

Wildlife Conservation In The Falkland Islands

Issue 12



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FALKLANDS CONSERVATION

Protecting the wildlife of the Falkland
Islands for future generations

www.falklandsconservation.com

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There's oil in those waters...

Not quite the words that our Members wish to hear and a more accurate statement would be there's oil under those waters. Hydrocarbon exploration has returned to the Falklands after nearly a decade and some are estimating up to 60 billion barrels of oil could be recovered. While companies investigate the viability of extracting oil, wildlife enthusiasts from near and far wonder if we might inadvertently find ourselves with "oil in those waters" and ask "What is Falklands Conservation doing to protect the interests of wildlife?"

In principle, Falklands Conservation does not oppose hydrocarbon exploration but we firmly believe that such activities must be underpinned by sound science, superior mitigation strategies and industry best practice for emergency preparedness. An absence of data regarding seabird and cetacean distribution during the first round of exploration (1998) prompted the work of our Seabirds at Sea Team. The result was a series of broad scale maps highlighting areas and times of the year in which seabirds are most vulnerable to surface oil pollution. These maps feature prominently in the latest batch of Environmental Impact Assessments. Yet, information gaps persist and addressing those gaps is critical if we hope to predict how hydrocarbon development might interact with our wildlife.

Over the past year, Falklands Conservation has assessed the numerous Environmental Impact Statements and provided recommendations to the Falkland Islands Government. We have advised on the development of the National Oil Spill Contingency Plan, and took the lead on the Oiled Wildlife Contingency Plan. Through a partnership with the Ministry of Defence and the Falkland Island Government, a purpose built facility for rehabilitating oiled wildlife will be a reality by this time next year. Lastly, we engaged Government, private donors, charitable trusts and the exploration companies in our efforts to address critical information gaps regarding vulnerable species, particularly the Southern Rockhopper Penguin, whose populations have been declining for the past 30 years. We are currently undertaking a multiyear study of Southern Rockhopper Penguins to examine how exploration activities might interact with their summer foraging and winter migration.

I have overheard a few folks suggesting that Falklands Conservation has been rather silent about the recent oil developments, and while we may not be prominent in the media, we have been anything but silent in representing wildlife interests throughout the exploration campaign.

Craig Dockrill,
Chief Executive
Officer

Ocean Guardian
— the oil rig currently
drilling for oil in
Falkland Island waters.



FRONT COVER PHOTO: Silvery Grebe *Podiceps occipitalis*. This is an attractive waterbird, resident in the Falkland Islands found in coastal kelp beds in the winter, returning to inland ponds to breed in September. This is an award-winning picture from our 2009 Photo Competition, taken by Dana Morrison.

Volunteer Adventure to Beauchêne Island

Alastair Wilson

During my summer of volunteering with Falklands Conservation I was fortunate enough to visit a variety of beautiful places. Top of the list would have to be my trip to Beauchêne Island, where I undertook shoreline surveys whilst a team from the Shallow Marine Survey Group explored underwater. This is the most southerly island of the Falklands archipelago some 54 km (34 miles) south of mainland East Falkland.

We arrived at Beauchêne on board the *Golden Fleece* on the morning of 20th December. After thoroughly disinfecting our boots, we were taken ashore in a small inflatable. I walked on to the island past sleeping elephant seals and curious rockhopper penguins, a vast swathe of tussac grass, then over the crest of the Island. It then hits you, stretching off into the distance, the vast black-browed albatross colony: 103,050 pairs carpet the western side of the island in black and white. The sight and sound of so many birds all in one place is quite breathtaking. Watching the coming and goings of the colony, it became apparent that not only was this a sea of albatrosses, but also rockhopper penguins (61,650 pairs), tussacbirds, and striated caracaras with curious sharp eyes looking out for their next meal. These numbers don't really do the spectacle justice, so to put this into context - there are more birds on Beauchêne than there are people in Cardiff, Belfast or Bristol!

The tussac grass was more than 2 m (6½ ft) tall and very dense. With no chance here of walking between the bogs, leaping over it was the only way forward. But the only endemic plant we found was the smooth ragwort. Towards the north western end boulder beaches with rotting kelp held numerous pairs of Cobb's wren.

The only other passerines were tussacbirds and black-throated (canary-winged) finches. Other shorebirds, ducks, oystercatchers, geese, were notable by their absence, presumably due to the extreme nature of the winter weather here.

For such a remote location, there was a surprising amount of debris along the coastline. This included driftwood, ropes, fishing nets, and buoys.

After three glorious days our visit to Beauchêne was over, and on the night of the 23rd we sailed north to Sea Lion Island. And then all that was left was the trip back to Stanley, and to tidy the yacht ready for its next adventure.



Boulders weren't just a problem for us, but also for the albatrosses, one of which had managed to fall down into a large hole with no way out.

I decided to lend a hand and rescued it from certain starvation.

A Wilson.

Locations of seabird colonies had to be noted and estimates of numbers provided. This was in fact rather tricky. Sections of the Island were sheer cliffs; other sections were littered with van-sized boulders ripped from the solid rock, and everywhere imaginable there were nests. SMSG.

Bird Recovery on Three Rat-free Tussac Islands

Robin Woods

Introduction

Falklands Conservation had been concerned for a number of years about the effects of introduced mammals on the fauna and flora of small offshore tussac islands so when Outer Island (20 ha) and Double Island (9 ha) off West Falkland came on the market in 1997, we appealed for funds and bought them. Nearby Harpoon Island (3 ha, 1.6 km north of Outer Island) remains in private ownership. A survey was undertaken shortly after purchase in 1998.

In September 2001, the first experimental rat eradication in the Falklands was carried out here. Monitoring visits have since been undertaken in December 2001, in 2006, and in November 2009.

An Absence of Rats and Presence of Camel Crickets

Since 2001 no signs have been found of rat survival on any of these islands. In 2009 we searched for the endemic, flightless camel crickets, a favoured food of Cobb's wren and found several on each island. Recent studies have shown that there ten times as many camel crickets on islands in the Falklands without rats. It can be confidently assumed that rat eradication will lead to an increase in the quantity and variety of invertebrate life, which in turn will support thriving songbird populations.

An Increase in Songbirds

The songbird numbers on all three islands for both species and individuals have increased.

On Outer Island

In 1998, only three songbirds were found; two pairs of ground-tyrants were present but only one grass wren and one Falkland thrush were heard singing. In November 2006, six of the nine native songbirds were present. Numbers had also increased, with a flock of at least 20 black-chinned siskins and at least 10 Thrushes seen. Two grass wrens sang and a single grass wren was noted foraging among large beach boulders.

In 2009 we noted three pairs of dark-faced ground-tyrants and the grass wrens had increased from two singing males to at least four.

We saw six pairs of Falkland thrushes and a number of juveniles. Black-throated finches were obviously breeding successfully, with three pairs and some juveniles. We found one pair and another female long-tailed meadowlark and two pairs of black-chinned siskins.

A single, clean dropped breast feather of the short-eared owl was picked up suggesting that this species

may be breeding or at least hunting over the island. There had been no previous evidence of this owl on Outer Island.

On Double Island

Little difference was noticeable in the number of species of larger shorebirds between 1998 and 2009. A pair of upland geese was a new record for 2009 and crested ducks seemed to have increased from three to five pairs. There was about the same number of Falkland steamer ducks in 2009, with the addition of a non-breeding flock of 95 birds resting on the rocky reef. Both oystercatchers increased from one or two pairs in 2006 to four pairs of each species in 2009. Three male grass wrens sang and one was feeding among beach boulders and kelp as in 2006.

Up to six adult thrushes were noted compared with 'few' in 2006. Possibly two black-throated finches were seen in 2006 and there were two singing males in 2009. A pair of long-tailed meadowlarks was seen in 2006 and one bird was calling in 2009 while two pairs of black-chinned siskins were recorded for the first time in 2009.

On Harpoon Island

In December 2001, bird life seemed very sparse. Two pairs of blackish oystercatchers were seen and there were single pairs of Magellanic oystercatchers and other larger shorebirds. The only songbird was a single dark-faced ground-tyrant. In 2006, two kelp



Double Island - eastern rock and sand beaches, looking north. Robin Woods.

goose nests were found and in 2009, at least four pairs were seen. There were four territory-holding pairs of Falkland steamer duck in 2006, and we saw three pairs and a non-breeding flock of 114 birds in 2009.

Both oystercatcher species were holding territory in 2006 and in 2009 we noted four pairs of Magellanic and at least six pairs of blackish oystercatchers, a substantial increase since 2001. In November 2006, a roosting flock of about 40 South American Terns was seen on the east-facing rocky promontory and in 2009, there was a flock of 100 or more in the same area. In 2006, we recorded two or three singing male grass wrens, whereas in 2009 there were probably six males holding territory. We saw a pair of black-chinned siskins in 2006 and adults in 2009 were feeding fledglings. In 2009, for the first time there was at least one pair of black-throated finches.

Conservation Issues

Monitoring visits to these three islands have demonstrated the immense value of Falklands Conservation's programme of rat eradication.

The songbird populations showed the most noticeable increases. Of those species found for the first time in 2006 or 2009, the black-throated finch and long-tailed meadowlark are widespread on East and West Falkland, while the black-chinned siskin occurs more commonly at settlements with planted shrubs and trees or on islands with mature tussac or the native Boxwood. As these three species were absent in 1998 and 2001, it is possible that the populations of rats on Outer, Double and Harpoon were sufficiently high to thwart breeding attempts

of birds that flew the few hundred metres from the mainland. Rats could be assumed to have had similar effects on the dark-faced ground-tyrant, grass wren or Falkland thrush that survived in very small numbers when rats were present.

Tussacbird and Cobb's wren were absent in 1998 and neither has recolonised. Distances from the closest islands known to have populations may be a significant factor in their continuing absence. The shortest route would involve flying over several kilometres of mainland West Falkland, where feral domestic cats roam, feral house mice inhabit low vegetation and rats occur at settlements and in coastal areas.

It is likely that Cobb's wren and tussacbird were inhabitants here before they were infested by rats. Tussacbird and Cobb's wren are both breeding on Beauchêne, about 60 km south of East Falkland, and presumably reached this island without human assistance. It is probable that both species will eventually reach Outer and Double Islands although such colonisation may take years.

The United Nations has declared 2010 the International Year of Biodiversity. It is particularly satisfying to be able to report that the biodiversity of some offshore islands has clearly improved since the rat eradication programme began. There are more than 700 offshore islands in the Falklands archipelago. By December 2009, surveys of 268 offshore islands had confirmed viable populations of the Cobb's wren on 96 islands. Rats and/or feral house mice are now known to be present on at least 108 islands. There is clearly much more work to be done.



Apart from songbirds, the greatest change on Outer Island in 2009 was the presence of a crowded king shag breeding colony with about 250 pairs, adjacent to a colony of at least 60 pairs of rock shags. *Robin Woods.*

Acknowledgements

The 2009 visit was made possible through sponsorship from the Flagship Species Fund of the Department for Environment, Food and Rural Affairs (DEFRA), administered through Fauna and Flora International, UK. As before, Michael Clarke provided transport and accommodation on the Condor between Carcass Island and these three islands in Queen Charlotte Bay. We are grateful for his care in getting us to and from these somewhat isolated islands, to Jeannette Clarke for accommodating us at West Point Island before and after the visits and to Lorraine and Rob McGill for their logistical support, accommodation and board on Carcass Island.

Plant Invaders in the Falkland Islands

Richard Lewis

Globally, invasive species are increasingly recognised as one of the greatest threats to island biodiversity. In the South Atlantic, St Helena now has only 5% of its land area left supporting native vegetation. The Falkland Islands are far from reaching this desperate state, but invasive plants are having an increasing impact on its native vegetation and, left unchecked, it is only a matter of time before the impacts are as severe here as elsewhere.

Introductions to the Falklands

The Falklands have 175 native species, and over 230 introduced species, the number of which is increasing at an alarming rate. The vast majority are of UK origin. During survey work over last austral summer an additional 62 introductions were identified. These new species mostly fall into one of two groups – garden escapes or weeds.

With large numbers of people and goods travelling between the UK and the Falklands, it is not surprising that many weeds arrive here accidentally and that most of the newly identified species were found at MPA or Stanley. Some weeds have been imported in potting compost or garden plants, but muddy boots, socks and Velcro on coats and camping gear are just some of the places seeds use to hitch a ride. It only takes one tiny seed to find its way to a suitable location to introduce a new weed to the Islands.

Unwelcome Invasives

Some introduced species are unlikely to ever spread much outside of settlement areas. Others are already present at or close to a number of Important Plant Areas, including Saunders Island, Port Stephens Coast, Bertha's Beach and Cape Pembroke. Here some of the Falklands' globally threatened plants including Moore's plantain, false plantain, hairy daisy and Antarctic cudweed are at risk. For farmers, invasives such as hemlock and introduced ragwort are poisonous to livestock. Thistles and calafate have spines that get lodged in sheep's wool, injuring shearers and reducing the value of the fleece. All invasive plants displace pasture grasses, reducing the availability of fodder for livestock.

Top ten Falkland Invasives

Calafate (*Berberis microphylla*)
Darwin's barberry (*Berberis darwinii*)
Spear thistle (*Cirsium vulgare*)
Creeping thistle (*Cirsium arvense*)
Mouse-ear hawkweed (*Pilosella officinarum*)
Orange hawkweed
or fox-and-cubs (*Pilosella aurantiaca*)
Oxford ragwort (*Senecio squalidus*)
Northern dock (*Rumex longifolius*)
Broadleaved dock (*Rumex obtusifolius*)
Curled dock (*Rumex crispus*)



In the Falklands, the invasives Calafate (left) and Orange Hawkweed (right) were originally introduced as garden plants. Managing species that have positive benefits as ornamental plants as well as potential negative impacts present a greater range of challenges than species that have no positive value.

Invasiveness is very hard to predict and the same species can react differently in different areas. In addition, many have a lag time of years or decades, when they are present but do not spread far before suddenly spreading very vigorously and rapidly becoming invasive. It is best to take a precautionary approach through biosecurity measures to prevent new species being imported, and have in place a rapid response to control any newly arrived species. My work this austral summer has focussed on developing control protocols for plants that are present in only small populations, but which may have the potential to spread much more widely. It is only at this stage that effective control is affordable. By the time the plants have become a problem, it is often too late.

Control of Invasives

The South Atlantic Invasive Species Project (SAISP), which ended in December 2009, worked with Falklands Conservation to identify and to start to control some of the worst invasive species, including calafate and thistles. Control work for thistles was initiated at all known locations, including Stanley,

MPA & Saunders Island. Recent funding from DEFRA (UK Government) along with support from the Pole-Evans family and personnel from MPA, has allowed this work to continue after the SAISP ended in December 2009. A successful volunteer weekend was held on Saunders Island in February 2010, and there have been other volunteer thistle control days at MPA and Mare Harbour, which have had a considerable impact in those areas. Additionally, a control strategy has been commissioned to guide future work, with the long-term goal of completely eradicating thistles from the Falklands.

Priorities for the Future

The greatest priorities for the immediate future are:

- 1 To draft and implement eradication strategies for those species already causing significant problems.
- 2 To eradicate all potentially invasive species, where this is practical. Around 90 introduced species are found in only a handful of places – it is much easier to control these now, before they have a chance to spread.
- 3 Increase biosecurity, for cultivated plants and weed species.
- 4 To raise awareness about the impact of invasive species and encourage reporting of any sighting of plants targeted for control.

Sustained action, if undertaken now, could eradicate many of the most damaging invasive plants and safeguard the future of Falkland wildlife, landscapes and habitats from one of the greatest threats to its terrestrial ecosystems. But, this opportunity is rapidly slipping away – with each year that passes, new species are arriving and existing species are strengthening their hold. For some invasive species it is probably too late and the battle has been lost, but for many others, we may just have got there in the nick of time.

Mouse-ear Hawkweed, with its wind-dispersed seeds, is already invasive and creating problems for native species and agriculture. It is scattered at low density over many square kilometres. Control may be unfeasibly expensive and logistically impossible.

Hebe hybrid

(*Hebe* × *franciscana*)

The native Falkland boxwood (*Hebe elliptica*) is an attractive hedging plant, grown in Stanley and Camp. Introduced to UK gardens in the 18th century with a related species (*Hebe speciosa*) from New Zealand, it has hybridised to form *Hebe* × *franciscana*, widely grown in many parts of the world, including the Falklands. This ornamental hybrid is now crossing with the Falkland native boxwood, producing plants intermediate in character. More work is needed to understand the potential impact of this 'genetic pollution' on wild boxwood populations.



Moore's plantain

Plantago moorei

Though it lacks showy flowers, this species has a sculptural beauty all of its own. Only found in the Falkland Islands, it is restricted to rocky areas along the southern coast of West Falkland and a few islands nearby.



Populations of this and other rare native species are threatened by the invasive mouse-ear hawkweed – see below.

Mouse-ear Hawkweed

Pilosella officinarum

About 30 cm tall, this is proving to be an aggressive enemy of both native vegetation and agricultural pastures.

At Port Stephens, in the southwest of West Falkland, where it probably arrived less than 30 years ago, it has already overtaken many hectares of pasture land near to the settlement. Its creeping stems create monocultures of hairy grey leaves covering every available patch of ground. It is also found up to 10 km from the settlement, including Stephens Peak, where it is invading the habitat of the threatened Moore's plantain (*Plantago moorei*). It has also been found at Little Chartres and Port North on West Falkland, and near Bull Point on East Falkland.



Richard Lewis is a botanist working with Falklands Conservation, the Falkland Islands Government and the UK Overseas Territories Programme of the Royal Botanic Gardens, Kew. He has been working on invasive plants in the Falklands since November 2008, undertaking surveys of cultivated plants and weeds, removal of invasive species, and educational work with both adults and school children. He is hoping to return to continue this work in the 2010-2011 field season.



Top and Bottom Islands: Wildlife islands close to Stanley

Falklands Conservation cleared rats from these islands in 2001 and has since visited them on an occasional basis to record wildlife and check up on their rat-free status. The latest visits were in November and December 2009. Together, they are now considered to be of high wildlife value.

Top (12 ha) and Bottom (8 ha) Islands lie on the southern side of Port William, close to Stanley and are owned by the Falkland Islands Government. At the east end of Bottom Island a rocky platform extends under the sea to emerge as a rock called The Viper, and to the west of Top Island lie the Kelly Rocks. They are all low lying, rising to no more than 15 m (50 ft) in height. Extensive kelp beds fringe both islands.

Tussac grass was cut here as animal fodder during 1900s to 1940s, but the islands have not been used for any agricultural purpose for many years and due to difficulty of access are largely undisturbed. In the 1940s 'Cracker' Jack Davies was reputed to have cut 60 bundles of tussac weighing 28 pounds each in one hour! The islands were set on fire in the 1982 conflict and the remains of a small Argentine shelter can be seen on Top Island. There is no damage evident from the fire, which was not persistent and did not penetrate deep into the peat.

Tussac Grass and other plants

The dominant vegetation on both islands is tussac grass. The interior of Bottom Island is completely covered in a healthy stands up to 2 m (6.5 ft) high. Passages between bogs provide regular access for sea lions, burrowing petrels and Magellanic penguins. Much of the shoreline is covered in orange lichen.

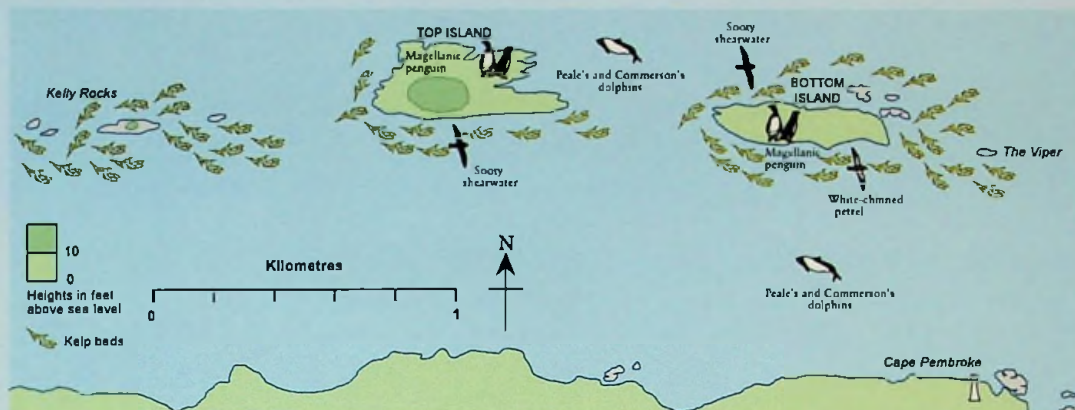
A number of other native plants have been recorded including wild celery, diddle-dee, pig vine, Falkland strawberry, Christmas bush, swordgrass, Antarctic starwort, tall and small fern. In November 2009 the extraordinary discovery of a small patch of non-native broad buckler fern, growing on Top Island, was made. The only other record of this plant growing in the wild in the Falkland Islands is from the extreme northwest point of West Falkland. Other introduced plants include common mouse-ear chickweed, Yorkshire fog, and sheep's sorrel.

A Good Place for Birds

Twelve breeding bird species have been recorded. Both islands now support good populations of Tussacbirds, which have colonised since the rat eradication in 2001. Falkland thrushes appear to have increased in numbers too. Other birds continue to thrive including grass wrens, turkey vultures, dark-faced ground tyrants, and kelp geese continue to thrive. Rock and king shags have colonies on both islands. There is as yet no evidence of Cobb's wrens breeding here, though a single juvenile was spotted on Bottom Island in 2004. It may be that there are too few boulder beaches on either Top or Bottom to attract them.

BELOW LEFT: White chinned petrel. BELOW RIGHT: Tussacbird. *Craig Dockrill.*
OPPOSITE: Immature Male southern sea lion on a tussac grass bog,
Top Island 2009. *Robin Woods.*





MAIN PICTURE:
From Top
Island looking
towards Bottom
Island with
Cape Pembroke
Lighthouse in the
far distance.
Ann Brown.

A Special Place for Seabirds

There are seabird burrows on both islands. A number of these on Bottom Island are home to Magellanic penguins and sooty shearwaters. Of significant conservation importance however is the presence of white-chinned petrels, which were recorded as probably breeding here in 2001. In 2005 Bottom Island joined New Island and Kidney Island as one of three breeding sites in the Falklands for this species, albeit with only two burrows recorded as occupied. Evidence gathered in 2009 suggests that the white-chinned petrel population is increasing and the birds probably have burrows on Top Island too. An overnight survey is required to confirm the presence and abundance of petrels on each of these islands.

White-chinned petrels are one of three seabird species in the Falklands protected under the international Agreement on the Conservation of Albatross and Petrels (ACAP). This commits the Government to take measures to minimise their mortality at sea, protect their breeding sites on land and increase knowledge about their biology and population status. The population of these birds in the Falklands is tiny (minimum of 55 pairs) compared with the 2 million on South Georgia. However, their conservation value here is as a geographically isolated genetic reservoir as the species breeds at only seven other localities around the Southern Ocean.

Mammals

These islands are an important resting ground for sea lions and elephant seals. There have been occasional reports of pups on Bottom Island. In 2009 over 60 southern sea lions were observed on the north coast of Bottom Island and of these several males were displaying territorial behaviour, each with a group of females. They had attracted over 40 turkey vultures, which are often associated with seal colonies. Ten or more were also seen in 2009 on Top Island, some on the tussac well inland, others lying about on rocks on the southern side of the island. Thirteen juvenile southern elephant seals were moulting amongst rocks at the east end of Bottom Island.

Both Commerson's and Peale's dolphins are often seen in Port William, in waters around these islands.

A National Nature Reserve?

These tussac islands, rich in wildlife, deserve special protection not least because they hold a white-chinned petrel colony, an ACAP species, but also for their high ecological value off mainland East Falkland. Since they were cleared of rats in 2001, the wildlife here is thriving. Top and Bottom Islands have been proposed as National Nature Reserves. It is hoped that a management plan to direct future conservation and approval of NNR status conferring statutory protection is not too far away.



With thanks to Sally Poncet and Robin Woods for contributing information contained in this article.

Seals as Oceanographers for the Falklands

Al Baylis, FC Conservation Officer

Marine biologists have been tagging elephant seals for decades, and now the satellite transmitters are sophisticated enough to provide oceanographers with valuable data too. Over the last few years, data collected from sophisticated tagging devices have made an enormous contribution to understanding oceanographic features and processes that influence marine mammal behaviour and ultimately their survival.

Lars Boehme is an oceanographer at the Sea Mammal Research Unit (SMRU) based at St Andrews on the Scottish east coast. I first met Lars on his way back to the UK from South Georgia in November. He had just spent the season deploying satellite transmitters on southern elephant seals at South Georgia as part of the 'South Atlantic Variability Experiment'

Using satellite transmitters developed at SMRU, Lars has gathered some groundbreaking information on both oceanography and elephant seal biology. "This is a real win-win situation," Lars commented. "We're trying to learn about the animals, to learn what's important about their environment and how to protect it. But at the same time we're able to provide information that oceanographers can use in other ways."

As the animals dive beneath the waves, sensors in the tags gather information on salinity, temperature and depth. When the animal surfaces, the data is transmitted to a satellite. Once the seal's transmission is beamed back down to Earth, it is processed and, within a couple of hours, relayed to the scientists. Some remarkable feats have been documented. Elephant seals have been recorded diving to depths of more than 2 kilometres deep, and have travelled up to 6,000 kilometres (3,728 miles) in several short months, before finding their way back to an island in the middle of the ocean.

Lars was hoping to also collect some oceanographic and behavioral data from the Falklands population of southern elephant seals. With the support of Falklands Conservation, the Falkland Island Government Environmental Planning Department and Rob and Loraine McGill from Carcass Island, the wheels were set in motion to do this.

Elephant seals breed at several sites around the Falklands. The population of elephant seals at Carcass Island is the second largest southern elephant seal colony (approx. 80 pups and increasing). Pregnant females usually arrive at Carcass in September/



Elephant seal with satellite transmitter in place on Carcass Island. Callan Duck.

October and give birth soon after arrival. Pups are nursed for about 20 days and then are abruptly weaned when the female departs to sea. The females return to Carcass Island in January to replace their old skin and hair (a process known as moulting). Lars was interested in deploying his units on seals that had finished moulting because the satellite transmitters would stay attached and transmit oceanographic and behavioral information until the seals moult next year.

In the last week of February, Callan Duck (SMRU), Al Baylis (Falklands Conservation) and Zoe Luxton (Veterinary Officer, FIG) flew to Carcass Island to deploy Lars's satellite transmitters on moulted adult female elephant seals. We were welcomed to Carcass Island by Rob and Loraine McGill. After a tour of the elephant seal beaches and bogs to avoid, Rob left us with a Land Rover 'with the best heater' (in case the weather turned) and a packed lunch equivalent to three standard meals. Suitable candidates were identified and we successfully deployed the three units in quick succession.

The latest data are thrilling. Maximum distance travelled from Carcass Island stands at 2200 km (1,367 miles), and the seals have dived to depths of 1000 m (3280 ft). I asked Lars for a prediction on where these seals may go. "At a guess, 11342 will head for the Bellinghousen Sea, 11079 might cross Drake Passage later this autumn and 11343 might visit South Georgia or Valdez for breeding".

In the future, SMRU and Falkland Conservation want to work closely together with the Elephant Seal Research Group on Sea Lion Island to set up an integrated project and so maximize the scientific outcome, but minimizing the impact on wildlife.

For more information on the South Atlantic Variability Experiment (SAVEX):
www.st-andrews.ac.uk/~savex/.

The most recent locations for the tagged Carcass Island seals can be viewed at
www.st-andrews.ac.uk/~savex/results_fi.html

Rare and Vagrant Birds in the Falkland Islands 2009

Mike Morrison and Alan Henry

This report summarises the sightings of rare and vagrant birds submitted to Falklands Conservation or made by the authors, volunteers and staff of Falklands Conservation during 2009.

Northern Rockhopper *Eudyptes moseleyi*

A single bird observed with the Rockhopper Penguin colony at Diamond Cove, Johnsons Harbour. This was seen on the 22nd November by Falklands Conservation staff doing the penguin counts. It was still in the same location on the 26th November when it was seen and photographed by Alan Henry, Mickey Reeves, Saphena Berntsen and Mike Morrison.

Atlantic Petrel *Pterodroma incerta*

Alan Henry saw at least eight birds off Cape Pembroke point on the 25th January.

Soft-plumaged Petrel *Pterodroma mollis*

Brian Aldridge reported seeing a single bird at Brenton Loch, Saladero on 11th November. This was a day of strong winds, snow and hail squalls, which may explain why it was driven into inland waters.

