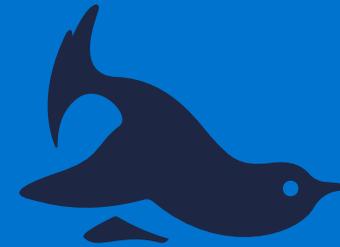


Conservation Prospectus



Penguin
Foundation



Penguin Foundation



PO Box 97 Cowes,
Victoria 3922 Australia
Tel: +613 5951 2800
Email: info@penguinfoundation.org.au
penguinfoundation.org.au



“ We acknowledge the Traditional Custodians of the land on which we live, work and learn, the Bunurong people. We pay our respects to their Elders past and present.”

Table of Contents

Foreword	2
Introduction	3
Benefits of support	4
Partnerships	5
Partnership Benefits	6
Previous successes	7

PARTNERSHIPS

Protecting our Marine and Coastal Environment

Identifying threats to Little Penguin health	8
Safeguarding the Little Penguin's marine ecosystem	9
Future-proofing Little Penguins	10
Wildlife Clinic	11

Rewilding an Island Haven

Recovering Phillip Island's native flora	13
Island Haven for threatened fauna	14
Eradicating feral cats	15
Building an Island Ark together	16
Citizen scientists mapping the benefits of an endangered ecosystem engineer	17
Trans-equatorial migration and foraging trip dynamics of Short-tailed Shearwaters under climate change	18
Reducing plastics and pollutants in our marine environment	19

Contact

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Conservation Foreword



As many natural areas around the world are starting to show the impacts of climate change, Phillip Island (Millowl) is being acknowledged for providing a unique haven for flora and fauna. We recognise this is owing to thousands of years of care of Phillip Island (Millowl) by Traditional Custodians as well as decades of conservation work by our local community, Phillip Island Nature Parks and other land managers. However, protecting and enhancing our biodiversity is and will only become more challenging as global warming rapidly and dramatically changes our environment.

Scientific modelling indicates that increases in ocean temperatures are likely to lead to changes in the marine food-web and in the distribution of marine species. Increases in land temperature are also likely to impact terrestrial flora and fauna. Some of the Island's freshwater ecosystems are likely to become saline and dry out. And conditions will no longer support vegetation communities. These alarming predictions need to be faced and acted upon now. Phillip Island Nature Parks will continue to ensure our scientific monitoring and expertise will create best practice management decisions.

This prospectus outlines priority biological and social conservation projects that will enable Phillip Island's

(Millowl) natural environment to adapt and flourish under these predicted changes as well other threats and pressures. In 30 years we will see coastal areas prepared for rising sea levels, marine protected areas established, wildlife habitats restored and new heat resilient ones created and once threatened species thriving after the removal of the last of the Island's introduced predators and more.

I thank you for considering to support this significant and important work.

JESSICA MCKELSON
Conservation Manager

Introduction

The Penguin Foundation raises funds to protect and enhance Phillip Island's (Mollw) natural environment through scientific research, conservation and education programs carried out by Phillip Island Nature Parks.

The Phillip Island Nature Parks consists of 1805 hectares of Crown Land and is part of the UNESCO Western Port Biosphere Reserve. It encompasses wildlife sanctuaries, wetlands, woodlands and coastlines which are protected and supports significant vegetation communities and wildlife populations as well as international migratory bird species. We are privileged to support this Crown Land that forms part of the traditional lands of the Bunurong People and acknowledge that the Land, Waters and Sea are of spiritual, cultural and economic importance to Aboriginal and Torres Strait Islander Peoples.

The priority projects featured in this prospectus span several key themes, from protecting our marine and

coastal environment, future-proofing penguin health, rewilding the Island's flora and saving threatened species from extinction and form part of the Phillip Island Nature Parks 5-Year Conservation Plan 2019-2023 under its 30-Year Conservation Vision. They are aligned with the United Nations Sustainable Development Goals which define global sustainable development priorities and aspirations for 2030 and serve as a universal framework to foster global collaboration to solve the world's most challenging tasks in sustainability.

We invite you to become a partner in one of these exciting initiatives and join us in protecting Phillip Island's remarkable biodiversity today and into the future.



