



CONSERVATION UPDATE

SEPTEMBER TO NOVEMBER 2021

PREPARED BY JESSICA MCKELSON,
CONSERVATION MANAGER

THREATENED SPECIES REPORT UPDATE 2020 - 2021

The Threatened Species report was published at the end of September which outlines the activities that help support an Island Haven. The report outlines the significant work that has been undertaken on Phillip Island (*Millowl*) over the last 12 months to strengthen our position as an Island Haven for threatened species, along with protecting existing threatened species (such as Eastern Barred Bandicoots, Hooded Plovers and Crimson Berry). Nature Parks is proud to showcase the incredible efforts that we have made to enable key species to thrive and recover from imminent extinction.

Recently, Australia has become the world's capital for mammal extinction lifting the total number of mammals known to have died out to 34. This extinction crisis is overwhelming as most species have been lost since European colonization. The significance of the Nature Parks work has never been greater than now, with the updated release of the Flora and Fauna Guarantee Act Threatened Species List identifying three of the Island's species needing help. The Bush Stone-curlew, Fairy Tern and Crimson Berry have all been reclassified to 'Critically Endangered' within Victoria and this reinforces the critical work in our Threatened Species Program to provide a safe Island haven for these populations to recover on Phillip Island (*Millowl*) and to curb the extinction crisis for Victoria.

Despite the last 12 months presenting a number of challenges, we have been able to lay significant foundations to continue our success. A big thank you to the Penguin Foundation for supporting our threatened species program and our other external collaborators that have enabled these conservation outcomes to be possible. Highlights include:

- Eastern Barred Bandicoot recovery program success
- Familiarising the local community with Bush Stone-curlews
- Feral cat detection dog development
- Threatened flora detection and management

Please click on the link here for the report -

<https://www.penguins.org.au/conservation/conservation/environment-news/>



CONSERVATION UPDATE

SEPTEMBER TO NOVEMBER 2021

HIGHLIGHT – THREATENED SPECIES DAY – 7 SEPTEMBER 2021



Yellow Buttons

The Conservation Team recently undertook works to protect and enhance indigenous plant species such as Yellow Buttons (*Chrysocephalum appiculatum*).

Although they are quite common in horticultural production and grown at the Barb Martin Bushbank, this lovely everlasting is under intense pressure from overgrazing from rabbits and possibly wallabies. Rabbits present a very real threat to Phillip Islands Biodiversity.

Cages were placed over existing plants that have been heavily browsed and more were planted and covered with protective cages.

Climbing for Crimson Berry

On Tuesday 7 September 2021 Environment Rangers collected herbarium and DNA samples from the cliffs of the Cape Woolamai Crimson Berry populations. Accompanied by molecular botanist, Daniel Murphy from Royal Botanic Gardens Victoria, the samples will be used in a genetic study of Crimson Berry to determine the relationship between populations and also individuals within populations. This is another action within the Threatened Species program sponsored by the Penguin Foundation that will help us make informed decisions for the protection and sustainability of this critically endangered plant.



EASTERN BARRED BANDICOOTS – BACK FROM EXTINCTION

At the beginning of September and after 30 years of conservation efforts, Victoria's Eastern Barred Bandicoot, *Perameles gunnii*, has officially been brought back from the brink of extinction.

This is a significant milestone as it marks the first Australian species to have its conservation status downgraded.

These small marsupials were wiped out in Victoria by foxes and habitat loss, and have only existed in sanctuaries on the mainland since 1991.

CONSERVATION UPDATE

SEPTEMBER TO NOVEMBER 2021

In 2015, we worked in collaboration with the EBB recovery team to translocate 20 bandicoots to the feral predator free Churchill island. Then, in 2017, after Phillip Island was officially declared fox-free, 67 bandicoots were released into the wild in the Summerland Peninsula. Both populations are thriving.

We are so proud of the teams of scientists, researchers, conservation staff, volunteers, community members, donors and partners involved in this recovery effort.

This is a conservation success story that will be cherished for years to come.

The EBB Recovery Team includes representatives from conservation volunteers, Department Environment Land Water and Planning (DELWP), Mount Rothwell National Trust, Parks Vic, University of Melbourne, Tiverton Property Partnering and Zoos Vic.