Cocoi Heron *Ardea cocoi*

A single bird near the *St Mary*, Whale Point, Fitzroy on 24th March was seen by Alan Henry, Andy Clarke, John Croxall and Stig Tore Lunde. Another single bird was seen in Douglas Creek by Nick Pitaluga on the 16th June. Phil Overton and Carol Green saw a single bird at a small creek near the Argentine cemetery, Goose Green, on 11th July; this is probably the same bird which was seen near Burnside house on 9th August by Kurt Whitney, 11th August by Alan Henry, 16th August Sue & Mike Morrison.

Cattle Egret *Bubulcus ibis*

Two birds near FIPASS sighted by Mickey Reeves on 26th March. Two birds were also seen on 28th March, one south of the Bypass road and the other one just south of the Cable & Wireless Earth Station both in association with horses (Sue and Mike Morrison). On 3rd April Alan Henry saw seven birds in front of the Cemetery (nine were seen here later in the day Alan Henry and also by Nic Huin), and one on the beach near Government House and six up at Moody Brook (Alan Henry). One bird was seen sheltering in a ditch near Stanley Airport on 5th April by Sue and Mike Morrison. Shannon Aazia reported one in Malvina paddock on 6th April. A single bird was seen flying over the Garden Centre on 21st April Sue and Mike Morrison. Val Berntsen saw approx one hundred birds



Northern Rockhopper Penguin. Mike Morrison.

landing near Government House on 23rd April. A single bird in the yard at 10 Fitzroy Road East seen feeding on carwigs; this bird was seen in the yard most days between 25th April and 4th May. Another two birds were seen in flight over Davis Street on 25th April (Sue and Mike Morrison). Five birds were seen in Cape Pembroke on 27th April by Alan Henry. Alan Henry also had a bird in the yard and picking at the patio door on 2nd May. A single bird was seen on Fitzroy Road by Sue Morrison on 23rd May.

Black Faced Ibis *Theristicus melanopis*

One bird observed on Saunders Islands in early November and still present at the turn of the year (Tony, David & Suzan Pole-Evans). Two birds also seen at Port North on 12th November (Roy McGie).

Coscoroba Swan *Coscoroba coscoroba*

All of the reports are from the Fitzroy area: up to twenty-four birds early in 2009. However it is thought that some may have dispersed during the winter as only five adults were seen in late November. A single cygnet was seen on Big Pond, Whale Point, in late December with the two pairs there and another pair was seen on Bertha's Beach Pond. Observers – Sue and Mike Morrison and Alan Henry.



Cattle Egrets, Stanley. Alan Henry.



Red Shoveler. Mike Morrison.

Cinnamon Teal *Anas cyanoptera*

A pair was seen on a small pond on the south side of Motley Point, Walker Creek on 21st February by Sue & Mike Morrison.

Red Shoveler *Anas platalea*

A single female on the pond in Cattle Point, North Arm on 11th January Alan Henry and Sue & Mike Morrison. This bird was seen again on a nearby pond on 12th March by Mickey Reeves and Sue & Mike Morrison. On 25th January Tim Earl and Allan White saw a pair on Betts Pond, Pebble Island. Another single female was seen on Swan Pond, Cape Dolphin on 22nd February by Alan Henry. On 7th June Sue & Mike Morrison saw a pair on a small pond where the road crosses the Estancia Brook and Alan Henry saw them two days later in Estancia Creek with a large flock of Speckled Teal.

Cinereous Harrier *Circus cinereus*

Brian Aldridge reported seeing a female or immature bird near Salinas Beach, Goose Green on 18th October.

White-winged Coot *Fulica leucoptera*

Carol Peck saw a 'Coot' on a small pond on Carcass Island down towards Leopard Beach on 9th October which was possibly this species. A single bird was seen on Big Pond, Pebble Island, by a Lodge guest on 22nd December.

South American Stilt *Himantopus melanurus*

A single bird first seen on the football pitch by Jeremy Poncet on 23rd May. It was seen again later the same day on the shore line near the Golf Clubhouse by Sue & Mike Morrison, Mickey Reeves and Alan Henry.

Southern Lapwing *Vanellus chilensis*

A single bird on the harbour front at Ross Road East on 3rd May was reported by Carol & Terrence Phillips. This bird was seen in the area over the next few days and Mickey Reeves found a dead bird on the Bypass Road on 7th May which was possibly the same bird. Brian Aldridge saw a Lapwing at Saladero on 28th and 29th October.

Hudsonian Godwit *Limosa haemastica*

Three birds were at Whale Point, Fitzroy on 5th January and six birds in the same location on 5th (Alan Henry) and 15th February. Four birds seen on 15th March (Sue & Mike Morrison), and four birds seen again on the 24th March, two of these birds were going into summer plumage (Alan Henry, Andy Clarke, John Croxall and Stig Tore Lunde). Alistair Wilson saw four birds in Adventure Sound on 25th November. Four birds also seen near the St Mary on 28th December by Sue & Mike Morrison.

(Hudsonian) Whimbrel *Numenius phaeopus hudsonicus*

The single bird seen at Kelp Point, Whale Point, Fitzroy as reported in the 2008 Report was sighted again several times in the same location during the early part of 2009. With sightings on 5th January, 5th & 15th February and 15th March. Observers Sue & Mike Morrison and Alan Henry. Another single bird was seen at Pebble Island settlement by Arina Berntsen. This bird was seen throughout the month of October around the settlement.

Greater Yellowlegs *Tringa melanoleuca*

A single bird was seen in the creek by North-west Arm house on 10th January by Sue & Mike Morrison and



Southern Lapwing, Stanley. Alan Henry.



Hudsonian Godwit, Whale Point. Alan Henry.

Alan & Trish Henry. Possibly the same bird was seen in a creek close to North Arm settlement by Neil Goodwin on 11th March and identified from a photograph taken by Bruce Campbell.

Lesser Yellowlegs *Tringa flavipes*

Two birds were seen in Island Harbour Creek from the MPA road by Sue & Mike Morrison on 31st January. On 19th October Alan Henry found a single bird at Yorke Bay Pond, this bird was seen in the area off and on up to 1st November. Another bird was seen in the same area on 9th November (study of photos indicate different bird from first - A Henry). This bird was seen again on 17th November. On 6th December another, different bird, was seen by Alan Henry, Darren Pattison and Alistair Ham.

Sanderling *Calidris alba*

Alan Henry saw twelve birds at Bertha's Beach on 27th February.

Baird's Sandpiper *Calidris bairdii*

Three birds at Bull Point, North Arm, on 10th January, and also on the same day five birds in the Race near North Arm settlement (Alan & Trish Henry and Sue & Mike Morrison). Seven birds seen at Sea Lion Point,

Salvador on 15th January (Sue & Mike Morrison) and seven birds were seen in Cape Pembroke on the south side of the road on 29th January by Sue & Mike Morrison. Four birds at Kelp Point, Fitzroy on 15th March: Sue & Mike Morrison. Two birds were seen on New Island on 26th October by Rafael Matias. All the remaining records are from the Cape Pembroke area starting with a single bird on 27th September, two birds on 3rd October (Alan Henry), and four birds on 29th October (Sue Morrison), three birds on 9th November (Robin Woods, Alistair Wilson and Mike Morrison), five birds on 14th November and seven birds on 6th December (Alan Henry) and two birds on 8th December (Mike Morrison).

Pectoral Sandpiper *Calidris melanotos*

Single bird seen by Sue & Mike Morrison on 29th January on the south side of the road in Cape Pembroke. Two birds seen on the beach at Kelp Point, Fitzroy on 15th March by Sue & Mike Morrison.

Least Seedsnipe *Thinocorus rumicivorus*

Mickey Reeves found a female bird on the potato fields at the Market Garden on 23rd May feeding with one of the Fared Doves. This bird remained in the area until 21st June when there was a heavy fall of snow.



Least Seedsnipe, Stanley. Alan Henry.



Eared Dove, Moody Brook. Alan Henry.

Eared Dove *Zenaida auriculata*

Martin Beaton reported a single bird on Weddell Island on 15th March. On 17th April Nick Stevens saw two birds on the potato field near the Seaman's Mission. The two birds were seen over the next few days, one remained in the area until 21st June. Bernadette Paver reported a bird in her hen run on 9th November. This bird was seen sheltering in the henhouse over the next few days during a particularly stormy period.

White-crested Elaenia *Elaenia albiceps*

Rafael Matias reported an immature bird at New Island on 7th February. Three birds were seen at Carcass Island, on 3rd March. It is thought that one had been resident there since at least November 2007, (Alan Henry). Rob McGill confirmed that one bird was still there on 24th November.

Tufted Tit-tyrant *Anairetes parulus*

Arina Berntsen sighted a single bird at Pebble Island settlement on 4th June. This bird was also seen by Allan White, and is only the second record in the Falklands.

Fire-eyed Diucon *Xolmis pyrope*

Allan White reported a single bird at Pebble Island on 22nd May. This bird remained in the area of the Lodge gardens until early August.

Fork-tailed Flycatcher *Tyrannus savana*

Jeremy Poncet saw a single bird at Pebble Island at the end of February.

Chilean Swallow *Tachycineta meyeni*

A single bird was seen at Cape Dolphin by Alan Henry on 22nd February. On 28th March Alan Henry saw a single bird up at Moody Valley Farm flying around and sometimes roosting on the big *Cupressus macrocarpa* tree. Rob McGill reported a bird at Carcass Island on 23rd November, Mike Morrison saw and photographed an adult bird the next day on Carcass which was probably the same bird. Carol Peck saw a single bird on Steeple Jason Island on 4th December.

Cliff Swallow *Petrochelidon pyrrhonota*

A single bird was seen at Cape Pembroke Lighthouse before flying over to Top and Bottom Islands, on 24th October by Alan & Trish Henry.

White-banded Mockingbird *Mimus triurus*

Rob McGill found a freshly dead bird in a small hut at Carcass Island Airstrip, and sent it into Alan Henry for identification. This species has only been reported once before when two birds arrived on the cruise ship *Ushuaia* in October 2007.

Double-collared Seedeater *Sporophila caerulea*

On 7th February Rafael Matias saw a single male bird at New Island. This is the first record of this species in the Falkland Islands.



Chilean Swallow, Moody Brook. Alan Henry.



Rufous-collared Sparrow. Mike Morrison.



Grassland Yellow finch, Cape Pembroke. Alan Henry.

Rufous-collared Sparrow *Zonotrichia capensis*

Nic Huin saw a male bird near the Cape Pembroke Lighthouse on 16th August; this bird remained in the area until 23rd August. Another male was seen and photographed by Mandy and John McLeod at Elephant Beach settlement on 14th September.

Grassland Yellowfinch *Sicalis luteola*

On 1st March Alan & Trish Henry found a juvenile bird on the north side of Cape Pembroke, seen again on 2nd & 3rd March in the same location. On 3rd March another bird was found near the jetty on Carcass Island by Alan & Trish Henry and Lorraine McGill. These are the first and second records of this species in the Falkland Islands.

NOTICEBOARD



The albatross was cleaned by Falklands Conservation and vets, and then put in a warm room to dry and recover.

People

Vice Presidents

Robin Woods has been appointed a Vice President of Falklands Conservation. He left our Board of Trustees in November 2009 after 15 years of service. For over 50 years he has been a meticulous observer and recorder of Falklands wildlife and intends to continue to actively support our work in his new role. Lady Philippa Scott, a Vice President and widow of Sir Peter Scott our founder, died on 22 November 2009 at the age of 91. She was a passionate conservationist with a particular interest in the Antarctic and the great whales. Julian Fitter writes of her '*We owe her a huge debt in waking us up to the dangers the natural world is facing, and we owe it to her to continue the fight.*'

Trustees

Louise Taylor, based in the Falkland Islands, has been appointed a new Trustee. Mike Richardson and Sally Blake were elected to serve a further term at the 10th Annual General Meeting held in Stanley on 25 November 2009. Darren Christie has taken over from Jan Cheek as Chairman of our Falkland Islands Committee. Congratulations to Jan Cheek on her election as a Councillor on the Falkland Islands Legislative Assembly.

Staff

Ann Brown retires as UK Executive Officer at the end of June 2009, after 16 years in the post. Sarah Brennan is taking over from Ann and joins us from the RSPB where she is currently Editor of Birds magazine. Watch our website for changes of address, e-mail and telephone number of the UK Office. If you are travelling to the Falklands and able to fit a parcel of two into your luggage, please contact the UK Office who would be very grateful for any help with deliveries to our Falklands Office.



Oiled Albatross Rescue

An oiled Black-browed albatross was saved by Trustee Alan Henry who was on a launch working as customs official and noticed an albatross being thrown off the back of a fishing trawler in Stanley Harbour. The albatross had probably crash landed on the boat and the crew were returning it to the water. However, because it was covered head to toe in a light oil and grime from the trawler deck, it was no longer waterproof, and would have drowned unless it had been rescued. It now looks much whiter and brighter. It is being kept until its plumage is fully waterproof and ready for flight. It is being fed rockcod, which it is perfectly happy at taking on its own, and is a very gentle animal. Unlike penguins, so far no one has been bitten, pecked, wing whacked, or scarred! It seems to be coping well with all the fuss and will be released within a week or two.

New Site Leaflets



Kelp



Kevin Schafer

The Falkland Islands are exceptionally rich in seaweeds – more here than in Australia or New Zealand. There are more than 200 different species recorded for the Falklands, some of them unique to the Islands. This is slightly more than the total number of native land plants. Kelp are large seaweeds belonging to the brown algae. They have the fastest linear growth of any organism, growing at the rate of two feet a day.

Charles Darwin, in April 1834, after spending some time examining the creatures of the kelp bed communities of Berkeley Sound, East Falkland, declared: *'Its main striking feature is the immense quantity of organic beings which are intimately connected with the kelp. I can only compare these giant forests to terrestrial ones in the most teeming part of the tropics'*.

Giant kelp or basket kelp is the most widespread and common species. Single strands can grow to over 197 ft (60 m) in length. It forms wide belts offshore up to 1 km (0.6 miles) long and two hundred metres (218 yards) wide. Tree Kelp with its many branched stems is abundant around most open coasts. It reaches several metres in height and grows in dense masses usually in slightly shallower water than giant kelp between low water mark and the offshore zone. Sea Lettuce grows in intertidal areas. It is grazed by kelp geese but is tasty to humans too and can be eaten raw or cooked by frying. Calcified seaweeds first grow offshore, but after being washed inshore they dry out, die and form huge deposits that have been used by farmers as fertiliser.



Wildlife Conservation in the **Falkland Islands**

Issue 13



Wildlife Conservation in the Falkland Islands

Issue 13 November 2010

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FALKLANDS CONSERVATION

Protecting the wildlife of the Falkland Islands for future generations

www.falklandsconservation.com

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FRONT COVER PHOTO AND ABOVE: King penguins *Aptenodytes patagonicus* – one of four penguin species to be counted in this year's Islands Wide Census. Craig Dockrill.

Seabird Conservation – updates on a core area of our work

Craig Dockrill, Chief Executive Officer

Falklands Conservation's remit encompasses everything from environmental education and advocacy to practical species conservation, and research. We are currently engaged in projects that seek to conserve and protect native flora, control invasive species, mediate conflict between wildlife and farming, promote understanding of the Falklands' natural heritage, and explore previously unstudied environments. While we now address a wide array of conservation issues in our annual programme, seabirds remain a focus for our conservation efforts, and a pillar of our research and monitoring programmes, which are now well recognised by the international community.

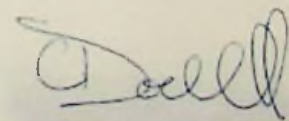
In September 2010, our Community Science Officer Sarah Crofts represented Falklands Conservation (FC) at the 1st World Seabird Conference and the 7th International Penguin Conference, promoting our southern rockhopper penguin research project and our longest running initiative – the Falkland Islands Seabird Monitoring Programme, which has been running for more than 20 years. Long term monitoring of selected colonies helps our scientists to identify critical information gaps, prioritise research, and make recommendations to government that might halt the decline of globally threatened species like the black-browed albatross and southern rockhopper penguin.

Since 2006, we have been working with the Wildlife Conservation Society (WCS) to monitor black-browed albatrosses, gentoo penguins, and southern rockhopper penguins at Steeple Jason. In 2009, this partnership was strengthened by our agreement to include Steeple Jason as one of the key sites in our study of southern rockhopper penguin foraging ecology. Further to these projects, the Royal Society for the Protection of Birds (RSPB), FC and WCS began investigating the impacts of house mice on burrowing seabirds at Steeple Jason last year, and will look to continue this work in 2011. These partnerships also offer FC's seabird conservation team invaluable training and capacity building opportunities.

In addition to a variety of research projects and the Falkland Islands Seabird Monitoring Programme (FISMP), we will also carry out the fourth Islands Wide Census in 2010 – surveying every colony of gentoo penguin, southern rockhopper penguin, and king penguin in the Islands, plus every colony of black-browed albatross. The FC-funded Islands Wide Census supports the FISMP by allowing us to determine how accurately our annually monitored sites reflect island wide population trends of the four species. The Islands Wide Census also provides a comprehensive assessment of black-browed albatross and southern rockhopper penguin populations.

As at mid-October, we had secured just over a third of the £25,000 needed to carry out the Islands Wide Census. Our negotiations with potential sponsors and supporters continue locally and overseas, but we would like to thank those members who have already responded to our Seabird Appeal. Your contributions will go a long way toward ensuring our seabird conservation team delivers on its many obligations for the upcoming southern summer. As we are still seeking considerable resources to fully implement the Islands Wide Census, we'd be very happy to hear from any members who missed an earlier opportunity to contribute to this important project or who know of potential funding sources we may have overlooked.

Finally, I would like to acknowledge the many landowners throughout the Falkland Islands, who were so essential to our success in planning such a massive undertaking. Thank you all for your continued participation, advice, and support.



Part of the black-browed albatross colony at Steeple Jason island. Craig Dockrill



The Shallow Marine Surveys Project: An ale of a tale

Dr Karen Neely

Trickle-down economics. The first portable computer. The lyrics to 'Louie Louie'. Restaurants and bars are rich spawning grounds for these and numerous other ideas that can shape the world we inhabit. The shallow marine environment of the Falkland Islands owes a debt to such a place...the birthplace of the Shallow Marine Surveys Group (SMSG).

A gathering of divers sharing stories over ales in 2006 prompted the observation that a guide to the animals of the Falklands' nearshore waters was non-existent. The island nation had never before had a long-term scientific eye turned towards identification of the species and habitats of its subtidal coastlines and, as the next round was bought, it was agreed that the time was nigh.

From that cocktail-napkin idea stemmed a partnership with Falklands Conservation and a successful funding application to the Overseas Territories Environment Programme to run the Shallow Marine Surveys Project. The goals laid out were to:

- Conduct marine surveys throughout the Islands in order to establish species lists and a specimen reference collection.
- Monitor the marine environment for invasive species.
- Carry out long-term monitoring of the marine environment.
- Conduct shoreline surveys to determine land-sea interactions of coastal birds.
- Advise the Falkland Islands Government (FIG) on the management of the marine environment.

- Increase community understanding and involvement in the shallow marine environment through public outreach and the publication of marine field guides.

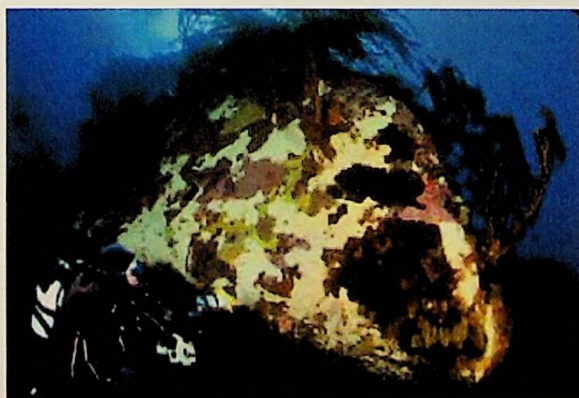
Now, nearing the end of the project's two year funding cycle, these goals are becoming realities.

Monitoring the diversity of marine life

A combination of lengthy live-aboard expeditions and shorter day trips has allowed SMSG members to survey nearly 300 underwater locations. From each of these comes data about the physical and biological characteristics of the site. The sites have also provided specimens and photographs that have contributed to a database of over 6,000 quality images and a museum collection containing more than 3,000 examples of local flora and fauna. These underwater forays have documented a biodiversity inhabiting the thin coastal band that trumps terrestrial species numbers: over 500 species have been identified to date.

One location visited repeatedly is a permanent study site established off the shores of the Kidney Island National Nature Reserve. This reserve, located just 9 km from Stanley, is designated for its bird populations, but its marine environment also displays a wealth of habitats and diversity, from steep submarine cliffs on the seaward side to wide kelp forests and sandy bays on the inshore face. Quarterly visits to permanent transects at three depths continue to provide a record of seasonal and inter-annual changes to the marine community including population pulses and the arrival or spread of invasive species.

Such pairings of diversity and biomass between the marine and terrestrial environments at Kidney Island are indicative of the broader links between land and sea that are still not well understood.

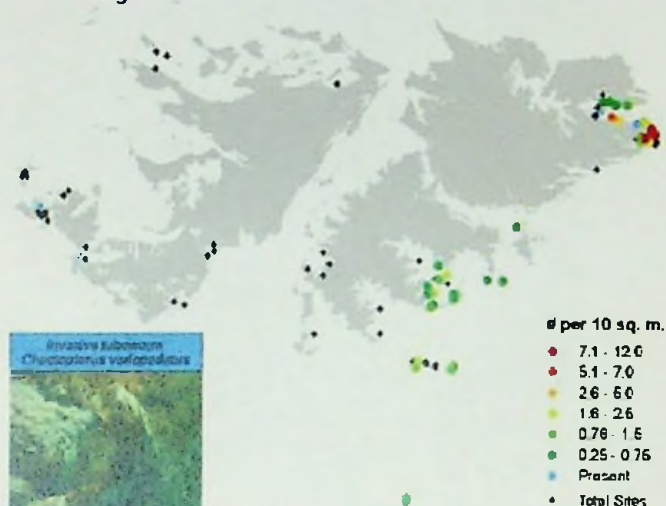


A sponge-covered boulder dominates the landscape in the deeper surveys of Beauchêne Island.



SMSG members await the arrival of divers returning from the long-term monitoring site at Kidney Island.

Monitoring for invasive species, such as the tubeworm *Chaetopterus variopedatus*, occurs on all surveys. Concentrations of invasives are particularly heavy around Stanley, the major port of entry for vessels from foreign waters.



An unidentified nudibranch of the genus *Doto* may be one of many species found in the Falklands that are new to science.

The very names of animals like 'sea lion' and 'kelp goose' are reminders that most of Falklands' fauna are residents of both worlds. To relate the biological and physical characteristics of shorelines, volunteers for SMSG have walked over 120 km of beach, shingle, and wave-hammered cliffs. They have gathered information on kelp densities, terrestrial vegetation, and a host of other factors to determine what drives abundances of birds like ducks and oystercatchers that rely heavily on the land, the sea, and the boundary between.

The Falkland Islands are really a maritime nation. With wrecks of battered brigantines decorating the harbour, tourists flocking by cruise ships to watch penguins flocking by seafoam, and a GDP driven by fish and squid, the historical, aesthetic and economic values of the Islands are entwined with the oceans. But while offshore waters are well measured and managed, the condition and fate of inshore waters have received little attention from FIG. SMSG has developed a series of reports to address this gap.

Falklands' waters contain numerous species subject to commercial exploitation. Though no large-scale extraction has yet occurred, *Marine Resources of the Falklands' Shallow Marine Environment: A Review of Species, Distributions, and Sustainability* addresses concerns and alternatives to any destructive fishing practices that might be undertaken. A second report, *Biotores of the Falkland Islands' Shallow Marine Environment*, identifies the subtidal habitats; only with such information can effective protection of rare or representative areas be established. Such protective measures are gaining ground as international agreements on the establishment of marine protected areas are implemented. Surrounded by waters mostly free from human-induced problems and with minimal conflict from stakeholders, the Falklands are in a prime position to lead the world in delineating such areas. SMSG's third report, *Guidelines for the Development of Marine Protected Areas within the Falkland Islands*, provides a roadmap for avoiding pitfalls and following best practices in building a network of protected areas.



An inquisitive pod of Peale's dolphins approaches a dive team near Stanley.



A sea lion accompanies SMSG Project Officer Karen Neely on a standard survey.

Increasing community understanding and involvement

Protecting the biodiversity of the coastal waters at a time when hydrocarbon development, population-related pollution, and exotic species invasions are all increasing, requires not only sound science, but also social will. Awareness is the first step, and SMSG has worked through a variety of media to increase community knowledge of the ecological resources in the sea. Presentations to the public, display and sale of photographs, and newspaper and radio coverage have illustrated the diversity and beauty of the environment beneath the grey waves. Students too have become more aware of the oceans through SMSG interactions with the WATCH Group and a coordinated effort with the Year 8 students on their interdisciplinary 'benthic environment' project which included science and art projects, learning to snorkel, and rolling up sleeves to collect the animals clinging to the docks. The education of students and adults alike is set to continue, with a public workshop and the publication of intertidal and marine field guides. These will use the photographs and information compiled by SMSG over the years to provide individuals with the information they need to better explore the coasts.



A juvenile catshark *Schroederichthys biviatus*, one of many found in the sandy surrounds of Sea Lion Island, suggesting this area may be a nursery ground for this species.

Which brings full circle the bar talk from years ago. From the voiced desire for an identification guide stemmed more adventure than even the conversation participants could anticipate. Discovering new species, providing the information to guide a national coastal management action plan, and educating a populace on marine issues: may all cocktail-napkin ideas yield such far-reaching effects.



The shallow waters of the Jason Islands are dominated by tree kelp and pink coralline algae that host a plethora of other species.

Acknowledgements

SMSG gratefully acknowledges its partners and sponsors: Falklands Conservation, JNCC, OTEP, Falkland Islands Government Environmental Studies Budget, Antarctic Research Trust, RSPB's South Atlantic Invasive Species Programme, and Beauchêne and Fortuna Fishing Companies.

Dr Karen Neely is the Project Officer/Benthic Ecologist for the Shallow Marine Surveys Group. She has recently taken over from Ali Liddle as the Education Officer responsible for the WATCH group.

Rediscovery of an Enigmatic Falkland Fern after almost 200 Years

Richard Lewis

Imagine rediscovering a plant last seen 190 years ago – a team from Falklands Conservation and the Royal Botanic Gardens, Kew did just that. Richard Lewis tells the story.

During routine plant survey work in December 2009, Dr Rebecca Upson from Falklands Conservation had an unexpected surprise in the form of an unusual and diminutive fern, unlike any other plant found in the Islands.

Rebecca had been joined by myself and volunteer Brian Bond for a five-day survey trip to this beautiful and botanically rich location. Parking the Land Rover at the base of the mountains, the team stopped for lunch before the long climb to the top, where we intended to camp. The fern was spotted just a few yards from the parked vehicle, leading to much debate about the identity of this unusual plant. We collected a specimen, along with important data on the habitat and size of the fern's population. Peter Edwards, a fern expert at the Royal Botanic Gardens, Kew later identified this specimen as the comb fern *Schizaea fistulosa*. This came as a great surprise, as the species had only been spotted in the Falklands once before – in 1820.

The comb fern joins a list of native plant species discovered or re-discovered by botanists working with Falklands Conservation over the past 10 years. Rediscovered species include the endemic Antarctic cudweed *Gamochaeta antarctica*, last recorded in 1842; Fuegian whitlow-grass *Draba magellanica*, last recorded 1914; and Sage's sedge *Carex sagei*, last recorded in 1949. In addition, three native species were identified for the first time in the Falklands – Banks' sedge *Carex banksii*, waterwort *Elatine triandra* and a purslane *Calandrinia* sp. These finds highlight the value of botanical work to discover and safeguard the Falklands' rare and threatened plants.

Chequered history

The comb fern has had a chequered history in the Falklands. Charles Gaudichaud-Beaupré (the second botanist to visit the Falklands) reported finding the fern behind sand dunes, but he did not take a specimen and later admitted uncertainty about seeing the fern.

The Swedish botanist Carl Skottsberg visited the Islands in the early 20th century and attempted to

Comb Fern *Schizaea fistulosa*

This diminutive and unusual plant, growing to only a few centimetres high, is easily overlooked and, at first glance, looks more like a small grass than a fern. The plant forms clumps of wiry stems, each bearing a tiny frond only a few millimetres long. One key feature that identifies it as a fern is seen in the young fronds, which start as tightly coiled 'fiddleheads', gradually uncurling until the mature fronds stand upright.

This species appears to be very rare in the Falklands, having only been found in one location, but it may turn up in other locations – so keep your eyes peeled if you are out and about! Outside the Falklands, it is found in several parts of the world, including Southern Chile, New Zealand, Australia and even the tropical islands of Madagascar, Fiji and New Caledonia.