Partnerships

Corporate partnerships play an important role in supporting our work to protect and enhance Phillip Island's natural environment and its native wildlife. We aspire to develop meaningful, authentic and mutually beneficial partnerships with organisations who share our conservation vision and values. Partner contributions are acknowledged with a range of unique benefits designed to directly connect our partners with the heart of our work and we are delighted to discuss tailored benefits for major support.

PARTNERS MAY WISH TO:

Support a specific project

This prospectus outlines priority conservation projects for 2019 - 2023 with clear outcomes. With conservation, research, education and wildlife rescue programs you can choose a project theme that aligns with your objectives. Project themes range from marine and coastal habitat protection, future-proofing little penguin health, saving threatened flora and fauna from extinction, citizen science and education and marine plastic pollution.

Support our overall work

An unrestricted donation allows the Penguin Foundation to distribute funds to priority conservation work.



Partner Benefits

Partner benefits are designed to engage your staff and clients, showcase what your support has achieved, build your brand reputation and credibility and meet your business objectives.

Partner benefits may include but are not limited to:

- Specific project naming rights for the duration of the partnership
- Project milestones, reports and updates from project lead for duration of partnership
- Meet & greet with project lead and tour of project site (if research permits allow)
- Video and image content showcasing the project your support has helped fund including a personal thank you from the project lead
- Corporate partner logos at the Phillip Island Penguin Parade Visitor Centre
- Joint media and PR opportunities
- Staff and client volunteer day at Phillip Island Nature Parks to partake in priority conservation activity – i.e. wildlife habitat tree planting
- Promotion of the partnership on Penguin Foundation website, social media channels and newsletter
- Use of Penguin Foundation logos and branding

Please contact us to discuss a partnership tailored to your needs and budget on +613 5951 2800 or info@penguinfoundation.org.au.

The Penguin Foundation holds a Deductible Gift Recipient status and all contributions are full tax deductible.

Previous Successes



Wildlife Clinic

In 2011, the Penguin Foundation contributed \$350,000 towards the redevelopment of the Phillip Island Nature Parks Wildlife Clinic. The new facility cares for sick and injured native wildlife and is Victoria's only specialised seabird rehabilitation centre and is capable for caring for up to 1500 Little Penguins in the event of an oil spill.

Fox Free Phillip Island

Phillip Island was declared fox-free in 2017 after over 25 years of dedicated efforts to remove them. The removal of this introduced predator has enabled Phillip Island's little penguin colony to thrive and to become a safe haven for many other wildlife species. The Ian Potter Foundation and Penguin Foundation donors provided significant funding towards the success of this program.



Oil Spill Wand

This new technology provides oiled wildlife with immediate treatment in the field using iron powder and magnets. The magnetic 'wand' is able to remove oil from the animal by simply waving it over the oil-affected area. Traditional oil spill cleaning methods rely on hot water and detergent, causing stress to the animal and often damage to their coats. This project has been supported by Google Australia.



Protecting our marine and coastal environment

Identifying threats to Little Penguin health

Project summary:

This project aims to identify persistent pollutants, including plastics and emerging diseases in the Bass Strait and Western Port ecosystem that may impact on the health of Little Penguins. Health impacts potentially include reduced breeding success, reduced survival and hormonal imbalances. This research is critical to help evaluate the levels of pollutants and the risk of infectious diseases in the Little Penguin population.

Funding target:

\$165,000 over
5 years



Project objectives:

- Identify levels of persistent pollutants, including plastics and disease risk to penguins
- Define role, in Little Penguins, of infectious diseases emerging in other penguin species
- Identify sources of pollutants and potential infectious diseases
- Monitor health of penguins in relation to levels of pollutants



“Identifying persistent pollutants and disease risk in Little Penguins will improve penguin survival in the future.”

DR PETER DANN
Research Director, Phillip Island Nature Parks

Partners

VETERINARY BIOSCIENCES, UNIVERSITY OF MELBOURNE,

ROYAL MELBOURNE INSTITUTE OF TECHNOLOGY UNIVERSITY

UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS



Safeguarding the Little Penguin's marine ecosystem

Project summary:

Little penguins spend 80% of their lives at sea. Predicting the impacts of threats to their unique food web, such as environmental variations, fishing, or prey mortality, as well as consumption and predator aggregation, is critical to little penguin conservation at sea.