EBB rescued from cat's clutches

Nature Parks Visitor Experience Rangers recently found a cat in the middle of Ventnor Road near Flynn's Beach holding an Eastern Barred Bandicoot. The cat took off into the bush and Nick picked up the shocked bandicoot and checked it over. There were no obvious signs of injury, but they took it to the Threatened Species Officer who reported that the bandicoot was showing normal signs of responsiveness, and there was no evidence of injury or puncture wounds from the cat - just a very tiny scratch on the right ear. He was microchipped and released back onto the Peninsula and Nature Parks Vertebrate Pest Ranger was also informed to follow up on the feral cat. Well done team!

PLOVER APPRECIATION DAY – 17 SEPTEMBER 2021

National Plover Appreciation Day – a day dedicated to raising awareness for the plight of these unique birds.

There are 66 species in the plover sub family and 19 of those are found in Australia. At the Nature Parks, we are working to protect the endangered Hooded Plover that nests on beaches across Phillip Island. Their average size is 19-23cm and they weigh around 100grams. There are only 3,000 individuals remaining in south-eastern Australia and they have one of the lowest survival rates of any species – at 1 in every 100 chicks. If an adult with young chicks notices a predator approaching, they will act as though they have a broken leg, to draw attention to themselves and protect their chicks.

If you live near a beach with Hooded Plovers, you can help protect them by taking care to avoid their nesting sites and paying attention to the signs.

BUSH STONE-CURLEWS

The two threatened species aviaries are on track to be completed by Christmas.

Volunteer feeding and care program for the captive Bush Stone Curlews is ongoing and in September the Nature Parks started investigating opportunities to source Bush Stone Curlews for these aviaries and are hoping to establish breeding pairs to support the recovery of this species within Victoria.

CONSERVATION UPDATE

SEPTEMBER TO NOVEMBER 2021

FLORA AND FAUNA

Spring woodland surveys revealed a few previously unrecorded plant species for Phillip Island. *Pultenea scabra*, Rough Bush Pea, *Thelymitra flexuosa*, Twisted Sun Orchid and *Caesia parviflora var minor*, Pale Grass Lily. The Pale Grass Lily is of particular interest, in that although not included in the Flora and Fauna Guarantee, it is on the Victorian Rare or Threatened Species Advisory List.



Caesia parviflora var minor, Pale Grass Lily

SHORT-TAILED SHEARWATERS

The Shearwaters started to arrive back on our shores on Sunday 26 September 2021. This is the usual time of year for their return from the Northern Hemisphere, whereas in some recent years we have seen birds delayed by a couple of weeks or more.

This season we've revisited our artificial nesting boxes on 4 nights to see how many birds were in the colony renovating nests in preparation for mating. Nest occupancy was lower than usual at this time of year, but whether this was due to fewer birds coming in to breed this season or because all four nights we visited all coincided with calm conditions is unclear. The birds have just returned from their two week 'honeymoon' trip which they undertake after mating and before laying their single egg. We will revisit the nest boxes in early December to see how many pairs have laid their eggs which will give us a clear indication of breeding participation this season.



Above photo: Checking shearwater boxes

CONSERVATION UPDATE

SEPTEMBER TO NOVEMBER 2021

AUSTRALIAN FUR SEALS

September seen Seal Rocks field work and preparation for breeding season that will commence in November.



Above: Releasing entanglements – Seal Rocks November 2021



Above: Entanglements removed from Seal Rocks

CONSERVATION UPDATE

SEPTEMBER TO NOVEMBER 2021

PEST CONTROL

Foxes

In order to protect Phillip Islands fox free status and reducing the likelihood of reinvasion from the mainland, a contractor has been appointed to undertake fox baiting in the mainland buffer zone on the Anderson Peninsula. Investigations of fox sightings at Surf Beach and Newhaven from community members, did not provide any evidence once the team followed up on them. A recent report of a fox sighting near Flynn's from a member of the public involved the fox detection dogs and indicated that there was no evidence of a fox in the area.



