CONSERVATION UPDATE

MARCH TO MAY 2021

PREPARED BY JESSICA MCKELSON,
CONSERVATION MANAGER

HIGHLIGHT – THREATENED SPECIES

Bush stone-curlews

We are one step closer to seeing Bush stone-curlews return to Phillip Island (Millowl). Last week members of the Conservation and Ground Services teams worked to secure bird netting over one of the WWF-sponsored Koala Rehabilitation Pens at the back of the Koala Conservation Reserve.

In the next couple of weeks, this pen will become a temporary home for a pair of Bush stone-curlews from Moonlit Sanctuary. These young birds are ready to leave their parents at Moonlit for a new life on Phillip Island (Millowl). After a few months in this temporary home, they will be moved into an aviary inside the Koala Conservation Reserve so that members of the public can see the birds and learn about their story - including how they used to live on the Island and our unique opportunity to bring them back from local extinction. When we have relevant permissions and are ready to proceed with a wild release of Bush stone-curlews onto Phillip Island (Millowl), these two curlews are planned to be part of the larger release group.

Bird netting installed over the Koala rehabilitation pen.

The two curlews in their pen at Moonlight Sanctuary.

Eastern barred bandicoots

Eastern barred bandicoots (EBB) were also routinely monitored in April and May 2021, with results fairly similar to previous years. On Churchill Island over three nights, we captured 59 individuals, 22 of which were brand new animals that had not been caught before. On the Summerland Peninsula we were once again joined by the Zoos Victoria Vet Team, who bled 27 live animals to test for the prevalence of toxoplasmosis in the population.

Bandicoots continue to disperse across Phillip Island (Millowl) - with bandicoots recorded over six kilometres from the initial release site on the Summerland Peninsula. The population that established in Fishers Wetland (adjacent to Churchill Island) has also been recorded as expanding into new inhabited areas in 2020, including Newhaven, Cape Woolamai and Surf Beach.

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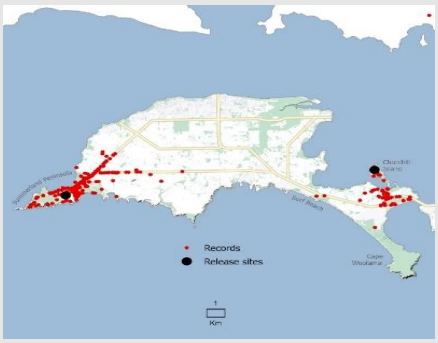
Community reports form a large part of our knowledge on bandicoot spread across Phillip Island, with the local community submitting over 100 records of bandicoots into our online EBB Sightings portal here https://ebb.natureparksresearch.com.au/sighting/



SHORT TAILED SHEARWATERS

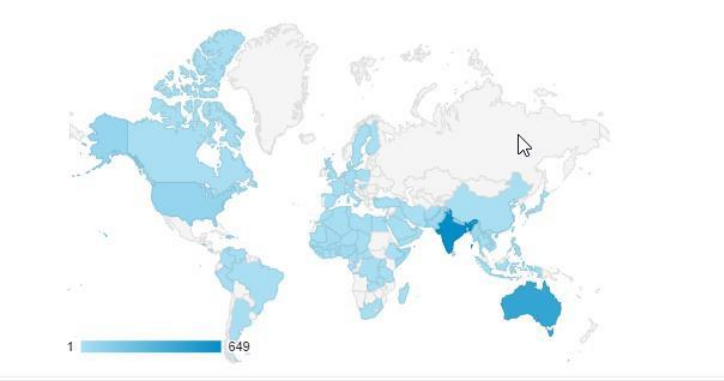
The Short-tailed shearwaters (also known as Byadin or muttonbirds) had a very successful breeding season in 2020-2021. The Nature Parks continued our long-term research into the breeding success and movements of the birds out at sea, despite some interruptions due to COVID-19 restrictions. This year the shearwaters arrived back a little later than usual, but the full colony did return in early October. Last year only a few started returning by this stage and it wasn't until late November that the normal number of birds were back in the colony.

There are 180 breeding boxes near Summerland beach that are regularly visited each year. Last year there were 86 breeding boxes occupied, which is around average. This year there were 136 boxes occupied. This is certainly a new record. Another record was the number of light sensitive geolocator devices that help us track their movements. The Nature Parks collaborates with the Victorian Ornithological Research Group (VORG) to undertake this work.