Phillip Island Nature Parks' marine scientists have developed an ecosystem level model which provides a robust measure of ecosystem health and assists to identify scenarios that can predict future changes to penguin food security in their feeding zones within Bass Strait, Victoria.

However, variations in the marine ecosystem are frequent and so maintaining this robust model requires extensive collation of data on penguin diet, prey biomass, fishery landings, and primary production, as well research on other species within the ecosystem. This information is critical to help form the Marine Spatial Plan and implement this for future proof our Little penguins and other species which share this ecosystem.

Funding target:

\$75,000 over
3 years



Project objectives:

- The continued collation of data for the marine ecosystem model to provide future ocean health and food security predictions
- Develop a Marine Spatial Plan for Phillip Island to protect Little Penguins in Bass Strait.
- Research Little penguin interactions with shipping lanes.

Partners

CSIRO MARINE & ATMOSPHERIC RESEARCH

ECOPATH INTERNATIONAL

MONASH UNIVERSITY

AUSTRALIAN RESEARCH COUNCIL



“Robust ecosystem health is critical to little penguin conservation at sea. As penguins live in a very dynamic marine environment, we need to predict penguin and prey movements to safeguard their future. In collaboration with CSIRO Marine & Atmospheric Research and Ecopath International, Phillip Island Nature Parks have developed an ecosystem model. We are using ecosystem models to predict future changes to penguin food security in their fast-changing environment of the Bass Strait.”

DR. ANDRE CHIARADIA

Phillip Island Nature Parks, Marine Scientist

UNITED NATIONS SUSTAINABLE
DEVELOPMENT GOALS



Future-proofing Little Penguins

Project summary:

Phillip Island Nature Parks scientists started to see the detrimental impacts of longer, hotter and drier summers on Phillip Island's Little Penguin colony in 2019 when significant numbers of penguins died of heat stress. This project involves improving habitat quality for Little Penguins to make them more resilient to climate change on the Summerland Peninsula by 2023. It includes trialing new penguin nest box designs and habitat vegetation species compositions to see if this reduces colony temperatures so that penguins are better equipped to deal with hotter life on land.

Project objectives:

- A trial of new penguin nest box designs and penguin habitat plant species to better equip penguins for a hotter life on land on the Summerland Peninsula.



Funding target:

\$50,000 over
1 year

Partners

LA TROBE UNIVERSITY
VOLUNTEERS

UNITED NATIONS SUSTAINABLE
DEVELOPMENT GOALS



“ Buffering the effects of increasing air temperatures through providing cooler places for penguins to moult and breed, will improve penguin survival in the future.”

DR PETER DANN, Research Director Phillip Island Nature Parks

Wildlife Clinic

Project summary:

Phillip Island Nature Parks operates a Wildlife Clinic on Phillip Island's Summerland Peninsula which cares for a range of native wildlife and specialises in the rescue, rehabilitation and release of seabirds. The facility provides care and treatment for over 150 Little Penguins and 300 to 400 other unique and endangered native wildlife on Phillip Island each year. The Penguin Foundation is seeking a partner to support Wildlife Clinic operations for a period of five years.

Project objectives:

- Have the ability to respond to significant environmental incidents involving seabirds throughout Victoria.
- Improved capability to care for threatened and vulnerable species on Phillip Island, including Eastern-barred Bandicoots, and the continued re-introduction of these species to Phillip Island.
- Expansion of the services for wildlife recovery on Phillip Island to meet the increase in needs with afterhours care program.



Funding target:

\$1,000,000 over
5 years

Partners

DEPARTMENT OF ENVIRONMENT, LAND,
WATER AND PLANNING

WILDLIFE VICTORIA

UNITED NATIONS
SUSTAINABLE
DEVELOPMENT GOALS



“The Wildlife Clinic is an important tool to help animals that are sick and injured on Phillip Island. Our wildlife rehabilitation provides a second chance opportunity and we continue to provide state of the art health care to all animals that enter our facility.”