Above photo: Detection Dog Handler Craig with Detection Dog Jazz investigating fox sighting at Flynn's

Feral Cat Research

Following on from a similar study at Cape Woolamai over the past 2 years, feral cat GPS tracking study at Summerland Peninsula commenced. To date one feral cat has been fitted with GPS collar and there are hopes to trap and collar several more to increase sample size. Data from this study will contribute towards a better understanding of population dynamics of feral cats, how they use the landscape and evaluate our camera monitoring programs.



Above photo: Feral cat tracking data (raw) Summerland Peninsula

CONSERVATION UPDATE

SEPTEMBER TO NOVEMBER 2021

Rabbits

In conjunction with Bass Coast Landcare Network, rabbit warren destruction and spotlight shooting in the north eastern coast of Phillip Island near Churchill Island has resulted in a 62% reduction in rabbit numbers. Work will continue after summer to extend this program further west to protect other areas of significance.



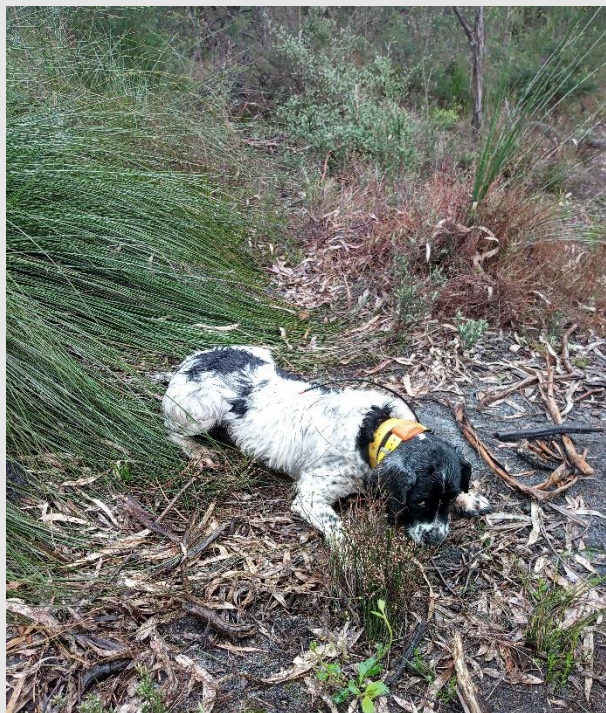
Above photo: Jason MCracken (Bass Coast Landcare Network) identifying warren entrances in preparation to destroy warren

Detection Dogs

In October the fox detection dog team assisted a project in East Gippsland to help estimate the fox population and identify at risk native species in the fox diet around key areas of habitat near Bairnsdale. Fox scat searches undertaken revealed 52 fox scats, which were mapped, and collected for genotyping to identify individual foxes. Scats will also be examined to identify prey animals including Threatened Species.

CONSERVATION UPDATE

SEPTEMBER TO NOVEMBER 2021



Above photo: Detection Dog Jazz indicating on fox scat

COASTAL MANAGEMENT

The Sunderland Bay Rabbit Exclusion project has seen an amazing response from the existing native vegetation after rabbit browsing has been removed. On Sunday 21 November, the Surf Beach Sunderland Bay Coastcare Group assisted with monitoring of the herbivore exclusion cages that had been installed in 2016 and 2018. All 4 cages had 96-100% native vegetation coverage with Grass Trigger Plants, *Stylidium graminifolium* recovering to cover up to 84% of the cages.

The next stage is to establish a rabbit exclusion fence which will protect/improve/restore up to 3 hectares of herbaceous coastal vegetation.



Above photo: Outside of cages showing intense rabbit browsing



Above photo: Monitoring of exclusion coups

CONSERVATION UPDATE

SEPTEMBER TO NOVEMBER 2021



Above photos: 5 years of protection has seen an emphatic response from the native vegetation

CAPE WOOLAMAI



The above pictures show some of the weed control works undertaken at Cape Woolamai in September. A focus on kikuyu control and Apple of Sodom was the priority.

BARB MARTIN BUSH BANK NURSERY

Spring at the Barb Martin Bushbank has had a focus on production and sales of key pollinating species including *Podolepis jacoides*, *Bulbine bubosa*, and *stylidium graminifolium*. Many of these species have dwindling populations across the Island due to herbivore predation.