AUSTRALIAN FUR SEALS

SealSpotter

The 2021 SealSpotter Challenge beat its own personal best this year with greater participation and more global coverage. 187 citizen scientists counted 9,280 images and 124,800 individual seals from three separate surveys of Seal Rocks and The Skerries breeding colonies. People from 93 countries viewed the social media links to the portal with India and then Australia having the highest hits.



Countries across the globe where SealSpotter links were opened.

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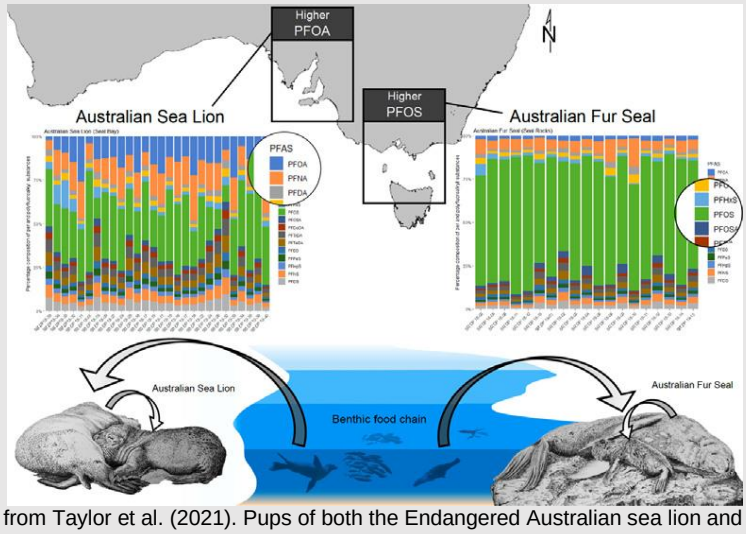
PFAS Research

Our collaborative research publication on PFAS compounds in Australian seals received much media attention. PFAS are most commonly associated with fire fighting foams and can be toxic. Samples from Australian fur seal pups at Seal Rocks, were contaminated with 16 PFAS compounds at higher levels overall than the other two species studied. The paper can be viewed here: https://doi.org/10.1016/j.scitotenv.2021.147446.



Graphical Abstract from Taylor et al. (2021). Pups of both the Endangered Australian sea lion and the Australian fur seal had high levels of PFAS contamination, likely accumulating in mother's via their diet then transferred to the pups through their milk.

PEST CONTROL

Foxes

- A total of 7 foxes (6 vixens and 1 dog fox) were trapped in the mainland buffer zone to complement a broader baiting program which commenced on May 3 with a total of 25 baits taken by foxes to date.
- A public sighting of a fox was reported in Newhaven Swamp, however no evidence has been detected with our cameras and detection dogs.

Feral cats

- Feral cat trapping was undertaken at Ventnor, the Ramsar coastline from Observation Point and Rhyll Inlet south to Long Point resulting in a total of 4 cats being removed over 1670 trap nights (number of traps x number of nights).
- Camera monitoring at Summerland Peninsula continues in order to estimate population estimates and target control efforts.
- A total of 35 cats has been removed this year to date for the 2020-2021 period (July 2020-May 2021) compared with 95 for the same time last year.
- Our Feral Cat Detection Dogs Milly and Marbee have completed their training and will now be gradually introduced to field work to detect feral cats in the landscape. These new team members will help us locate feral cats in some of our high value conservation sites and eventually help us achieve a feral cat free Phillip Island.

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Feral cat trapped at Rhyll Inlet

Infra-red photo of feral cat on Summerland Peninsula

Feral cat detection dog Milly indicating on cat scat

Rabbits

Working in collaboration with Bass Coast Landcare Network, rabbit monitoring and control continues in the north-eastern section of Phillip Island in areas around Fishers Wetland. Pre-control spotlight counts were undertaken to serve as a measure of change in the population at sites with follow-up counts planned after control measures have been implemented. Currently warren mapping and fumigation is underway to destroy these areas that rabbits depend on for survival.

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COASTAL AND WOODLAND MANAGEMENT

Redeployed staff spent some great days cleaning up around our Rehabilitation Centre and planted 500 plants around the shearwater boardwalk at the Penguin Parade to reduce kikuyu infestation.

