

# Environmental Studies Budget small grant scheme Report 2025



FEBRUARY 2026

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**Falkland Islands Government  
Environment Department**

# Replanting Misery Valley

Kicki Ericson and Thies Matzen



- Several trailer loads of branches were transported to Misery Paddock and spread over bare soil to provide wind protection, adding to the areas treated in previous years.
- By autumn 2025, it was clear that tussac was the most successful grass, so healthy tillers were collected from West Point and taken to Misery Valley.
- Around 2,500 tussac tillers were planted across the lower part of the valley, placed deep (20–25 cm) and fairly close together (about 70 cm).
- Two buckets of boxwood seedlings were also planted among the new tussac.
- A visit to the west-facing Misery Gullies in late April 2025 showed that the existing tussac had recovered very well after a year and a half without grazing, looking denser and healthier than before.
- The branches and grasses are expected to help protect the soil and allow natural vegetation to establish, and the tussac and boxwood are hoped to continue growing well on their own.

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## Keppel Island Habitat Restoration

Chris Hawksworth

- Two important biodiversity areas were identified and fenced off in the previous project Fencing of three important areas of biodiversity, Keppel Island.
- A total of 6.72 ha was fenced by Chris and Shane to help protect the areas.
- A total of 4,000 tussac tillers were pulled from a neighbouring island, transported, and replanted over a five-day period.



# Island LandCare National Purple Thistle Control Programme 2024 – 2027

## Sally Poncet

- Year 1 of the three-year Island-wide weed control programme was completed, targeting spear thistles and creeping thistles across multiple sites.
- Spring 2024 was an excellent growing season for thistles, with damp soils from a wet winter followed by warm temperatures. A small overall increase in spear thistle cover this season was due to a newly discovered site at Fitzroy Farm (110 m<sup>2</sup>).
- Creeping thistles were easier to control because they spread mainly vegetatively. One new creeping thistle site at Race Point Farm was reported this year.
- Up to four days of calafate spraying were also carried out on Keppel Island, continuing the control work started in 2017.
- Some sites now require only occasional visits, as indicated by the “not visited” entries for locations that only need attention every other year.



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## Fencing of three important areas of biodiversity Keppel Island

### Chris Hawksworth

- Fencing materials were unloaded from the Concordia Bay and transported to all three protection sites.
- Crates, kiss gates, and perimeter fences were fully installed at each location.
- Fieldwork was completed by Chris Hawksworth and Shane Blackley between 7 and 20 November.
- The original target of 3.2 ha for protection was exceeded, with a total of 6.72 ha fenced off.
- Rapid regeneration of previously grazed tussock was visible within weeks of fencing.



# Dyke Island

## Giselle Hazell

### Work Completed 2024

- 52286 plantings: Tussac Grass 47945. Cinnamon Grass 3942. Marram Grass 415. Blue Grass 68. Fuegian Couch 68
- 806 Hours or 100.75 days
- 3 Ha Planted of which :1.8 ha bare ground covered and 1.2 ha of maintenance infilling

### Work Completed 2025

- 54747 plantings: Tussac Grass 50239. Cinnamon Grass 1033. Blue and Fuegian Mix 3475
- 95 days labour with 6 days travel.
- First trial to create capacity building through employing locals this year.

### Positive Outcomes, changes and benefits

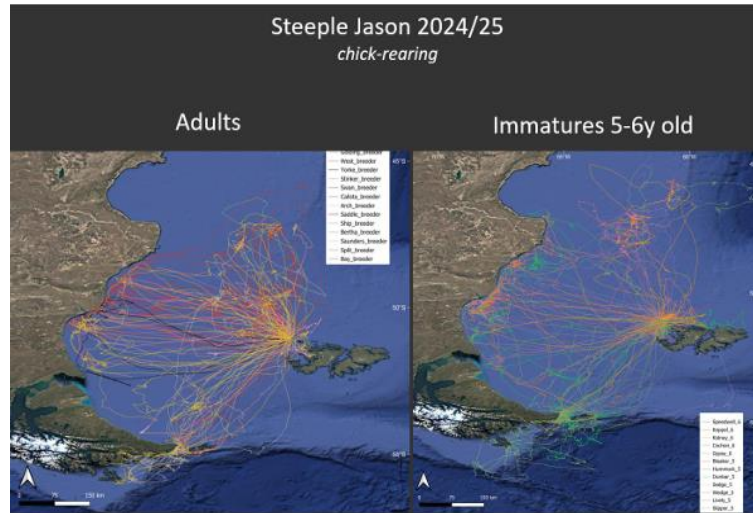
The effects of the restoration efforts will take some time to present themselves.