The comb fern has no close relatives in the Falklands, being part of a relatively small plant family that is largely restricted to the tropics. However, at 16 species, the total diversity of native fern species in the Falklands is higher than many people realise. Whilst common species such as small fern *Blechnum penna-marina* and tall fern *B. magellanicum* are widespread and well known, most Falkland ferns are very rare, such as maidenhair fern *Adiantum chilense* and leathery shield-fern *Rumohra adiantiformis*, both of which are restricted to a small number of locations in the northwest of the Islands.

re-find the fern, but with no success. Unable to find it, he disbelieved the earlier record, stating that the comb fern had never been present in the Falklands.

David Moore sided with Gaudichaud and included the species in his *Vascular Flora of the Falkland Islands*, published in 1968, commenting that it had not been seen since 1820 and was "perhaps now extinct".

In 1999, the Falkland Islands Government included the comb fern in a list of 19 rare and threatened plant species to be given legal protection.

Just a year later, research by David Broughton supported Skottsberg's scepticism and the species was removed from the Checklist he published in 2002. There was still no hard evidence to support Gaudichaud's record and no one had seen the fern in the Falklands for 190 years.

The rediscovery of this fern in 2009 therefore marks the end of a long-running debate, though there is still more work to do to safeguard the future of this plant in the Falkland Islands.

Spotlight on some Current Projects

2010 is the first International Year of Biodiversity and our projects reflect the diversity of wildlife and habitats in the Falkland Islands. Here's a selection of those that will be keeping us busy over the next six months.



WATCH Group

Our WATCH group, a nature club for young Islanders, has grown to 57 members.

Another group is being established for the children of military personnel at Mount Pleasant.

A full programme of activities included trips to Bleaker Island, Port San Carlos, Port Edgar, Cape Dolphin, Weddell Island, Hill Cove and Elephant Beach Farm. We have an equally exciting programme planned for the coming season.

Standard Chartered Bank

Islands Wide Census

The 4th Islands Wide Census (IWC), happening in Oct-Nov 2010, will provide total estimates of population numbers of four penguin species and black-browed albatross. In addition, the IWC allows us to determine how accurately changes in our annually monitored sites reflect total population changes of key seabird species.

Landowners across the Islands, all volunteers and Falkland Islands Government



Raptor – Livestock Interactions Project

This six-month pilot study that began in June 2010 is focusing on the interactions between birds of prey and sheep farming in the Falkland Islands. The species involved include the southern caracara (also known as the Carancho), the turkey vulture and the striated caracara or Johnny Rook.

The project will develop techniques for monitoring the movements and behaviour of the birds, and gather farmers' views of the situation and their experiences with raptors.

The Darwin Initiative Challenge Fund

Biodiversity Monitoring

Our Seabird Monitoring Programme has been running for over 20 years. This year's results showed a downward population trend among all penguin species monitored, though populations of gentoo penguins remained above the long-term average. At the annually monitored sites, we will be counting breeding pairs in November and chicks in January.

Falkland Islands Government
(Environmental Studies Budget)



Our grateful thanks to the key funders and partners listed under each project as well as all FC members and volunteers. We would not be able to carry out our work without their support.

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Sea Lion Ecology

This collaborative study with British Antarctic Survey will be looking at southern sea lion ecology at Steeple Jason Islet and other sites in the Falklands in February 2011. GPS tags will be deployed at 2-4 main breeding colonies to assess seasonal and colony differences in foraging location and behaviour.

Darwin Initiative Challenge Fund and
Project AWARE



Native Plants Programme

Following field surveys to assess the distribution of a number of native plants, species and habitat action plans are being produced for key endemic and threatened flora.

Work is also underway to create an online directory of Important Plant Areas to be published on our website.

The Overseas Territories Environment Programme
and Royal Botanic Gardens – Kew



Rockhopper Penguin Research Programme

The aim of this two-year project is to investigate the foraging ecology, distribution and diet of southern rockhopper penguins at Steeple Jason and Beauchêne Islands. Collectively, these two sites are home to around 62% of the Falklands' rockhoppers. Hopefully, the results will provide some clues regarding the population differences between the two locations, as well as to the overall population decline of this species.

The Overseas Territories Environment Programme



Albatross Demographics Study

We hope that the first cohort of black-browed albatross chicks ringed in 2006 will return to the study site on Steeple Jason Island. This project will give us a greater understanding of the survival and movement of individual birds. Ultimately, the findings can be used to provide policy advice to government.

Falkland Islands Government (Environmental
Studies Budget) and Wildlife Conservation Society



Odd Birds of the Falkland Islands

Mike Morrison

This article summarises the sightings of birds with unusual pigmentation features over the last decade.

Over the last 10 or so years I have come across some odd birds, and others have been made known to me, that is to say albino, leucistic and melanistic. I don't offer any explanation for their occurrence and include them here for their curiosity interest only.

True albinism seems very rare and I think mainly what we see fits into the leucism category. This is when there are a number of pigmentation cells that fail to develop properly; the result is a variation of pale plumages from creams to white. Melanism occurs when there is an increased amount of dark pigmentation.

Penguins

King Penguin *Aptenodytes patagonicus*

Derek Pettersson spotted these two on the greens at Volunteer Point. One (*right, top*) has retained the orange ear patch, but the orange/yellow of the chest has been replaced with black. The other (*right*) is a probable immature bird (normally a lot paler than adults), but this bird is without any orange and yellow colouring.



King Penguins. Derek Pettersson.

Gentoo Penguin *Pygoscelis papua papua*

Gentoos seem to be the most common or perhaps the most noticeable 'white penguins'. One was reported from Port King, North Arm in October 2001 and also a fledgling chick was seen at Kidney Cove in January 2004. A photo taken of this bird by David Lewis appeared in WCFI Issue 4.

This leucistic gentoo (*below left*) was seen at Limpet Creek, Salvador, in December 2000 and the black gentoo (*below*) at New Haven, Goose Green, in February 2005. Interestingly, it has retained the bill colouration and the white crown stripe.



Gentoo Penguins. Mike Morrison.



Rockhopper Penguin. Mike Morrison.

Rockhopper Penguin *Eudyptes chrysocome*

I only know of the one (*opposite; bottom right*) on Pebble Island. It was first seen by Jacqui Jennings in November 2003, but has progressively got darker over the years (Allan White pers. comm.). Alan Henry and I saw it while doing the Penguin Census in November 2005. This penguin featured on a Falkland Island stamp issued in December 2008. This is a good example where the dark pigment has not developed, whereas the bill, yellow eyebrow and superciliary crest plumes are normal.

Magellanic Penguin *Spheniscus magellanicus*

I have seen two birds: one at Seal Bay, Port Louis, in the early 80's had an all-white plumage with small black flecks over the body. The other one, at Cow Bay, Johnsons Harbour in October 2001 had an all-white body with black flippers and black mottling around the throat. Unfortunately, I was unable to get a photograph of either bird.

Ducks and Geese

Upland Goose *Chloephaga picta leucoptera*

Bill and Clara McKay showed me photographs of a goose they had seen near Tamar Pass on Pebble Island that had a light cream-coloured body with a darker head and neck.

Gloria Torsen at Teal Inlet alerted me to this white gander in November 2007 (*top*) that shows very slight barring and has yellow legs.

The picture (*2nd from top*) shows a goose, one of two that were always seen together so probably from the same brood. Mike and Donna Evans first saw them in South Harbour Rincon and then later in the year by the house at South Harbour, where this one was photographed in August 2007. The wings, back and tail have all been affected by a reduced amount of dark pigment.

Alan Henry spotted this odd goose (*2nd from bottom*) at Cape Dolphin in October 2005 that is showing some very odd plumage.

The picture (*bottom*) shows a gander with yellow legs, but it is not clear what may have caused this phenomenon. Alan Henry photographed this one at Steeple Jason in November 2006. I have also seen one on the greens by the Volunteer Shanty in October 2001. Any visitor going to Volunteer Point may have seen this bird, as I believe it is still in the area.



Upland Goose. Mike Morrison.



Upland Goose. Mike & Donna Evans.



Upland Goose. Alan Henry.



Upland Goose. Alan Henry.



Ruddy-headed Goose. Mike Morrison.

Ruddy-headed Goose *Chloephaga rubidiceps*

Eileen and Ian Jaffray mentioned a cream-coloured 'brent' they had seen at North Arm settlement, so Alan Henry and I went out there in May 2003 and found it still in the settlement area. This individual (*above*) has retained some body colour but not on the wings, head, back and tail.

The 'brent' (*opposite*) has a very grey plumage as opposed to the normal ruddy red, and has a white belly. White bellies are occasionally noted in the ruddy-headed goose population in the Falkland Islands. Alan Henry saw this grey bird on Carcass Island in March 2008.



Ruddy-headed Goose. Alan Henry.

Falkland Steamer Duck *Tachyeres brachypterus*

In November 1996 there was a light cream-coloured bird (*bottom*) among a flock of non-breeding birds at the Graveyard Pond, Port Louis.

Patagonia Crested Duck *Lophonetta specularioides*

A cream-coloured bird was seen at Porpoise Creek, Weddell Island in November 2000 when we landed there to count the gentoo penguins at Stanhope Hill.

Skuas

Falkland Skua *Catharacta antarctica*

Robin Woods saw a white skua in December 2001 when he was ashore at Ship Island in Ship Harbour, New Island. It had an all-white body and black bill, and was only seen in flight when it flew towards him and passed within 50 yards. Robin and I saw a second bird, again only in flight, when on Double Island in November 2009. This bird had a nearly white body and light grey wings with darker primaries and a black bill and legs.



Falkland Steamer Duck. Mike Morrison.



Dark-faced Ground-tyrant. Mike Morrison.

Falkland Thrush *Turdus falcklandii falcklandii*
Jonathan Clarke first told me about the two birds (*opposite*) which were seen at Waterfall Valley, Byron Heights in January 2009. Although they were both seen at about the same time, they were at opposite ends of the valley (Robbie Maddocks pers. comm.). The bird on the left is very striking with its all white plumage; the bird on the right shows more variation, with a rusty orange body and lighter flight and tail feathers.



House Sparrow. Mike Morrison.

House Sparrow *Passer domesticus*
An email from Lachie Ross alerted the birders to this individual in April 2008 (*picture above*) that he had seen at the Lookout Industrial Estate, Stanley. It has a very varied plumage, with the head, neck and back being the most affected: it can still be seen in the same area of Stanley today. House sparrows are self-introduced to the Falkland Islands, arriving by ship from Uruguay in 1919 (Woods 1975). They are now resident in Stanley and some camp settlements. I have seen one other 'albino' bird in Stanley a few years ago, which had an all-white body with small black flecks.

Passerines

Dark-faced Ground-tyrant *Muscisaxicola maclovianus maclovianus*

When at North Arm in November 2008, Stephen Dickson told me about a strange bird he had seen at the head of the creek by North Arm settlement. We were unable to track it down on that visit, but in January 2009 Alan Henry and I managed to get some photos of it (*left*).

It had a very varied plumage, retaining only part of the back and secondary flight feathers as normal, tail and primaries showing as pale yellow and the rest of the plumage without any colour and even the bill and legs, which are normally black, were yellow/orange.



Falkland Thrushes. Robbie Maddocks.

White-bridled Finch (Black-throated Finch)

Melanodera melanodera melanodera

Allan White photographed this finch on the sand dunes on Pebble Island in November 2004 (*picture right*). It could possibly be a male because of the distinct change in plumage between the throat and breast.



White-bridled Finch. Allan White.

Black-chinned Siskin

Carduelis barbata

I saw a pale-plumaged bird at Goose Green in April 2006. It had retained the green colouring but much reduced, with the wing bars, cap and chin showing darker.



Black-chinned Siskin. Mike Morrison.

Mike Morrison is a Trustee of Falklands Conservation. We are very grateful for his help with this year's Islands Wide Penguin Census.

Reference

Woods, R.W. 1975. *The Birds of the Falkland Islands*.
Anthony Nelson, Oswestry.

NOTICEBOARD

Staff changes



Sam Cockwell



Karen Neely



Farrah Peck



Sarah Brennan

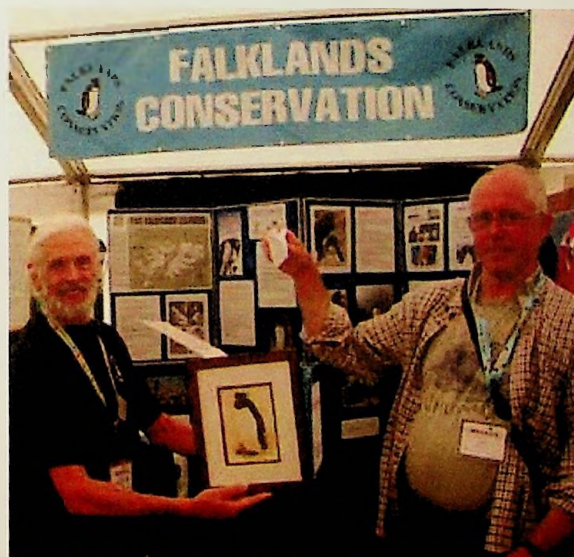
Since the last magazine was published, there have been a number of changes. Sam Cockwell joined the team in Stanley in June to lead the six-month project to look at bird of prey interactions with livestock. Born in the Islands, he returned after completing a BSc in Environmental Sciences at Manchester University. Also in June, Farrah Peck took over from Carol Peck as Office Administrator. And they say everything happens in threes, as Sarah Brennan also joined in June from the RSPB to take over from Ann Brown as the UK Executive Officer. After 17 years' dedicated work to Falklands Conservation, we would like to extend a huge thank you to Ann for all her hard work and unswerving commitment. Ann played a pivotal role in the development of the organisation over many years and her depth of knowledge and range of skills will be much missed.

Having organised a hugely successful Charity Ball in September (see item opposite), Ali Liddle left Falklands Conservation after 15 years in the Islands to return to the UK. But not for long, as in November she joins the first of a number of trips as a wildlife guide on cruise ships bound for South Georgia, the Falklands and the Antarctic Peninsula. We wish Ali all the very best. Last but not least, Karen Neely has taken on Ali's role as Education Officer with responsibility for the WATCH Group. Until October, Karen was working as the Shallow Marine Surveys Group Project Officer (see her article on page 4 of this issue).

Birdfair 2010

It was wonderful to meet so many members at the annual Birdfair at Rutland Water in August. We were also delighted to recruit 10 new members and raise over £1,000 through sales, donations and competition entries. The Fair provides a great opportunity to talk to people about FC's work, with the focus this year on rockhopper penguins, Johnny Rooks and the Islands Wide Census. Grateful thanks to the team of volunteers who worked so hard to make this such a successful weekend.

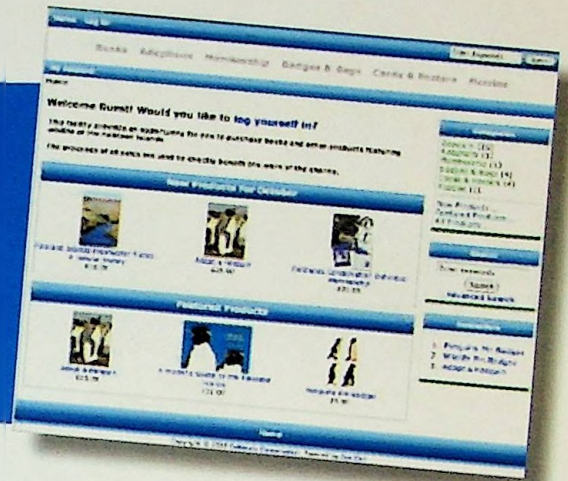
The photograph shows joint co-organiser of the Birdfair, Martin Davies, drawing the winning competition entry from the box held by FC Trustee, Tim Carr. The lucky winner won an original oil painting of a rockhopper penguin by artist and FC Vice-Chair, Mandy Shepherd. *Robin Woods.*



NEW WEBSHOP

Our new webshop was launched in June. It's now much easier to view and buy a variety of goods, including the ever popular range of pin badges and books. Or why not Adopt a Penguin for a friend this Christmas?

Please go to www.falklandsconservation.com



AGM notification

This year's Annual General Meeting and Members' meeting will be held at 6.30 pm on Tuesday 30 November at the Abbey Community Centre, Westminster, London. After the formal business of the AGM, there will be presentations by Craig Dockrill on the 'Current Challenges and Future Opportunities for Wildlife Conservation in the Falkland Islands' and by Dr Mark Bolton from the RSPB on his research looking at the impacts of house mice on breeding burrowing seabirds at Steeple Jason Island.

Conservation Grants Scheme

This year, the Conservation Grants Scheme will provide approximately £1,800 to facilitate three practical conservation actions around the Islands. Vernon and Gail Steen of Paragon, and Kris Thoreson of Teal Inlet will undertake tussac restoration trials, while signs will be erected on Sea Lion Island to discourage the disturbance of breeding southern giant petrels.



Charity Ball

Organiser Ali Liddle, auctioneer Tony Mills, and Chief Executive Officer Craig Dockrill at this year's Falklands Conservation's Charity Ball in September that delivered glamour, glitz and gourmet food to more than 200 guests at the FIDF Hall in Stanley. Over £15,000 was raised on the night by the auction and raffle. We would like to thank Consolidated Fisheries Limited, Quark Expeditions, Falkland Islands Company, Seafish Chandlery, the Malвина House Hotel, and all those who donated raffle prizes or auction items, bought raffle tickets or bid such wonderful amounts in the auction. It was definitely a night to remember.



Craig and Kirsty Lewis showing off their new WATCH Group sweatshirts sponsored by Standard Chartered Bank. Ali Liddle.

Southern Sea Lion



Alan Henry

In appearance, the southern sea lion *Otaria flavescens* is perhaps the archetypal sea lion. Males have a large head with a well developed mane making them the most leonine of the eared seals. Weighing twice as much as females at up to 350kg, males can grow to over 2.75 metres. Pups are born black or dark brown moulting to more of a chocolate colour.

Southern sea lions feed on a variety of fish, including hake and anchovies, as well as squid and octopus. They have also been seen preying on penguins, pelicans and young South American fur seals. Normally hunting in shallow water within 8km of the shore, southern sea lions forage close to the ocean floor for slow moving prey or hunt schools of fish in groups.

The world population is estimated at 265,000 animals. They are increasing in Chile and Argentina, but are declining in Uruguay and the Falkland Islands. The population in the Falklands has declined by 97%, from an estimated 80,000 pups in 1938 to approximately 2,000 pups today. Despite the cessation of sealing in 1962, the population continued to go down into the mid 1990s. The most recent census in 2003 suggests the population may be increasing slowly (3.8% a year between 1995-2003). However, we lack the basic ecological information to be able to protect the Falklands' population adequately.

In February 2011, Falklands Conservation, together with British Antarctic Survey, will begin a project to monitor sea lion movement and dive behaviour using GPS tags. Animals will be tracked from colonies close to areas of commercial fishing and/or oil exploration, as well as from colonies outside these areas. We also plan to carry out an Island wide population census of southern sea lions.



www.falklandsconservation.com

Wildlife Conservation in the **Falkland Islands**

Issue 14



Wildlife Conservation in the Falkland Islands

Issue 14 May 2011

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FALKLANDS CONSERVATION

Protecting the wildlife of the Falkland Islands for future generations

www.falklandsconservation.com

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Building a Conservation Community

As shorter days lead us ever closer to winter, we pause only briefly to reflect on a successful summer and the contributions of all our staff, volunteers, and members. Thank you everyone for all your hard work.

The end of summer brings us new focal points for our conservation energy. Last month, Falklands Conservation (FC) and New Island Conservation Trust (NICT) co-hosted a review of the Falkland Islands Biodiversity Strategy 2008-18 (FIBioS). The aim of this workshop was to engage the wider Falklands community in deciding the priorities for local conservation action in order to progress the FIBioS over the next few years.

Georgina Strange and I worked with facilitator Colin Clubbe, who heads the Overseas Territories Programme at Royal Botanic Gardens – Kew, to put together an informative and diverse agenda. Eight sessions over a period of three days framed our discussions on fisheries, seabirds, the shallow marine environment, biosecurity, farming and biodiversity, protected areas, invasive species, and oil exploration. Attendance exceeded expectations, with more than 40 individuals representing civil society, government, commercial fishing companies, farmers, military, tourism, and citizens at large. Despite the varied perspectives of those in the room, it was soon evident that we were all in our own ways working toward a common goal: sustainable management of our resources and the conservation of nature. After three days of sharing experiences, knowledge, and perspectives, several priorities for action were agreed:

- coastal & marine species and ecosystems – to fill major knowledge gaps;
- enhancing biosecurity to protect native flora and fauna; and
- wider engagement of the Falkland Islands' community in conservation issues.

There is hope and excitement that the events of 18-21 April 2011 could be a turning point for conservation in the Falkland Islands. The workshop demonstrated how sharing ideas and information, respecting others, and putting our common love of the Falklands' environment first can present opportunities to work together to conserve the Falklands' environment for its people and its wildlife. Moving forward, we must seek opportunities for win-win scenarios in partnership with farmers, fishermen, civil servants, politicians or other conservation groups. Opportunities exist, people are willing, and it is time to act... together.

Craig Dockrill, Chief Executive Officer

Footnote

Financial support for the 2011 Falkland Islands Biodiversity Strategy Workshop was provided by the Falkland Islands Government's Environmental Studies Budget.

FRONT COVER PHOTO: In the recent Census, black-browed albatross numbers appear to have increased at several sites. Ruedi Abbuehl.

Island Wide Census – The Big Count

Box 1: Why undertake an Island Wide Census every 5–10 years?

An underlying assumption of the annual FISMP is that monitored sites are representative of the population as a whole. The IWC allows us to determine how accurately our annually monitored sites reflect island-wide population trends, and whether additional sites need to be considered.

In addition to validating our annual counts, we were keen to undertake an IWC in 2010 to assess the current populations of the southern rockhopper penguin and black-browed albatross, in particular.

The southern rockhopper penguin is of concern because of the 80% decline in population since the 1930s, from an estimated 1.5 million pairs to approximately 210,000 in 2005. Because our annually monitored sites showed a further decline in breeding pairs over the past five years, we were eager to establish a total population estimate in order to understand better the current status of this species.

Only the last two IWCs counted the black-browed albatross breeding sites. These showed the population had declined from 418,000 pairs to 399,000 (1% per annum). Again, the recent IWC gave us the opportunity to assess current trends across all the Islands' colonies.

Looking across to Steeple Jason island from Grand Jason. Both of these wildlife-rich islands are owned by the Wildlife Conservation Society. Al Baylis.

Conservation Officer, Dr Al Baylis, describes his first Island Wide Census and shares the initial results.

Falklands Conservation (FC) set up the Falkland Islands Seabird Monitoring Programme (FISMP) in 1989. Every year an FC team makes two visits to selected sites to count the numbers of breeding seabirds and the number of chicks produced. In addition to this annual monitoring programme, we conduct an Island Wide Census (IWC) of all penguin and black-browed albatross colonies every five years.

In November 2010, FC completed the 4th penguin and albatross Island Wide Census (Box 1). The census involved three dedicated teams – one each on East and West Falkland, and one to census offshore islands. It is a massive undertaking, made possible with the support and assistance of many landowners and the enthusiasm, experience and commitment of local volunteers.

A month of counting

Over the course of 28 days, our teams drove, camped, climbed and sailed their way to more than 100 colonies. This included visiting:

- 52 southern rockhopper penguin colonies (200,000 pairs, approximately 20% of the global population)
- 42 gentoo penguin colonies (100,000 pairs, approximately 30% of the global population)
- 17 black-browed albatross colonies (400,000 pairs, approximately 65% of the global population).



Sarah Crofts, an FC employee undertaking a postgraduate degree on rockhopper penguins was part of the offshore island census team. Asked what was most memorable about the census, Sarah replied "Obviously the wildlife! Visiting key penguin and albatross breeding sites is a privilege and a pleasure. It remains a source of inspiration because the work that we do, and that our members support, contributes directly to the conservation of these populations." However, the census isn't all sunshine and penguins, as Sarah added, "While chickpeas were a novelty on the first night, they definitely lost their attraction by day 20."

The potential for weather delays, particularly for the offshore islands team, was a constant source of concern (and not just the thought of yet more chickpeas...). FC has a limited window of time within which to complete the census as counts are timed to occur just after peak egg laying (Box 2). Delays due to weather impact our surveys and our budget, so we were less than pleased with the four-day gale that greeted us at the start of the planned census.

Calm waters

The route of the offshore island team (Figure 1) incorporated FC-owned islands such as North Island (off the north tip of New Island), home to 20,000 breeding pairs of albatross and 3,500 breeding pairs of rockhopper penguins. This island is notoriously difficult to access, requiring a very rare combination of light winds and calm seas to put ashore safely. In the Falklands these conditions are called "chance", which fortunately was on our side when we visited North Island. Indeed, the weather in November was exceptional and, following the initial delay, the census was completed as scheduled.

Encouraging results

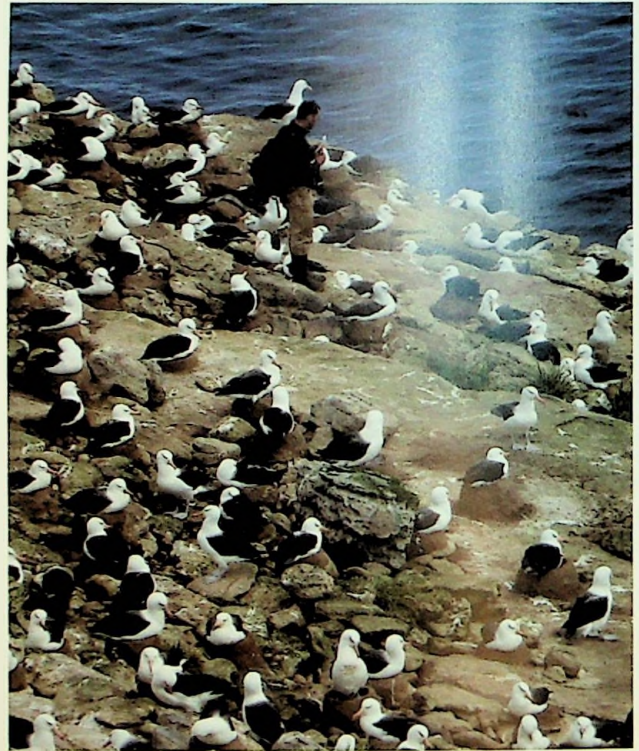
The initial analysis for the 2010/11 breeding season is encouraging and, overall, suggests a population increase from the last census. However, these are preliminary results for some species at selected sites and it will be several months before we are able to confirm population trends using the final IWC results. Early indications are as follows:

- The gentoo penguin breeding population has increased from the previous IWC total of 65,000, even allowing for the fact the Falkland Islands' population of gentoos tends to oscillate from one year to the next, and large inter-annual changes in the number of breeding pairs are not unusual.
- Rockhopper penguin breeding pair numbers varied across sites, with some sites recording higher numbers of breeding pairs, while other sites are down on the 2005 results.
- Black-browed albatross numbers appear to have increased at several sites.

Box 2: Why conduct the census in November?

The objective of our census is to estimate the total number of seabird pairs that laid an egg (ie attempted to breed). This provides a reliable and repeatable measure that is used to assess population changes. If undertaken too early, then we may underestimate the number of birds that attempted to breed. Similarly, if the census is too late then pairs laying an egg that subsequently failed before the census took place will also be missed. Therefore, we aim to time our counts so they occur just after peak egg laying.

Look out for a summary of final counts in the next issue.



Counting black-browed albatrosses. *Grant Munro.*



The *Condor* on her way to pick up the team. *Grant Munro.*

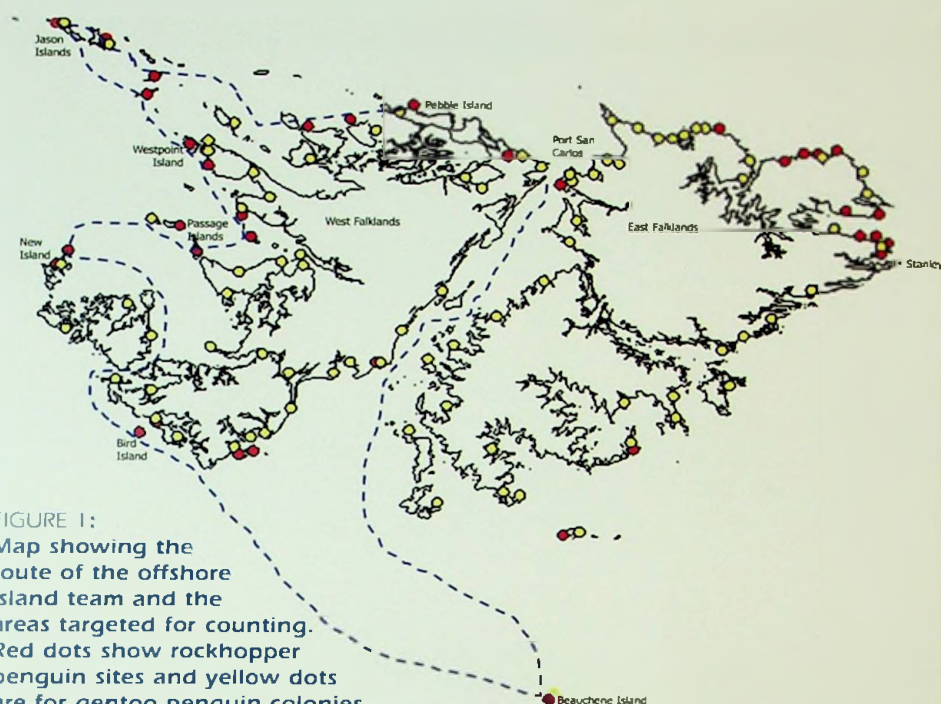


FIGURE 1:
Map showing the route of the offshore island team and the areas targeted for counting. Red dots show rockhopper penguin sites and yellow dots are for gentoo penguin colonies.