From the period 1 March to 31 May, 290 hectares of weed control work were conducted by Nature Parks staff and contractors. The focus of the work was woody weed control, though other life forms were also targeted in discrete locations. The extent of work is shown below.

- The planting season has officially started with our first few education groups participating in the rewilding program. This program is allowing students to be part of the continuing restoration of Summerland Peninsula and the vital habitat.
- To date we have planted 16,425 plants this financial year.

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- Arborcaft commenced work on the 3 May 2021 at Five Ways Reserve to carry out all the arborist works in our tree audits. Work has been delayed due to the impacts of COVID-19 for the Oswin Roberts Reserve, Churchill Island and Koala Conservation Reserve.

Contractors Arborcaft at KCR

Management only signs bollards installed on the Fire break at Summerland Peninsula and managements track in the Five Ways reserve.

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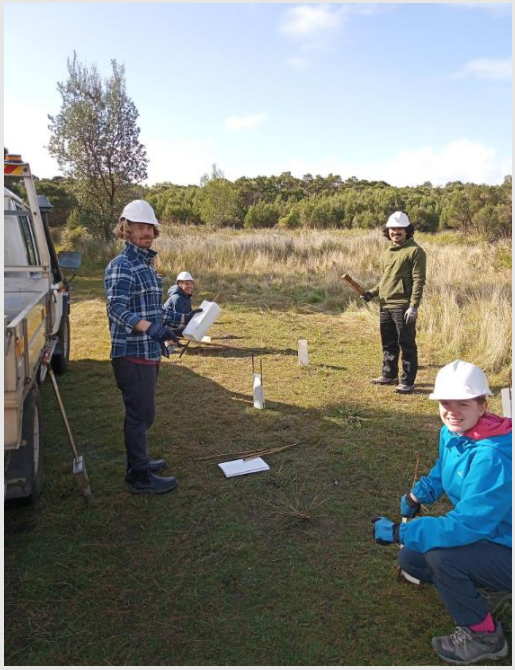

Volunteers planting in the exclusion coop at the Ventnor Koala Reserve. Sites at Conservation Hill will form part of this vegetation management program going forward.

As part of the vegetation management program, Rangers Chris and Kat are seen working on fence maintenance at Five Ways Reserve.

PENGUINS

The average number of Little penguins crossing the beach at the Penguin Parade (graph below) in March to May period ranged from 1,106 to 1,454, trending upwards with an increase of 21% in May 2021 in comparison with May 2020. Penguin weights are also increasing, keeping above the long-term average. Penguins have been responding to changes in climate by breeding earlier each year. Climate change continues to influence Australian and global climate. According to the Bureau of Meteorology, Australia's climate has warmed by 1.44 C in 1910–2019, while southern Australia has seen a reduction of 10–20% in cool season (April–October) in recent decades. For penguins, the increase temperature means early breeding onset as observed in 2020. However, penguins may not start breeding earlier this year as there is no prediction for an El Nino or La Nina year. Climate model outlooks show a neutral ENSO state (indication of La Nino/La Nina trend) is likely to continue for at least the coming six months.

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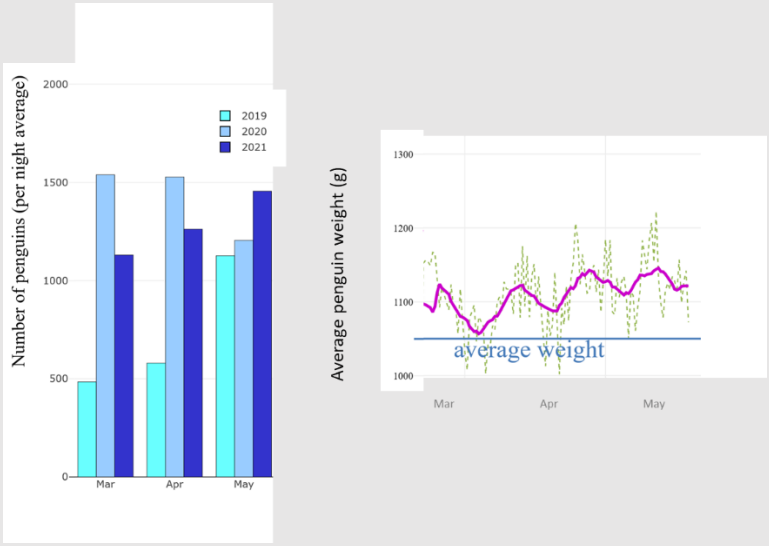

Number of penguins crossing the Parade (left) and adults penguin weights (right) in March-May 2021. Number of penguins have been trending upwards and weights were above the long-term average in this period as penguins recover from the energetically expensive the moulting period.