- . Protect existing Tussac and other native grass communities
- . Reduce loss of soil and reduce further loss of habitat through creeping/wind-blown erosion
- . Improve water retention and reduce water run off
- . Aid in carbon draw down and sequestration
- . Restore biodiversity to the site
- . Create long term nursery stock to further restoration projects on the rest of Dyke Island in the medium term and facilitate plant stocks for other projects in the Falkland long term.
- . Create local capacity building opportunities and document the role that a circular economy can benefit the rural sector.
- . Protect our natural environment for future generations of Falklanders.



# A long-term study of Black-browed Albatrosses as a tool for conservation and environmental monitoring

Paulo Catry



- Continued progress toward long-term objectives for science-based conservation of black-browed albatrosses in the Falkland Islands.
- Strengthened understanding of the Falkland Islands marine ecosystem through detailed study of a key pelagic predator.
- Supported monitoring of the Southern Patagonian Shelf environment, including climate variability, pollution, fisheries interactions, disease risks, and oil exploration impacts.
- Contributed data and insights to marine management and spatial planning in the Falklands region.
- Advanced training and capacity building for Falkland Islands researchers.
- Completed extensive fieldwork during the 2024/25 breeding season on New Island and Steeple Jason.
- Successfully tracked adult and immature albatrosses, including known-age individuals from the Falklands Conservation study plot.
- Generated significant scientific output, contributing to four publications in high-impact international journals.
- Increased public outreach through an article in the Falkland Islands Newsletter on seabird diving abilities.
- Integrated project data into the Falkland Islands Seabird Monitoring Program coordinated by Falklands Conservation.
- Continued contribution to ACAP, supporting the Falkland Islands' commitments under the international agreement.
- Engaged local volunteers from the Fisheries Department in fieldwork activities.
- Shared research findings with the broader public to enhance awareness and understanding of seabird ecology.
- 22 years of continuous long-term monitoring of black-browed albatrosses, increasing the project's value for understanding medium- and long-term population and environmental dynamics.

# The Dyke Island Project

## Oly Dempster

- 10 days of filming, 10 days of editing, equipment hire, insurance, overheads, software, and music licensing.
- Initial contact established with Gisselle Hazell regarding her restoration work.
- First-hand accounts from returning volunteers highlighted the intense workload and dedication of Alec and Gisselle.
- Filming revealed the exceptional commitment and deep connection to nature shown by the couple.
- The filming process provided an immersive learning experience about the ecological importance of Tussac grass.
- Gisselle explained the interconnectivity between species using Tussac and how each contributes to the health of the ecosystem.
- The completed film has reached a combined 21,000 views across social media platforms.
- The filmmaker gained substantial ecological knowledge, all documented in the final project now available for viewing.

Video can be found [here](#)

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# Dunbar Little Creek Restoration

## Marie-Paul & Hugues



- 1,000 Fuegian couch seedlings planted in September 2024.
- Remaining species planted from April 2025.
- Planting focused on diddle-dee dieback areas with highest erosion risk.
- 600 blue grass tillers collected from The Twins Islands and planted.
- Around 70 cinnamon grass tillers collected on-farm and planted.
- Boxwood seeds sown last winter; no germination observed.
- 6,710 seedlings planted in total: 680 boxwood, 2,700 Fuegian couch, 2,830 cinnamon grass, 500 blue grass.
- Tillers planted: 600 blue grass and about 70 cinnamon grass.
- Good prospects for establishment in dieback areas; restoration work continuing.

