



# Ulva Island Update

## A newsletter for the friends of Ulva Island

Summer is well upon us and the birds have been busy breeding. The robins are finished for the season and saddlebacks are not far behind. This issue contains updates on the Ulva Island bird research, as well as further information on rat invasions. On the human front, the DOC concession team explains how concessions work. The kakapo visit was hugely successful and provided an opportunity for a thousand people to see a special bird in an amazing setting.

As usual, there has been a lot happening on Ulva Island. Enjoy this update.

**Brent**

### New Rat Signs Installed

#### Brent Beaven

In the last issue we discussed how only 17% of people going to Ulva were aware that they needed to check for rats and seeds. Of these, one third got this message from the signs. Obviously, there is huge room for improvement. One thing we were able to immediately improve was the quality of the signs on Ulva Island. Two of the problems identified were that they were too wordy and didn't stand out. This has now been fixed!!



Visitors to the island will have noticed new signs at all of the wharfs as well as a large greeting sign on Ulva Island itself. The large sign seems to have stirred up a bit of debate, but love it or loath it, the sign is doing its job with more people talking about checking for rats that I have heard in a long time.

### Quarantine Requirements

#### Brent Beaven

Rats are amazingly successful as hitchhikers and are often underestimated by people. Complacency also assists rats in getting to Ulva – it is not surprising that standards slip on the hundredth trip to the island.

To give some idea of just how successful rats are, the DOC database lists 10 island rat invasions in 2006. Ulva Island has had 11 rat invasions since it was made rat free and unfortunately there is no guarantee that we will be able to catch all invading rats. As usual prevention is better than cure. The most likely spots for rats to hide are amongst bulk gear or on boats.

The standards that DOC adheres to are:

1. All food is checked and packed into pest proof plastic buckets in a specially designed room.
2. Any packs/bags are checked and then stored in this rat proof room. Bags should be packed or re-packed on the day of departure.
3. All gear is checked by a designated person before leaving the rat proof room.
4. Gear is transported directly from the room to the boat for transport. Never leave gear sitting around for long periods of time or overnight.
5. Boats are checked for stowaways moving containers, ropes and rags.
6. On arrival, gear is immediately taken inside and unpacked with all windows and doors shut.

Further advice on specific quarantine requirements can be obtained from DOC, Stewart Island.



## Ulva Island Illegal Operators

### Recreation/Tourism Concessions Team

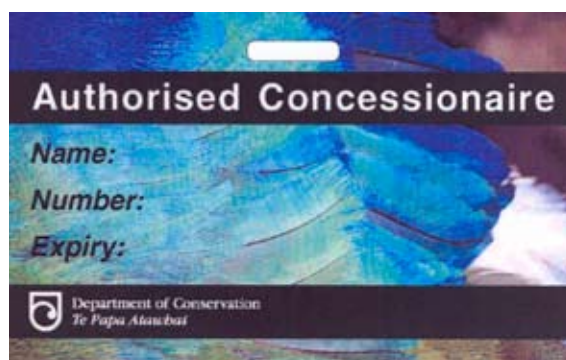
The Department of Conservation are keen to hear from the public of any people operating commercial activities without a concession on Ulva Island.

It is illegal for someone to operate commercially on conservation land without authorisation from the department – known as a concession. The department has a set of procedures to follow when processing concessions which ensures that the operator adequately avoids, remedies or mitigates any potential adverse effects on the land, and the species which rely on the land for their survival. The department also manages all visitors' experiences on Ulva Island by requiring that commercial operators abide by special conditions, such as limited group sizes.

The fact that some guiding operators are not willing to go through the concession process and make their guiding activity legal is of concern. It is also unfair on those who have gone through the process to see others not doing so.

At present there are 16 operators with concessions for Ulva Island. These operators are:

- Aurora Charters (Hopkins, M & C)
- Bravo Adventure Cruises (Smith, Phillip John and Dianne Margaret)
- C&E Tours Ltd
- Kiwi Wilderness Walks (Tuatara Investments Ltd)
- Mana Charters (Hawkless, RJ & CA)
- McKay Shipping Ltd
- Nature Quest New Zealand Ltd
- Ruggedy Range™ Wilderness Experience (Ahmad, Furhana)
- South Sea Mermaid Tours Ltd
- Southern Limits Ltd
- Stewart Island Adventures Ltd
- Stewart Island Experience Ltd
- Stewart Island Water Taxi (Wilson, Ian and Fraser-Wilson, Philippa)
- Talisker Charters (Tait, PM and Tait, I R A)
- Ulva's Guided Walks (Goodwillie, Ulva)
- Unlimited New Zealand Ltd



The department has recently introduced an identification system to help identify who has a concession. All concessionaires in Southland are required to display their ID on any vehicles they use, and each guide should also be wearing the ID card.