Comparative study

An added element of this year's Island Wide Census was a collaborative study involving Falklands Conservation, the ACAP representative (SW Atlantic), the Falkland Islands Government Environmental Planning Department and the New Island Conservation Trust. The objective was to review the performance of several different census methods at specific sites. Ultimately, we hope the results from this exciting comparative study will help to shape future Island Wide Censuses.



Counting at Bird Island. Al Baylis.



Andy, Grant, Al and Sarah enjoying lunch at North island. Sarah Crofts.

Acknowledgements

We extend our sincere thanks to all involved in the IWC for their time, effort and dedication.

In particular, we were delighted to have the experience and enthusiasm of Mike and Sue Morrison, who counted the colonies on East Falkland, and Peter and Shelly Nightingale who counted those on West Falkland with help from Kerry Ford and Marylou Delignieres. We are indebted to Mike Clarke, an exceptional mariner and skipper of the *Condor*, and his first mate, Patrick Berntsen. The offshore island team comprised Andy Black, Grant Munro, Sarah Crofts and Al Baylis.

We were also fortunate to have the assistance of a huge number of landowners, some of whom conducted the census on our behalf. In addition, we would like to thank the New Island Conservation Trust and the Narrows Nature Reserve who provided census information.

Finally, it would not have been possible to conduct the census without financial assistance from The HDH Wills 1965 Charitable Trust, the Ernest Kleinwort Charitable Trust, the William A Cadbury Charitable Trust, the A S Butler Charitable Trust, the Whitley Trust, and all those Members who gave so generously to last year's Seabird Appeal. Our very grateful thanks to you all.

Learning more about birds of prey

Sam Cockwell undertook a pilot project to investigate the impacts of scavenging and predatory birds on the livestock of the Falkland Islands.

In the Falkland Islands, it is well known that from the latter part of the 19th century until the middle of the 20th birds of all kinds, including raptors (birds of prey), were shot in large numbers across the Islands. However, this practice has been changing over recent decades, especially since the introduction of the Conservation of Wildlife and Nature Ordinance (1999). This protects all birdlife in the Islands, with the exception of the upland goose and some species of duck within the hunting season.

Raptors are now completely protected unless a landowner has applied for a licence to cull a limited and specific number; and this is available only if it can be proved the raptor is having an economic impact, such as by predating livestock.

New project

Falklands Conservation carried out a scoping project in 2010 to investigate the impacts of raptors on the livestock of the Falkland Islands. We examined several species of scavenging and predatory birds, namely the Near Threatened*

Charles Darwin described the striated caracara as "very mischievous and inquisitive, quarrelsome and passionate" and "extraordinarily tame and fearless". Robin Woods.

striated caracara or Johnny Rook *Phalacrocorax australis*, southern caracara or carancho *Caracara plancus*, turkey vulture *Cathartes aura* and the southern giant petrel *Macronectes giganteus*.

Researchers worked from the middle of winter in June until the height of summer in December to achieve four key goals:

- (1) Field test various capture, marking, and tracking methods for the study species.
- (2) Collate historical reports and summarise economic impacts of raptors on sheep farming.
- (3) Observe interactions between raptors and livestock.
- (4) Interview 10 landowners to better understand their perceptions of raptors on their farms, lamb loss levels, and the conservation status of raptors.

Capture

During the winter months, researchers tested four methods of capturing birds, the majority of which were very effective. The best for the striated caracara was a very simple cord snare operated by hand. Leg bands were fitted, together with a small number of GPS logging devices on the backs of both caracara species. The fitting of neither type of tag had any lasting impact and, less than an hour later, birds were seen to behave and socialise normally. We also fitted patagial (wing) tags to turkey vultures and southern caracaras with similar success.

* BirdLife International classifies this species as Near Threatened due to its restricted geographic distribution and small population.





James Dwyer surrounded by striated caracaras. Sam Cockwell.

History

The team then delved into the history of raptor impacts on livestock, but found very little pertaining to the actual economic impact. However, they did find some records from the early 1900s that point towards the numbers of birds shot at that time. In 1924, one farm shot 620 turkey vultures, 75 striated caracaras and 107 southern caracaras. In contrast, only 68 turkey vultures and four southern caracaras were culled under licence across the whole of the Falklands in 2009.

Interactions

During the austral spring, time was spent observing lambing flocks on West Falkland for any interactions between raptors and lambing ewes or young lambs. While we did see birds feeding on afterbirth and some older carcasses, we did not see any actual predation at that time, although this does not necessarily mean that it does not happen.

Interviews

Of paramount importance throughout this project was the involvement of the landowners, as they have the best impressions and experiences of the impact of raptors on livestock. We interviewed the owners of 10 farms, covering many of the different environments in the Falkland Islands. We found that opinion regarding the impact of raptors varied significantly, in part due to the presence of different species and in part to the different practices of each farm. For example, farms with large areas of coastline were concerned with the impact of southern giant petrels, whereas other farms did not consider them a threat at all.

All the individuals we spoke with were keen to see changes in the policy regarding management of raptors, as they perceive the current policy to be out of touch with the realities of farming in the Falklands. All agreed they would prefer a non-lethal method of control so long as it was effective.



Wing-tagged turkey vulture. Roo Campbell.



Sam with a tagged striated caracara. Roo Campbell.

Next steps

Given the successes of the seven-month project, and the sensitivity of this issue among the conservation and agricultural communities, we are hopeful our work can be extended and expanded in the coming year, funding permitting. We are currently seeking to undertake a more comprehensive survey of farmers and spend more time observing sheep flocks for interactions.

Acknowledgements

We would like to thank the Darwin Initiative Challenge Fund for funding the project, the National Birds of Prey Trust, and to everyone else who helped.

Starting conservation at a young age

We take a peek at Education Officer Karen Neely's photo album to see what the WATCH Group has been up to.

We're very proud that our WATCH Group has been running for over 10 years and that it's so popular. It provides wonderful opportunities for young people to see the spectacular wildlife of the Islands, to understand more about local and global conservation issues, and to get involved – great fun!

OCTOBER: Boo! It's Halloween and the WATCH Group learned about animal camouflage and then camouflaged themselves in the tussac. Here they are by the lighthouse on Cape Pembroke – if you can see them! Karen Neely



NOVEMBER: Conservation in action. It's never too young to start thinking globally, acting locally. Members planted native species in a park and painted bins for aluminium recycling. Karen Neely



DECEMBER: Deck the halls. The annual Christmas barbecue, this year at Long Island Farm, included eco-friendly presents, diddle-dee wreath-making, and a mouth-watering feast. *Julie Courtney*

Our grateful thanks to all the volunteers and landowners for helping to make these activities so successful.

We are very grateful to the Standard Chartered Bank in Stanley for their continued sponsorship, but we need to look for additional sources of funding to keep the Group going. If you would like to contribute to this key area of our work please get in touch with the UK or Stanley offices (addresses on inside front cover).



JANUARY: Summertime fun. Elephant Beach and Cape Dolphin Farms bravely hosted the entire WATCH Group (all 55 of them!) for the summer camp. Activities included paddling, cave exploring, penguin encounters, whale skeleton building, sea lion watching, and so much more. *Karen Neely*



ALL SUMMER LONG: Small-group camps are a highlight for every WATCH Group member. Trips to Goose Green, Sea Lion Island, and Lorenzo have enabled kids to get close and personal with wildlife, resulted in cleaner beaches and new tussac stands, and led to loads of adventures. There are many more to come. *Karen Neely*



Rare and Vagrant Birds 2010

Mike Morrison and Alan Henry

This report summarises the sightings of rare and vagrant birds in the Falkland Islands during 2010.

Chinstrap Penguin *Pygoscelis antarcticus*

24 Aug – oiled bird seen at Surf Bay (Tanzi Bonner). This bird was caught at Hooker's Point and brought to Stanley to be cleaned. It was later released following rehabilitation by the Falklands Conservation and Agriculture Department team. 10 Oct – a bird seen by the jetty at San Carlos (Liz Penrose). Later enquiries revealed this bird was first seen on 6 Oct (Sharon Halford pers. comm.). Early Dec – a single bird seen at Bleaker Island (Maria & Georgina Strange) and later at the Rockhopper rookery (Mike Rendell). 19 Dec – single bird seen at the Rockhopper rookery at Cape Bougainville, Salvador (Sue & Mike Morrison).

Northern Rockhopper Penguin *Eudyptes moseleyi*

The single bird seen last year at Diamond Cove, Johnson's Harbour returned again this season to the same colony and was observed (Mike & Sue Morrison) on 10 Nov during the Islands Wide Penguin Census. This bird was seen again at the same location on 1 Jan 2011 (Sue & Mike Morrison and Alan, Trish & Lucianne Henry).

Southern Royal Albatross *Diomedea epomophora epomophora*

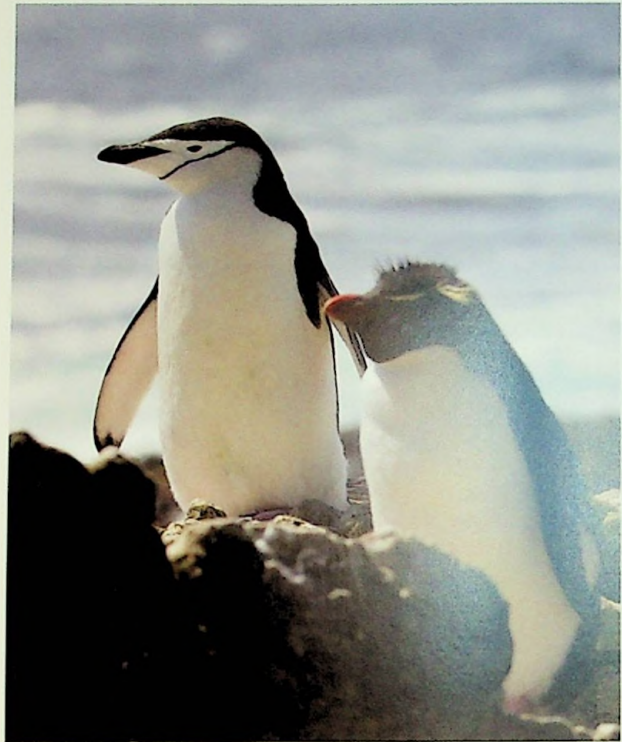
Atlantic Petrel *Pterodroma incerta*

Soft-plumaged Petrel *Pterodroma mollis*

All three species seen from Cape Pembroke on 13 Mar during a day of heavy rain and gales from the east (Alan Henry).

Neotropic Cormorant *Phalacrocorax olivaceus*

13 Nov – two birds found on Big Pond, Pebble Island (Allan White) and still present at time of writing in Feb 2011 – only the second recorded sighting in the Falkland Islands. Further sightings were to follow with two birds at Swan Pond, Smylies Farm on 8 Dec (Mike Morrison &



Chinstrap Penguin. Mike Morrison.

Nick Stevens). A phone call to Allan & Jacqui confirmed the two still on Pebble, so these were additional birds. A single bird reported at the Rookery at Saunders Island on the same day (Carol Pole-Evans). 16 Dec – final sighting of one at Volunteer Point in a peaty pond on the way to Cow Bay, Johnson's Harbour (Micky Reeves).

Cocoi Heron *Ardea cocoi*

Single bird seen at Calf Creek, near Walker Creek settlement on 9 & 10 Oct (David McLeod). He was told it had been around for about a month. 8 Nov – another single bird sighted at Lock Head Pond where it runs out at Cow Bay beach, and again on 16 Dec at the same location (Micky Reeves).



Neotropic Cormorant. Alan Henry.

Great White Egret *Ardea alba*

Single bird sighted on 11 Nov at Teal Inlet settlement (Kristiane Thorsen). This bird remained in the area for a few weeks. 29 Nov – Mandy McLeod reported seeing it at the Pretty Banks, near T I settlement.

Cattle Egret *Bubulcus ibis*

Once again, an autumn influx. First report on 26 Mar at Volunteer Point (Derek Pettersson). One stayed at the Gentoo penguin rookery for three days. Three birds seen on Carcass Island the next day (Micky Reeves). 6 Apr – 12 birds at the Canache (Ken Newton) and 24 on Saunders Island (Suzan Pole-Evans). 7 Apr – 29 on the sea-front Ross Road in Stanley (Alan Henry) and the same birds reported from MPA (Les & Jill Harris and Edith Street). Over 40 birds seen at the Market Garden (Trish Henry) on 12 Apr. Large numbers seen flying in a westerly direction by Sue Morrison on the same day. A look around in the evening only located around 20 in association with horses to the south of the Cable & Wireless Earth Station. 18 Apr – three seen at Goose Green settlement (Alan Henry). Last reported sighting was on 12 May when a single bird was seen in the yard of 10 Fitzroy Road East.

Black-faced Ibis *Theristicus melanopis*

Two birds on the re-seed in Moro Point near Douglas Station settlement on 17 Feb (Tanya Clarke). Possibly the same two birds seen at Cape Dolphin on 20 Feb. Two birds also seen on the greens at Elephant Point, Saunders Island on 29 March (Carol Peck). These birds may have survived the winter as two birds reported as still present by Suzan Pole-Evans on 19 Sep and 11 Nov. Two birds seen at Hope Cottage farm on 15 Oct (Paul Phillips). Two birds also reported from New Island on 11 Nov (Richard White) – they had been in the area for several weeks.

Coscoroba Swan *Coscoroba coscoroba*

All reports this year are from the Whale Point and Kelp Lagoon area at Fitzroy, with no sign of any breeding this season. 1 Jan – five birds seen (Alan Henry) and seven on 21 Feb (Alan Henry & Steve Young). Six birds seen in total on 27 Dec with two on Big Pond, Whale Point, three in Kelp Lagoon and one on the Pleasant Roads Pond (Sue & Mike Morrison).



Red Shoveler. Mike Morrison.



Cinereous Harrier. Alan Henry.

Cinnamon Teal *Anas cyanoptera*

Single male sighted at Big Pond, Pebble Island on 17 Sep (Jacqui Jennings). Alan Henry reported seeing this bird on 20 Nov at the same location.

Red Shoveler *Anas platalea*

Single male on the small ponds at Volunteer Greens on 10 Nov (Micky Reeves). Still in the same place the next day where Mike Morrison was able to photograph it on the ponds (Sue & Mike Morrison).

Cinereous Harrier *Circus cinereus*

7 Mar – Alan, Trish & Lucianne Henry saw a juvenile bird fly past the garden. They followed it to the old FIG butchery site where Alan was able to photograph it before it flew up to Moody Brook.

American Kestrel *Falco sparverius*

Single bird seen when it landed at Long Island house on 19 Sep (Neil Watson).

Aplomado Falcon *Falco femoralis*

Single bird reported on Carcass Island on 12 Feb (Nic Huin). The bird was seen again in late March at the same location (Micky Reeves).

White-winged Coot *Fulica leuaptera*

29 Mar – five birds on the ponds at Elephant Point, Saunders Island (Carol Peck).

American Golden Plover *Pluvialis dominica*

Single bird on Pebble Island between Quark and Betts Ponds on 11 Dec (Allan White).

Hudsonian Godwit *Limosa haemastica*

Two birds near the *St Mary*, Whale Point, Fitzroy on 1 Jan (Alan Henry).

Lesser Yellowlegs *Tringa flavipes*

Two birds by a small pond on Cape Pembroke on 1 Jan (Isobel & David Castle).



Wilson's Phalarope. Mike Morrison.

Ruddy Turnstone *Arenaria interpres morinella*

Single bird at the car park at Volunteer Greens on 10 Dec (Micky Reeves).

Baird's Sandpiper *Calidris bairdii*

Single bird near the *St Mary*, Whale Point, Fitzroy on 1 Jan (Alan Henry). Six birds between Big and Long Ponds on Pebble Island (Dr Juan F Masello reported by Allan White on 11 Dec). Remaining reports are all from Cape Pembroke area: two birds on 26 Sep (Sue & Mike Morrison); five birds on 1 Oct (Alan Henry); two birds on 9 Oct (Alan Henry); four birds on 10 Nov (Alan Henry); and five birds on 25 Dec (Sue & Mike Morrison).

Pectoral Sandpiper *Calidris melanotos*

One or possibly two birds seen at Volunteer Point on 7 Nov (Micky Reeves).

Wilson's Phalarope *Phalaropus tricolor*

Single bird on a pond on the south side of Cape Pembroke on 4 Oct and seen again on nearby floodwater on 9 Oct (Sue & Mike Morrison).

Arctic Tern *Sterna paradisaea*

Single bird in a large flock of South American Terns at Bertha's Beach on 21 Feb (Alan Henry & Steve Young). Single bird also seen at the west end of Elephant Beach, Pebble Island (Dr Juan F Masello and reported by Allan White on 13 Dec).

Eared Dove *Zenaida auriculata*

Two birds at West Point Island on 26 Feb (Alan Henry) with one bird still present the next day.

Fork-tailed Flycatcher *Tyrannus savana*

Single bird on 22 Oct at Fox Bay (Samantha Dodd).

Chilean Swallow *Tachycineta meyeni*

The first report came from Derek Pettersson at Volunteer House on 4 Feb – two birds at first, then four later in the day and seen on and off over the next three days. Five birds on Steeple Jason Island on 10 Feb and



Patagonian Mockingbird. Alan Henry.

a single bird on Carcass Island on 12 Feb (Nic Huin). Two birds at Fitzroy Road East, Stanley on 9 Mar which was probably this species (Sue Morrison). Single immature bird to the south of Government House on 12 Mar (Carol Peck). Two birds at Pebble Island on 20 Nov (Alan Henry).

Sand Martin *Riparia riparia*

Single bird with Chilean Swallows at Pebble Island on 20 Nov (Alan Henry). Single bird at Volunteer Point on 16 Dec (Micky Reeves).

Barn Swallow *Hirundo rustica*

Single bird seen at Gypsy Cove on 23 Apr (Sue Morrison). This bird remained in the area until at least the 27th. Single bird seen in the late evening on 12 Oct along the gravel road by the Islander hangar at Stanley Airport (Sue & Mike Morrison). Two birds reported from Volunteer's on 16 Dec (Micky Reeves).

Patagonian Mockingbird *Mimus patagonicus*

Two birds at Shallow Harbour on 20 Jul (Joan Porter & Kevin Marsh). When Alan Henry visited the site on the 22nd only one bird was present, but it's probable they were both the same species. This species was last recorded in June 1991 (Jimmy Forster at Bold Cove – *Penguin News*, Vol. 3 No.15). This bird remained in the Shallow Harbour area for the next couple of months.

White-banded Mockingbird *Mimus triurus*

Single bird at the settlement on Pebble Island first seen on 10 Oct (Arina Berntsen) when it was heard calling (possibly blown in on the strong wind the day before). Allan White reported it was last seen on 17 Nov.

Patagonian Sierra-finch *Phrygilus patagonicus*

8 Sep – single bird reported at Port Stephens settlement (Ann Robertson).

Many thanks to everyone who reports their sightings.

Important Plant Areas

The Falkland Islands, lying between the continents of South America and Antarctica, are an important place for plants, with many species at the eastern and southern limits of their global range.

With recent additions to the list, there are now 174 vascular plant species recorded as native to the Islands, as well as one hybrid species. Of these, 14 are found nowhere else in the world and two are near endemics. Six species are globally threatened, one is near threatened, and 22 are currently recorded as nationally threatened (under review).

The Important Plant Areas (IPA) Programme, coordinated by Plantlife and IUCN, aims to "Identify and protect a network of the best sites for plant conservation throughout Europe and the rest of the world, using consistent criteria." The IPA label is not a legal designation and "protect" in this context encompasses a broad range of actions from setting the land aside to managing it in a way that has minimal impact on vulnerable species. The identification of IPAs is a first step towards working with landowners to develop management practices for any species at risk, and enable the rational prioritisation of conservation action, such as the control of invasive species, to sites that are the most important from a global perspective.

Using all known botanical records and carrying out two years' targeted field work, FC's Plant and Habitat Conservation Officer, Dr Rebecca Upson, has identified 16 IPAs across the Falklands. This marks a vital step forward for plant conservation

BELOW: Keppel Island. Rebecca Upson.
INSET: Hairy Daisy. Robin Woods.



"The IPA site list is already proving useful in planning and carrying out practical plant conservation work across the Islands. More broadly, I hope the IPA work will raise awareness within the Falklands and beyond of the range of unique plant species that occur here and why it is important that we safeguard their future."

Dr Rebecca Upson

work in the Islands and allows an objectively justified plant conservation strategy to be developed.

The next stage of plant conservation work in the Falklands is dependent on developing workable solutions with individual landowners and the Falkland Islands Government, using a site-based approach to address the particular needs of each IPA. We look forward to helping to make this happen.

With only three IPA sites also identified as Important Bird Areas (Saunders Island, Beaver Island and Keppel Island), it is clear that sites vital to key threatened plant species are not necessarily associated with key bird colonies. More broadly, this emphasises the importance of considering as many taxa as possible when identifying key areas for conservation.

A full IPA directory will be published on www.falklandsconservation.com later this year.

We would like to take this opportunity to thank the Overseas Territories Environment Programme (OTEP), Royal Botanic Gardens – Kew, Richard Lewis, Robin Woods, David Broughton and all the landowners and volunteers who have been involved in supporting Rebecca's work.

NOTICEBOARD



King Penguins. Tim Carr.

New king penguin project

Thanks to a generous grant of £25,000 from WWF-UK, Conservation Officer Dr Al Baylis was able to deploy eight satellite tags on king penguins at Volunteer Point on East Falkland. The aims of this new project are to find out and map where the birds are going to feed to determine what they are eating during the tracking period. Results will be known later in the year.

Trustees

Ian Moncrieff, based in the UK, has been appointed a new Trustee. Jan Cheek (FI), John Croxall (UK), Mike Evans (FI) and Roger Spink (FI) were all elected to serve a further term at the 11th Annual General Meeting held in London on 30 November 2010. We would like to thank Mike Bowles and Alan Henry for their work during their time as Trustees – both retired at the AGM.

A long swim

A Magellanic penguin with a flipper tag was sighted on Saunders Island by Suzan Pole-Evans in early February and traced back to the Centre for the Recovery of Marine Animals (CRAM) in southern Brazil. The penguin, a rehabilitated oiled bird that had been released from Cassino Beach on 17 September 2010, is believed to be breeding on Saunders. While its exact route to the Falklands is unknown, the straight-line distance between Cassino Beach and Saunders Island is 2,200 km.

The sighting is significant as it further supports the belief that South Atlantic penguins frequently disperse between the Falklands and South America and mix readily. And the sighting of this individual is encouraging for all organisations, including Falklands Conservation and the FIG veterinary department, involved in rehabilitating oiled birds.

Birdfair 2011

Please do come along and say hello at this year's Birdfair at Rutland Water from Friday 19 to Sunday 21 August. We'll be at our usual stand in Marquee 5. We look forward to welcoming friends old and new.

Talks

Do let the UK Office know (contact details on page 2) if you give talks on behalf of Falklands Conservation, as we may be able to help with information and images. And if you're looking for someone to give a talk, we will try to put you in touch with a suitable speaker.

Update on sea lion project

In a partnership between FC and the British Antarctic Survey (and funded by the Darwin Initiative Challenge Fund), five tracking devices were successfully deployed on adult females with pups on Big Shag Island. The map shows a single foraging trip north of the Falklands made by one of the females. The ideal fieldwork plan is to get data for two foraging trips for each female. This would enable us to explore whether females utilise the same foraging area on repeat trips. The trackers will then be recovered and redeployed on sub-adult male sea lions at the Kelp Islands. This is new and exciting data and we'll publish updates in future issues.



Fundraising penguins

An important source of funding, as well as raising awareness of our work, is the presence of large penguin collection boxes in various zoos and wildlife parks. Our grateful thanks go to the Cotswold Wildlife Park and Gardens, Drusillas Park and Thrigby Hall Wildlife Gardens for their very generous donations totalling over £3,400 in the last year. To date, they've raised over £35,000 between them – that's a lot of money for penguin protection! We have one spare penguin box looking for a suitable home. If you know a site that would be happy to host one, please get in touch with the UK Office.

Storm damage

An unusually severe storm in December 2010 significantly damaged two of the Falklands' most important seabird colonies. Teams from FC, working on Steeple Jason Island (owned by the Wildlife Conservation Society) and Beauchêne Island (FIG owned), experienced the storm's ferocity first-hand.

In the aftermath, it was evident that many black-browed albatross and penguin nests had been destroyed. At Beauchêne Island an estimated 20,000 albatross nests failed due to breaking waves or prolonged exposure to salt spray. Several hundred adult albatross deaths were recorded, with many tangled in kelp and debris. And it was estimated as many as 10,000 rockhopper penguin

nests were also lost. On Steeple Jason Island, Dr Al Baylis reported that one colony of around 12,000 breeding pairs of albatross and 3,500 rockhopper penguins suffered near complete breeding failure.

The South Atlantic is no stranger to storms. However, until now none has been recorded causing the death of large numbers of adult albatrosses or such significant breeding failure. With the predicted rise of severe storms due to climate change, the frequency of these events may increase. As well as the immediate loss of hundreds of breeding birds, a longer term consequence will be lower numbers of successfully fledged juveniles recruited into the population of breeding adults in about 10 years' time.



BELOW: South-westerly winds drench seabird colonies at Beauchêne Island. Sarah Crofts.
LEFT: Wet and waterlogged albatrosses the morning after. Sarah Crofts.

Membership rate increase

After many years of unchanged subscription fees, rising operating costs and an undiminished list of conservation challenges to tackle, the Trustees have reluctantly decided to increase the annual membership rates from 1 July 2011. We will be contacting all members prior to their renewal date to explain these changes in detail.

Plants book offer

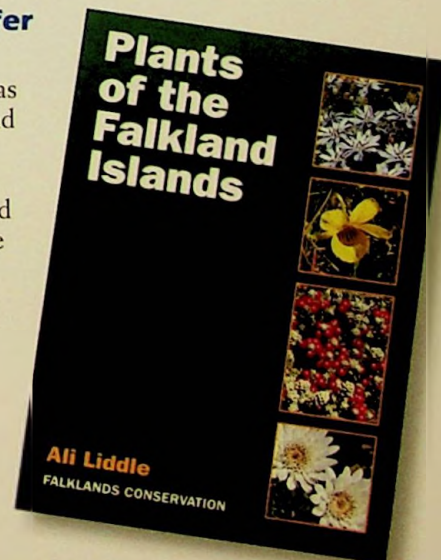
If you've read the Important Plant Areas article on page 13 and would like to find out more about the plants of the Falkland Islands, why not take advantage of our special book offer?

You can save £3.00 on the usual retail price of £10.00

by sending a cheque for £7.00 (including postage and packing) to the UK Office at

14 East Hatley, Sandy, Beds

SG19 3JA. This offer closes on 31 July 2011.



Falkland Conservation's Year in Numbers

Here are some highlights of our work over the year – every one of them relied on our members, funders, volunteers and supporters. Our sincere thanks to you all for making possible so much of what we passionately believe to be necessary.

108 penguin and black-browed albatross sites were monitored over **28** days as part of the 4th Island Wide Census.

2010 was the **21st** consecutive year of FC's Seabird Monitoring Programme to count breeding pairs and chicks of four penguin species at **20** sites around the Islands.

At least **19** species new to science were found during the two-year Shallow Marine Surveys Group project that ended in December.

5th year of Albatross Demographics Study to understand the movement and survival of individual birds. The first chicks ringed in 2006 are due to return this year.

16 Important Plant Areas across the Falklands identified by FC's Plant and Habitat Conservation Officer.

30 geo-locators deployed on black-browed albatrosses to track their winter movements – new collaboration with Memorial University, Newfoundland, Canada.

55 children in the WATCH Group enjoyed monthly meetings and trips to view wildlife and take part in conservation activities.

