, 7 November, and 13 birds were sitting on eggs, the first egg having been seen in box #74 on 22 October. With 25 boxes having been visited this week there is potential for a few more.

It is also interesting to reflect on how long this project has been going as the five surviving birds that were part of the 2006 translocation will be having their 11<sup>th</sup> birthday after Xmas.

I have installed 4 trail cameras opposite some burrows and have a few short video clips back. Most show birds moving about but 2 have shown birds fighting and it will be interesting to see what we get in the future.

These cameras were obtained using a grant from The Sargood Bequest, Dunedin, and we are extremely grateful to them as we get a greater understanding of the birds' behaviour.

**Lindsay Rowe**

7 November 2016





## Welcome Back Events

The spring return of our Titi from the overwintering in Australian waters is a special event in Kaikoura's wildlife calendar, and this year we celebrated in a new way, with an event for Youth, and an event for the wider community.

It is our Youth that will carry our Hutton's mantle forward, so to engage them in celebrating and in particular, anticipating the return of our titi, we organised a "Flash disco - Bird Dance" to be activated at the sight of our first significant rafts of birds. There was a certain difficulty in organising an event for which we didn't have a date, but we were strongly supported by many, including schools, Sarah Beardmore, the Maori Wardens, and Whale Watch who sponsored a BBQ dinner for those who came. Olly Hughes was a very able DJ, and we had an approximate attendance over the night of 40-50 children, several of whom brought their families along. The disco was held on Wed 31st August, one day later than the rafts returned in 2015. Nicky McArthur and Bill Lonsdale collaborated in designing a new Hutton's Banner which was hung on the bridge to give our Kaikoura community a message that our birds were back.

On September 24th, we welcomed our birds and the start of a new season with a

champagne breakfast and auction, enjoying the view and hospitality at Cellar View. Kevin Heays was our auctioneer. An Eruera Solomon original "The titi of Te Poha o Tohu Raumati" and a Clare Reilly canvas Hutton's print, found happy homes, as did two wonderful buckets of waratah flowers provided for auction by our Coordinators, Elspeth and John. Eruera Solomon is a 15 year old Rangatahi of Ngati Kuri descent.



His acrylic painting is his interpretation of our precious Titi (Hutton's shearwater). In Eruera's words he has tried to capture and interpret the true spirit and Wairua of the Titi in its natural environment through the eyes of a young person. His gift in sharing the profits from this sale with the Trust is a true expression of the partnership involved with the management of this taonga species.

After breakfast, we accompanied Geoff Harrow and sculptor Sam Mahon to the Peninsula Walkway, where a magnificent titi sculpture commissioned by Geoff as a Hutton's Donation box, was unveiled and blessed. Since the unveiling the donation box has been cleared and contained a tidy sum. A big thank you to all those who supported us in our Welcome Home celebrations.

**Ailsa Howard, Secretary**



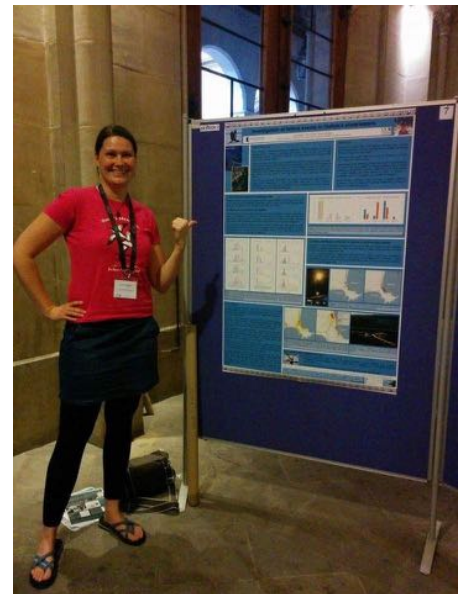
## International Presentations

In what must surely be a first for the Trust, two Trustees attended and presented at international conferences during September. Nicky McArthur presented to the 13th International Seabird Conference in Edinburgh "A New Zealand conservation story of a globally unique seabird, Kaikoura's Titi, the Hutton's shearwater". The presentation provided an overview of the conservation and management of the species and emphasised amongst the international community the unique characteristics of our very own bird. Special not just to Kaikoura, Ngai Tahu, and New Zealand, but unique on the world stage as the only alpine nesting seabird in the world. Nicky covered the science aspects of both the mountain and Te Rae o Atiu colonies, and reported that the story of our bird was extremely well received. There was considerable interest in

Lindsay's use of PIT tags (effectively bar codes for birds!) which was thought to be unique or at least very uncommon.