# Remote cameras for monitoring seabirds and fire damaged habitat at Sea Lion Island

Sarah Croft



- Upgraded remote monitoring system with 4K solar-powered cameras.
- Continuous year-round surveillance of Gentoo and Southern Rockhopper Penguins.
- Identification of previously unknown nocturnal predation by Southern Giant Petrels.
- Improved detection of disease outbreaks and unusual mortality events.
- Launch of a resilience-building program for Southern Rockhopper Penguins in 2020/21.
- Recognition of nocturnal predation as a key factor in chick losses.
- Installation of boulder shelters reducing storm impact and predation pressure.
- Consistent annual increase in fledging success from 2021 to 2024.
- Comprehensive monitoring of 20 hectares of fire-damaged habitat.
- Identification of erosion-prone diddle-dee/small fern habitat for targeted restoration.
- Rapid natural regrowth dominated by groundsel stabilizing soil.
- Successful trial planting of native Fuegian couch grass with high survival rates.
- Restoration of tussac areas to reduce peat loss and protect exposed ground.
- Confirmation of full extinguishment of smouldering peat after the fire.

## New House Lake – Haven Pond

Jeremy Poncet

- A 70-m dam was built with protective islands to reduce wave erosion.
- Turf was added on both sides of the dam to prevent scouring.
- A rock-cut spillway was created to reconnect with the natural watercourse.
- Spillway and overflow designed to handle extreme flood events (up to 2,000 L/s).
- Embankment slope was reduced and reseeded with native plants for stabilization.
- Embankment recovery expected within a year due to rapid germination.
- The new 2-hectare lake supports ideal conditions for Californian Club Rush.
- Teal ducks and rare bird species have already begun using the site.
- The area is expected to become an important nesting habitat as vegetation grows.
- Tasselweed will be added to attract swans.
- Planting includes Club Rush, Tussac, Swordgrass, Cinnamon grass, and multiple native seeds.



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## Pebble Island Group Restoration

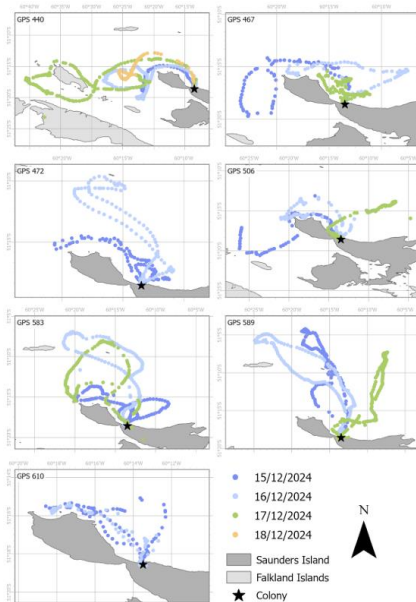
Chris Hawksworth



- Eight habitat-restoration sites across four islands were identified.
- A total of 10,390 tussac tillers were pulled and replanted between 6–14 August.
- Tillers were sourced from neighbouring islands and transported by S/V Porvenir.
- Starter colonies were established to accelerate future restoration efforts.
- Fieldwork covered 25 nautical miles and visits to nine islands.

# Impact of environmental variability on southern rockhopper penguin population trends and foraging behaviour

Diane Pavat



- Archival and new datasets are being combined to assess how environmental conditions affect foraging and breeding success.
- Ten GPS/TDR devices and SIA samples were collected on Saunders Island in December 2024.
- Ten more GPS loggers and SIA samples were collected on Hummock Island in January 2025.
- Early crèche formation on Saunders suggests favourable foraging conditions.
- Hummock chicks were still attended nightly, indicating short foraging trips.
- All tracked birds foraged locally within King George Bay, showing high productivity.
- First breeding-season tracking and dietary data were collected for two new colonies.
- New datasets will enable comparisons across colonies and environmental contexts.
- The 2025/26 season will focus on Steeple Jason with ~30 planned GPS/TDR deployments.
- The project aims to identify ecological thresholds linked to colony decline.
- Findings will support Marine Managed Areas, impact assessments, conservation planning, and IUCN evaluations.

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## Invasive Earwigs in the Falklands: How Big Is the Threat?