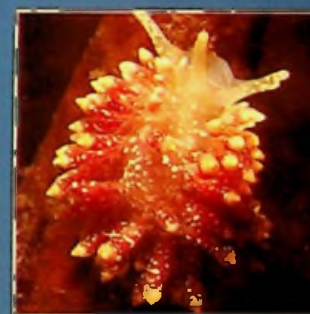
20% of the global population of the southern rockhopper penguin lives in the Falklands – we hope our ongoing project will provide some clues as to why this species is declining. Using satellite and GPS technology we managed to collect data on **60** foraging penguin tracks.

65 bird species breed in the Falklands – of these, **46** feed or nest in tussac grass. During the year we were involved in replanting native tussac at **4** sites.

18 years since there's been a study on the foraging ecology of southern sea lions in the Islands. The F1 sea lion population is thought to have declined by over **90%** since the 1930s. A new FC project is looking at where sea lions go to feed and on what.

23 tagged turkey vultures reported in Stanley by members of the public.

41 Ross Road (cheating a bit here!) – we continued converting the garden at our office in Stanley to grow only native plants.



TOP TO BOTTOM:
Black-browed albatross
survey – Sarah Crofts;
Diddle-dee – Mike Morrison;
An unidentified nudibranch
of the genus *Eubranchus* –
SMSG; Southern sea lion
– Alan Henry

Wildlife Conservation in the Falkland Islands

Issue 15



Wildlife Conservation in the Falkland Islands

Issue 15 November 2011

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FALKLANDS CONSERVATION

Protecting the wildlife of the Falkland Islands for future generations

www.falklandsconservation.com

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A Lasting Legacy

At the time of writing I have been two months in post – and I still have not got to grips with all the work that currently encompasses Falklands Conservation. You will read here about some of the ground-breaking research we have done this year, but there is also all the work that we have carried out in the past – a veritable treasure trove of information. As information builds up over the years, it becomes more and more difficult to keep track of it all and to implement the many recommendations that come forward. Information management is an issue I hope to tackle during my tenure.

However, the research we have undertaken and the information we have garnered does leave a lasting legacy. Our long-term seabird monitoring programme, which you can read about here, illustrates how long runs of data prove invaluable in detecting population trends. Long-term studies, though, are often the most difficult to fund because funders like a project to be 'innovative' and to be time-limited. Hence most of our research is through short-term projects. These can evolve into long-term action undertaken by others, such as the continuing eradication of rats and invasive plants from many areas of the Falklands, and measures put in place to prevent albatrosses being killed on the high seas. Likewise, we hope that much of our research on penguins and albatrosses will assist in the identification of future Marine Protected Areas, in the same way that our research on plants and birds has led to the identification of Important Plant and Bird Areas.

We also have the challenging three-year project, just started, which, by bringing together all existing information on the Falklands' plants and animals, will suggest a coherent system of protected areas for the Islands' wildlife. This will be collaborative as it will only succeed with the general support of all Islanders. Funded by the Overseas Territories Environment Programme, its legacy should be lasting. We have also improved our website, where more of the information we have collected over the years is available to download. Please take a look at it and tell us if there is anything you would like to see added. Ultimately, there is no point in us undertaking research unless the results are easily available and are used to practical purpose.

Dr James Fenton, Chief Executive Officer

FRONT COVER PHOTO: A relaxed southern sea lion.
Read about our joint project with British Antarctic Survey on page 14. Dr Al Baylis.

Life at the extreme: Falkland king penguins

Dr Al Baylis describes how tracking king penguins is helping us to uncover foraging 'hot spots' in the seas around the Falkland Islands.

With the help of the WWF-UK, Falklands Conservation is working towards identifying the critical foraging habitats of Falkland Islands key marine predators. We hope that uncovering these foraging 'hot spots' will ultimately lead to enhanced protection for the amazing marine biodiversity of the Falkland Islands.

One key predator that is helping us to uncover these 'hot spots' is the king penguin *Aptenodytes patagonicus*. King penguins are the second largest species of penguin (emperor penguin being the largest). They breed on several subantarctic islands, including South Georgia, but the Falklands' population is particularly special as it is the northernmost accessible colony of king penguins in the world. Volunteer Point on East Falkland is the largest king penguin colony in the Falklands, and was probably established in the 1930s. The most recent count in 2010 indicates a population of approximately 600 breeding pairs.

King penguins are unusual in that their breeding cycle is extended over a 12-month period (ie it takes over a year from egg-laying to fledging chicks). Other species of seabird that breed at the Falkland Islands cram chick rearing and fledging within the short months of summer. Summer months coincide with higher food availability (and incidentally better weather for those of us studying seabirds!). This means parents can usually find enough food and close to home in order to sustain themselves and meet the nutritional demands of a growing chick.



A satellite-tagged king penguin going about its business.

One way king penguins deal with seasonal variability in food availability between summer and winter is to stop feeding their chicks for extended periods over winter and undertake long foraging trips that often exceed 30 days. It sounds counterintuitive, but chicks are well adapted by this stage to survive such extended periods of fasting.

This year, Falklands Conservation deployed eight satellite tags on king penguins (see photo) to find out where they go over winter and define which areas of the ocean are important. In total, the data logged over 10,000 at-sea locations and showed the eight king penguins travelled some 11,000 km (7,000 miles) and visited three foraging regions (Figs. 1 & 2). These were:

- (i) 900 km to the North of the Falkland Islands
- (ii) 200 km north of the Falkland Islands, associated with the Patagonian shelf break (Fig. 1 below)
- (iii) 900 km south of the Falkland Island, associated with Antarctic waters (Fig. 2 below).

The three foraging regions highlight multiple foraging strategies over winter and a degree of foraging flexibility that is simply awesome.



Fig. 1



Fig. 2

Our very grateful thanks to WWF-UK for funding this work; to Jan Cheek at Johnsons Harbour for access to Volunteer Point; and to Micky Reeves, the Volunteer Point Warden, for assistance in the field.

Rockhopper × Macaroni hybrid penguins in the Falkland Islands

Mike Morrison

*Cross-breeding has been noted among crested penguins in the Falkland Islands, where there are approximately 211,000 pairs of Southern Rockhopper Penguins *Eudyptes chrysocome* and 24 pairs or individuals of Macaroni Penguins *Eudyptes chrysolophus* (2005 Penguin Census Results).*

There was one Erect-crested Penguin *Eudyptes sclateri* as a summer resident on Westpoint Island between November 1961 and 1966 (Napier 1968) and one on Pebble Island from 28 January 1997 (James McGhie) to 17 March 2008 (Allan White), which Alan Henry and I saw in November 2005 when it was incubating egg/s.

Northern Rockhopper Penguin *Eudyptes moseleyi*, Snares Crested Penguin *Eudyptes robustus* and Royal Penguin *Eudyptes schlegeli* have also all been recorded in the Falkland Islands.

Hybrids have been known to produce chicks before in the Falkland Islands (White & Clausen 2002) but this seems to be fairly rare and it is unknown if any have reached the fledging stage.

During November 2010, when my wife and I were conducting the Islands Wide Penguin Census on East Falkland on behalf of Falklands Conservation, we noticed several hybrids among the Rockhoppers. The notes below are of what we observed during this brief visit. We also made a return trip to Cape Bougainville, Salvador on 19 December, and on 1 January 2011 to the north coast of Berkeley Sound to Rugged Hills and Eagle Point with Alan Henry and family. Nick Stevens and Andy Stanworth assisted me on Kidney Island.

The most distinguishing feature of the hybrid is the fleshy pink gape (although less so in birds 1 and 11), a characteristic inherited from the Macaroni; the eyebrow and superciliary crest are more golden yellow than the lemon yellow of the Rockhopper, but the amount of plumes in the crest and the size of the eyebrow are very variable. In birds 4, 5 and 7 the eyebrow appears to be absent. The three birds at Cape Bougainville also showed yellow flecks across the forehead.

Rugged Hills, colony 1: Mixed colony with King Shags *Phalacrocorax atriceps albiventer*; 398 pairs of Rockhoppers; 2 Macaronis, one of which mated with a Rockhopper, and two lone hybrids.



Bird 1 Rugged Hills Colony 2

On the November visit it was standing near the perimeter of the colony unmated. On 1 January, it was observed in the same location but now standing next to a Rockhopper, which suggested they were mated.

Rugged Hills, colony 2: 327 pairs Rockhoppers and 1 hybrid.

Eagle Point, colony 1: 363 pairs Rockhoppers and 1 pair of Macaronis.

Eagle Point, colony 2B: 372 pairs Rockhoppers; 3 hybrids, two mated with Rockhoppers and possibly also the third. 2 Macaronis, one of which mated with a Rockhopper.

Eagle Point, 3B: 138 pairs Rockhoppers; 1 pair of Macaroni plus a single bird and 2 hybrids, one of which mated with a Rockhopper.

Kidney Island: 295 pairs of Rockhoppers; 2 Macaronis, one of which mated with a Hybrid, and one lone bird; and 2 hybrids, one mated with a Rockhopper and the other with the Macaroni.

Cape Bougainville colony 1: Mixed colony with King Shags; 556 pairs of Rockhoppers; 1 Macaroni, probably mated with a Rockhopper; and 3 hybrids, two mated together and the other breeding but mate unknown.

Cape Bougainville colony 2: 917 pairs of Rockhoppers and 3 Macaronis, one pair and the other nesting but mate unknown.

It is thought that all of these hybrids described are a result of interbreeding between the Southern Rockhopper *Eudyptes chrysocome* and Macaroni *Eudyptes chrysolophus* producing hybrids *Eudyptes chrysocome* × *chrysolophus* as both of these species

were present in the colonies, plus three mixed pairs were noted in these colonies during the Census.

The only other crested penguin reported from these colonies was a Northern Rockhopper on Kidney Island on 12 December 2004 (Matias, Catry, Pearman and Morrison 2009).

The colony at Diamond Cove on the north coast of Berkeley Sound has also had a summer resident Northern Rockhopper over the last two seasons (Morrison & Henry 2010 & 2011), although seemingly unmated, and no hybrids or Macaroni penguins have been noted from there during this time.



Bird 2 Rugged Hills Colony 1
Not seen on the November visit. On 1 January it was standing in the colony with no obvious mate or chicks.

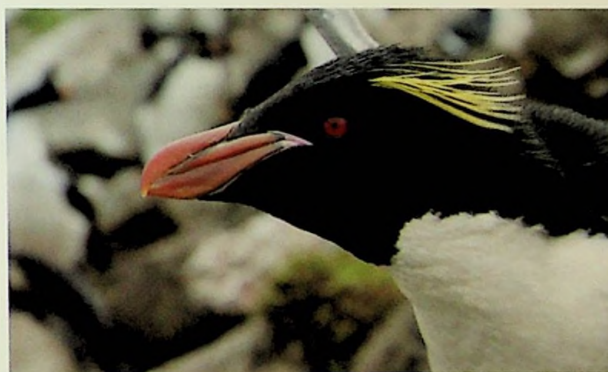
Rockhopper and Macaroni penguins are 'crested penguins' belonging to the genus *Eudyptes*. The genus was described by the French ornithologist Louis Jean Pierre Vieillot in 1816; the name is derived from the ancient Greek words *eu* 'good', and *dyptes* 'diver'.

Crested penguin species are similar in appearance, having sharply delineated black and white plumage with yellow crests and red bills and eyes. All lay two eggs but usually raise only one young per breeding season; the first egg laid is substantially smaller than the second.

Crested penguins breed on subantarctic islands in the world's southern oceans. Their breeding displays and behaviours are generally more complex than other penguin species.



Bird 3 Rugged Hills Colony 1
Not seen on the November visit. On 1 January it was standing in the colony with no obvious mate or chicks.



Bird 4 Eagle Point Colony 2B
On 10 November, mated with a Rockhopper, the hybrid standing by and the Rockhopper mate sitting on the nest. When we returned on 1 January both birds were present with two chicks.



Bird 5 Eagle Point Colony 2B
On 10 November, mated with a Rockhopper, the hybrid standing by and the Rockhopper mate sitting on the nest (within two metres of bird 4). On 1 January, the bird was nearby but not on the nest site and no sign of the mate or chicks.



Bird 6 Eagle Point Colony 2B
Not seen on the November visit (overlooked or not present). On 1 January, standing near the top edge of the colony with a chick, mate unknown but quite possibly a Rockhopper which would account for not seeing it previously.



Bird 7 Eagle Point Colony 3B

On 10 November, mated with a Rockhopper, hybrid sitting on the nest and the Rockhopper mate standing by. Not seen on the return visit on 1 January – breeding success unknown as the chicks may have been with the Rockhopper mate.



Bird 8 Eagle Point Colony 3B

Not seen on the November visit. On 1 January standing on a nest site but with no chicks or mate. Distinguished from bird 7 alongside by different head plumage and also the location within the colony.



Bird 9 Kidney Island Colony

First seen by Robin Woods and Ann Brown on 28 November 2009 when it was incubating eggs on the north cliffs of Kidney Island. When my wife and I visited the site on 12 December 2009, it now had two chicks, mate not seen. On 14 November 2010, it was in the same location standing by its Rockhopper mate sitting on the nest; when Alan Henry visited the site on 8 December 2010 the pair had again hatched two chicks.



Bird 10 Kidney Island Colony

On 14 November, hybrid sitting on the nest and, while we were observing it, the Macaroni mate returned and took over the incubating duties. The breeding success of this pair is unknown.



Bird 11 Cape Bougainville Colony 1

On 21 November, sitting on the nest incubating but no mate present. When we returned on 19 December, the bird was present with one chick and still no mate, so the latter remains unknown.



Birds 12 & 13 Cape Bougainville Colony 1

On 21 November, these two birds had mated and one of them was incubating and the other standing by. On 19 December, one of the birds was present but no sign of any chicks; the reason for the failed breeding is unknown.

Falklands Conservation Review of the Year 2010-11



Achievements and Performance

Our 2010-11 work programme was the first to be built upon the pillars of our 2010-19 Strategic Plan: Conservation and Research; Protected Areas and Policy Advocacy; Education and Outreach; and Capacity Building. The work we do reflects our mission to engage and empower the people of the Falkland Islands to take action with us to conserve biodiversity and manage landscapes and seascapes for the benefit of nature and people.

FC team update

Our Chief Executive, Craig Dockrill, completed his second full year in post, while Sarah Brennan completed her first as UK Executive Officer. Ali Liddle departed the Falkland Islands in

September 2010, after many years of dedicated service; most recently as the WATCH Group Coordinator. We were fortunate to have Dr Karen Neely take up this role on an interim basis, and have been equally fortunate in having Maggie Battersby take on the role on a permanent basis in April 2011. Sam Cockwell successfully completed a seven-month raptor project.

Vice Presidents: Sir David Attenborough, Julian Fitter, Robert Gibbons, Peter Harrison, Sir Rex Hunt, Rebecca Ingham and Robin Woods

Board of Trustees as at 30 June 2011

Henry Robinson (Chairman), Mandy Shepherd (Vice Chair), Darren Christie (FI Chairman), Paul Brickle (FI Vice Chair), Bill Featherstone (Hon Treasurer), Keith Biles (FI Hon Treasurer), Sally Blake, Mike Bowles (resigned Nov 2010), Tim Carr, Jan Cheek, John Croxall, Mike Evans, Alan Henry (resigned Nov 2010), Ian Moncrieff (elected Nov 2010), Mike Morrison, Mike Richardson, Roger Spink and Louise Taylor.

Here are just some of the highlights from the year:

Conservation and research

- 2010-11 marked the 21st consecutive year of the Falkland Islands Seabird Monitoring Programme. It was a very good year for seabirds, with monitored species showing positive trends and several populations reaching their highest levels since monitoring began.
- We carried out the 4th Islands Wide Census of penguin and black-browed albatross colonies across the Islands. Early analysis of the data is showing positive results.
- Our seabird research at Steeple Jason Island (with kind permission from the Wildlife Conservation Society) included the 5th year of the Albatross Demographics Study; a study of the foraging movements of southern rockhopper penguins; and further investigation into the impacts of mice upon burrowing seabirds (in collaboration with the RSPB and WCS).
- We deployed eight satellite trackers on southern rockhopper penguins in order to follow their winter movements, and
- a new partnership with WWF-UK allowed us to initiate a satellite-tracking study of king penguins to follow their winter movements too. Resulting data will help us to map key feeding areas.
- Our two-year project with the Shallow Marine Surveys Group ended in December 2010 with many new species discovered and information gathered to guide a national coastal management action plan.
- A project with the British Antarctic Survey addressing southern sea lions was carried out between February-May 2011. The apparent inability of sea lions to reverse their downward population trend remains a grave concern.
- We carried out a scoping project to investigate the impacts of raptors on the livestock of the Falkland Islands and conducted informative interviews with a number of landowners.
- We entered the fourth and final year of our Native Plants Programme, which was highlighted by botanical surveys on New Island, the identification of a species new to science, and continuing to strengthen relations with landowners. We also facilitated a scoping study of lower plants in the Falkland Islands, and continued to monitor the recovery of recently cleared minifields.





Plant identification field course

Protected areas and policy advocacy

- While the Native Plants Programme continued to progress the Important Plant Areas directory, we also spearheaded the development of a Management Plan for Sea Lion Island, one of two Falklands sites designated under the Ramsar Convention.
- Importantly, we secured three years' funding from the Overseas Territories Environment Programme to facilitate the development of a home grown protected areas strategy for the Falklands. We are confident this participatory project will allow community interests and priorities to be encompassed within government policies and decision-making frameworks.
- We combined forces with the Falkland Islands Government and the New Island Conservation Trust to host a three-day Biodiversity Strategy Workshop in April, providing for the first time a venue for community members to discuss common challenges and future priorities.
- We have been a catalyst for the re-formation of a Forum to address environmental concerns related to hydrocarbon development and exploration activities, and have a seat on this Forum.

Education and outreach

- Members of the local community continued to show their dedication to and support for conservation by helping us to remove invasive species like thistle, restore tussac habitats, and count hundreds of thousands of penguins.
- A partnership with the Royal Botanic Gardens – Kew and Stanley Nurseries helped us to make native plants readily available to the public for the first time. And our native plants garden at 41 Ross Road really started to thrive – winning a prize at the Stanley Garden Show!
- Our WATCH Group goes from strength to strength. All 55 youth members enjoyed at least one excursion to a significant wildlife site in the Falklands, and numerous supplemental arts, crafts and science activities throughout the year.
- We delivered a number of presentations to the newly formed conservation group at Mount Pleasant and, in conjunction with the Falkland Islands Tourist Board, we revised nine of our information leaflets profiling key wildlife tourism sites.
- This year also marked the second consecutive year in which we organised a display and hosted a social night for farmers during Farmers' Week, helping us to communicate more clearly how farming and conservation can work together to achieve common goals.
- Our Small Grants Scheme supported three land managers with various initiatives this year.

Increasing our profile

- We have gained planning permission for major restorative works at our two Jubilee Villas and also the construction of a multi-use building to the rear that will provide a venue for the WATCH Group and other public engagement activities.
- We continued to raise the profile of the Falklands internationally, as FC team members represented the organisation and the Islands at the World Seabird Conference, International Penguin Conference, Patagonian Forum, BirdLife Americas Partnership meeting, and an Overseas Territories climate change adaptation symposium hosted by the EU.
- We completed major revisions to our website and launched our first social media page on Facebook. We hope these will introduce the Islands and our organisation to a whole new audience.



Future plans for 2011-12

Drawing upon our Strategic Plan 2010-19, the Trustees have approved another ambitious programme for the coming year. This plan includes the 22nd consecutive year of the Falkland Islands Seabird Monitoring Programme and the 6th year of our Black-browed Albatross Demographics Study. In addition, we will be focused on protected areas through the recently approved OTEP project, and on invasive plant species with support from Defra.

Our study of raptors and sheep continues through a partnership with the Hawk Mountain Sanctuary, while we pursue funds for a full-scale project. We aim to publish a Falkland Islands' Southern Rockhopper Penguin Species Action Plan, manage the transition from our Native Plants Programme to a Lower Plants Inventory, and hope also to sustain our work on southern sea lions. The WATCH Group will once again be a flagship for our community and education activities and, for the first time in several years, we will look to create more synergy between our research and outreach activities.

Our thanks and acknowledgements – we could not have achieved so much without you!

Major supporters of our work in the past year were the Falkland Islands Government, the UK Government's Overseas Territories Environment Programme and the Darwin Initiative Challenge Fund, the Wildlife Conservation Society, The Royal Society for the Protection of Birds, the Royal Botanic Gardens – Kew, WWF-UK, British Antarctic Survey, the Royal Zoological Society of Scotland, the People's Trust for Endangered Species, National Birds of Prey Trust and Hawk Mountain Sanctuary.

We also wish to acknowledge the vital contributions made by The H B Allen Charitable Trust, the New Island Conservation Trust, Standard Chartered Bank, Consolidated Fisheries Ltd, Stanley Nurseries, Quark Expeditions, and many landowners in the Islands.

We would like to thank the following for financial assistance with the 4th Islands Wide Census: The HDH Wills 1965 Charitable Trust, the Ernest Kleinwort Charitable Trust, the William A Cadbury Charitable Trust, the A S Butler Charitable Trust, the Whitley Trust, and all those Members who gave so generously to last year's Seabird Appeal.

Photos: Dr Ai Baylis, Sarah Crofts, Ali Liddle, Grant Munro, Karen Neely, Dr Rebecca Upson, Allan White

Of course, none of our work would be possible without our Members, who support our important conservation work with generous donations, thoughtful ideas, advice, and their belief in the work we do.

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For more information please go to our website

www.falklandsconservation.com

Plant conservation in the Falklands – the highlights

Dr Rebecca Upson, Plant and Habitat Conservation Officer, reflects on the last four years of plant conservation in the Falkland Islands, highlighting some of the major achievements of the two OTEP-funded projects which have run across this period.

Conservation work in the Islands

Targeted botanical survey work has formed the backbone of the two projects, underpinning a range of conservation outcomes. One valuable step forward over the last four years has been the identification of 16 Important Plant Areas (IPAs) across the archipelago. IPAs are established based on internationally accepted criteria; to qualify as an IPA, a site must hold significant populations of one or more globally threatened species, a particularly rich example of a given habitat type and/or a significant proportion of a threatened habitat of global conservation value. To determine whether sites within the Falklands qualified under these parameters, targeted, standardised, geo-referenced population and habitat data were gathered and analysed in conjunction with data from historical inventories. The identified IPAs have already helped to create a framework for plant conservation. For example, in consultation with landowners, IPAs are acting as effective starting points for implementing Species Action Plans (SAPs) and Habitat Action Plans.

Key threats affecting IPAs have been identified and a site-based approach to tackling these has begun to be used, working with landowners to identify possible feasible solutions. In many cases, the threats are of equal concern for landowners and conservationists alike. At Port Stephens IPA we

have been able to map outlying populations of an invasive plant species Mouse-ear Hawkweed *Pilosella officinarum* and have facilitated eradication trials that will feed into on-the-ground control work this coming field season. Overall invasive plant species control has been implemented at four IPA sites over the course of the two projects. To combat coastal erosion a range of Tussac planting trips has been organised each year with local volunteers. These have included targeting eroded areas of the Cape Pembroke IPA.

The Chartres Horse Paddock (930 ha) has been designated as a National Nature Reserve based on its qualification as an IPA. Having been only lightly grazed for over 100 years this site is home to large stands of one of our nationally threatened habitats, Fachine Scrub, several populations of a globally threatened species Falkland Rock-cress *Phlebotrium maclovianum*, along with other nationally threatened species and interesting wetland habitats.

Ex-situ conservation

With the help of many volunteers and staff from the Royal Botanic Gardens – Kew (RBG Kew), we have now collected seed from five of the six globally threatened species and 11 of the 20 seed-bearing nationally threatened species. Such collections are vital forms of *ex-situ* conservation, providing immediate safeguarding of species, as well as opportunities for research into conservation-relevant areas.

The projects have also facilitated research into the germination and propagation requirements of a range of native plants at RBG Kew and Stanley Nurseries. These results have been applied to both restoration work as well as the sale of native plants to local Falkland gardeners through the development of the 'Falkland Collection' at Stanley Nurseries.



Teamwork to carry out restoration work of an eroded peat site at Cape Pembroke. N Simpson.

The collaboration developed with RBG Kew has benefited plant conservation in the Falkland Islands in many ways. We have, for example, been able to facilitate visits by RBG Kew staff that have, amongst other things, enabled training of local staff and volunteers in a range of plant conservation techniques such as sustainable seed collecting. Staff and volunteers at RBG Kew have also been working their way through imaging Falkland Island herbarium specimens and these images will soon be made available online for all to access.

Red Listing

Expanded botanical records have allowed a corresponding revision of the international Red List for Falkland vascular plants, which has been submitted to the IUCN for review. Key populations of all globally threatened species are covered through the IPA network, and SAPs have now been written for five. Over the last two field seasons we have also begun targeted surveys to follow up records for nationally threatened species with the aim of revising the national Red List by the end of this year. Eighteen of the nationally threatened species now have basic SAPs written. It is important to have as accurate a red data list as possible as this drives future conservation priorities.

Population and habitat monitoring

The precise geographical information that is now available for all globally threatened species as well as for the majority of nationally threatened species allows sites to be easily re-located for future population monitoring. Permanent monitoring plots have been established at one key population of the Hairy Daisy *Erigeron incertus*. Data gathered will enable us to build a better understanding of the biology of this globally threatened endemic species and how it responds to the changes in the

environment, such as changes to plant communities after removal of grazing and any future impacts of climate change.

Long term monitoring of plant communities is also important for building our knowledge of succession and how different habitats respond to changes in the environment. So far, vegetation transects have been established on New Island and Middle Island and long term vegetation quadrats have been set up at these sites and at Elephant Beach Farm. Community level data gathered for a range of plant communities are also beginning to help with mapping of particular sites of interest across the Islands with the aim of eventually producing habitat maps for all IPAs. Habitat maps are useful for planning and assessing the success of site management as well as providing another way of monitoring change more broadly.

New discoveries

Survey work carried out for the IPA programme has also yielded unexpected and exciting discoveries such as Darwin's Filmy-fern *Hymenophyllum darwinii*, which although known in Patagonia has not previously been recorded in the Falklands. Such findings continue to improve our understanding of the biogeography of the Islands.

Restoration trials

Less tangible but equally useful are the insights gleaned into plant succession and recovery of sites after overgrazing, fire or other damage. Keppel, Weddell, New, Middle and Motley Islands have all been particularly informative in this area. Lessons learned from these sites are providing ideas for restoration work, as well as for sustainable grazing. For example, botanical surveys carried out over the last four years have shed light on those native species that are good colonists of bare ground.

This knowledge has allowed the selection of a suite of native plants to be tested for use in restoring sites

Restoration site six months after planting on a former minefield site. *Rebecca Upson.*





Rebecca surveying the habitat within which Moore's plantain grows. Colin Clubbe.

recently cleared of mines (funded by the Falkland Islands Government). These trials have shown for the first time that tillers of Bluegrass *Poa alopecurus* can be successfully established in sand. Talks about this work at Farmers' Week have already inspired two landowners to try this grass as a native alternative to the introduced and invasive Marram grass *Ammophila arenaria* on eroded sandy sites. Marram grass also has low pasture value whereas survey work across the Islands has shown that Bluegrass is selectively grazed by livestock.

Awareness-raising and education

Awareness-raising and education are vital to any successful conservation programme and over the last four years many events and materials have been run and produced with the aim of promoting plant conservation within the Falkland Islands. One project has been the development of a plant identification course. This has run twice, been fully booked both times, and most of the participants have gone on to help with other plant conservation activities. The FC office front garden has also been converted into a mini botanical display of native plants for the benefit of tourists and locals alike.

Falklands Conservation's website has recently been updated and this has allowed ID sheets produced over the last year to be made available for download online. These sheets cover the majority of both globally and nationally threatened vascular plant species. Last year an art exhibition to promote endemic species generated positive interest amongst the community, and our presence at the first two farmers' markets displaying and selling native plants has also increased awareness of plant conservation issues within the Islands.

Overall, these have been four fruitful and rewarding years that have seen plant conservation progress significantly and lay the foundation for a positive future for plants and their habitats in the Falkland Islands.



Darwin's filmy fern – a new record for the Falkland Islands. A. Wilson.

Acknowledgments

The work carried out over the last four years has, in part, depended on data gathered over a number of years by Falklands Conservation staff, local and international volunteers and affiliated researchers; the work would not have been possible without their contributions. Among this group I would like to mention and thank Jess Abbott, Ragnhild Bränström, David Broughton, Richard Lewis, Mike Morrison, Sally Poncet and Robin Woods for their valuable records. In particular, major contributions to botanical records have been made through the two Overseas Territories Environment Programme (OTEP) projects.

I am grateful to everyone who has contributed to the botanical survey work in the Islands. They include the owners of all sites now listed as Important Plant Areas, managers of farms and those who provided assistance with transport to remote areas of camp, including offshore islands.