JESSICA MCKELSON

Phillip Island Nature Parks, Conservation Manager

An aerial photograph of a rugged coastline. A paved road winds along the edge of a cliffside covered in green and brown vegetation. The ocean is turbulent, with white-capped waves crashing against dark, jagged rock formations. In the distance, a large body of water is visible under a hazy sky.

Rewilding an Island Haven

Recovering Phillip Island's native flora

Project summary:

Phillip Island is home to ten Victorian Ecological Vegetation Classes (EVCs) considered Endangered, three Vulnerable and three severely depleted and 23 Victorian Rare or Threatened native flora species. These important plant communities play important roles within woodland and coastal habitats and require special management for their protection and enhancement.

With further external threats such as climate change and pest animal species (rabbits), we require specialised botanical skills and knowledge to conduct thorough flora assessments, recommendations and plans. The ultimate aim of this project is to create a seedbank of robust and resilient threatened flora and translocate new populations of two species (Crimson Berry and Small Grass Tree).

Funding target:

\$300,000 over

3 years



Project objectives:

- Develop five rare and threatened flora recovery plans for Phillip Island.
- Collect and store seed for five threatened flora species for future rewilding.
- Conduct DNA tests and germination trials to enable recovery of two threatened flora species (Crimson Berry (Vulnerable) & Small grass tree).
- Store seeds in a seed bank to insure the species against extinction.
- Propagate and translocate new populations of two threatened flora species Crimson Berry and Small grass tree.



“Some of the rare and threatened plant species historically recorded for Phillip Island (Mallow) are already thought to be extinct. It is important that we stop any further extinctions by looking after our most rare, vulnerable and threatened plants.”

SUSAN SPICER

Phillip Island Nature Parks, Environment Ranger

Partners

PHILLIP ISLAND NATURE PARKS VOLUNTEERS

BARB MARTIN BUSHBANK

ROYAL BOTANIC GARDENS

UNIVERSITY PARTNERS

DEPARTMENT OF ENVIRONMENT, LAND,
WATER AND PLANNING

PARKS VICTORIA

UNITED NATIONS SUSTAINABLE
DEVELOPMENT GOALS



Island Haven for threatened fauna

Project summary:

The Nature Parks' vision is to expand its conservation role by supporting the Island and its community to further enhance its status as an 'Island Haven'. We can return threatened species to the Island and continue to provide sanctuary to resident threatened species.

Over the next five years, the Nature Parks aims to achieve the successful reintroduction of at least two threatened species of fauna, playing a key role in the improvement of the conservation status of these species through increasing breeding productivity, survival, genetic diversity and distribution. To complement these reintroductions, we have an opportunity to focus on the threatened flora that occurs in the surrounding habitat. This holistic approach towards threatened species management encourages an increase in the health and security of biodiversity and important ecosystem functions.

Funding target: 
\$520,000 over
5 years

Project objectives:

- Continue to monitor the introduced populations of Critically Endangered Eastern Barred Bandicoots on Churchill Island and Phillip Island.
- Reintroduce previously locally extinct fauna species to Phillip Island, with a focus on Bush stone-curlews and Long-nosed potoroos.
- Undertake conservation planning workshops with regional and international experts, community stakeholders and project partners for the reintroduction of key species.

Partners

PHILLIP ISLAND NATURE PARKS VOLUNTEERS
ZOOS VICTORIA
UNIVERSITY PARTNERS
DEPARTMENT OF ENVIRONMENT, LAND, WATER AND PLANNING
PARKS VICTORIA

“Without the threat of fox predation, Phillip Island (Millow) has become a significant safe-haven where threatened species can be secured and their important ecological functions returned to the landscape”.

DUNCAN SUTHERLAND
Phillip Island Nature Parks,
Deputy Director of Research



UNITED NATIONS
SUSTAINABLE
DEVELOPMENT GOALS

Eradicating feral cats

Project summary:

It is estimated feral cats kill 75 million native animals every day. They have contributed to over 20 mammal extinctions and are a major cause of decline for many terrestrial endangered wildlife. To achieve the vision of Phillip Island as an 'Island Haven' to protect our wildlife and to provide a safe haven for threatened species and Little penguins, it is imperative that the threat posed by cats is eliminated.