Environment Climate change Climate policy

Warming sparks penguin breeding boom but experts sound note of caution

By **Miki Perkins**

Updated April 2, 2021 — 8.40am, first published at 5.00am

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Phillip Island Nature Parks' Little penguins are in the midst of a breeding boom, with around 24,000 chicks hatching this season. The successful breeding season is due to 'double clutch' breeding, a relatively new phenomenon for the Phillip Island mega colony where penguins are breeding more than once in a season, along with favourable breeding conditions. This is the second year the 32,000 strong penguin colony at Phillip Island has produced a large number of chicks, which scientists attribute, in part, to rising ocean temperatures. Phillip Island is one of the few little penguin colonies to benefit so far from a rise in global temperature. Double-clutch breeding is an effective way for penguins to boost the population, especially as they only lay between one to three eggs at a time, unlike multiple eggs usually laid by terrestrial birds. These strong chick numbers tell us the Little penguin colony at Phillip Island is healthy. Our intensive conservation effort over the years has resulted in the protection of penguins on land. The challenge now is how to guarantee penguin food security at sea in the future.

Phillip Island is now a fox-free island backed by a strong habitat restoration, translated into a growing penguin population. Thanks to all these efforts, the mega colony of Phillip Island is now the largest colony in the world for this species.

This story was also front page of The Age on the Good Friday (02/04/2021)

- **Bank of Melbourne Bayside Automated Penguin Monitoring System**

The bayside automated penguin monitoring system is now mostly complete with the electronic engineer visiting in May and installing the final pieces of the hardware. Penguin Foundation sponsor Bank of Melbourne and the creative agencies behind their 'If You Have the Will' campaign, Saatchi & Saatchi Melbourne and VFX, joined us for a team building day on 12 May. Bank of Melbourne has supported

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the development of the bayside automated penguin monitoring system with a $120,000 donation and significant promotional support for the Penguin Foundation and its Adopt a Penguin program to their customers. The team provided brilliant feedback of their time at the Nature Parks which included getting 240 plants into the with Sam and Mitch and a project site visit with Paula and Andre to hear how their funds have and continue to support research and are looking forward to promoting the project through their networks in the coming months.

Above photo: Penguins are crossing well at the new bayside automated penguin monitoring system.

Bank of Melbourne, Saatchi & Saatchi Melbourne and VFX visited the site of the new bayside automated penguin monitoring system were Andre and Paula gave them a rundown of the system.

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KOALAS –

A wild mother and joey spotted and photographed in the Koala Conservation Reserve surrounds. This is a first joey spotted on back of its mother since 2007.

- Plantation rejuvenation works underway in preparation for 900 Eucalyptus seedlings to be planted for future koala browse use. This has included chipping, slashing and conducting burn piles.
- Six staff undertook a 'Felling small trees' course run by external educators in the KCR plantations.
- Two of our koalas on display, Lisa (19 years) and Bernie (12 years), passed away from natural causes.
- One of our plantations has had the tracks sealed in recycled concrete which has enabled access through the wetter months.
- The Rangers continue to cut koala browse from the Westernport Water site at King Road on a weekly basis. This allows for the resting of parts of our plantations which were heavily harvested during the rehabilitation period of the bushfire koalas last year.

The new adventure play space in front of the visitor's centre is nearly complete and will be open to the public shortly.

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WILDLIFE REHABILITATION & MANAGEMENT

- Wildlife Rangers responded to over 360 Calls for injured wildlife, ranging across 37 different species during the past months.
- 46 penguins were responded to during this period, many were malnourished juveniles washed up after the storms.
- The Short-tailed shearwater fledging season kept rangers busy with 87 calls for shearwaters.
- Staff worked alongside DELWP and Parks Vic giving information and advice about the whale at Forrest Caves.