New Trustee Lorna Deppe presented a poster at the 6th International Albatross and Petrel Conference in Barcelona on "Investigations of fallout events in Hutton's shearwaters", a project run in collaboration with the University of Canterbury and funded by Encounter Foundation. This covered the issue of crash landings fledglings caused by light disorientation, an issue of major concern in Kaikoura. Of interest at this conference were further presentations on light pollution and a video presentation on Manx shearwaters in Britain (<http://www.iapc6.info/>) which had some interesting parallels with Della Bennet's research documented on page 3 (including some brilliant footage of

underwater feeding behaviour). A plenary talk on "Foraging ecology and stable isotopic analyses in seabirds" which also directly relates to Della's research, and a whole session dedicated to the topic of "Seabird bycatch and light pollution" all go to showing that the Hutton's shearwater research being carried out is current and of high international interest. Congratulations to all those involved!



## Education report

For the last five years the Year 9 Mathematics students at Kaikoura High School have been collecting data on the awareness of the local Kaikoura residents on the Hutton's Shearwaters. This is done as part of their Statistics unit. The students conduct research on the birds; where they nest, the new Peninsula colony, migration, fledgling crash landings and so on. The students

are placed into groups and construct surveys. One is for the local town and surrounding country population and the other is designed to be given to visitors. As well as class room learning the students are shown a short film on the birds and have a visiting expert talk with them. The unit of work culminates in a trip on a Dolphin Encounter boat to observe the birds in their natural

environment. This is kindly offered each year free of charge by Dolphin Encounter.

All year 6's have now completed this trip. This in line with our Strategic direction of each child in Kaikoura having Education on Hutton's shearwaters twice in their school lifetime.

**Nicky McArthur**

Convenor education HSCT

# University Research Report from Della Bennet

## Tracking the foraging behaviour of Hutton's shearwater (*Puffinus huttoni*) off the Kaikoura Coast

Della Bennet, Sharyn Goldstein,  
Travis Horton & Jim Briskie

University of Canterbury

Little is known about the diet of Hutton's shearwaters, their foraging behaviour while at sea, and how diet and foraging impact on breeding success. We are addressing these questions through stable isotope analysis ( $\delta^{13}\text{C}$  and  $\delta^{15}\text{N}$ ) of Hutton's shearwaters and their potential prey items, plankton and larval fish, along the Kaikoura coast.

Stable isotopes are forms of carbon and nitrogen found in an organism's tissues, and their composition and quantity can be used to pinpoint migratory movements and foraging locations of birds. During the 2014-2015 breeding season, we collected feathers from chicks and adults within the alpine and peninsula breeding colonies. These feathers were then analysed to estimate the ratios of carbon to nitrogen, as differences in ratios are related to differences in the types of food ingested. Variation in C ( $\delta^{13}\text{C}$  from -14.79 to -19.40) and N ( $\delta^{15}\text{N}$  8.09 to 17.43) was observed within individual feathers, between feather types and amongst individuals. This high level of variation suggested that Hutton's

shearwaters were feeding on a broad range of prey, although further comparisons of  $\delta^{13}\text{C}$  and  $\delta^{15}\text{N}$  ratios in both the birds and in the isotopic signatures obtained from their food are underway.

To link the isotope ratios measured in the shearwaters with that of potential prey items, we collected larval fish and plankton through tow sampling in the sea off Kaikoura area over a seven month period. These samples have produced a 'food web map', which details the food chain from producers to consumers and predators. The results of the food web were then compared with the isotopic signatures from the feathers of the shearwaters. As with the feathers, the food web samples showed variability in isotopic signatures within fish species, zooplankton, and between months.

In comparing the isotope ratios from shearwater feathers to the tows, somewhat surprisingly, the isotope ratios did not reflect the pattern expected if the birds had been foraging close to shore. This suggests that either the birds were foraging further offshore or were feeding on near-shore items not included in the food web.

To examine Hutton's shearwater foraging behaviour in more detail, we next deployed time-depth loggers between November

2014 and January 2015 on breeding adults in the peninsula colony, monitoring a total of 44 dive days, and 13,137 dive events. The loggers are miniature devices that are temporarily attached to the legs of adults and measure the depth that birds dive in the water column. Amazingly, Hutton's shearwaters were found to dive **to an average depth of 5.6m (maximum 35 m) and completed an average of 69 dives per day** (maximum 339 dives). Diving depth and frequency varied among individuals and time of day. We also found a difference in diving behaviour between birds incubating an egg and those feeding a nestling.

Further work on the foraging behaviour of Hutton's shearwaters is planned for the summer of 2017, but already our results have provided key data on the diving behaviour and diet of this species. Until now, conservation efforts have mostly targeted the terrestrial environments used by the Hutton's shearwaters, including predator control and restoration of breeding colonies. Knowing where birds forage and what they select as prey will help ensure the marine environments used by Hutton's shearwaters are as equally protected.



## Te Rae o Atiu - Preparatory and maintenance work

The following are activities related to the Shearwaters and have occurred since August in preparation for the birds arrival plus other tasks.