Managing feral cats is challenging, but with the declaration in Victoria that they are an established pest on public lands, work can now be undertaken to improve the efficacy of feral cat management with a view to becoming feral cat free on Phillip Island. This project will explore innovative techniques to improve the detectability of feral cats, enhance our ability to control them, and better understand their full impact on native wildlife.

Project objectives:

- Improve the efficacy of feral cat management on Phillip Island.
- Reduce feral cat density on public lands of Phillip Island.
- Ensure Phillip Island remains fox free.
- Enable the reintroduction of threatened species to Phillip Island.
- Reduce the impact of cat borne disease on native wildlife.

Funding target:

\$255,000 over
3 years



“Cats are recognised as a key threat to many species of Australian wildlife through predation and the spread of disease, but through this project, native wildlife on Phillip Island will again have the chance to flourish.”

STUART MURPHY
Phillip Island Nature Parks
Vertebrate Pest Program Manager

Partners

BASS COAST SHIRE COUNCIL

DEPARTMENT OF ENVIRONMENT,
LAND, WATER AND PLANNING

UNITED NATIONS SUSTAINABLE
DEVELOPMENT GOALS



Building an Island Ark together

Project summary:

With the removal of foxes, we now have the unprecedented opportunity for Phillip Island to play a key role in preserving the biodiversity of Victoria, to create an 'island ark' haven. Critical to creating a conservation ark is the need to understand and be responsive to the values, perceptions and attitudes of local people towards wildlife. If the values and perceptions of the community are not aligned with a conservation ark, significant conflicts can result, potentially undermining conservation efforts.

A key gap in our knowledge is a detailed understanding of these community and stakeholder values and perceptions to the consequences of fox eradication, the increased threat of cats (feral, stray as well as companions) and the return of threatened species. Understanding these attitudes is key and will inform multiple approaches to engage with our community through a behaviour change campaign which seeks to enable people to embrace and live in greater harmony with wildlife.



Funding target:

\$90,000 over
3 years

Project objectives:

- Developing a Living with Wildlife campaign with a focus on cats.
- Improved rates of responsible cat ownership with a community education campaign.



“Critical to establishing an island ark on a large established island such as Phillip Island is the need to understand and be responsive to the values, perceptions and attitudes of local people towards wildlife and conservation.”

DR DUNCAN SUTHERLAND

Phillip Island Nature Parks, Deputy Director of Research

Partners

BASS COAST SHIRE COUNCIL

DEPARTMENT OF ENVIRONMENT,
LAND, WATER AND PLANNING

RMIT UNIVERSITY

UNITED NATIONS SUSTAINABLE
DEVELOPMENT GOALS



Citizen scientists

mapping the benefits of an endangered ecosystem engineer

Project summary:

Phillip Island is home to a growing population of endangered Eastern Barred Bandicoots (EBBs) after years of dedicated efforts by the Nature Parks, conservation partners and community to save the species from the brink of extinction. This program is the first time in Victorian history that a species decline has been successfully reversed after previously being declared extinct in the wild. The population requires continuous monitoring and provides an exciting and unique opportunity to engage and empower students and volunteers to be involved in innovative conservation through citizen science.

This project aims to involve students and the local community in citizen science to investigate the influence of the expanding population of EBBs, considered ecosystem engineers for the benefits they bring to the soil structure of their habitats, on the island.

UNITED NATIONS
SUSTAINABLE
DEVELOPMENT GOALS



Funding target:

\$150,000 over
3 years



Project objectives:

- Investigate the influence of an expanding population of Eastern barred bandicoots (EBB's) by mapping the number of bandicoot digs in relation to soil strength, soil moisture and vegetation cover.
- Enable young people to engage in innovative wildlife research processes.
- Gather evidence to inform conservation actions including biodiversity restoration projects.
- Involve and empower local community and school groups to understand the benefits and participate in threatened species conservation and maximise community support.
- Provide a world-class example of a citizen science project focused on conservation of threatened species.



“By mapping and measuring the benefits of EBBs as they spread across Phillip Island, students can discover the incredible value of our native species and develop skills for their future.”