- 'Greg' (affectionately named by Ranger Mark Merryfull) the Australasian gannet (*Morus serrator)* or tākapu (Māori name) chick was transferred to the Nature Parks' wildlife shelter on 27 January 2021 from Melbourne Zoo, still very fluffy and weighing 2,610g. The chick was originally rescued from Dromana boat ramp on 24 January 2021 and spent a couple of days at the zoo. Initially housed in half of the penguin pool pen while still downy, he (or she) progressed to the seabird pool pen where the bird could start building flight strength and maintain waterproofing in the inground pool. These young birds often require assist feeding (they rarely self-feed) and this occurs twice a day, so the rehab staff got to know this not so little bird pretty well over the couple of months in care. Staff take these birds to the cliffs at Cowries Beach on the Summerland Peninsula on windy days when they are ready for release. Often these birds will have a few trips where they spend a few hours at a time trying out their wings and gaining strength and confidence before finally taking flight when ready, and conditions are right. Greg took flight on his third visit to Cowries on 13 March.

RESEARCH PUBLICATIONS

World's seabirds breeding less successfully over the last 50 years, particularly fish-eating, surface-feeding seabirds in the northern hemisphere.

Science 28 MAY 2021: 980-983

ECOSYSTEM SENTINELS

Hemispheric asymmetry in ocean change and the productivity of ecosystem sentinels

W. J. Sydeman[1]*, D. S. Schoeman[2,3], S. A. Thompson[1], B. A. Hoover[4], M. García-Reyes[1], F. Daunt[5], P. Agnew[6], T. Anker-Nilssen[7], C. Barbraud[8], R. Barrett[9], P. H. Becker[10], E. Bell[11], P. D. Boersma[12],

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S. Bouwhuis[10], B. Cannell[13], R. J. M. Crawford[14], P. Dann[15], K. Delord[8], G. Elliott[16], K. E. Erikstad[17], E. Flint[18], R. W. Furness[19], M. P. Harris[5], S. Hatch[20], K. Hilwig[21], J. T. Hinke[22], J. Jahncke[23], J. A. Mills[24], T. K. Reiertsen[25], H. Renner[21], R. B. Sherley[26], C. Surman[27], G. Taylor[16], J. A. Thayer[1], P. N. Trathan[28], E. Velarde[29], K. Walker[16], S. Wanless[5], P. Warzybok[23], Y. Watanuki[30]

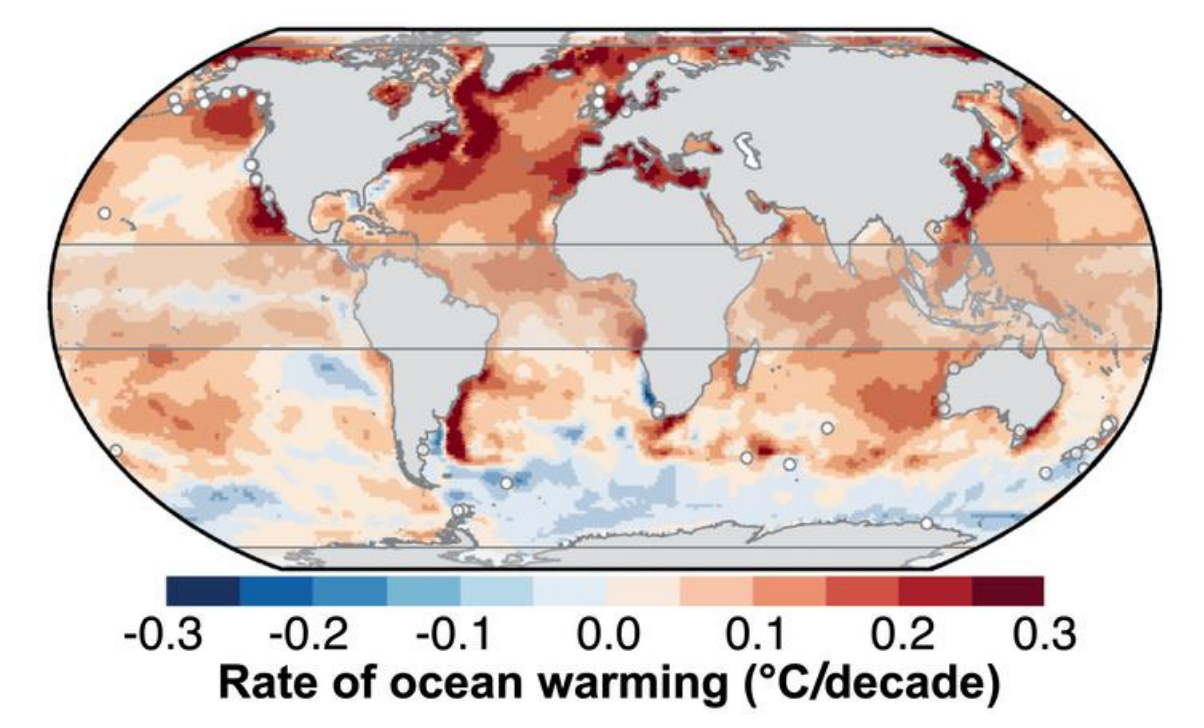
Climate change and other human activities are causing profound effects on marine ecosystem productivity.