We have continued our propagation trials of threatened flora species including *Leptocophylla oxycedrus* (crimson berry), *Monotoca glauca* (currantwood), *Xanthorea minor*, *Limonium australe* (sea lavender), *Stylidium graminifolium* (grass trigger plant), *Olearia* ssp 2 (peninsula daisy bush). We are happy to report success has been achieved in all species with *Olearia* ssp2 and *stylidium graminifolium* now our two best sellers in our retail outlet.

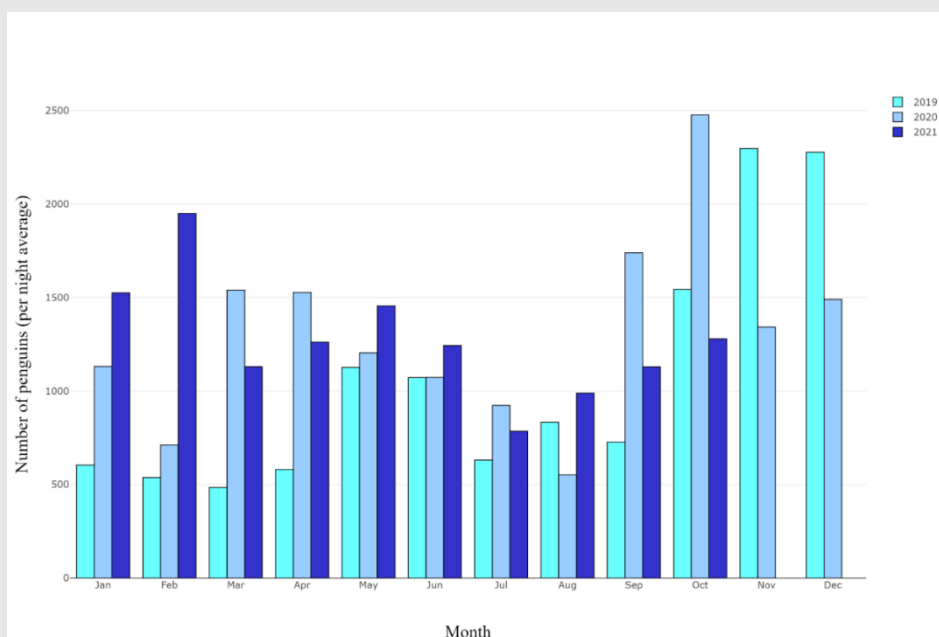
The Nature Parks are very excited to contribute to a significant environmental project the Phillip Island Biolink project with the Nursery supplying our plants to the Bass Coast Shire and Landcare network.

CONSERVATION UPDATE

SEPTEMBER TO NOVEMBER 2021

LITTLE PENGUINS

September parade counts



The average number of penguins crossing the beach at the Penguin Parade in October 2021 was 1279 penguins, a decrease of 48% from 2475 penguins recorded in October 2020. A few nights of storms and cloudy conditions may have influenced penguin numbers, furthermore, conditions are patchy, and seems this October seen a decline in breeding activity around our study sites.

Penguin Presentations

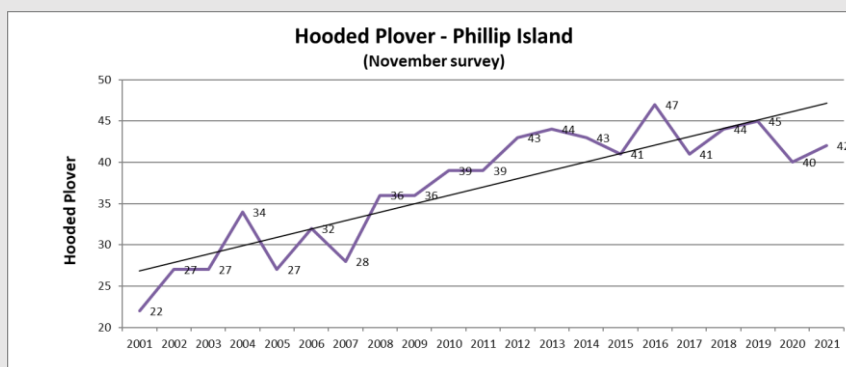
In September, Nature Parks Technical Research Officer gave presentations via teleconference to the Friends of Burnie Penguins, Friends of Lillico Penguins and Bicheno Penguin Tours in Tasmania. The presentation included basic Little penguin facts, Nature Parks penguin research and threats including climate change and plastics may have on their future and penguin friendly habitat. It is the third year that these presentations have occurred and each year it is very well received with excellent feedback and great relationships established.