DR DUNCAN SUTHERLAND
Phillip Island Nature Parks, Deputy Director of Research

Partners

BASS COAST LAND CARE NETWORK
PHILLIP ISLAND CONSERVATION SOCIETY
CITIZEN SCIENTISTS
VOLUNTEERS

Trans-equatorial migration and foraging trip dynamics of Short-tailed Shearwaters under climate change

Project summary:

Changes observed in migration and/or foraging patterns of Short-tailed Shearwaters will provide an indicator for profound changes taking place in these regions. e.g. the rapid retreat of Arctic Ice sheet.

Climate change is likely to exacerbate threats to food supply in the Northern Hemisphere prior to migration or on return in local waters near breeding colonies, as well as increase the severity of storm systems during migration. These have been suggested as causing, mass die-offs, or shearwater wrecks, that have been observed in some years in both their Northern Pacific feeding areas and upon arrival in Australian waters. This research will enable scientists to forecast and communicate change within marine ecosystems and advise on marine food security.

Partners

VICTORIAN ORNITHOLOGICAL RESEARCH GROUP
UNIVERSITY OF TASMANIA
U.S. FISH & WILDLIFE SERVICE

Funding target:

\$90,000 over
3 years



Project objectives:

- Fine resolution mapping of movement patterns and key foraging areas of adult and fledgling shearwaters.
- Definition of environmental factors likely to drive migration and foraging patterns such as sea-surface temperature, productivity and wind patterns.
- Base-line foraging and migration patterns of shearwaters against which changes in these patterns associated with climate change could be assessed.



“Short-tailed shearwaters travel from one end of the globe to the other each year and are likely to be particularly sensitive to climate change. This project is critical to understanding how they respond and how we can protect them into the future.”

DUNCAN SUTHERLAND

Phillip Island Nature Parks, Deputy Director of Research

UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS



Reducing plastics and pollutants in our marine environment

Project summary:

Human-associated impacts on seals are a significant global problem. Research performed in 2013–2019 has detected elevated levels of persistent organic pollutants and heavy metals, including some associated with an alopecia syndrome in the Australian fur seals of Bass Strait.

The pollutants alter hormonal balance and the associated hair loss prevents the seals from thermoregulating, limiting their foraging ability and therefore reducing survival. Increased levels of heavy metals such as mercury and arsenic can compromise the seals' immune system, making them more susceptible to disease.

Recreational boats and fishing around breeding colonies can also disturb the seals, the combination of hormone disruption, increased disease susceptibility and human disturbance can reduce a female seal's ability to produce healthy pups. Australian fur seals also suffer from entanglement in marine plastic pollution and fishing gear, which is fatal if not removed.

Large populations of Australian fur seals are in decline and these are likely contributing factors. The fur seals share the ecosystem with many marine species including Little Penguins that may also be affected. This research can be applied to improving industry practices and developing a behaviour change campaign that targets key plastic and pollutant reductions in our local marine environment.

UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS



Funding target:

\$240,000 over
3 years

Project objectives:

- Perform research on Australian fur seals as ecosystem sentinels and top predators of Bass Strait.
- Using the research from Australian fur seal health to develop and implement a behaviour change campaign.
- Advise and collaborate with agencies responsible for action plans and recommendations for pollution management to mitigate ongoing biodiversity threats.
- Promote sustainable industrial practices to protect ecosystem health and food webs.

“Australian fur seals have their pups close to our urban areas in southern Australia, they also share the ocean with many industries making them vulnerable to human impacts. We have shown that the seals are affected by pollutants and that their population has reduced; as ecosystem sentinels, they are an important indicator of the health of all the species that live in Bass Strait. This project will inspire change to help conserve our oceans.”