This paper was co-authored by 36 seabird scientists who collated a database of breeding productivity for 66 seabird species from 46 sites (including Little Penguins on Phillip Island) around the world, from 1964 to 2018. The data show that the breeding success of the world's seabirds is negatively tracking ocean warming and human impacts, with the strongest effects on fish-eating, surface-foraging species in the northern hemisphere.

The Northern Hemisphere Ocean systems are degraded and urgently need better management and restoration. Damage to Southern Hemisphere oceans from threats such as climate change and industrial fishing is accelerating, but opportunities remain there to avoid the worst. For the north, tactical, climate-based recovery plans for forage fish resources are needed to recover seabird breeding productivity. In the

south, lower-magnitude change in seabird productivity presents opportunities for strategic management approaches such as large marine protected areas to sustain food webs and maintain predator productivity.

Global monitoring of seabird productivity enables the detection of ecosystem change in remote regions and contributes to our understanding of marine climate impacts on ecosystems.



Ecosystem terrestrial model for Phillip Island

Rendall AR, Sutherland DR, Baker CM, Raymond B, Cooke R, White JG. 2021. Managing ecosystems in a sea of uncertainty: invasive species management and assisted colonizations. Ecological Applications 31(4): e02306. DOI: 10.1002/eap.2306

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Ecological Applications, 0(0), 2021, e02306

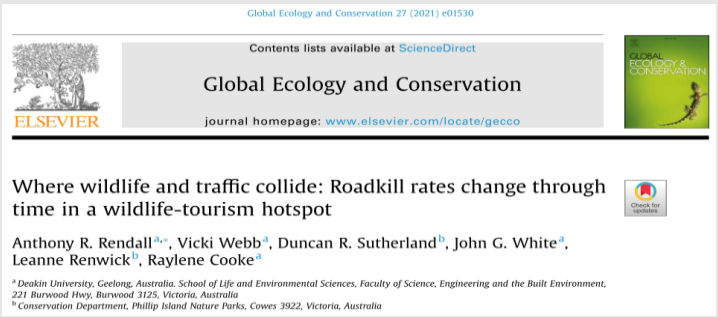
Managing ecosystems in a sea of uncertainty: invasive species management and assisted colonizations

ANTHONY R. RENDALL [1,2,9] DUNCAN R. SUTHERLAND [3] CHRISTOPHER M. BAKER [4,5,6] BEN RAYMOND [7,8] RAYLENE COOKE [1] AND JOHN G. WHITE [1]

[1]*School of Life and Environmental Sciences, Deakin University, Geelong, Victoria 3220 Australia*
[2]*Centre for Integrative Ecology, School of Life and Environmental Sciences, Faculty of Science, Engineering and the Built Environment, Burwood Campus, Burwood, Victoria 3125 Australia*
[3]*Conservation Department, Phillip Island Nature Parks, Cowes, Victoria 3922 Australia*
[4]*School of Mathematics and Statistics, The University of Melbourne, Melbourne, Victoria 3010 Australia*
[5]*Melbourne Centre for Data Science, The University of Melbourne, Melbourne, Victoria 3010 Australia*
[6]*Centre of Excellence for Biosecurity Risk Analysis, The University of Melbourne, Melbourne, Victoria 3010 Australia*
[7]*Australian Antarctic Division, Department of Agriculture, Water and the Environment, Kingston, Tasmania 7050 Australia*
[8]*Institute for Marine and Antarctic Studies, University of Tasmania, Hobart, Tasmania 7000 Australia*

This study used qualitative models and Ensemble Ecosystem Models to consider how suppression or eradication of (1) feral cats and (2) exotic prey, influenced the wildlife species community on Phillip Island. Models also considered whether critically endangered Eastern barred bandicoots were likely to persist under each scenario. Our analysis revealed the potential for unintended outcomes associated with feral cat control operations, with rats and rabbits expected to increase in abundance. A strategy based on managing prey species appeared to have the most ecosystem-wide benefits, with rodent control showing more favorable responses than a rabbit control strategy. Eastern barred bandicoots were predicted to persist under all feral cat control levels (including no control).