HOODED PLOVER AND GULL COUNT

On 3 November 2021 volunteers and staff participated in the island-wide Hooded Plover and Gull Survey. 42 Hooded Plovers were recorded (3 juvenile and 39 adults), just over half (n=22) of the birds were banded and many were on breeding territory, however an anomaly to this was on Summerland Beach where there were 6 birds in a small flock. The total, although not the highest in recent times continues a trend of a strong population on Phillip Island.

CONSERVATION UPDATE

SEPTEMBER TO NOVEMBER 2021



CAPE BARREN GOOSE SURVEY

The spring survey of Cape Barren Goose *Cereopsis-novaehollandiae* was conducted across Phillip Island on 10 November 2021. There were 65 juvenile, 185 immature and 2599 adults: **Total 2849**

The survey started in 1993 following the introduction of Cape Barren Geese to Phillip Island. This total is the fifth highest, just 81 birds less than April 2021 (2930 geese) but 226 birds more than Nov 2020 (1623). Again, it was a challenge to identify young birds as they were almost indistinguishable from the adults. The survey conditions were a challenge with cool temperature 12°C, clearing rain and a moderate SW breeze. All areas were surveyed using binoculars or telescope mainly vehicle based with short walks to vantage points to allow an accurate count while reducing the chances of disturbance and thus geese movements.

The survey was conducted by staff, and landholders, there was no volunteer participation due to Covid19 restrictions and to reduce risks related to a vehicle-based survey. There was a moderate number of counters n=17 (staff 16 and landholders 1). The weather was a factor as the rain took longer than expected to clear and long grass in many paddocks obscured some of the views. There was, however, a reasonable degree of confidence in the total numbers due to experienced counters, good coverage of all sections and local information from landholders.

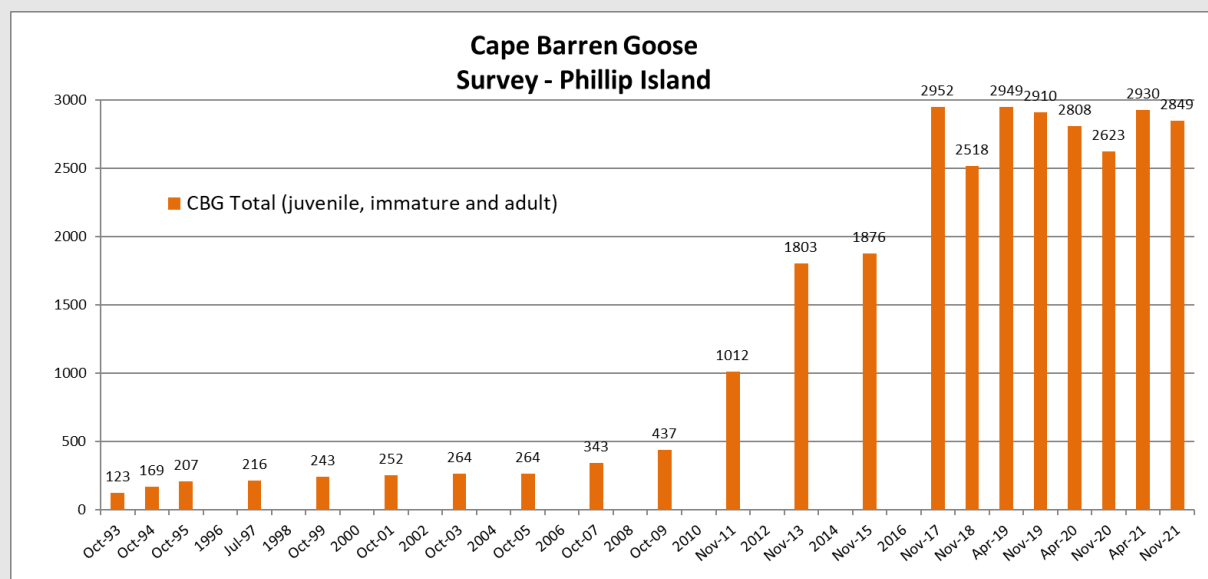
The logistics this time were again challenging due to Covid19 protocols, Most of the survey was completed between 8:00am and 15:00pm to reduce the chance of birds movement.