DR REBECCA MCINTOSH

Phillip Island Nature Parks, Marine Scientist

Partners

UNIVERSITY OF SYDNEY, SYDNEY, NSW
WITH NATIONAL MEASUREMENT INSTITUTE (NMI), DEPARTMENT OF INDUSTRY, RYDE NSW

UNIVERSITY PARIS SUD, PARIS, FRANCE

NATIONAL MEASUREMENT INSTITUTE (NMI),
DEPARTMENT OF INDUSTRY, RYDE NSW

VICTORIAN FISHING AUTHORITY

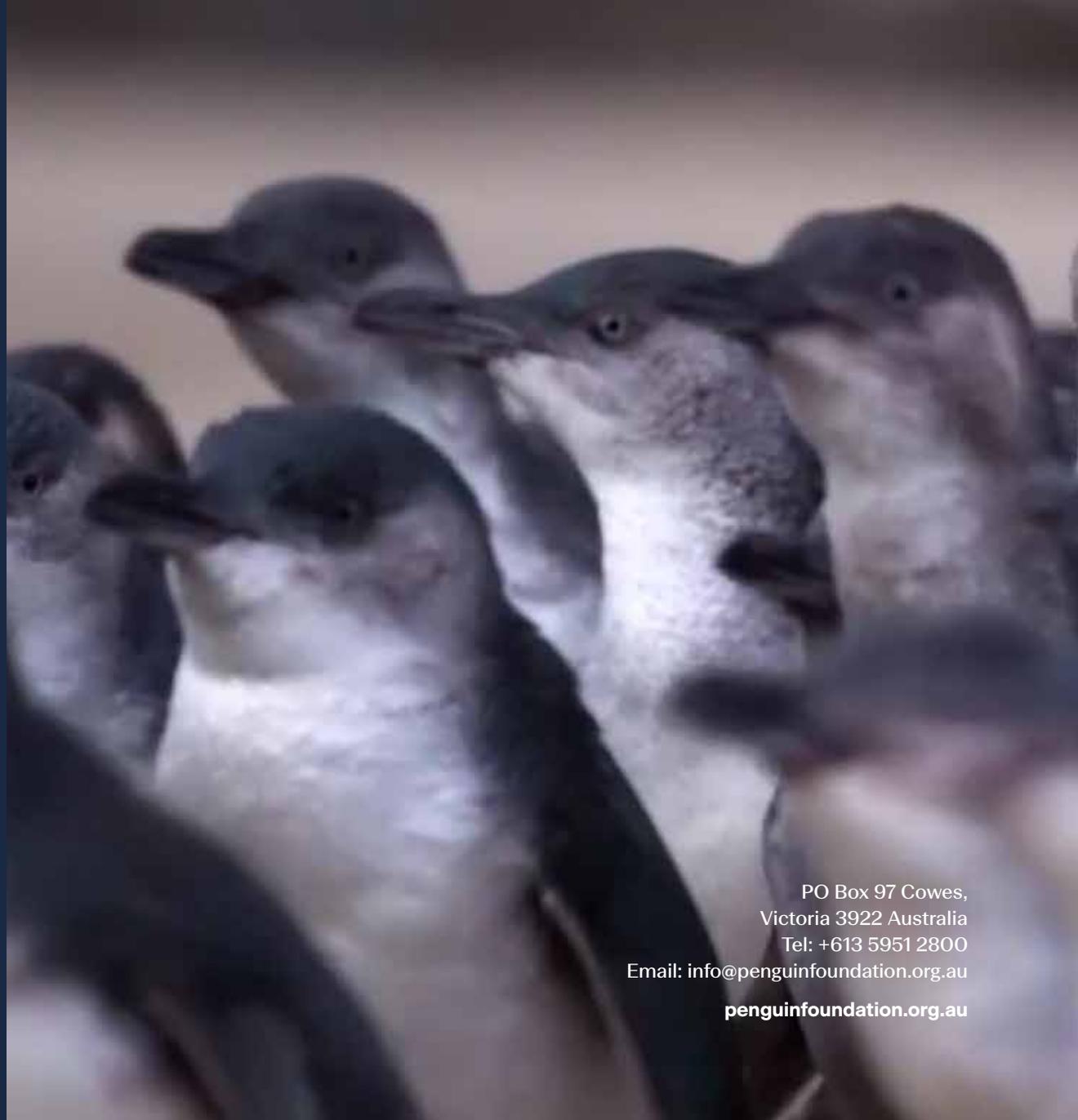
SOUTH EAST TRAWL FISHING INDUSTRY
ASSOCIATION (SETFIA)

VOLUNTEERS

CITIZEN SCIENTISTS

Thank you

Penguin
Foundation



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