Stephen Gillanders and SAERI

- A second full field season was completed between September and March, covering East Falkland, West Falkland, and four outer islands.
- This represents one of the largest terrestrial biological sampling efforts ever undertaken in the Falklands.
- Earwig abundance was mapped across seasons, habitats, and settlements.
- Thousands of invertebrate specimens were collected to assess earwig impacts on native communities.
- Several taxa may be formally recorded in the Falklands for the first time.
- A public opinion survey was launched to understand community knowledge, perceptions, and support for management options.
- The project will clarify the ecological impact of earwigs and their interactions with native invertebrates.
- The extensive dataset will support conservation planning, ecosystem understanding, and future research on climate and biosecurity risks.

# Long-term coastal bird monitoring of Stanley Harbour and Cape Pembroke National Nature Reserve

Sally Poncet



- Bird abundance and distribution along 43 km of coastline showed no major changes.
- Falkland Steamer Ducks and Rock Shags remained the most abundant species.
- No measurable wildlife impacts were detected from construction at Bennett's Paddock or Tussac House.
- Continued housing growth is expected to increase House Sparrow numbers (and domestic cats).
- Planned FIPASS replacement is likely to significantly affect habitats used by breeding steamer ducks, grey ducks, and Magellanic oystercatchers.
- Winter grazing continues to damage peat soils and native plants between Christina Bay and the lighthouse.
- Tussac planted in 2023–24 between Hadassa Bay and Hooker Point is thriving and expanding habitat quality.
- Naturally established tussac near the lighthouse is attracting more southern sea lions and tussacbirds.

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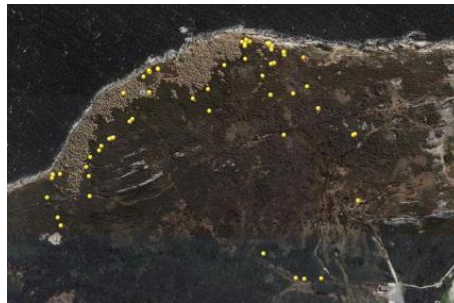
## Use of biosecurity dogs to detect and interdict invasive invertebrate populations throughout the Falkland Islands

Duncan Willis

- A new detection dog was sourced and trained after the original trial dog was lost.
- Training focused on controlled, systematic searching and imprinting using safe odour "soaks".
- A local apprentice was trained to professional handler standard.
- A Falkland-resident handler dog team is now fully operational without introducing any non-native species.
- The team conducts weekly school sweeps and community engagement at FICS.
- Searches have covered vessels, cargo, yachts, warehouse, and private properties across Stanley.
- All work has been provided free of charge.

# Conserving Cape Pembroke's Sooty Shearwaters

Ross James, Naomi Cordeiro, Sally Poncet & Ken Passfield

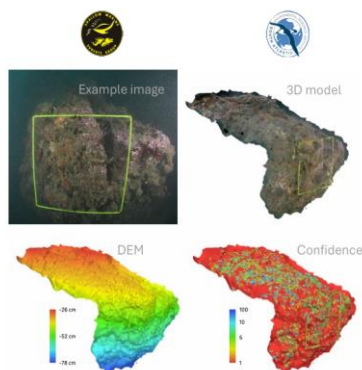


- Twenty-two dog searches were completed, detecting over 70 cat scats and guiding trap placement.
- Six feral cats were captured, including a lactating female and kittens, indicating a breeding group that has now been suppressed.
- Sooty Shearwater activity followed expected seasonal patterns, with nocturnal overlap highlighting predation risk.
- Cameras recorded rodents, hares and native species; over 3,900 images were processed through Wildlife Insights for standardised analysis.
- Scat analysis showed a diet dominated by mice; bird remains were found in 8 scats, including one containing Sooty Shearwater feathers.
- Additional scat findings included krill (likely via seabird regurgitate) and plastic, indicating opportunistic feeding.
- Partner surveys reported signs of colony expansion and successful fledging, though not directly attributable to cat control due to slow maturation rates.
- The project demonstrates that targeted invasive predator control can reduce biodiversity threats and support long-term colony resilience.