For sharing their time and expertise, I am particularly grateful to everyone in the UK Overseas Territories team at the Royal Botanic Gardens - Kew, in particular Colin Clubbe and Martin Hamilton, as well as technical assistance from RBG - Kew's GIS team. I am also grateful to Liz Radford at Plantlife for valuable discussions over the course of this project.

Thanks also to all the volunteers who have given up their time to help with a range of projects from tussac planting to seed collecting. You have all made a huge contribution to the project.

Finally, the work would not have been possible without funding support from OTEP and the Falkland Islands Government. For valuable information relating to introduced plant species across the Islands, this project has also been supported in part by funds from the European Union's EDF-9 programme through the South Atlantic Invasive Species Project administered by the RSPB.

Satellite tracking southern sea lions

In a joint project with BAS and funded by the Darwin Initiative Challenge Fund, Conservation Officer Dr Al Baylis set out to find where southern seal lions go to feed.

Southern sea lions *Otaria flavescens* are an icon of Falkland Islands wildlife. These enigmatic critters are featured on Falkland Islands currency, on Falklands stamps and on the cap badge of the Falkland Islands Defence Force. Sea lions are part of the Islands' heritage.

In the 1930s, the Falklands' population of southern sea lions was thought to be the world's largest. However, this population has declined by an unprecedented 97% from an estimated pup production of 80,000 in 1938 to 2,000 pups in 1995. To put the sea lion population decline into some perspective, it is the largest population decline of any seabird or pinniped species breeding in the Falklands (by per cent). However, unlike that of their feathered counterparts, the plight of the Islands' sea lions has received very little attention.

Initial sea lion population declines were attributed to sealing activities. However, despite the cessation of sealing in the 1960s, the population continued to decline into the 1990s. In short, sealing simply cannot account for the extent of the population decline. The most recent population census in 2003 indicated that while *some* of the 65 sea lion colonies across East and West Falkland had increased, colonies at several sites actually remained stable or had declined.

The contrasting population trends, small population size and (presumably) limited immigration from mainland South America mean that the Falklands' population is vulnerable. Currently we lack the most basic of information to answer questions such as is the population going up or down, where do sea lions forage and what do they eat? This information is necessary to help identify any potential impediments to sea lion population recovery. That's why in 2011 Dr Alastair Baylis (Falklands Conservation) and Dr Iain Staniland (British Antarctic Survey) initiated the Darwin Challenge Southern Sea Lion Project, an exciting new project to add to FC's portfolio.

This project involved the deployment of satellite tags to follow the at-sea movements of adult females during late summer and autumn and juvenile sea lions over winter. Satellite tags are attached to the hair of sea lions and transmit location data to satellites when the animals surface (*see photo above*). So what did we find?



Adult female southern sea lion equipped with a SIRTRACK satellite tag in February 2011.
Andrew Stanworth.

Although a 'snap-shot', our results redefined our understanding of sea lion foraging habitat. Lactating females showed two modes of foraging with (i) overnight trips confined to waters close to their colony and (ii) trips lasting several days involving distances of over 100 km to shelf break waters (Fig. 1). Another important finding was that adult females from the two colonies foraged in discrete areas (ie colony-specific foraging areas). This means that any potential threats to sea lion colonies will vary depending on colony location.

Unlike adult females, juvenile sea lions don't have to return to the same colony at regular intervals to feed a hungry pup. Juvenile foraging trips were longer than those of adult females (10 days), and they foraged farther afield (300 km). They also often took time to visit other colonies and haul-out sites (Fig. 2).

We hope this initial research will form the basis of a more comprehensive and ambitious multi-year project starting in 2012. The ultimate goal of the Darwin Southern Sea Lion Project is to develop a more comprehensive Species Action Plan to help with future conservation planning and management.

Acknowledgements

We would like to thank the Darwin Initiative Challenge Fund; British Antarctic Survey; the landowners for their hospitality and access to the sea lion colonies; and to Kristian Peters and Alex Blake for their help in the field.



Fig. 1: Example of a juvenile male foraging track (green dot is start location, red dot is end location).

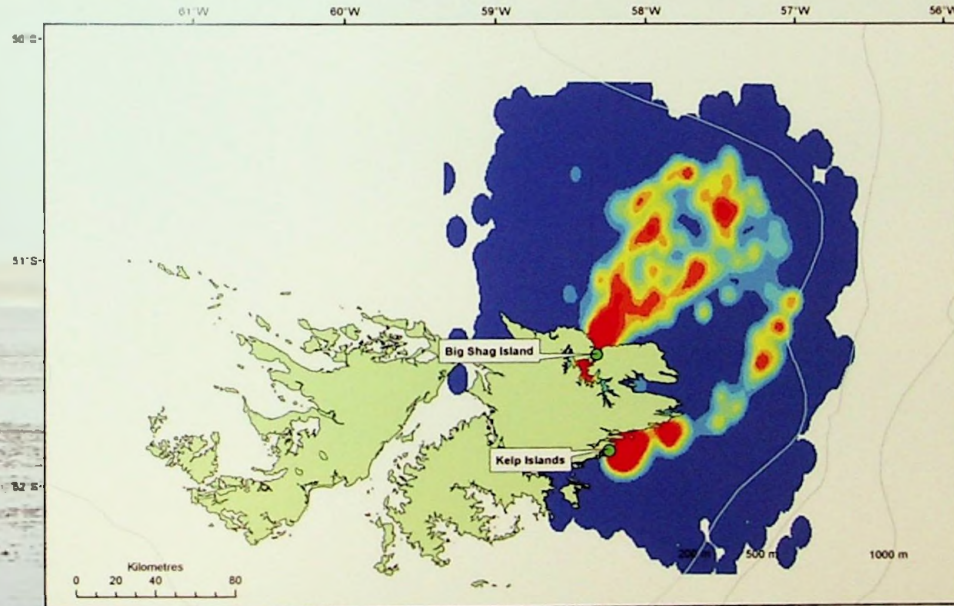


Fig. 2: Initial results showing the distribution of foraging effort of adult female southern sea lions from two breeding colonies.

Analysis of our tracking data is providing new information on the foraging habits of southern sea lions.
Kris Peters.

Seabird Statistics

Every year for the last 21 years, Falklands Conservation staff and volunteers have counted breeding pairs and chicks of gentoo, southern rockhopper, magellanic and king penguins at selected sites across the Islands. More recently, we've also begun to count the number of breeding pairs and chicks of black-browed albatross and southern giant petrel to get an idea of annual population changes. Here are the topline results of the 2010 Seabird Monitoring Programme survey:

Gentoo penguin Total of 26,318 breeding pairs (at 15 colonies), representing a 61.5% increase compared to 2009.

Southern rockhopper penguin Breeding pairs increased by 33.4%, from an estimated 3,999 breeding pairs in 2009 to 5,336 in 2010. A violent storm in December 2010 affected breeding success – this declined from 0.69 chicks per breeding pair in 2009 to 0.25 in 2010. This is well below the average of 0.8 chicks per pair calculated from the previous 16 seasons.

Magellanic penguin Overall burrow occupancy at Gypsy Cove (near Stanley) was 30.7% and remains below the average calculated for the previous nine seasons (34.1%).

King penguin The number of king penguin chicks produced in 2010 declined by 3.4% (547 chicks in 2010, compared to 566 in 2009).

Black-browed albatross The figure for breeding pairs is comparable to last season's, marginally increasing from 3,031 in 2009 to 3,083 in 2010 (1.7% increase). However, overall breeding success decreased from 62% in 2009 to 20% in 2010, primarily due to the storm in December 2010. We estimate 20–30% of active nests failed on Steeple Jason Island as a result of this event.

Southern giant petrel Breeding pairs remained stable in 2010 (1,750 pairs in 2009 compared to 1,748 in 2010). The good news is that breeding success increased markedly in 2010, to an average of 35.3% (from 16.9% in 2009). So saying, this is below the average breeding success of 38.7% calculated for the past five years.

The 4th Islands Wide Census carried out every five years also took place in November 2010. The data are still being analysed but the early results are encouraging. This latest census also provided a good opportunity to re-assess data-collecting timings and methods to help with future monitoring surveys.

The team is about to start the fieldwork on the 22nd consecutive Seabird Monitoring Programme, and it will be fascinating to see this year's results and to find out what impact the violent storm in mid-December 2010 has had on this year's breeding success rates.



Magellanic penguin
Tim Wilby



Black-browed albatross
Sarah Brennan



Southern giant petrel
Ruedi Abbühl



Wildlife Conservation in the Falkland Islands

Issue 16



Wildlife Conservation in the Falkland Islands

Issue 16 April 2012

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FALKLANDS CONSERVATION

Protecting the wildlife of the Falkland Islands for future generations

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Protected Areas Strategy Officer: Clare Cockwell



Editorial

I was impressed when reading the drafts of this magazine about how much is going on in the Falkland Islands – and this is bearing in mind that the magazine has not got enough space to keep you up-to-date with everything we are doing. Looking at the Rare and vagrant birds article it is good to note how many people are sending in bird records, which denotes a healthy interest in the natural environment. Additionally, our volunteer activities in the Islands have been well attended, whether planting tussac grass in the depths of winter, bashing thistles on Saunders Island or helping out with the Watch Group. There is also an active conservation group at the Mount Pleasant Complex, ably led by Roy Smith, who is always keen to get involved with our work. You will see the interesting article on lower plants by Jeffrey Duckett, which shows there is a lot more still to be discovered about the mosses and liverworts on the Islands: unfortunately, there is not a similar corps of volunteers able to help out with bryophyte or lichen surveys as with birds – 'twas ever thus! But if anybody is interested, then please get in touch.

It is good to see that the number of members has not suffered from the recent increase in subscription rates brought upon us by ever-increasing costs. Knowing there is a large group of supporters interested in the wildlife of the Islands gives us the strength and confidence to pursue our work in a world where nature conservation too often takes the back seat. However, we are always looking for more people, so why not persuade your friends and relations to join?

At the end of July we will be losing our botanist, Rebecca Upson, who has done a tremendous amount of work over the past four years, especially in putting our Important Plant Areas on a firm footing. We are also losing our conservation officer, Al Baylis, although at the time of writing we are recruiting for this post. Al led the most recent Island Wide Census and has significantly taken forward our research on penguins, albatrosses and sea lions. We wish them both the best for the future, and thank all those of you who continue to support Falklands Conservation.

Dr James Fenton, Chief Executive Officer

FRONT COVER PHOTO: Magellanic penguins – summer visitors to Volunteer Point. Micky Reeves.

Rare plant rediscovered after 100 years

Richard Lewis

In 1909, the highly knowledgeable amateur naturalist Eleanor Vallentin recorded a pretty little plant with white flowers growing along the coast 'in the vicinity of Darwin Harbour'. Specimens of this plant were sent to Kew, where experts confirmed that this was indeed the Magellanic saxifrage *Saxifraga magellanica*. For the next 100 years, Eleanor Vallentin was the only person known to have seen this plant growing wild in the Falklands and by 2000 it was assumed to have gone extinct in the Islands.


Richard Lewis, in the middle of a five-month field trip to the Falklands mainly to study invasive plants but also interested in researching native and endemic species, was collecting samples in an area close to Goose Green when he unexpectedly stumbled across a small patch of the Magellanic saxifrage in full flower. 'I couldn't believe what I was seeing' said Richard, 'Suddenly there it was on a low cliff, this plant we thought was locally extinct in the Falklands.'

Richard found a total of 15 plants in flower and several smaller plants, and in one rocky crevice there were some tiny seedlings. Coincidentally, some plants were also found by Mike Morrison at around the same time. The information collected will help us understand the needs of the plant, as well as allowing us to monitor any future increase or decline in plant numbers.

Richard also collected DNA samples and some old seed heads from last year.

The DNA samples will be kept at Kew, where researchers studying this species will be able to use them, which may eventually help us to understand more about the plants in the Falklands and how they relate to similar plants in Patagonia. The seeds will be sent to the Millennium Seed Bank at Kew where they will be carefully dried and frozen, allowing them to remain viable for decades or even centuries for use by researchers or possibly for habitat restoration work. In the meantime, we hope that some of our dedicated volunteers will be able to find more plants growing nearby and, thanks to our links with the Native Plants Nursery at Stanley Growers, we hope eventually to grow some seeds in Stanley so more people can see and appreciate this beautiful plant.

This is the latest in a series of exciting discoveries in the Falklands by botanists working with Royal Botanic Gardens – Kew and Falklands Conservation. Two years ago Richard Lewis and Rebecca Upson refound the comb-fern *Schizaea fistulosa*, last seen in the Falklands in the early 1800s, while last year Rebecca found Darwin's filmy fern *Hymenophyllum darwinii* – the first time this species has been recorded from the Falklands. Other recent new records for the Falklands include Banks' sedge *Carex banksii* and waterwort *Elatine triandra*.



The rediscovered Magellanic saxifrage appears to have always been rare in the Falklands. Given the available evidence it seems likely this is a native species. Richard Lewis.

Assessing the impacts of house mice on Steeple Jason

Mark Bolton, Andy Stanbury and Richard Cuthbert describe two research trips to Steeple Jason to find out how mice are affecting the wildlife of this special island.

The Falkland Islands represent an important biodiversity hotspot in the South Atlantic, hosting plants, invertebrates and birds found nowhere else.

Island species have often evolved in absence of mammalian predators and either do not recognise the threat that newly arrived predators pose or have no mechanism to avoid predation. The RSPB is leading a Darwin-funded project, working with partners in the Falklands, Tristan and South Georgia, to assess the impacts of house mice on various components of these island ecosystems, and to trial procedures for mouse eradication. In the Falklands, the RSPB is working with Falklands Conservation and the Wildlife Conservation Society (WCS) to study the impacts of house mice on Steeple Jason, where they are the sole introduced mammalian predator.

Steeple Jason is managed by WCS for the benefit of conservation and is home to the world's largest colony of black-browed albatrosses, as well as several species of smaller petrels and storm-petrels. As comments in the visitor book attest, Steeple Jason appears a veritable island paradise for wildlife, but a closer look suggests that mice may be having substantial impacts. Storm-petrels are the smallest of all seabirds, little bigger than a sparrow, and have been found to suffer unsustainably high levels of predation by house mice on other Atlantic islands.

We carried out studies on Steeple Jason in 2009 and 2011 to assess the distribution and levels of activity of house mice in relation to the storm-petrels. We used chocolate-flavoured wax blocks to assess the level of mouse activity from the coastline to the rocky summits. The small chocolate wax blocks were laid out in all major habitats, and left overnight. The number of blocks nibbled overnight gave an index of the level of mouse activity.

Early findings

In November 2009, we found that mice occurred in all habitats of Steeple Jason Island, but densities were more than seven times higher in the coastal tussac grass than elsewhere. Nocturnal surveys revealed that the two species of storm-petrel (Wilson's and grey-backed) showed the opposite distribution pattern – most birds occurred away from the coastal tussac. This was to be expected for the Wilson's storm-petrels, which prefer to nest in crevices among the boulder-strewn slopes that occur



A remote camera monitors activity at a storm-petrel nest hole.

at higher elevations, but was not anticipated for grey-backed storm-petrels, which generally nest in burrows dug in the pedestals of tussac grass.

The suggestion that grey-backed storm-petrels were avoiding nesting in the coastal tussac of Steeple Jason because of the high mouse numbers was reinforced when we visited neighbouring mouse-free Grand Jason. The differences between the two islands were immediately apparent on stepping ashore – here we found nesting Cobb's wrens, absent on Steeple. Nocturnal surveys revealed grey-backed storm-petrels to be much more abundant in the coastal tussac grass than they were on Steeple Jason and, whilst Wilson's still showed a preference for the boulder-strewn slopes, they were much more numerous on Grand Jason.

So we returned to Steeple Jason in January 2011, armed with every nest-monitoring device known to seabird researchers, to try to establish if mice were causing high nesting failure. Since storm-petrels nest in tiny holes and only visit the colony under the cover of darkness, we knew it would be challenging to locate and monitor a large number of nests in our all-too-brief three week visit. We were also acutely aware that very few nests of either species of storm-petrel had ever been found anywhere in the Falklands. So we took the precaution of sending an advance party to the island to find nests of small land birds (black-throated finch) in order to assess mouse impacts on the other species, and as a fallback option if storm-petrel nests proved elusive.

We were also interested to see if mice were having similar impacts on the invertebrates as rats do elsewhere: a recent study had shown that the endemic camel cricket is much less numerous on rat-occupied islands in the Falklands.

The advance party had located six finch nests by the time we arrived. Five of these were predated over the course of the next few weeks. A remote camera clearly showed that eggs at one nest were eaten



Incubating Wilson's storm-petrel. This is the same nest as to the right. The chick from this nest did not survive to fledge.



BUSHNELL 1.23.2011 00:01:33

A Wilson's storm-petrel incubates its egg (centre) whilst a mouse scuttles around the nest chamber.



Black-throated finch.



BUSHNELL 1.19.2011 22:03:21

A mouse takes a black-throated finch's eggs.

by a mouse, and at another where there was no camera, the chicks' leg muscles had been delicately nibbled from the bones, suggesting a mouse was responsible.

In the event we found over 30 Wilson's nests (but not a single grey-backed), and remote cameras showed that mice were frequent visitors to some nests. Whilst we did not find direct evidence of mouse predation during our short visit, most nests were occupied by adults that would be able to defend their eggs or newly hatched young. Storm-petrel chicks are most vulnerable to predation when they are first left alone by their parents, at about one week old.

A follow-up visit to Steeple in February found that around half of the Wilson's nests failed to fledge a chick. This rather low level of breeding success is likely to result in a population decline,

and is very similar to the value found for white-faced storm-petrels on Selvagem Grande in the North Atlantic, where predation by mice was shown to be a problem and an eradication was subsequently carried out.

And what of the invertebrate surveys? We collected and analysed 30 samples of invertebrates from the coastal tussac areas where camel crickets are most likely to occur, and found a good number of beetles and spiders...but not a single camel cricket.

Taken together, the evidence suggests that mice are having an effect on the distribution and number of both species of storm-petrel and are probably excluding the endemic Cobb's wren and the Falkland camel cricket from Steeple Jason. A mouse eradication programme would be required to restore the ecosystem and and return Steeple Jason to the island paradise it deserves.

We thank the Wildlife Conservation Society for permission to work on Steeple and Grand Jason, and for provision of accommodation. We are also grateful to Craig Dockrill, Al Baylis, Sarah Crofts, Marilou Delignières and Drew Robertson for good company and fieldwork assistance on Steeple Jason. We also thank Rob McGill for superb accommodation on Carcass Island and for organising our stay on Steeple. Thanks also to Mike Clarke and crew of the *Condor* for safe passage to Steeple and Grand Jason from Carcass Island. Funding for this work was generously provided by the UK Government's Darwin Initiative (grant number 18-017), and RSPB International and Conservation Science Departments.

Rare and Vagrant Birds 2011

Mike Morrison and Alan Henry

This report summarises the sightings of rare and vagrant birds in the Falkland Islands during 2011.

Chinstrap Penguin *Pygoscelis antarcticus*

A single bird seen on a rocky ledge with Rockhopper Penguins at the Neck, Saunders Island on the evening of 10 Jan (Chris Laine & Dave Martin). A single bird at Surf Bay on 25 Sep (Deborah Vollborth).

Northern rockhopper Penguin *Eudyptes moseleyi*

The one at Diamond Cove, Johnsons Harbour reported last year was present in January but not seen this breeding season. A single bird also at Beauchêne Island seen by Klemens Pütz on 27 Nov.

Royal Penguin *Eudyptes schlegeli*

Tony Chater reported a single bird at New Island in January.

White-headed Petrel *Pterodroma lessonii*

Ryan Irvine reported a single bird on 25 May at 50°28S 53°57W and another single bird at 50°53S 54°22W.

Soft-plumaged Petrel *Pterodroma mollis*

Alan Henry observed three birds off Cape Pembroke on 20 Jan and four birds on 29 Mar. Three individual at sea birds were reported by Ryan Irvine, first on 25 May at 50°39S 53°70W, 7 Jun at 51°66S 57°77W and on 11 Jun at 50°12S 53°35W.

Grey Petrel *Procellaria cinerea*

Two birds on 25 May at position 50°44S 53°75W and a single bird on 9 Jun at 50°33S 53°53W. Both sightings reported by Ryan Irvine.

Neotropic Cormorant *Phalacrocorax olivaceus*

The two birds at Big Pond, Pebble Island, as reported in 2010, were still present during the early part of 2011 and one bird remaining through the winter and still present on Big Pond in November (2 Nov - Alan Henry; 30 Nov - Mike Morrison).

Cocoi Heron *Ardea cocoi*

Micky Reeves reported the bird at Loch Head Pond was still present in March and April and again this summer (first reported in 2010). Several birds seen in April – one at the head of Shepherd's Creek, Johnsons Harbour on the 12th (Micky Reeves). On the 16th Micky saw three birds on the same day – one at the Low Pass on the Teal Inlet road and the Shepherd's Creek bird and the one at Loch Head. Two days later he saw one at the Lagoon Sands, Volunteer Point. This may have been a fourth bird.

Also on the 16th Alan Henry saw a bird coming into roost in the trees by the West Store, Stanley. This same bird possibly seen again by Arina Berntsen and Clara McKay on 24 Apr flying to the south over west Stanley, and a bird seen by Hay and Sam Miller on the 26th at the head of Stanley Harbour. Kristiane Thorson reported a bird at the Corral Pass on the Teal Inlet Road on 21 Apr, 13 Jun and 14 Nov. On 12 Nov a single bird seen at a large pond in Eagle Point, Johnsons Harbour (Mike & Sue Morrison). This is possibly the same bird Micky Reeves saw at Lagoon Sands on 4 Nov. A single bird seen at the Corral Pass on 11 Dec (Mike & Sue Morrison).

Great white Egret *Ardea alba*

A single bird seen by Kristiane Thorsen on 15 Apr at the Low Pass on the Teal Inlet Road. A single bird also seen at Fitzroy settlement in late April by Allan Eagle and Isabella McLeod.

Cattle Egret *Bubulcus ibis*

The first report this year was on 26 Mar when Chris Taylor saw one at the reservoir at Goose Green settlement, a single bird near the Seaman's Mission on 1 Apr and two birds near Sappers Hill on 2 Apr (Alan Henry). On 3 Apr Alan Henry and Steve Copsey saw a bird being taken by a Variable Hawk at the creek near the Sound House. Six birds on the fields at the Market Garden on 15 Apr (Alan Henry). There was a single bird at 4 Kent Road on 14 May (May Roberts), and a single bird in the yard at 10 Fitzroy Road East between 16 and 22 May (Mike & Sue Morrison).

Black-faced Ibis *Theristicus melanopis*

The two birds reported at New Island in the 2010 Report were still present on New Island at the end of January (Tony Chater) as was the bird on Saunders Island (Suzan Pole-Evans). A single bird was on Speedwell Island on 4 Dec (Lindsey May). A single bird at Yorke Bay Pond on 5 December (Alan & Trish Henry); this bird remained in the area between Yorke Bay Pond and the greens at Penguin Walk until 1 Jan 2012. A single bird was seen on the green at Darwin very early in the morning on 16 Dec.



Black-faced Ibis. Alan Henry.



American Purple Gallinule. Ryan Irvine.



Southern Lapwing. Alan Henry.

Coscoroba Swan *Coscoroba coscoroba*

One pair on the big pond in Whale Point, Fitzroy on 12 Feb (Sue & Mike Morrison). Two birds seen in Kelp Lagoon and three birds on Bertha's Beach pond on 10 Apr (Sue & Mike Morrison). Three birds on Bertha's Beach pond on 4 Apr (Steve Copsey) and they were still there on 22 Apr (Alan Henry). Five birds on Bertha's Beach pond on 22 May (Micky Reeves). One pair on the Pleasant Roads pond, possibly nesting, and four birds on the big pond in Whale Point, Fitzroy on 5 Nov (Sue & Mike Morrison). One pair with a small cygnet on the big pond in Whale Point, Fitzroy on 27 Dec (Sue & Mike Morrison).

Cinnamon Teal *Anas cyanoptera*

The male on Big Pond, Pebble Island reported in the 2010 Report was present through 2011 (18 Feb and 30 Nov - Mike Morrison; 4 Nov - Alan Henry). On 19 May Micky Reeves saw a male on a large pond south of the Mare Harbour Road. There were three males here on 28 May (Alan Henry) and two of the same birds still in the same area on 5 Jun (Alan Henry). Jim Woodward reported a single bird at Little Chartres on 22 Aug.

Red Shoveler *Anas platalea*

Micky Reeves reported a female bird at Volunteers on 17 Feb.

American Purple Gallinule *Porphyrio martinica*

A single bird at Yorke Bay Pond, Cape Pembroke on 29 May (Ryan Irvine). The remains of this bird were found nearby in the sand dunes by Jeremy Poncet on 6 Oct.

White-winged Coot *Fulica leucoptera*

Two birds on the ponds in Elephant Point, Saunders Island on 9 Jan (Mike Morrison).

Southern Lapwing *Vanellus chilensis*

Alan Henry found a single bird just south of the Airport Terminal on 16 Oct; this bird later moved to the greens east of Yorke Bay Pond up to Penguin Walk and seen in the area up to 23 Dec.

Grey Plover *Pluvialis squatarola*

A single bird at Cow Bay, Johnsons Harbour on 13 and 14 Dec (Micky Reeves). This is the first reported sighting of this species in the Falkland Islands.

Hudsonian Godwit *Limosa haemastica*

Jenny Luxton reported two birds near the garden at Sea Lion Island on 24 Oct; one was seen at the Long Pond the next day.

Upland Sandpiper *Bartramia longicauda*

Raymond Evans photographed a bird on rotovated ground to the south-west of First Mountain on Pebble Island on 23 Oct, which Alan Henry was able to identify as an Upland Sandpiper.

Greater Yellowlegs *Tringa melanoleuca*

Micky Reeves saw a single bird at Dutchman's, Johnsons Harbour on 19 Feb. Another single bird seen at Island Harbour creek on 11 Dec (Alan, Trish & Lucianne Henry & Jack Alazia).

Lesser Yellowlegs *Tringa flavipes*

A single bird at the small ponds on the south side of the road at Cape Pembroke on 23 Oct (David & Isabel Castle); this bird remained in the area for the next week. Alan Henry found another single bird at a small pond at Bull Point, North Arm on 12 Nov. Another single bird seen at Yorke Bay Pond on 8 and 12 Dec by Tony Chater. Two birds to the south of Goose Green settlement on 29 Dec (Alan Henry).

Sanderling *Calidris alba*

Four birds on the sand beach at East Cove opposite Bertha's Beach on 10 Apr (Sue & Mike Morrison); one bird seen in the same location on 18 Dec (Alan Henry). A single bird seen at Volunteers on 18 Nov (Micky Reeves). Possibly the same bird seen at Cow Bay the next day (Andy Pollard) with two birds seen at Cow Bay on 24 Nov (Micky Reeves).

Baird's Sandpiper *Calidris bairdii*

Most of the sightings are from Cape Pembroke - one bird on 5 Oct, three birds on 14 Oct, and four birds on 15 Oct (Alan Henry). Four birds on 23 Oct (Mike Morrison). Micky Reeves saw one bird at Volunteers on 3 Nov and again on 6 Nov. Two birds at Small Pond, Pebble Island on 3 Nov (Allan White & Alan Henry). A single bird seen to the east of Betts's Pond, Pebble Island on 1 Dec (Mike Morrison).

Pectoral Sandpiper *Calidris melanotos*

Alan Henry flushed a bird from the north side of Stanley Airport runway, Cape Pembroke on 29 Oct. He saw this bird in the same area on 1 Nov. On the same evening four birds flushed by a Peregrine just south of Yorke Bay Pond, Cape Pembroke seen by Alan Henry and Mike Morrison. Six birds seen in flight together the next day (Sue Morrison), most probably the same six were seen in a flock on 15 Dec (Alan Henry) and 25 Dec (Mike & Sue Morrison). Another single bird seen on the south side of Cape Pembroke on the same day, confirming seven birds in the Cape Pembroke area. Two birds also seen on Bleaker Island on 25 Dec by Brian and Judy Summers. A single bird seen on Small Pond, Pebble Island on 3 Nov (Allan White & Alan Henry).

Wilson's Phalarope *Phalaropus tricolor*

Two birds on a small pond on Sea Lion Island reported by Jenny Luxton on 17 Oct; these birds were still present in the same location on 25 Oct.

Grey Phalarope *Phalaropus fulicarius*

A single bird seen feeding on Pleasant Roads Pond on 24 Feb by Alan Henry, Scott Weidensaul and Dave Nicolas.

Least Seedsnipe *Thinocorus rumicivorus*

On 25 Oct Alan Henry found a single female bird on the north side of Stanley Airport runway; this bird appeared shy and flighty and was not sighted again.

Arctic Skua *Stercorarius parasiticus*

A single bird reported by Maurice Blackley on 6 Jan at Bull Hill on Sea Lion Island; this bird seen in the same location off and on up to the end of March.