The ID card system is working well and by now all operators should have their ID cards. So, if you are out and about on Ulva Island and see anyone obviously guiding, and their guide is not wearing an ID card, please let the department know. You can contact the DOC Information Centre in Oban, phone 03 219 0002 or email [stewartislandfc@doc.govt.nz](mailto:stewartislandfc@doc.govt.nz)

## Ulva Island Research Update

### Steph Hicks

Yet again there is a team of polypro-clad bush monkeys following the robin and saddleback populations on Ulva Island. The season got off to a slow start with the robins breeding two weeks later than last year and we didn't find saddleback nests until the first week of November. Since then we have been finding new nests most days and have noticed distinctive changes in the behaviour of other pairs. There is no clear explanation for this, although I hear it was a cold winter in these parts. This would have affected resource availability plus, coupled with an increase in population numbers and competition, a delay in breeding might have been the result. Despite all this there are now twenty-eight new robin territories and thirty-one new saddleback territories on the island. This, including floaters (birds moving around without territories) and some birds pairing with new mates, gives a current population size of 156 for robins and 193 for saddlebacks.

In terms of the Otago University project, the two PhD students (Rebecca Laws and Bryan Rhodes), have returned for a second season to continue their research. Rebecca is looking at the genetic effects of inbreeding in survival and productivity of robins. Bryan is determining how nest characteristics and microhabitat affect breeding success in saddlebacks. As well as this, we are hoping to find all the robin and saddleback nests, band the new season offspring and collect blood samples for DNA analysis. This will maintain the pedigree of individual birds that has continued since the project began and help provide data that supports this valuable research.

So far quite a few people have been involved in this season's fieldwork and we cannot thank them enough for all their hard work and dedication. Volunteers make the conservation world go round and we too have had help from all over the globe.

And where to now for the robins and saddlebacks of Ulva Island? Well this should be an interesting season. Last year the birds continued to form pairs and establish territories in the preferred coastal habitat. This resulted in smaller territory sizes and increases in local density. Typically this is what the birds are doing again this year, but the odd pair has settled in the podocarp dominated interior of the island. As the density of birds on the island begins to increase, this is when we would expect the effects of

such things as inbreeding to become more obvious. Hopefully the data over the next couple of seasons will start to show some of these trends and this can further the research and conservation management of these species on Ulva, as well as other island sanctuaries.

If you have any questions we're a friendly bunch, so if you meet us on the tracks or around Stewart Island feel free to have a chat.

## The Cost of Incubation

### Bryan Rhodes

Amongst the many researchers working on Ulva Island, you may have seen me around searching for breeding pairs of saddlebacks. All of this searching is gathering data toward my PhD, looking at cavity nesting in the South Island saddleback.

New Zealand is unusual that there were no predatory mammals or other land-based egg predators until relatively recently. In most studies of cavity nesting birds, predation is considered an important force that causes birds to nest within cavities but this predation pressure was likely not present in pre-human New Zealand.

My project is examining the role temperature plays in the choice of cavity nests for saddlebacks. I am testing this in two ways: firstly by adding an outside source of heat to cavity nests and then by comparing nesting success to the quality of cavities the saddlebacks are choosing. If temperature is critical to nesting saddlebacks, then adding extra heat should increase their nesting success. I am placing "heat pads" commonly used by skiers into the saddleback nests to keep the eggs warm. After the breeding season is over, I will measure all the saddleback cavities hoping to show that some are better quality than others. If this proves to be true, habitats that provide the best and warmest cavities may be a consideration for future saddleback translocations.