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## Enhancing underwater photographic capacity for marine biodiversity surveys and advanced habitat mapping

Paul Brewin



- All equipment was purchased and delivered as planned.
- Two ecological tests of the new underwater 3D photogrammetry system were completed.
- The first test mapped benthic habitats, producing 3D surface area, elevation models, and metrics useful for analysing species patterns.
- The second test created a 3D model of a single Cliona sponge colony, measuring orientation, surface area, and volume for future monitoring.
- The benthic test showed strong potential, though image quality was reduced by suspended particles and wave surge; protocols will be refined.
- The sponge-colony test was successful and produced usable monitoring data.

# Phillips Point Set-aside and Restoration

Stefen & Holly Turner

- Phillips Point expanded from 204 ha to 237 ha, now free of livestock and hares.
- The extra 33 ha were enclosed using mesh netting on a new grant-funded fence.
- Fence alignment was adjusted to include more valley habitat.
- The added area includes key environmental features, including a pond supporting plants and waterfowl.
- Deep-peat valley areas received most tussac seedlings due to ideal damp conditions.
- Planting was concentrated at the west end to improve establishment.
- Bluegrass and Wavy Hair-grass were planted on the ridgeline; Fuegian couch along the coast; Swordgrass and Boxwood in sheltered northern valleys.
- Most seedlings represent native species being reintroduced to the area.
- These species will spread naturally over time as grazing pressure is removed.
- Valley habitats will develop ponds, sphagnum, tussac, fascine, and native grasses.
- Northern areas will form dense Boxwood and Swordgrass, improving bird habitat.
- Phillips Point will become a more accessible future source of tussac tillers for restoration.



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## Diddle-dee dieback: developing remote sensing solutions to quantify and understand areas at risk

Evan Langridge



- Multispectral satellite imagery and supervised classification were used to map diddle-dee dieback across four West Falkland farms.
- Around 5% of surveyed areas showed dieback, though confidence varied.
- Island-wide mapping suggested ~3% dieback on West Falkland and <1% on East Falkland, with low confidence for the latter.
- Weak links were found between dieback and topography or soil, suggesting other drivers such as climate or disease.
- Remote sensing proved effective for detecting and monitoring dieback, but predictive

# Land restoration, recovery and climate resilience programme workshop

Lewis Clifton



- Planning for the workshop began immediately after seed funding was confirmed, requiring extensive coordination to bring scientists to Stanley and secure a suitable venue.
- The two-day workshop was fully recorded by FITV and professionally edited before Prof. McAdam prepared the final report.
- Invitations were extended to MLAs, public officers, the scientific community, and Governor Blake, who attended.
- Presenters and participants adjusted fieldwork and farming schedules to contribute, and several professors also delivered sessions at FICS.
- The workshop report was distributed to RBA members on USB, summarising the major challenges facing rural sustainability and the need for “measure to manage” approaches to prevent irreversible soil erosion.
- The report highlights that biodiversity regeneration is achievable with sustained resources, time, and in some cases mechanised support and land set-aside.

# Cape Pembroke Breeding Bird Survey (Inland)

Ryan Hawksworth

- A full two-year breeding bird survey of Cape Pembroke was completed, covering all 13 transects and building on the 2022 baseline.
- Fifty-nine inland bird species were recorded, including both Falklands endemics and 11 endemic subspecies.
- Thirty species were confirmed breeding, with detailed GPS-mapped distributions created for each.
- Sooty Shearwaters increased from 300+ pairs in 2023 to 400+ in 2024, breeding in tussac between Gypsy Cove and Hadassa Bay; night surveys recorded 150–300 birds arriving, with feral cats present during each visit.
- Rare or significant breeding events were recorded, including a successful brood of Flying Falkland Steamer Ducks, the first since 1998.
- Major pressures on breeding birds were identified: feral cats, off-road driving, overgrazing by horses, uncontrolled dog walking, HPAI, climate-driven wetland loss, and post-demining erosion.
- Targeted cat trapping reduced Sooty Shearwater fledgling mortality during the critical March–April period.