Chilean Pigeon *Columba araucana*

A single bird at Moody Valley seen flying in and roosting on the big *Macrocarpa* tree by Sue Morrison on 23 Mar; dull, rainy conditions prevented any good images being obtained and no sign of the bird the next day.

Picazuro Pigeon *Columba picazuro*

A single bird seen at Saunders Island settlement and remained for about a week from 6-14 Nov reported and photographed by Suzan and David Pole-Evans. This is the first report of this species in the Falkland Islands.

Eared Dove *Zenaida auriculata*

A single bird seen at Shallow Harbour on 12 Mar (Marlene Marsh). Another bird seen at Port Stephens on 11 Apr (Diane Towersey). The remains of a dead bird were recovered from along the sea front below the potato fields at the Market Garden on 22 May by Mike Morrison. A single bird seen in a garden on Jeremy Moore Ave on 13 and 14 Dec (Charlene Rowland).

Green-backed Firecrown *Sephanoides sephaniodes*

Tony Chater reported a single bird at New Island settlement that remained there for about a week in early May.



Pectoral Sandpipers. Alan Henry.



Greater Yellowlegs. Alan Henry.



Lesser Yellowlegs. Alan Henry.

Eastern Kingbird *Tyrannus tyrannus*

A single bird seen at Whalebone Cove, Cape Pembroke by Gerald Cheek on 12 May; this bird had drooping wings and although feeding looked exhausted from the long flight. Another single bird found by Alan Henry at Pebble Island settlement on 3 Nov.

Fork-tailed Flycatcher *Tyrannus savana*

Alan Henry first saw a male bird at Goose Green settlement on 14 Jan with another sighting on 2 Mar. When comparing photographs he concluded it was a different bird, also present on 6 Mar.

Chilean Swallow *Tachycineta meyeni*

Two at Moody Valley house on 14 Mar and four there on 18 Mar (Alan Henry). Three at Surf Bay and Hookers Point area on 23 Mar (Nic Huin). A single bird seen



Eastern Kingbird. Alan Henry.



Common Diuca-finch. Alan Henry.



Fork-tailed Flycatcher. Alan Henry.

flying along Davis Street, Stanley on 29 Mar (Mike Morrison). Up to 20 seen feeding over a pond at Hill Head by Les and Jill Harris on 5 Apr. Single birds seen at Volunteers house on 1 Mar, 1 Apr and 19 Nov (Micky Reeves).

Bank Swallow (Sand Martin) *Riparia riparia*

A single bird with six Barn Swallows at Sea Lion Lodge, Sea Lion Island on 16 Nov seen by Gert Huijzers.

Barn Swallow *Hirundo rustica*

A single bird seen flying over Kent Road, Stanley on 12 Mar was probably this species (Sue & Mike Morrison); two days later Alan Henry saw one at Crozier Place, Stanley. Two or possibly three birds feeding along the Airport road east of Mega Bid on 24 Oct (Sue & Mike Morrison). Up to five birds seen at Surf Bay Beach on 26 Oct (Sue Morrison). Gert Huijzers saw six birds in the company of a Bank Swallow at Sea Lion Lodge, Sea Lion Island on 16 Nov. Single birds seen at Volunteers house on 25 Jan, 24 Feb and 27 Nov (Micky Reeves). A single bird seen on the south beach at the Neck, Saunders Island on 4 Nov (Alan Henry, Peter Harrison).

Patagonian Mockingbird *Mimus patagonicus*

Tony Chater reported a single bird at New Island in late April.

White-banded Mockingbird *Mimus triurus*

On 4 Nov Micky Reeves saw a single bird at Volunteer Shanty; this bird remained at Volunteers at least until 14 Nov.

Creamy-bellied Thrush *Turdus amaurochalinus*

Micky Reeves found a single bird at Magellan Beach, Johnsons Harbour on 6 Jun. This is the first time this species had been reported from the Falkland Islands. However, on seeing the photographs of this bird, it was realised that a bird that Sue Morrison photographed in the yard at 10 Fitzroy Road East, Stanley a year earlier was also of this species.

Common Diuca-finch *Diuca diuca*

Alan Henry saw a single bird at Marble Shanty, Pebble Island on 2 Nov. This is the first recording of this species in the Falkland Islands.

Rufous-collared Sparrow *Zonotrichia capensis*

One bird reported on Saunders Island on 1 Jul (Suzan Pole-Evans). Two birds at Shallow Harbour on 3 Jul increased to three birds overnight and these stayed around until early August (Marlene Marsh). Andy Pollard reported two birds on the north coast of Elephant Beach Farm on 29 Aug.

Many thanks to everyone who reports their sightings.



Creamy-bellied Thrush. Alan Henry.

New facility for oiled wildlife

Sarah Crofts describes the progress being made on a new building to house oiled seabirds thanks to the local community.

Oil pollution on seabirds has devastating effects as essentially it renders them unable to survive at sea. However with early intervention, oiled seabirds can be rehabilitated and given a second chance. To date, FC and the Islands' Veterinary Department have successfully rehabilitated and released gentoo, king, rockhopper and chinstrap penguins, mostly rescued from the local area surrounding Stanley.

Until now, the rehabilitation of oiled seabirds had taken place in a small shed with no water or electricity, making the process challenging for staff and volunteers involved. But in January 2012, following a period of fundraising and with the support of the British Forces at Mount Pleasant, the building units finally arrived in Stanley and were assembled at the new site near to the Veterinary Department. The next step will be to modify the building as a wildlife facility. So far we have received the kind support and free time from a plumber and electrician based at Mount Pleasant.

Once the unit is functional it will boast a triage and rehabilitation area where birds are assessed and cleaned, a small kitchen area with store room, a heated room and a large enclosure with a small pool, which the Mount Pleasant Infant School is currently fundraising for. And, when there are no wildlife in-patients, we envisage the facility will also be used as a wet lab for scientific work as well as providing a messy activities area for FC's junior Watch Group.

Acknowledgements

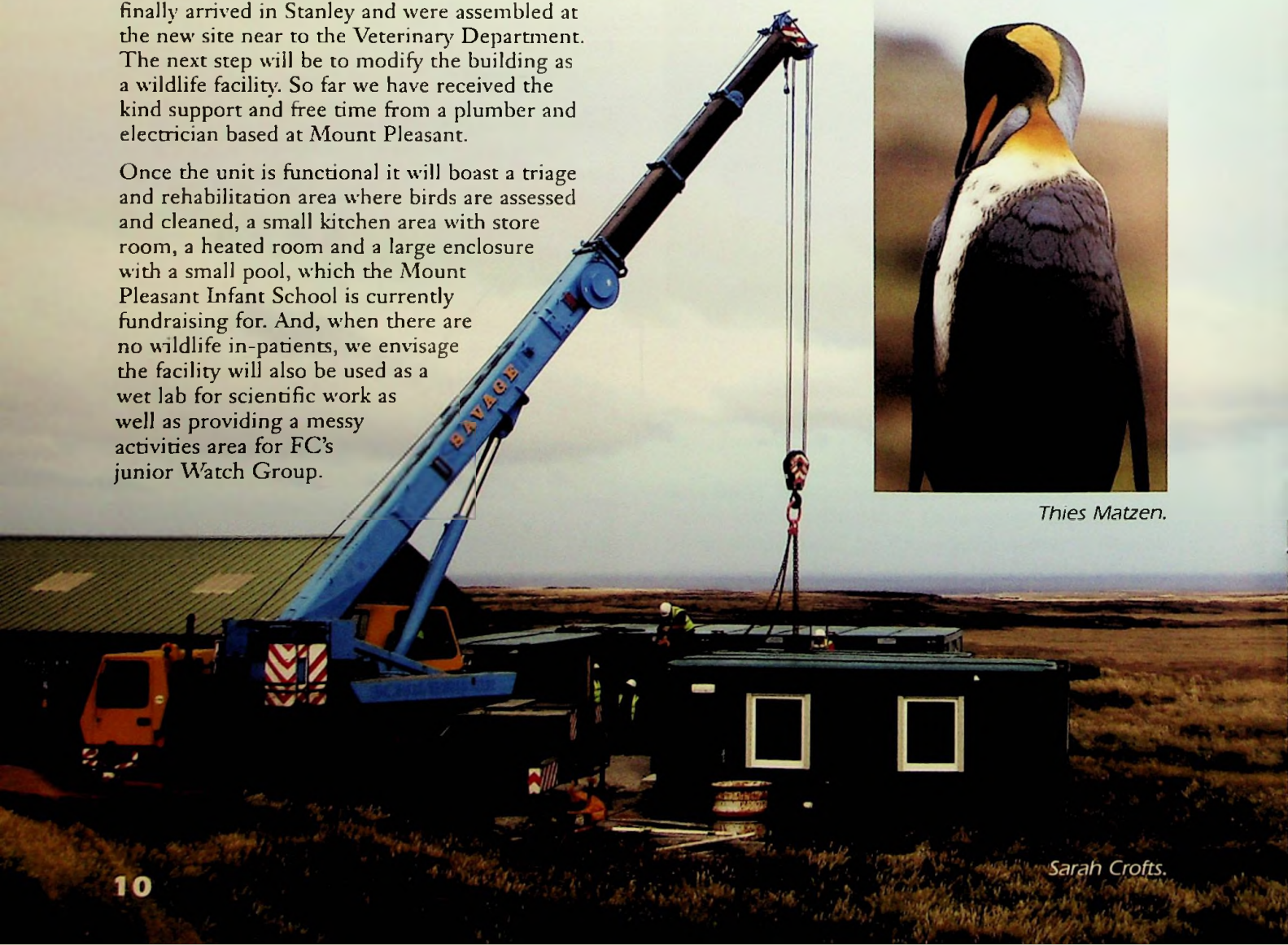
The project is a collaborative effort between FC, the Falkland Islands Government's Veterinary Department and the British Forces South Atlantic Islands. The latter have been instrumental – not only donating corimec units for the facility but also in raising money. We also received other charitable donations from the local Infant and Junior School, Travel in Depth, the Royal Naval Bird Watching Society, Mark Roberts and Roula Drossis, and other visitors to the Islands.

We would like to take this opportunity to thank the British Forces South Atlantic Islands, in particular CBF Brigadier Aldridge and Environmental Theatre Protection Officer Roy Smith; Interserve Defence Limited, Defence Infrastructure Organisation, FUSAI Conservation Group and Morrisons Ltd in Stanley, as well as Simon Watkey and Peter Bouchier.

For a full list of donors and progress visit our blog on the Oiled Wildlife Facility Appeal at www.falklandsconservation.com



Thies Matzen.



Sarah Crofts.

NOTICEBOARD

Trustees

Dr Colin Clubbe and Tým Marsh, both based in the UK, were appointed as new Trustees at the AGM held in Stanley in November 2011. Keith Biles (FI), Dr Paul Brickle (FI) and Darren Christie (FI) were all elected to serve a further term at the same meeting. We would like to take this opportunity to thank Dr Mike Richardson very much for all his work during his time as a Trustee. Mike retired at the AGM.

Since the AGM, Carol (Hay) Miller has been co-opted as a Trustee, while the FI Chairman, Darren Christie, is standing down owing to other commitments. Paul Brickle (FI Vice Chairman) is also standing down since his recent appointment as Director of the South Atlantic Environmental Research Institute.

Spot the penguin

Members of the WATCH Group are enjoying using some new pocket binoculars kindly donated by JD Sports through a scheme managed by the RSPB. We are very grateful to both organisations for their generosity.

Go ahead for new project

At the end of January we received the good news that the Darwin Initiative had approved a three-year project to deliver a programme to improve the conservation status of raptors in the Falkland Islands through scientific study, policy advocacy and community engagement activities. This followed a successful Darwin Challenge Fund project in 2010/11. A key aspect will be to undertake dedicated research on the Near Threatened striated caracara (known locally as the Johnny rook) with particular emphasis on where the birds go in winter and what they feed on.

We thank the Darwin Initiative for this funding and are looking forward to working with the Royal Zoological Society of Scotland, Hawk Mountain Sanctuary, Falkland Islands Government, the RSPB, Wildlife Conservation Society, Boise State University and EDM International to provide a scientific basis for government policy regarding the management of conflicts between raptors and rural livelihoods in the Falklands, particularly sheep farming.

New nature reserve on West Falkland

We are very grateful to Tony Blake who recently gifted the Lyn Blake Nature Reserve to Falklands Conservation in memory of his late wife. Lyn had been an FC Trustee and was fond of the Hawk's Nest Pond area close to her home at Little Chartres. We are honoured to become guardians of this wonderful area with its populations of breeding waterfowl. Tony Blake has been given life membership of Falklands Conservation in recognition of his generous donation.

Our grateful thanks

In the articles we publish in the magazine we try to acknowledge and thank our partners involved with each specific project. However, we are also very grateful to those charitable trusts and organisations who give us donations to cover a spread of our work. We would like to take this opportunity to thank The H.B. Allen Charitable Trust and the Cotswold Wildlife Park and Gardens in particular for their generous long-term support.



New binoculars donated. Eileen Davies.



New project: Striated caracara. Tim Mason.



New reserve: Hawk's Nest Pond. James Fenton.

Mosses and liverworts of the Falkland Islands: the Expedition of January 2011

Professor Jeffrey G Duckett from the Department of Botany at the Natural History Museum describes a three-week reconnaissance survey of the bryophytes of East and West Falkland. Accompanying him was Dr Ray Tangney, a colleague from the National Museum Wales, who focused on the mosses while Jeff concentrated on the liverworts.

Whereas there has been comprehensive work on the birds and marine mammals, the Falkland Islands State of the Environment Report 2008 and the FI Biodiversity Strategy 2008-18 highlight 'lower plants' (mosses, liverworts, algae, lichens, fungi) as the most critical knowledge gap and underline surveying and taxonomic identification of these as a high research priority.

Due to the prevailing geo-climatic conditions, the diversity of lower plants in the Falklands is far greater than the vascular flora (174 native flowering plants to date). Lower plants also play an important role in many of the Islands' ecosystems and are likely to be sensitive indicators of climate change. Whereas nearly 500 mosses have been recorded in Patagonia and Tierra del Fuego, 125 from South Georgia and 193 liverworts from the Brunswick Peninsula, Southern Chile (Engel, 1978), only 141 moss species and 136 liverworts have been reported for the Falklands (Duckett *et al.*, 2012; Engel, 1990; Matteri, 1986).

Consequent on a scoping visit in 2010 by Shaun Russell, to establish the necessary contacts and infrastructure (accommodation, transport and laboratory facilities), plus rigorous preplanning of an itinerary, using Rebecca Upson's local knowledge, Jeff and Ray were able to spend no



Members of the 2011 expedition – left to right: Jeff Duckett, Rebecca Upson (Falklands Conservation), Alan Orange (lichenologist) and Ray Tangney (both at the National Museum of Wales, Cardiff). M Carr.

fewer than 19 of their 21 days on the Islands doing field work; the other two days were devoted to processing specimens and running two workshops. Ray's 608 herbarium specimens are by far the most extensive moss collection from the Islands, whilst Jeff's liverworts included over 95% of the species previously seen plus several new ones. A further factor contributing to the comprehensive nature of the 2011 bryophyte collections was the compilation, prior to the visit, of illustrations of all the bryophytes recorded from the Islands. Copies of this invaluable resource are now available in the Falklands Conservation office in Port Stanley.

New discoveries

Though identification of the collections remains 'work in progress', we have already found many specimens new to either West or East Falkland and several completely new to the Islands and are able to draw some major conclusions from our visit. It was thought previously that the richest areas biologically are near the summits of Mt Adam and Mt Osborne: in contrast, the 2011 expedition found many taxa previously seen only near the mountain tops, and typical of high altitudes elsewhere in the world, close to sea level on the Falklands.

Sheep grazing is more important than altitude in determining bryophyte distributions on the Falklands. Thus, ungrazed areas between stone runs and rocky outcrops provide a variety of bryophyte-rich niches; here we see the development of communities closely resembling the mixed



Bryophyte-rich habitats in the Falklands: Ungrazed areas between stone runs (left) and a typical stream (right). Jeffrey G Duckett.

liverwort mats of the northern hemisphere (Hodd & Sheehy Skeffington, 2011), a surprising discovery given the low rainfall (maximum 646 mm at Port Howard, West Falkland).

More tolerant of grazing are the conspicuous mosses *Breutelia*, *Dicranoloma* and *Racomitrium* and a rampant introduction *Campylopus introflexus* that is particularly abundant around penguin colonies along the coasts. In contrast to the huge bogs in Tierra del Fuego, the bog moss *Sphagnum* forms only limited patches on the Falklands. The presence of mature sporophytes at the time of our visit in high summer was, as might have been predicted, exactly six months out of synchrony with the northern hemisphere. A further surprise is that we estimated that 70-80% of the total bryophyte biomass on the Falklands is liverwort. Streams and stream banks in particular are liverwort-dominated with *Chiloscyphus* and *Clasmatocolea* species plus smaller quantities of the mosses *Drepanocladus* and *Blindia* in the water and the simple thalloid liverworts *Jensenia* and *Atrichoposis compressa*, an unusual polytrichalean genus lacking dorsal leaf lamellae, along the silty margins.

Old whale bones are a peculiarly South Atlantic bryophyte habitat. These support a range of mosses,

particularly *Syntrichia* species including *S. papillosa* and *S. subpapillosa* (new to the Islands), the only two bryophytes common as epiphytes on planted trees (*Nothofagus*, *Populus*, *Salix*, *Sambucus*, *Ulex*) on the Falklands. We also found *Tetraplodon unioides*, the first record for the dung and carrion moss family the *Splachnaceae*, on the carcass of a sheep on a stone run on Mount Usborne. On the subject of unusual habitats, another discovery was an undescribed moss species growing on timbers from a shipwreck dating from the 1920s.

The largest liverwort on the Falklands is the complex thalloid *Marchantia berteriana* which form patches, sometimes several metres in diameter, at frequent locations from sea level to the mountain tops. Since cosmopolitan 'weedy' bryophytes are rare or absent from the Falklands, we were surprised to discover another *Marchantia*, *M. polymorpha* newly introduced in the plant nursery at Port Stanley. *Marchantia polymorpha* is also an introduction associated with human activity in Antarctica. We suggest that measures be put in place to confine this species to the plant nursery to prevent its spread, particularly onto nutrient-rich soils around bird-nesting colonies to the possible detriment of the natural bryophyte flora.





ABOVE: Mosses (clockwise from top left); *Breutelia integrifolia*, *Sphagnum fimbriatum*, the endemic *Dicranoloma billardieri* var *compactum*, whale bone with *Syntrichia* species.

BELOW: Liverworts (clockwise from top left); *Marchantia berteriana*, *Noteroclada confluens*, liverwort mat containing *Balantiopsis* and *Riccardia*, liverwort mat containing *Lepicolea*, *Cryptochila* and *Frullania* growing together with the filmy fern *Hymenophyllum falklandicum*.

All images Jeffrey G Duckett.

Next steps

The clear priorities for future expeditions to the Falklands are the identification and mapping of the richest liverwort communities and streams for both the conservation and long term monitoring of the impacts of climate change, plus sampling of the smaller offshore islands where grazing is much reduced or absent and sampling for ephemerals in the spring months. Though nearly two centuries of sheep grazing have badly damaged the natural bryophyte communities of the Falklands, providing that appropriate measures are now taken, there is no reason to expect any sheep-derived extinctions in the future. On the contrary, given the dedication and commitment of Falklands Conservation and good local support for and understanding of the Islands' conservation priorities, we are optimistic that Falkland bryophytes will provide important subjects for future research on carbon cycling and climate change impacts in the South Atlantic.

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Jeff would like to thank the Ernest Shackleton Scholarship Fund, the Falkland Islands Government Environmental Studies Budget and the British Bryological Society Bequest Fund for financial support.

A rockhopper penguin's winter journey

Sarah Crofts

In the Falklands southern rockhopper penguins *Endiptes chrysocome chrysocome* breed on land between October and March and spend the winter (April – September) entirely at sea. To find out where they go we used state of the art satellite-tracking devices (Sirtrack, NZ) to follow their journey during the winter period as part of our two-year Rockhopper Penguin Project.

The map shows the journey of one adult rockhopper penguin leaving its breeding colony at Steeple Jason Island. The penguin, equipped with its satellite tracker (*below*), left the colony in April and travelled directly to the coast of mainland South America. Here, it remained foraging until the end of May when it headed north, following

the currents, along the Patagonian Shelf*.

By mid-July the penguin was at its farthest point recorded, some 1,340 km from Steeple Jason Island. The bird began to travel south back towards the Falklands through July and August, at which point the batteries of the tracking device gave up. The available data revealed the penguin travelled some 4,500 km over four months and utilised an area more than 500,000 km².

The project has been tracking rockhopper penguins over the winter and summer months at Steeple Jason and Beauchêne Island – the next phase of the project will be to analyse the data, including diet data and publish the findings at the end of the year.



Sarah Crofts.



* The Patagonian Shelf ecosystem in the South Atlantic is at least three million km². These highly productive waters are home to a vast range and number of marine predators such as whales, seals, penguins and other seabirds.

Acknowledgements

We would like to take this opportunity to thank the Overseas Territories Environment Programme, the People's Trust for Endangered Species, Falkland Islands Government Environmental Studies Budget and the John Cheek Trust. We are also grateful to the Wildlife Conservation Society (owners of Steeple Jason Island) and the Falkland Islands Government (owners of Beauchêne Island).

Falkland Islands Penguin Census



Stuart Newman

Falklands Conservation set up the first Island Wide Census (IWC) in 1995 and has run one every five years since then. The purpose of the IWC is to ensure that fluctuations at selected annually monitored penguin breeding colonies are representative of changes for the Falkland Islands population as a whole. Regular monitoring of the Islands' seabird populations has contributed to the identification of regional and global conservation priorities and provides information necessary for IUCN listing.

The fourth IWC of gentoo and southern rockhopper penguins breeding at the Falkland Islands took place in November 2010 (see background article in WCFI 14, May 2011). Following data analysis the results are as follows:

Gentoo penguin:

- The 2010 population estimate was 132,321 (+/- 2,288) breeding pairs, double the number counted during the 2005 IWC (65,860 +/- 1,052).
- This recent estimate is the largest number reported for the Falkland Islands and is now likely to be the largest population in the world.
- Based on the revised Falkland Islands population estimate, the global population is now about 400,000 breeding pairs.

Southern rockhopper penguin:

- The number of rockhopper penguin breeding pairs increased by 51% when compared with the number counted during the 2005 IWC.
- The Falkland Islands population is now estimated to be 319,163 +/- 18,503 breeding pairs, the second largest population after Chile.
- Although excellent news, the FI rockhopper penguin population is best described as 'stable' as it remains at less than 20% of the population estimated in the 1930s.



Wildlife Conservation in the **Falkland Islands**

Issue 17



Wildlife Conservation in the Falkland Islands

Issue 17 November 2012

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FALKLANDS CONSERVATION

Protecting the wildlife of the Falkland Islands for future generations

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 Raptor Project Officer: Micky Reeves



James Fenton

Dr James Fenton, Chief Executive Officer

Editorial

There is some good news in this magazine which is particularly heartening as conservation stories are often all doom and gloom about what we are doing to the wildlife of the planet. It would appear that the black-browed albatross, that iconic seabird of the South Atlantic and familiar to anyone who has sailed its waters, is increasing in numbers around the Falkland Islands. A few years ago the population was in definite decline and there is no doubt that accidental capture of albatrosses by commercial fishing vessels contributed to this. A lot of effort within the industry, including work by Falklands Conservation, has over the years been put into reducing this 'bycatch' and it now looks as if this work is paying off. Of course, in ecological matters, it can be hard to relate cause and effect, particularly in the oceans where there is a multitude of variables: variation can be both natural and human-caused. But we hope the improvement is due to this remedial action. The news is tempered, though, by a continuing reduction in black-browed albatrosses breeding on South Georgia, albeit this is a much smaller population.

The rockhopper penguin is of course our symbol and is many people's favourite penguin. Sarah's article about rockhoppers, or 'rockies' as they are affectionately known, makes fascinating reading. I was particularly amazed that they need to dive 400–800 times to get enough food to fill their stomachs before they can return home to feed their young. Also of interest is that the two largest populations, on Beauchêne to the south and Steeple Jason to the north, go their separate ways, the two populations rarely meeting. Similar work on elephant seals on Sea Lion Island shows that the population here rarely mingles with the larger populations on South Georgia. So maybe we are learning that island populations of birds and mammals very much like to stick to the colleagues they know and, at breeding time at least, to keep to their home area. Is that so different from us?

It is not all doom and gloom with invasive plants either, as Richard's article shows. Many of the introduced plants which could cause future problems have been spotted early enough and their potential expansion nipped in the bud. If only this had been the case with the plants that are now problematical on the Islands. This illustrates the need for eternal vigilance as well as the need for knowledgeable botanists. In relation to which, in recent years we have forged very strong links with the Royal Botanic Gardens, Kew, facilitated by Dr Colin Clubbe who leads Kew's work in the Overseas Territories. There is an increasing collection of Falkland Island plants being grown at Kew, so when you next visit the gardens be sure to find them. And our own native plants garden in front of our office on Ross Road in Stanley now has a garden bench, so enjoy a sit in the sun when you next visit!

Developing the co-operative management of biodiversity

Project Officer Clare Cockwell explains how she is working with the local community on the Falkland Islands Protected Areas Strategy project as it approaches the halfway stage.

This two and a half year project, funded primarily by the Overseas Territories Environment Programme (OTEP), aims to provide a framework for building a comprehensive network of Protected Areas in the Falkland Islands. The project outline rightly places a very high importance on co-operation and solutions that reflect community values. However, a 'comprehensive' protected areas network suggests a list of areas chosen on scientific grounds for their biodiversity values. Put that in a context where almost all of the places already identified as being important for wildlife are privately owned and you have, well, a challenge.

After an initial desk study to find out what had gone before and to set the Protected Areas Project in the context of existing Falkland Islands Government (FIG) policy and legislation, I presented a scoping paper to the Project Steering Group, which then took part in a workshop to establish some principles to guide the creation of a Protected Areas Strategy. These principles reflect current scientific knowledge in terms of conserving biodiversity, but they place equal emphasis on social and cultural aspects of protected areas, and recognise the importance of issues of practicality and urgency. It thus became clear at a very early stage that any Protected Areas Strategy would be about more than biodiversity alone.

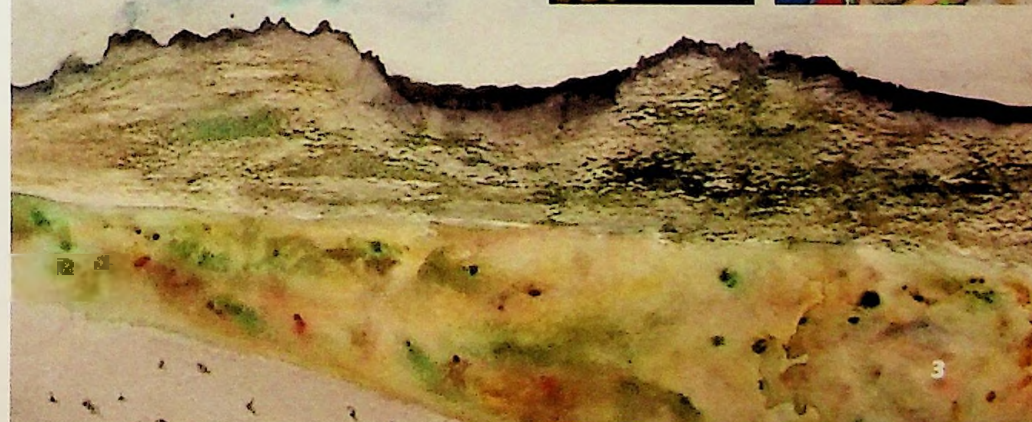
I then embarked on a lengthy and varied programme of education and outreach activities, which included a series of public meetings, presentations and discussions with elected members and landowners, and also a workshop to examine in detail the options for developing a range of protected area designations that are appropriate for the Falkland Islands.

The project calls for specific work in the schools, using a budget provided by FIG. This year's big project was a joint one with the Infant and Junior School and Camp Education to coincide with the 30th Anniversary of the Liberation of the Falkland Islands. Children were asked the question 'What do you love about where you live?', and worked with local artists, who volunteered their time to help the children to express their ideas through art during a week of field visits and workshops. When Liberation Day came round, we put on a very successful exhibition that was attended by several hundred people, many of whom added their own answers to the original question on our comment board.

There is still a lot to do but the approach that is emerging as being the most likely to achieve results is one of embracing opportunism and maximising goodwill and co-operation wherever they are to be found, whilst keeping the ultimate goal of a comprehensive protected areas system in sight.



Some of the artwork created by local children to express what they love about where they live. Ben Cockwell and Maggie Battersby.



Studying southern rockhopper penguins – new data

Having spent two years working on a comparative study of rockhopper penguins at the Falklands' two largest colonies, Sarah Crofts describes some of her findings.