The Hub/drop off shed and site has power on with internal lights and two movement security lights in place. A larger sign has been attached to the boat shed that clearly directs people to the drop off boxes. It's being used which is the reason for its establishment so that's all good. The drop off boxes need to be checked



daily due to people just leaving birds with no notification. It shows that local DOC staff and others need to be aware that once the birds return they can be dropped off at any time regardless of the weather. I make it a point to check the hub every time I pass going to and from work. Essentially this means checking for lids down which can be done with a drive or walk - by. If I am about in the weekends I always check especially if weather conditions are poor. I think it would be prudent to have a system in place every weekend to ensure the boxes are checked nearer to when the chicks fledge.

All the burrows were inspected and set up for the arrival of birds. This included, clearing of entrances, checking each tunnel

for obstructions, placing tussock or dry grass as nesting materials, placement of fences internally and externally and rewriting the numbering system on the plastic tags that had faded and finally spraying the service tracks and entrances.

The fence boundary was sprayed and its monthly inspection completed.

20 additional wooden entrance tunnel covers were made up and installed along the lower burrows that have no nesting chambers.

The rock piles for skinks were sprayed and weed eaten around. High numbers are evident now the weather is warmer. There were a number seen in the burrows when they were maintained.

The speaker system was reinstalled then tested in early August. One speaker was moved that had become obstructed by a growing cabbage tree but essentially faced the same direction.

10 ink pad tunnels were set up for the month of August. No evidence of mice since the poisoning. All the Pest-off tunnels have now been removed. The 10 box traps within the deer fenced area have caught few animals apart from 1 weasel, 2 hedgehogs and a few rabbits that have appeared since August.

Some crusher dust and soil was placed on the steps in order to

reduce their height and improve areas which had been eroded.

I also assisted Lindsay to transport equipment to the site which he had either brought back from the Kowhai colony or removed from the enclosure site after birds had left. Lindsay had obviously spent time checking and repairing this equipment so that it was in working order on site prior to the birds returning. A lot of boxes so a lot of work.

Keith and Ian assisted with the construction of the donation box and maintained the interpretation sign on a regular basis.

National Geographic NZ were assisted with getting footage and information for a cover article on the birds. This involved travel and assistance at the Kowhai Colony for which they contributed half the flying costs, a boat trip to film birds on the water, footage inside the enclosure assisted by Lindsay and some discussions with Nicky on her site and education. Overall they were really pleased with what they achieved and the quality of material gathered. This was a really good team effort and should go a long way to providing a very good profile for the birds. And to top it off they were really enjoyable to work with.

The predator fence is in excellent order and this is testament to its design and those who built it.

**Mike Morrissey, DOC**

## Hutton's shearwater 'Fallout'

The term 'fallout' is mainly used to describe young birds which crash land as a result of being disorientated by street lighting. Last season a 'Flysafe' month was held to ensure these birds were looked out for, looked after, and



returned to the wild as soon as possible. The 'Hutton's Hub' was set up to provide a central collection point for these birds to be dropped off and looked after. Another 'Flysafe Month' will be held in March next year to ensure everyone knows what to do, but in the meantime it is important to note that disorientation can also happen to adult birds outside of the main fledgling season, as noted in the previous article by Mike Morrissey from DOC. So please keep an eye out for any birds which have crash landed, and return them as soon as possible to the 'Hutton's Hub' located by the DOC office in Ludstone Road. The photo to the left shows not a communal long

drop, but the 'hotels' where the birds are housed until they can be released. The nest like boxes keep the birds warm, safe, and calm.



## Sponsorship and funding

The Trust recently received a donation from the Tumbleweed Conservation Fund. Tumbleweed Tees produce t-shirts, teatowels, baby wear, art prints and notebooks with mainly bird based design. Money from purchases is put into their conservation fund and distributed to good causes such as Hutton's shearwaters. A genuine thank you for this unexpected gesture. Check out their beautiful designs at <https://tumbleweedtees.com/>.

We are fortunate to have received funding from a range of sources,

including NZ Lottery Grants Board, Pacific Development & Conservation Trust, Mohamed Bin Zayed Species Conservation Fund and those shown below.

It is a priority to look for some

longer term sources of funding to facilitate future planning for some of the major projects identified within the Strategic Plan, which will be finalised in the next few months.





## Works of art

The Trust is extremely fortunate in having Geoff Harrow as Patron. One of his generous donations has been to commission two works of art; the first a painting by Austen Deans, the second a sculpture by Sam Mahon. The Austen Deans print have now sold out, but all those who bought one have something to enjoy and treasure for a lifetime.

The sculpture was designed and priced for the collectors market. It captures the spirit of the bird, and arose from a long standing friendship between Geoff and Sam.



Trustee Nicky McArthur has continued in Geoff's footsteps

by commissioning a painting by Clare Reilly. This is a very peaceful painting with beautiful colours. Signed prints are available from the website. These artworks are all very special and will not be available forever, so don't miss out. They have provided significant funds to the Trust, and we are of course very grateful to Geoff and Nicky for their generosity, and the artists for their magnificent work.



The Hutton's Shearwater Charitable Trust was established in 2008 to:

*Encourage and promote the preservation, conservation, research, public education, and sustainable management of the Hutton's shearwater.*