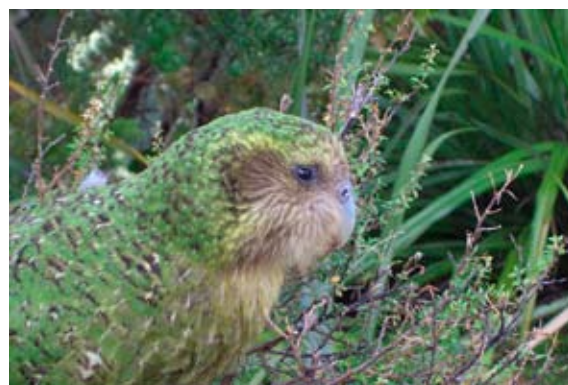
Bryan Rhodes

## Kakapo Visit a Success!

### Ulva Island Trust

On 10 August and 25 October 2006 the Ulva Island Trust, in conjunction with the Department of Conservation and the Kakapo Recovery Team, successfully hosted a single rare kakapo, Sirocco, on Ulva Island.

Sirocco lived in a 380m<sup>2</sup> natural enclosure and was cared for full time by various experienced minders. Each evening, up to 30 visitors from all over New Zealand and other parts of the globe were transported by boat from Halfmoon Bay to Ulva Island, to view Sirocco up close through a specifically designed viewing pen. The visitors were guided by experienced guides to the viewing area and given a detailed commentary on the kakapo recovery programme, Sirocco, conservation and Ulva Island, each trip lasting for approximately two hours.



Sirocco

In total 904 adults and 126 children visited Sirocco during the course of his stay.

On his departure, Sirocco had put on approximately one kilogram in weight since his arrival and was in extremely good health. At no time during his stay did he show signs of the change in environment negatively impacting on his behaviour. In fact he appeared to thoroughly enjoy the increase in attention.

This project has made a significant contribution to the Stewart Island community, both economically and educationally, as well as increasing the awareness for the kakapo recovery programme and conservation in general.

It is estimated that taking into account accommodation, transport and food, the Kakapo Encounter made a \$350,000 injection into the Stewart Island economy over a ten week period – a significant boost to an otherwise limited tourism season.

## Re-introduced Robins and Saddlebacks

### Habitat selection in re-introduced populations of Stewart Island robin and South Island saddleback on Ulva Island

#### Pascale Michel

Re-introduced populations of Stewart Island robin and South Island saddleback have successfully established on Ulva Island. The habitat both species selected was primarily determined by the structural composition of the vegetation, with preference for mixed size stems of broadleaved coastal species. The first year after re-introduction both species established breeding territories in coastal scrub habitat, characterised by a denser cover of *Brachyglottis rotundifolia* (mutton-bird scrub), *Dracophyllum longifolium* and *Metrosideros umbellata* (Southern rata). The following years they moved further into the coastal forested habitats, comprising *Weinmannia racemosa* (kamahi), mature *Metrosideros umbellata*, *Dicksonia squarrosa* (tree fern) and *Ripogonum scandens* (supplejack). Robins and saddlebacks on Ulva avoided sites dominated by podocarp species (*Prumnopitys ferruginea* miro, and *Podocarpus hallii* totara) and dense ground cover of moss. Preference for coastal habitats in robins and saddlebacks was mostly explained by habitat quality.



Saddleback

Mixed forest composition of coastal habitat on Ulva Island contributed to greater abundance and diversity of invertebrates, providing birds with greater foraging opportunities. Saddleback nests built in coastal banks



Adult robin and chick

or tree species also showed the highest productivity. However, coastal habitat varies across the island with the western section being more suitable for foraging and nesting than the eastern section. Recently, pairs of robins and saddlebacks have colonised sites away from the coast or in the eastern part of the island, which has less suitable nesting medium (dead tree) and fewer food items, resulting in slightly lower breeding success.

In summary, it has been suggested that since saddlebacks historically inhabited podocarp forests, they should also use this type of habitat on Ulva Island. However, coastal habitats are not only familiar to this species, but also the most suitable for nesting and foraging. The pristine dense podocarp forest of Ulva Island was rare in New Zealand, whereas a mixture of podocarp-broadleaved forests were more common on the mainland. Further, mixed forests are known to support a greater abundance and diversity of species by providing a diversity of substrates for foraging or reproduction. Consequently, mainland podocarp-broadleaved forests were the most likely suitable habitats for saddlebacks to survive and breed.