In 1921 the Government naturalist A.G. Bennett wrote a description attesting to the difficulties of studying birds in the Falklands. His attempts to reach remote islands were often dashed by the frequent rough seas that the westerly winds churn up. On top of this, he was thwarted by poor communications and, upon reaching islands, the uncertainty of being picked up again before his supplies ran low was a hazard of the job.

To be honest, this does not sound dissimilar to studying birds in the Falklands in the 21st century, especially a cliff-nesting seabird at the two most remote islands: Steeple Jason and Beauchêne. If you can imagine spending a day in a small, rolling boat waiting for waters that resemble the inside of your washing machine to calm, and finally and precariously unloading people and supplies on small inflatables to land on these remote slabs of tussac strewn rocks then that is pretty much what it takes to study Falkland rockhopper penguins. So why did we choose these two islands? They are home to the two largest populations of southern rockhopper penguins in the Falklands, accounting for 125,000 breeding pairs (73% of the Falkland population) or a quarter of the global population (FC 2010 census).

Thankfully, 21st century communication is one great improvement. Not only has our ability to plan and safely operate on these remote islands improved, the technology has allowed us to communicate directly with the birds we study, and this was the focus over the last two years of the rockhopper penguin project. Tracking data on their foraging trips during the chick rearing period and the winter migration, information on diving behaviour and depths, as well as their diet, were collected for over several hundred individual birds at Steeple Jason and Beauchêne islands.

So, with all the data collected, it can only mean one thing – that it all needs to be analysed and written up. In a cunning attempt to miss a Falkland winter, I swapped the southern hemisphere chill for a soggy summer in the UK (not part of the plan!), and was based both at the University of Glasgow and at the British Antarctic Survey in Cambridge, working with Norman Ratcliffe.

The main emphasis of the data interpretation has been comparing the individual behavioural strategies of the penguins at the two locations, looking at how variations may help explain differences in population trends, as well as investigating the range and type of human activities and threats faced by each population.



Summer – chick rearing

Penguins typically return daily to feed their chicks and so foraging was a maximum distance of 30–40 km from the colony. The birds exploited the shallow water environment (less than 200 m) in the vicinity of their colony. Beauchêne penguins spent more time at deeper depths regularly diving up to 40 m, whilst birds at Steeple Jason foraged at much shallower depths, indicating differences in both prey and habitat (see maps on page 6). The longest dive was 171 seconds and the deepest dive 96 m (their depths are dictated by their physiology and size, for instance much larger penguins like the kings have been recorded diving over 300 m). Penguins will generally only return to the chick once their stomachs are full, and the number of dives it takes to return with a full stomach depends on the quantity and quality of the food available. For our rockhoppers this took between 400–800 dives per day to accomplish.

Diet and prey preferences

Crustaceans, particularly a large Euphausiid krill, dominated prey at Beauchêne Island. Fish, in particular sprat, was the main diet component at Steeple Jason in 2010, but this turned to crustaceans later in the season. Individual prey sizes taken were typically small, possibly accounting for the many dives it took to get full stomachs. Most krill and juvenile squid preyed upon measured 20–36 mm in length and the largest food item taken was sprat at 21 cm.

Rockhopper penguin with satellite tracker before the winter migration.
Norman Ratcliffe.



Project Officer, Sarah, with a rockhopper penguin carrying a tracker ready for deployment.
Norman Ratcliffe.

To infer the diet over a longer period of time and during times when diet samples were not taken (e.g. in the pre-moult period and the end of winter period), blood and feather samples were collected. Analysing the samples was carried out at the Scottish Universities Environmental Research Centre in Glasgow and involved hours of weighing minuscule amounts of dried blood and feathers in tiny tin capsules. The capsules were loaded in to a complex machine called an isotope ratio mass spectrometer and combusted, the carbon and nitrogen ratios in the gas subsequently measured. These ratios reflect the dominant prey composition in the diet and can indicate regional foraging areas as well as the prey's level in the food chain.

Winter migration

As birds deplete the resources around the colonies over the summer, they disperse farther afield to find adequate food to replenish energy reserves over the winter. Foraging tracks from Steeple Jason rockhopper penguins highlight the importance of the Patagonian Shelf, in particular around the coast of South America, foraging in waters less than 200 m deep on the continental shelf. For Beauchêne Island birds, the area around the Burdwood Bank, a shallow region some 200 km south of the Falklands, was highly important and areas of shelf-slopes and deeper oceanic waters associated with cold water currents and nutrient up-welling. Little overlap of the two populations occurred, and Beauchêne birds are likely to have more overlap with their South



Sarah Crofts.

American counterparts breeding on Staten Island, than those from Steeple Jason.

Implications for conservation management

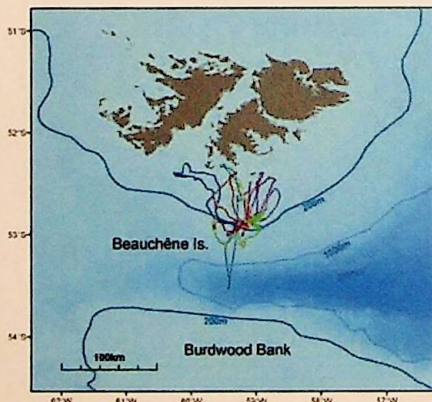
Survival at sea in all seasons and success in raising chicks are influenced by productivity and food availability but also can also be impacted by human-caused activities. Fisheries and hydrocarbon exploration are both extensive in the South Atlantic region, and this recent research will help give us a better idea of where potential overlaps may exist, the most vulnerable periods, and any differences in potential threats to Steeple Jason and Beauchêne birds.



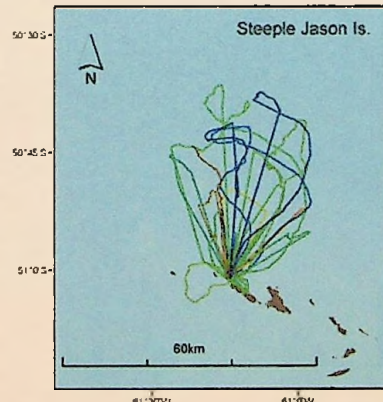
Rockhoppers coming ashore at Beauchêne Island. Sarah Crofts.



Rockhopper penguins diving underwater. SMSG.



Tracks of individual female rockhopper penguins on foraging trips during the chick rearing period at Beauchêne Island.



Tracks of female rockhopper penguins from Steeple Jason during the chick rearing period in December 2011 (see James Robinson's account on page 12).

Acknowledgements

Funding: Overseas Territories Environment Programme (OTEP); People's Trust for Endangered Species; Falkland Islands Government (including access to Beauchêne Island); John Cheek Trust; Rockhopper Exploration; BHP Billiton; and Desire Petroleum. Access to Steeple Jason Island: Wildlife Conservation Society. Many thanks also to all the patient boat skippers and for the good companionship of field co-workers.

Falklands Conservation Review of the Year 2011-12



Achievements and Performance

Our 2011-12 work programme, again supporting the 2010-19 Strategic Plan, reflects our mission to engage and empower the people of the Falkland Islands to take action with us to conserve biodiversity and manage landscapes and seascapes for the benefit of nature and people.

FC team update

Craig Dockrill completed his term as Chief Executive Officer, to be replaced by Dr James Fenton in August. Sarah Brennan, our UK Executive Officer, continued in post throughout the year. Our Conservation Officer of two years, Dr Alastair Baylis, left the organisation in May, to be replaced in June by Dr Andrew Stanworth. Sarah Crofts continued as our Community Science Officer, and Farrah Peck as our Office Administrator in the Falklands. Maggie Battersby continues to provide strong support to the Watch Group on a part-time basis.

We also have had several project staff over the year. Dr Rebecca

Upson, the Plants and Habitat Officer, has been based at the Royal Botanic Gardens, Kew, for the last months of her contract. Clare Cockwell, our Protected Areas Officer, was recruited in October to lead on the OTEP project. Richard Lewis was taken on in July as the Invasive Plants Officer and was joined by Samuel Miller, an Invasives Plants Trainee, for the summer months. Micky Reeves started work as the Raptor Project Officer in May. And we have been very grateful for the assistance of many dedicated volunteers both locally and overseas.

Vice Presidents Sir David Attenborough, Julian Fitter, Robert Gibbons, Peter Harrison, Sir Rex Hunt, Rebecca Ingham and Robin Woods

Board of Trustees as at 30 June 2012

Henry Robinson (Chairman), Mandy Shepherd (Vice Chair), Darren Christie (FI Chairman), Dr Paul Brickie (FI Vice Chair – resigned April 2012), Roger Spink (FI Vice Chair – from May 2012), Bill Featherstone (Hon Treasurer), Keith Biles (FI Hon Treasurer), Sally Blake, Tim Carr, Jan Cheek, Dr Colin Clubbe (elected Nov 2011), Professor John Croxall, Mike Evans, Tyn Marsh (elected Nov 2011), Carol Miller (co-opted Feb 2012), Ian Moncrieff, Mike Morrison, Dr Mike Richardson (resigned Nov 2011) and Louise Taylor.

Conservation and research

- The annual Seabird Monitoring Programme continued into its 22nd year. This is a survey of rockhopper, gentoo and king penguin populations, together with black-browed albatross. This has been a good year in terms of breeding success, with most populations increasing.
- The Black-browed Albatross Demographic Study continued for a 6th year on Sleaford Jason. Adult birds and chicks within the study site were ringed; the information will be useful in the long-term in assessing the survival of these birds.
- Our work on penguins continued with satellite-tracking king penguins to see where they go in winter, southern rockhopper penguins to determine where they spend their time at sea; and also gentoo penguins to understand more about where they feed. And, for the latter two, we have also been undertaking diet studies to see where in the food chain these penguins are feeding.
- Our three-year, OTEP-funded Protected Areas Strategy project began in October 2011 and aims to provide a framework for building a comprehensive network of protected areas. To date, it has involved extensive background research and consultations with all the various interested parties and, in time, will result in recommendations to the Falkland Islands Government.
- With funding from the Darwin Initiative, our three-year project to study currently unknown raptor biology and ecology and provide a scientific basis for government policy regarding management of conflicts between raptors and rural livelihoods in the Falkland Islands, particularly sheep farming, was able to start in May 2012.
- The Native Plants Project funded by OTEP over the last four years is now coming to an end. This project advanced the conservation action necessary to protect the native plants and habitats of the Falkland Islands, in particular those that are threatened or endemic. It has significantly improved our knowledge regarding distribution and status of these



Jonathan Handley measuring lobster krill as part of his study into the diet of gentoo penguins. Stuart Bennett.

key species and will result in a new vascular plant Red List and associated Action Plans. It has also focused on the 16 Important Plant Areas, with a directory in its final stages, and set up vegetation and individual species monitoring systems. Additionally, it has facilitated the setting up of a native plants nursery at Stanley Nurseries which enables both the sale of native plants to the general public as well as for use in restoration projects. There has been a special effort made to encourage restoration of native plant habitats, and also monitoring of vegetation recolonisation of removed minifields.

- We started work on the 18-month Defra-funded Invasive Non-Native Plants project in July 2011. Its aim is to develop a co-ordinated strategy to deal with all invasive plants in the Falklands and increase local capacity to implement this strategy.
- As part of an RSPB-led Darwin Initiative project, planning began at the end of the year for extensive fieldwork on Sleaford Jason to look at non-native house mouse ecology and baiting potential. Concurrently, a project will look at the winter behaviour and diet of striated caracaras.

Future plans for 2012-13

Drawing upon our Strategic Plan 2010-19, the Trustees have set an ambitious workplan for the coming year. This includes the 23rd consecutive year of the Falkland Islands Seabird Monitoring Programme; the 7th year of our Black-browed Albatross Demographic Study; the continuation of our projects on gentoo penguins, raptors and rural livelihoods, and invasive non-native plants; researching the impacts of climate change on plants in the Falklands; and developing a protected areas strategy. In addition, we will fully instigate the three new Darwin Challenge Fund projects (seed mixes for habitat restoration, inshore cetaceans, and vegetation mapping), carry out research on mouse eradication at Sleaford Jason, and make a study of the endemic *Nassauvia* plant species. And, funding permitting, we will be involved in partnership projects on lower plants, southern sea lions and looking at the potential for a marine protected area around the Jason Islands group. Finally, we will contribute to the forthcoming Biodiversity and Environmental Mainstreaming Group which aims to support government in the implementation of the Falkland Islands Biodiversity Strategy, and ensure that environmental considerations are taken on board in all activities in the Islands. It will be a busy year!

Here are just some of the highlights from the year:

Advocacy, outreach and environmental education

- We continued to provide environmental advice to government, industry and other stakeholders in the Falklands and abroad. Most notably, we were actively engaged in the JNCC's Environmental Mainstreaming Project, involved in the creation of the new South Atlantic Environmental Research Institute, and also in the consultation that led to the recent publication of the UK Government's White Paper on the UK Overseas Territories.
- With the support of the RSPB, we have commented on several of the oil companies' Environmental Statements and Oil Spill Contingency Plans. And, for the Falkland Islands Government (FIG), we scoped environmental issues pertinent to the different options for a new deepwater port.
- We are members of the Falkland Islands Offshore Hydrocarbons Environmental Forum and the recently set-up Seabird Bycatch Committee, and attend FIG's Environment Committee as formal members.

- Work began on fitting-out our new Penguin Rehabilitation Centre to receive oiled penguins and other seabirds. British Forces South Atlantic Islands at the Mount Pleasant Complex provided the portakabins and transported them to Stanley on our behalf.
- This year Tony Blake kindly gifted us the Lyn Blake Nature Reserve at Hawks Nest Pond on West Falkland and we plan to use this to showcase wildlife to the public.
- Our efforts to build appreciation and understanding of wildlife and conservation continued through the work of our Watch Group. We were able to take children to many of the remoter parts of the Falklands and also to maintain a programme of activities throughout the year.



Our thanks and acknowledgements – we could not have achieved so much without you!

Major supporters of our work in the past year were the Falkland Islands Government, the UK Government's Overseas Territories Environment Programme, the UK's Department for Environment, Food and Rural Affairs, including its Darwin Initiative and Challenge Fund programmes, the Royal Society for the Protection of Birds, and the Mohamed bin Zayed Species Conservation Fund. And we would like to thank the following organisations with whom we have forged strong links and worked closely over the year: Royal Botanic Gardens Kew, the Wildlife Conservation Society, the Royal Zoological Society of Scotland, the Hawk Mountain Sanctuary, WWF-UK, British Antarctic Survey, People's Trust for Endangered Species, Boise State University, EDM International, Stanley Nurseries and Beaver Island LandCare.

We also wish to acknowledge the important contributions made by the H B Allen Charitable Trust, the John Cheek Trust, Standard Chartered Bank, Stanley Services, Hurtigruten, Polar Cruises, Cotswold Wildlife Park and Gardens, Thrigby Hall Wildlife Gardens, and Travel in Depth.

For the annual Charity Ball we would like to thank our major sponsor, Consolidated Fisheries Ltd, and also Quark Expeditions,

Rockhopper Petroleum plc, Lindblad Expeditions, Malvinas House Hotel, Falkland Islands Company, Seafish Chantry and Government House for their donations or raffle prizes.

Of course, none of our work would be possible without our members, who support our important conservation work with generous donations, thoughtful ideas, advice, and their belief in the work we undertake. We wish to thank you all, including our many penguin adopters.

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Photo credits – Main picture – Gaila Turner. Insets top to bottom – Richard Lewis, Roy Smith, Sarah Brennan. Children on beach – Maggie Ballerby. Thistle pulling – Roy Smith. Watching penguins. Gentoo penguins – Stuart Bennett. Kevin Scherer.

For more information please go to our website

www.falklandsconservation.com

NOTICEBOARD

New Darwin Challenge projects

We are delighted to announce that the three Darwin Initiative Challenge Fund proposals we submitted have all been given the go ahead. These one-year pilot projects will lead to applications for larger scale projects next year. The projects are as follows:

1. Developing native seed mixes for habitat restoration in the Falklands – to identify the most suited species, testing their seed viability and suitability for planting.
2. Inshore cetaceans of the Falkland Islands – to trial survey techniques of primarily Peale's and Commerson's dolphins.
3. Mapping the Falklands: facilitating systematic conservation planning and implementation – to produce a land cover/vegetation map of the Falklands to aid biodiversity and agricultural planning.

Falklands Conservation is the lead partner on the first two projects and we will be working closely with the Durrell Institute of Conservation and Ecology on the third.

Dancing the night away

This year's Charity Ball was held on 21 September in the Town Hall, Stanley. It is our main fundraising event in the Falklands and is seen by some as the highlight of Stanley's social calendar. This year, together with the associated auction and travel raffle, it raised over £23,000 which is amazing for such a small community. We thank everyone who contributed to its success, whether through donating items or helping out in person. In particular we thank the main sponsors Consolidated Fisheries Ltd, One Ocean Expeditions for donating an Antarctic cruise, Falklands Oil and Gas for the UK flights and Seaview Ltd for the overseas travel voucher – and Sarah Clement of SeAled PR Ltd who made such a good job of organising the event.



Auctioning an Antarctic cruise. James Fenton.

New pin badge

This lovely new addition to our range of pin badges was delivered in time for this year's Birdfair. It is available for sale from our shop in Jubilee Villas in Stanley, on our webshop and from the UK Office (postage and packing to be added).



Birdfair 2012

Despite the unusually hot temperatures at this year's Birdfair at Rutland Water in August, we were delighted to meet so many members and visitors interested in learning more about our work. We also raised a record amount from sales, donations and competition entries. With our grateful thanks to the team of volunteers who worked so hard to make this weekend such a success.



Tim Carr

Staying on...

Further to the item in Noticeboard (WCFI 16), we are delighted that Darren Christie has decided to stay on as Chairman of the Falkland Islands Committee. We are also grateful to Roger Spink for taking on the position of FI Vice-Chair following Paul Brickle's resignation to focus on his new role as Director of the new South Atlantic Environmental Research Institute.

AGM notification

This year's Annual General Meeting and Members' Evening will be held at 6.30 pm on Monday 26 November at the Union Jack Club, Waterloo, London. After the formal business of the AGM, there will be presentations by Dr James Robinson on his time helping with the rockhopper penguin project and Dr Rebecca Upson on the highlights of her four-year project on native plants. We hope to see you there.

We would like to thank...

...the following for their very generous donations to our work in the last few months – Mrs Mariacristina Rapisardi, Hurtigruten, Drusillas Park, and the A S Butler Charitable Trust. We are also very grateful to BACTEC International Limited, Trant Construction Ltd and Colas Limited for funding the replacement of ageing field equipment.

Christmas with the rockhoppers

Dr James Robinson, Director of RSPB Northern Ireland, and his wife Lorraine enjoyed getting up close and personal with rockhopper penguins while volunteering on sabbatical on Steeple Jason.

As a seabird fanatic, it has always been my dream to help threatened seabirds in the South Atlantic. After working for the RSPB for seven years in Northern Ireland, I had the wonderful opportunity to take a month-long sabbatical. I jumped at the chance to help the amazing work of Falklands Conservation where I could use some of my existing scientific skills. My wife Lorraine, who is studying for a PhD on seabird ecology at Queen's University in Belfast, also made the trip down with me to Stanley, taking the long flight from a chilly Brize Norton in early December last year.

Our main job was to help Sarah Crofts with her ongoing studies of the southern rockhopper penguin; a population that has suffered a seriously worrying decline in recent decades. We had a great adventure flying from Stanley to Carcass Island and then sailing out to Steeple Jason Island in the far north-west of the archipelago. On the five-hour boat trip on the *Condor* we had some fantastic views of seabirds we had never seen before like diving petrels and thin-billed prions, whilst Commerson's and Peale's dolphins hurdled through the splash at the bow. We landed on slippery rocks and were greeted by a huge and noisy colony of gentoo penguins. We then made our way to the Wildlife



James getting to grips with an obnoxious penguin.
Lorraine Chivers

Conservation Society's (WCS) field station where we would stay for four weeks. It was good to learn that WCS is so supportive of FC's work and allowed access to these wonderful facilities for research on threatened wildlife.

Our work involved tracking female rockhoppers using global positioning systems (GPS) and finding out what they were feeding their chicks. This information is crucial to understand, and

then manage, the interactions between these birds and other users of the seas, such as fishermen and those exploring for oil reserves. On our first day, we set off along the stunning coastline to the study site, followed by a gang of ever-curious striated caracaras or 'Johnny Rooks' and angry Falkland skuas. We then fought through the dense tussac grass and literally stumbled into one of the most amazing wildlife spectacles on this planet. Before us were tens of thousands of noisy nesting black-browed albatrosses, interspersed with pockets of rockhoppers incubating eggs or brooding recently hatched chicks. It was these rockhoppers we would track over the next four weeks, so we got to know them very well as they tackled the challenges of rearing their young.

To fit the tracker to the female penguins, we had to hide at the edge of the colony and wait until they arrived in the evening to feed their chicks. They would hop up to the colony along specific penguin 'highways' to their nests, and here we could catch them and attach the trackers to the feathers using special waterproof tape. Then we would let them go and return the following evening to retrieve the trackers ready to download the information on their day's trip onto a laptop computer. This often meant waiting for many hours until they arrived – time we spent eating a lot of biscuits! The devices we used are amazing. Not only do they store the locations of the birds when they are out at sea, but they also track the dives of the bird so you can really learn about their foraging trips in great detail. Once Sarah has analysed all the data from the project, she will have a wonderful story to tell you about these very special birds and their future conservation (see page 4).



Lorraine finding that rockhoppers are easy subjects to photograph. *James Robinson*

We also got the chance to help with censuses of the penguins on the island and studies of the diving behaviour of gentoo penguins. With tussacbirds, southern giant petrels, southern sea lions, fur seals and so many other types of wildlife keeping us company, the experience was incredible.

It was a great privilege to spend so much time in the vast colonies of seabirds on Steeple Jason and to support the committed and dedicated staff of FC as they strive to solve some very difficult conservation issues with such limited resources. It was a trip that Lorraine and I will never forget and we are determined to go back one day to help FC again. I want to thank all the FC team for their friendship, support and inspiration during our stay and you, the members of FC, who provide vital financial support for such important work.

Spot the rockhoppers in a large colony of black-browed albatrosses on Steeple Jason. *Lorraine Chivers*



Our grateful thanks to the Wildlife Conservation Society for granting us access to carry out this important research project and also to James and Lorraine for all their hard work.



Lorraine Chivers

Invasive plants – species on our 'hit list'

Falklands Conservation's invasive plants project is well under way, led by Richard Lewis, our Invasive Plants Officer. Alongside some of the better known non-native invasive plants such as thistles and ragwort, this project is also targeting some less well known species.

With increasing transport of people and goods to and from the Islands, more plant species are arriving accidentally in the Falklands every year. Early intervention control to eradicate recently arrived weeds is one of the most effective ways to reduce the impact of invasive plants on native habitats and conservation. Before a plant establishes it can be difficult to foresee what impacts it may have, so we are taking a precautionary approach. We are hoping to eradicate several species before they have a chance to cause any significant problems and have already had some early successes.

Here is a selection of species we are tackling:

Rosebay willowherb (*Chamerion angustifolia*) and **Great willowherb** (*Epilobium hirsutum*): Very visible in the UK, where these two similar species with pink flowers are common weeds, most prominent along railway lines and road verges. A single patch of each species was found near Stanley in 2008. Although each spread to cover around 50 m², it is believed that these plants set very few viable seeds and after three years' control work, both are believed to be eradicated from the Islands.



Rosebay willowherb. Richard Lewis.



European eyebright. Richard Lewis.

European eyebright (*Euphrasia confusa*) and **Yellow bartisia** (*Parentucellia viscosus*): Pretty, but dangerous! These small plants are parasites on the roots of grasses. This may impact native habitats and may also out-compete the rare native Antarctic eyebright. It is also of particular concern for farmers as they favour the more productive 'greens' and significantly reduce the growth of pasture grasses.

Hemlock (*Conium maculatum*): Well known for being poisonous to people and livestock (Socrates famously died after drinking an extract). Small patches of this plant are present in Fitzroy and Roy Cove, so eradication should be possible within a few years.

Procumbent yellow-sorrel (*Oxalis corniculata*): A well known garden weed in the UK and one of the worst weeds of commercial horticulture. A small number of plants were found in a garden in Stanley. If left to spread, initial impacts will be as a garden weed, but it is likely that it would eventually spread to natural habitats. Luckily, early control seems to be very successful for this plant.



Hogweed. Richard Lewis.



Yellow bartisia. Richard Lewis.

Hogweed (*Heracleum sphondylium*): A familiar weed of gardens and roadsides in the UK, a small but vigorous population had become established on a roadside in Stanley. Thanks to sterling work by two dedicated local volunteers, this is now almost completely eradicated.

Spear-leaved orache (*Atriplex prostrata*): Six young plants were found three years ago during survey work at Mount Pleasant Airbase. These were controlled before they set seed and subsequent monitoring indicates this species has been successfully eradicated. Unfortunately, a closely related plant, **Common Orache** (*Atriplex patula*) is well established in the Falklands, where it has colonised many coastal areas, even impacting on native habitats on uninhabited offshore islands.

Cow parsley (*Anthriscus sylvaticus*): Another familiar roadside plant from the UK. Whilst the potential impacts of this species in the Falklands are unknown, it is known to be highly invasive in parts of Canada, northern states of the USA and Iceland. It is better to be safe than sorry so, in cooperation with local gardeners, we are working to eradicate the three known populations of this weed – in private gardens and Cape Pembroke National Nature Reserve.

About this project

Funded by the Department for Environment, Food and Rural Affairs (DEFRA) and formally titled 'Understanding and addressing the impact of invasive non-native species in the UK Overseas Territories in the South Atlantic', this two-year project aims to make quick progress in surveying non-native thistles and ragwort and filling in gaps in our data and risk assessments for all non-native plant species. It will go on to set out a long-term strategy to guide future work and improve local capacity. Project Officer, Richard Lewis, has been working on invasive plants in the Falklands since November 2008, and we are working in close partnership with the Royal Botanic Gardens, Kew on this project.



Field horsetail. Richard Lewis.

Perennial stinging-nettle (*Urtica dioica*): Another familiar weed from the UK. The similar **annual stinging-nettle** (*Urtica urens*) is widespread in Camp Settlements and has even colonised native habitats on uninhabited offshore islands. Whilst the perennial form is possibly less likely to become invasive in the Falklands, it is hard to predict and eradication of the small patches is likely to be relatively easy and is a sensible precaution.

Coltsfoot (*Tussilago farfara*): A single small patch around 5 m² of this persistent weed was found in Stanley during surveys three years ago. Repeated control has significantly reduced the extent of this patch, but the vigorous rhizomes (underground stems) help the plant to spring back from control actions. It is expected that this plant will be eradicated in the next few years.

Field horsetail (*Equisetum arvense*): Two patches are known on the outskirts of Stanley, the largest covering around 40 m². With persistent rhizomes and a unique biology that makes it resistant to control, including by most herbicides, this species is proving the most difficult to control. Fortunately, it currently only covers a small area and we are experimenting with different techniques to eradicate it before it has a chance to spread.

Black-browed albatross – good news!



Stuart Bennett.

Over 70% of the world's population of black-browed albatrosses breeds on 12 sites across the Falkland Islands, so the status of this population has a significant bearing on the global conservation status of the species which is presently considered Endangered on the IUCN Red List.

A new report by Dr Anton Wolfaardt, ACAP* Officer for the UK South Atlantic Overseas Territories and Joint Nature Conservation Committee, indicates the numbers of black-browed albatrosses breeding in the Falkland Islands have increased. The report, based on a synthesis of historical and recent survey results, including much Falklands Conservation data, was submitted to the Environment Committee of the Falklands Islands Government in July.

Within the Falklands different methods (aerial and ground-based surveys) have been used independently to census the black-browed albatross populations. Up until and including the 2005 census results, the different methods reported contrasting population trends. However, both aerial and ground-based surveys conducted in 2010 reveal a welcome increase of at least 4% per annum between 2005 and 2010. The Falklands' population is currently estimated to comprise approximately 500,000 breeding pairs.

Dr Wolfaardt said: "The exact reasons for the increase are not entirely clear, but efforts to reduce incidental seabird mortality associated with fisheries' activities by employing mitigation measures such as bird scaring lines, and beneficial feeding conditions, are likely to have contributed."

On the basis of these reported results, and the global importance of the Falklands' population, the IUCN Red List conservation status could be changed from the formal 'Endangered' status to a lower category of threat.

* The black-browed albatross is one of the 30 species listed under the Agreement on the Conservation of Albatrosses and Petrels (ACAP), a multilateral agreement that seeks to conserve albatrosses and petrels by co-ordinating international activity to mitigate known threats to their populations. ACAP came into force in February 2004 and currently has 13 member countries, including the United Kingdom and its Overseas Territories.



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