Roadkills on Phillip Island's roads



Global Ecology and Conservation 27 (2021) e01530

Contents lists available at ScienceDirect

Global Ecology and Conservation

journal homepage: www.elsevier.com/locate/gecco

Where wildlife and traffic collide: Roadkill rates change through time in a wildlife-tourism hotspot

Anthony R. Rendall[a,*], Vicki Webb[a], Duncan R. Sutherland[b], John G. White[a], Leanne Renwick[b], Raylene Cooke[a]

[a] Deakin University, Geelong, Australia. School of Life and Environmental Sciences, Faculty of Science, Engineering and the Built Environment, 221 Burwood Hwy, Burwood 3125, Victoria, Australia
[b] Conservation Department, Phillip Island Nature Parks, Cowes 3922, Victoria, Australia

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This is a paper published on the wildlife roadkill rate in the late 1990s and 2014. It identifies the hotspots and factors influencing roadkill rates for different species. The number of wildlife roadkills recorded in 4 months (17th February to 1st June 2014) along 45 km of road on Phillip Island was 688 carcasses. Wildlife roadkill rates were higher on roads with moderate to high speed limits. The speed limit was the most influential factor affecting roadkill rates. Roadkill rates are higher near conservation reserves. Swamp wallabies were the most regularly detected species. Roadkills represented 4.9% of the total estimated population size of the species on Phillip Island in just 4 months of sampling. Roadkills of wallabies were highest on roads with speed limits of 80-100 km/h and in rural areas, possums most frequent on roads with 60-80 km/h limits and denser vegetation, and rabbits on urban roads with 60 km/h limits; there was no relationship with speed for birds. The factors influencing roadkill rates are not the same for different species, but reducing road limits would benefit all species.

Ravens as penguin nest predators

Tan LXL, Dongen WFDv, Sherman CDH, Ekanayake KB, Dann P, Sutherland DR, Weston MA. 2021. Transmission of a novel predatory behaviour is not restricted to kin. Biological Invasions. DOI 10.1007/s10530-021-02517-4

Biol Invasions
https://doi.org/10.1007/s10530-021-02517-4

Check for updates

ORIGINAL PAPER

Transmission of a novel predatory behaviour is not restricted to kin

Laura X. L. Tan · Wouter F. D. van Dongen · Craig D. H. Sherman · Kasun B. Ekanayake · Peter Dann · Duncan R. Sutherland · Michael A. Weston

Little raven depredation of Little penguin clutches is intense but appears to have emerged only in recent years. Understanding whether or how the behaviour is transferred provides an opportunity to disrupt this undesirable behaviour. We explore the role genetic relatedness may have on the occurrence of raven burrow-raiding behaviour. We test whether ravens preying upon eggs or chicks in penguin nests are more genetically related than ravens which do not raid burrows. We found no significant difference in mean relatedness between culprits and other birds. Burrow-raiding behaviour does not appear to be restricted to kin, and targeting ravens based solely on their relationship to culprits is unlikely to reduce depredation rates.

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Penguins are making the most of old age

Ecology and Evolution

Open Access

ORIGINAL RESEARCH | Open Access

Making the most of the old age: Autumn breeding as an extra reproductive investment in older seabirds

Francisco Ramírez, Andre Chiaradia, Danielle A. O'Leary, Richard D. Reina

First published: 26 March 2021 | https://doi.org/10.1002/ece3.7431

SECTIONS PDF TOOLS SHARE

This is a study conducted in collaboration with Monash University and the Institut de Ciències del Mar (Institute of Marine Science) in Barcelona, Spain. Using an 11-year data set of penguin breeding, we examined why penguins are putting so much breeding-like effort in autumn, which is outside their right time for breeding. There was a significant difference in the age of birds that bred in one or both these peaks, indicating an increased investment by older penguins to breed in autumn. It revealed that penguins may be aware of their diminishing reproductive potential and have the capacity to detect environmental cues to start breeding, such as warmer ocean temperatures. Penguins breeding in autumn are around two and a half years older than penguins breeding in spring. Penguins usually choose survival over breeding and can abandon breeding if feeding conditions are not favourable. Penguins are behaving in autumn precisely in the same way they behave in spring. That is, they show all signs they are going to breed.