Many thanks to the local farmers: Andy Walton, Bob & Anne Davie, Rob Jeffery, Charlie Guy, Fergus Cameron, Tim Greeks, Liz Patterson, Bill Cleeland, Helen Henderson, Barry & Jenny Jackson and Rosie who allowed access to property or opted to do the count themselves. Also thanks to Newhaven College and The Adventure Resort for access. Many thanks to Phillip Island Nature Parks staff.

Vale Don Dixon who passed away recently, we are indebted to him for his friendship and support for this and many other programs, and condolences to the Dixon family.

CONSERVATION UPDATE

SEPTEMBER TO NOVEMBER 2021



KOALA CONSERVATION RESERVE

September to November has been a busy time at the KCR. In early October we conducted our 5-yearly, Island-wide koala count throughout the Nature Parks Reserves and surrounding roadsides. Line transect searches, with Rangers and redeployed staff 15 metres apart, were used over a period of 2.5 days. We only found 3 koalas, 2 males and one female. Combined with public sightings we believe there are 10-15 koalas in the wild on Phillip Island. This is down from the estimated 30 koalas in 2016, the last time the count was undertaken.



The annual koala catches and health checks were undertaken over the week beginning Monday the 25th of October. All 19 koalas were caught and checks were undertaken of body condition, teeth, eyes and general health. Chlamydia swabs, both eye and urogenital, were undertaken by local veterinarian Jenny Hibble on 13 of our 'breeding age' koalas and sent off to the University of Melbourne for analysis. These results will determine the possible movements between areas/boardwalks of koalas to improve breeding success. The overall health of the koalas were good with results consistent with last year.

This year's joey was identified as a female and we are awaiting a name with a Mallacoota theme to honour the father, Roger, who was one of the koalas rescued from the Bushfire in Mallacoota in early 2020.

CONSERVATION UPDATE

SEPTEMBER TO NOVEMBER 2021



At the start of November we took stock of a 19 month old male koala, Wirra, from Healesville Sanctuary. He is currently housed in one of our pens and is settling in well. Once Wirra reaches maturity he will join the breeding program.



There has currently been a male koala in the wild on Phillip Island that has been very active around the Cape Woolamai and Newhaven area. He has made it on to social media repeatedly and the Rangers have had calls from concerned members of the public. He appears healthy so there is no need to intervene but we encourage anyone with concerns to his health and safety to call the Wildlife Rehabilitation mobile: 0409558482



Above photo: Wild male koala at the Newhaven Park

CONSERVATION UPDATE

SEPTEMBER TO NOVEMBER 2021

WILDLIFE REHABILITATION & MANAGEMENT

From September to November 2021 there was a total of 266 wildlife calls responded to, including a Little penguin found wandering around the Nobbies car park that was taken to the rehab centre for assessment and observation. He was released a couple of days later, chipped and enter the big blue ocean without any issues.

With Spring in full force , the Rehabilitation Centre have been caring for a range of animals including manyduckings, goslings and cygnets. Most of thesespecies were able to be fostered to a family of the same species with similar aged young. We currently have a cheeky magpie fledling that loves foraging for mealworms to eat. Yum, yum!

Rangers received a call regarding an entangled whale, shortly after the initial call the member of public called back to report that the whale had ‘started it’s motor and taken off’ , apparently the whale was actually a boat!



Above photo: Release of litte penguin from the rehabilitation hospital

RESEARCH PUBLICATIONS



3rd World Seabird Conference – 4 – 8 October 2021

A total of 13 Nature Parks talks and posters were accepted for this conference. This was hosted online with our Research staff in attendance.

Please see below topics –

- 1) What are little penguins telling us about rapid climate deterioration – 20 years of fine scale marine life cycle of the smallest of all penguins.
André Chiaradia, Akiko Kato, Richard Reina, Fran Ramírez, Graeme Hays, Claire Saraux, Quentin Schull & Yan Ropert-Coudert.