This information helps us gain a better understanding of our little penguins so we can do our part to protect and maintain a healthy population in the future

Marine Biology (2021) 168:62
https://doi.org/10.1007/s00227-021-03867-2

ORIGINAL PAPER

Check for updates

Intra- and inter-individual changes in little penguin diving and isotopic composition over the breeding season

Françoise Amélineau[1] · Claire Saraux[2] · Yan Ropert-Coudert[3] · Akiko Kato[3] · Keith A. Hobson[4] · Ben Raymond[5,6] · Ilka Zimmer[7] · André Chiaradia[8]

Received: 25 September 2020 / Accepted: 15 March 2021
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Over the course of 2.4 million years, penguins have mastered the art of fishing as our study revealed they have a remarkable flexibility in their search for food. Studying penguins at sea is hard, so scientists rely on sensors like Fitbits to explore how penguin forage. Usually penguins are deployed with Fitbits for one single trip; a snapshot that is then extrapolated to the whole breeding stage or even the entire breeding season. But we thought, what about if we are getting it wrong as individual feeding and diving may vary within the stage and season? Our findings revealed a remarkable difference within breeding stages, showing that it is vital to consider individual variability at each step of the breeding season. This is another piece of a puzzle to understand lives of penguins at sea, crucial information for their food security in the future.

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ACHIEVEMENTS

Shani Blyth made it to the Semi Finals in the **Yarn Strong Sista Indigenous Achievement Award** which forms part of the 2021 7NEWS Young Achiever Awards VIC.

Young achiever and Strong Sista

Phillip Island Nature Parks ranger Shani Blyth has been nominated for the Yarn Strong Sista award, as part of the Victoria Young Achievers Awards.

The Yarn Strong Sista award acknowledges the work of young Indigenous people who are giving back to their community and providing strong role models for their peers.

Shani commenced her journey at Phillip Island Nature Parks as an Indigenous Trainee which she describes as an "interesting career jump" as she had just been offered full time work at the ANZ bank after completing a school-based traineeship.

She didn't really know what the job would entail but she knew that she wanted to be working outside on Bunurong Country.

She says now she is very grateful she took the jump as she "cannot imagine not working out on Country each day".

During her role as a trainee, she became aware there was no real process for working on Country.

She knew Phillip Island (Millowl) was "such a unique cultural landscape that needed to be protected the right cultural way".

Working alongside another Bunurong Community member she developed the Nature Parks' first Cultural Heritage Portfolio.

Shani has been instrumental in implementing the cultural heritage management processes through training and ongoing works on Country.

She describes this as her greatest cultural achievement in protecting the landscape of Phillip Island (Millowl) and educating and sharing her knowledge with others.

Nature Parks ranger Shani Blyth, who has been nominated for a Young Achiever award, at a Board Meeting on Country 2020 Cape Woolamai with BLCAC CEO Dan Turnbull.

This had help shift the organisation's entire environmental management culture to respect and care for Country.

Shani's integrity was critical in ensuring that the process was inclusive and respectful of the Bunurong Land Council Aboriginal Corporation and a newly signed MOU.

She is also very proud of the Bush Foods Garden at the Penguin Parade Welcome to Country area.

This space was created for and with the local Community to have a place to harvest from the bush and to create a safe meeting place.

"The local Community helped me establish this area through planting days and working together to create this space," she said.

Since joining the Nature Parks, Shani has completed a Certificate III in Conservation and Land Management, graduating in the top 20 students.

At the completion of the traineeship, Shani was promoted to a full time Environment Ranger.

She is currently working with the Bunurong Land Council Aboriginal Corporation, to develop an Aboriginal Cultural Heritage Land Management Agreement (ACHLAMA) for the Nature Parks – one of the first of its kind to be completed in Victoria.

"We need to protect these sites as they tell stories and the history of how the land was, is and can be used in the future," she said.

"I have really enjoyed the practical side of cultural heritage and would like to also acknowledge the people who have offered me experience and taken me under their wing, I am forever grateful for these opportunities and hope there will be more in the future."

We acknowledge the Traditional Owners of the land and waters on which we live, work and learn, the Bunurong. We pay our respects to their Elders past, present and emerging and to all Aboriginal and Torres Strait Islander Community members