CONSERVATION UPDATE

SEPTEMBER TO NOVEMBER 2021

- 2) Life-history trait effects on fitness: the secret of high-quality individuals.
Claire Saraux, Nicolas Joly & André Chiaradia.
- 3) Little penguins respond to odours linked to food but not to the nest.
Gaia Dell’Ariccia, Ross Holmberg, Francesco Bonadonna & André Chiaradia.
- 4) The rapid removal of volatiles from oil contaminated wildlife using oil absorbing magnetic particle technology: The quick clean.
John Orbell, Stephen Bigger, Peter Dann, Lawrence Ngeh, Linda Diep, Angela Shewan.
- 5) Impacts of terrestrial heat waves on survival of little penguins during moult.
Lauren Tworowski, Peter Dann, Ursula Ellenberg & Kylie Robert.
- 6) Using fauna grids to prevent penguin mortality.
Leanne Renwick, André Chiaradia, Ross Holmberg, Damian Prendergast.
- 7) Penguin Microbes. Meagan Dewar, John Arnould, Peter Dann, Phil Trathan & Theo Allnutt.
- 8) Environmental effects on foraging performances of an inshore seabird: A combination of phenology and short-term variability.
Nicolas Joly, André Chiaradia, Jean-Yves Georges & Claire Saraux.
- 9) Foraging habitat preference of an inshore seabird within estuarine plume fronts.
Nicole D. Kowalczyk, Richard D. Reina, Tiana J. Preston, Yan Ropert-Coudert, Akiko Kato & André Chiaradia.
- 10) Towards a Penguin Global Conservation Agenda promoted by the IUCN SSC Penguin Specialist Group.
Pablo García Borboroglu, Dee Boersma, Sue Ellis, Charly Bost, Tom Schneider, Phil Seddon, Alejandro Simeone, Phil Trathan, Lauren Waller, Barbara Wienecke, Natasha Gownaris & André Chiaradia.
- 11) Is it worth doing? Little penguin rehabilitation and release on Phillip Island.
Paula Wasiak, Jodi Bellett & Rose Baulch.
- 12) Recovery of the largest colony of the world's smallest penguin. Peter Dann & Duncan Sutherland
- 13) Weighbridges: remote monitoring with minimal disturbance.
Ross Holmberg, Kean Maizels, Richard Reina & André Chiaradia.

CONSERVATION UPDATE

SEPTEMBER TO NOVEMBER 2021

VOLUNTEERING AT THE NATURE PARKS – SNAPSHOT

VOLUNTEERING AT THE NATURE PARKS IN 2020/21

AT A GLANCE

240

volunteers

6,719

volunteer hours recorded

Overall, how satisfied with your volunteer experience with the Phillip Island Nature Parks are you?

VERY
94.44%

5.56%
SOMEWHAT

0%
NOT AT ALL

Where did the hours go?

Conservation Volunteer hours breakdown

| | |
|------|--|
| 2583 | Conservation opportunities (e.g. planting days, water watch) |
| 1300 | Barb Martin Bushbank |
| 776 | Churchill Island (e.g. farm, collection management, maintenance, garden) |
| 604 | Visitor Experience roles (Churchill Island, Koala Reserves and Nobbies) |
| 373 | Community Engagement |
| 359 | Eastern Barred Bandicoot Research |
| 316 | Turn the Tide |
| 315 | Learning and Development |
| 93 | Hooded Plover Watch |

Conservation Placement

| | |
|------|------------------------|
| 1388 | Conservation Placement |
| 494 | Conservation Interns |
| 452 | Other |
| 249 | Wildlife Clinic |

What did we do?

- Started Visitor Experience Volunteers at the Penguin Parade
- Curlew Custodians began caring for our bush stone-curlews
- Partnered with Wildlife Victoria to train Response Volunteers
- Began work on the restoration of the Churchill Island Tipping Drey
- Partnered with Interchange Gippsland to provide volunteering opportunities to adults with disabilities
- Applied for a grant to run youth volunteering

What are we going to do?

- Create a Volunteer Strategy
- Develop a Volunteer Procedure
- Build 'Master Modules' to upskill Volunteers
- Run the 'Building a Brighter Future' youth volunteering program
- Continue to support Volunteers through changing restrictions

Phillip Island
NATURE PARKS

penguins.org.au/volunteer